

# **CITY COUNCIL**

## **AGENDA**

Monday, May 27, 2013 – Council Chambers, City Hall

Call to Order:	2:00 PM
Recess:	5:00 PM to 6:00 PM

### **1. IN CAMERA MEETING**

- I.1. Legal Matter
- I.2. Human Resources Matter
- I.3. Land Matter

### **2. MINUTES**

- 2.1. Confirmation of the Minutes of the Monday, May 6, 2013 Special Council Meeting  
(Agenda Pages 1 – 4)
- 2.2. Confirmation of the Minutes of the Monday, May 13, 2013 Regular Council Meeting.  
(Agenda Pages 5 – 15)

### **3. POINTS OF INTEREST**

### **4. PRESENTATIONS**

- 4.1. Special Council Update: Governance - The Journey . . . .

**5. UNFINISHED BUSINESS**

- 5.1. Red Deer Native Friendship Society Cultural Centre  
Land Use Bylaw Amendment 3357/M-2013  
Consideration of First Reading

(Agenda Pages 16 – 33)

5.1.a. Approve recommendation

5.1.b. Consideration of First Reading

- 5.2. Ambulance Dispatch

5.2.a. Add to Agenda

5.2.b. Approve Recommendation

- 5.3. River Bend Golf & Recreation Society - Sustainability Final Report and  
River Bend Golf & Recreation Society - Loan Bylaw Amendment 3391/A-2013  
Consideration of Second and Third Reading

(Agenda Pages 34 – 43)

- 5.4. Plebiscite Question

(Agenda Pages 44 – 54)

**6. REPORTS**

- 6.1. Value for Money Audit

(Agenda Pages 55 – 84)

- 6.2. Integrated Movement Study - Mobility Playbook

(Agenda Pages 85 – 316)

6.2.a. Lift from the Table



6.2.b. Endorse Report

6.3. Municipal Election Signs

(Agenda Pages 317 – 325)

6.3.a. New Sign Locations

6.3.b. Change to Election Sign Location

6.4. Discretionary Use for Outdoor Sale and Display of Goods in Clearview Market

(Agenda Pages 326 – 335)

6.5. Change in Start Time for the Monday, June 10, 2013 Council Meeting

(Agenda Pages 336 – 336)

6.6. AUMA Resolutions

(Agenda Pages 337 – 345)

6.6.a. Increasing the Reporting Threshold for Non-Injury Collision

6.6.b. Provincial Recycling Programs

6.6.c. Reducing Greenhouse Gas Emissions from Power Generation

6.7. IBEW Bargaining Update

(Agenda Pages 346 – 347)

**7. BYLAWS**

- 7.1. Minor Amendment to the Lancaster Vanier Neighbourhood Area Structure  
Plan / Bylaw Amendment 3217/A-2013  
Consideration of First Reading

(Agenda Pages 348 – 355)

**8. PUBLIC HEARINGS**

**9. CORRESPONDENCE**

**10. PETITIONS AND DELEGATIONS**

**11. NOTICES OF MOTION**

**12. COUNCIL MEMBER INQUIRIES**

**13. ADJOURNMENT**

**14. ATTACHMENT(S)**

- 14.1. Appendix C - Value for Money Audit - Electric, Light and Power Department  
(EL&P)

(Agenda Pages 356 – 649)

- 14.2. Appendix C - Value for Money Audit - Red Deer Water/Wastewater Utilities

(Agenda Pages 650 – 930)



## **UNAPPROVED M I N U T E S**

**of the Red Deer Special Council Meeting  
held on Monday, May 6, 2013  
commenced at 4:30 p.m.**

### **Present:**

Mayor Morris Flewwelling  
Councillor Buck Buchanan  
Councillor Paul Harris  
Councillor Lynne Mulder  
Councillor Chris Stephan  
Councillor Tara Veer  
Councillor Frank Wong  
Councillor Dianne Wyntjes

City Manager, Craig Curtis  
Director of Community Services, Greg Scott  
Director of Corporate Services, Elaine Vincent  
Director of Planning Services, Kim Fowler  
Director of Human Resources, Kristy Svoboda  
Director of Communications & Strategic Planning, Julia Harvie-Shemko  
Director of Corporate Transformation, Lisa Perkins  
City Clerk, Frieda McDougall  
Corporate Meeting Coordinator, Christine Kenzie  
Client Support Services, Jody Zeniuk  
Revenue & Assessment Manager, Joanne Parkin

### **Absent:**

Councillor Cindy Jefferies



## **I. UNFINISHED BUSINESS**

### **I.1. 2013 Tax Rate Bylaw 3495/2013**

Moved by Councillor Buck Buchanan, seconded by Councillor Paul Harris

**SECOND READING:** That Tax Rate Bylaw 3495/2013 (to authorize the rates of taxation to be levied against assessable property) be read a second time.

**IN FAVOUR:** Mayor Morris Flewwelling, Councillor Paul Harris, Councillor Lynne Mulder, Councillor Dianne Wyntjes

**OPPOSED:** Councillor Buck Buchanan, Councillor Chris Stephan, Councillor Tara Veer, Councillor Frank Wong

**MOTION DEFEATED**

At this time the 2013 Tax Rate Bylaw 3502/2013 (Option I) was introduced and considered by Council.

Moved by Councillor Tara Veer, seconded by Councillor Dianne Wyntjes

**FIRST READING:** That Tax Rate Bylaw 3502/2013 (Option I - to authorize the rates of taxation to be levied against assessable property) be read a first time.

**IN FAVOUR:** Mayor Morris Flewwelling, Councillor Buck Buchanan, Councillor Lynne Mulder, Councillor Tara Veer, Councillor Frank Wong, Councillor Dianne Wyntjes

**OPPOSED:** Councillor Paul Harris, Councillor Chris Stephan

**MOTION CARRIED**



Moved by Councillor Tara Veer, seconded by Councillor Dianne Wyntjes

**SECOND READING:** That Tax Rate Bylaw 3502/2013 be read a second time.

**IN FAVOUR:** Mayor Morris Flewwelling, Councillor Buck Buchanan, Councillor Lynne Mulder, Councillor Tara Veer, Councillor Frank Wong, Councillor Dianne Wyntjes

**OPPOSED:** Councillor Paul Harris, Councillor Chris Stephan

**MOTION CARRIED**

Moved by Councillor Frank Wong, seconded by Councillor Lynne Mulder

**Resolved** that with the unanimous consent of the Council members present, that Bylaw 3502/2013 be presented for third reading.

**IN FAVOUR:** Mayor Morris Flewwelling, Councillor Buck Buchanan, Councillor Paul Harris, Councillor Lynne Mulder, Councillor Chris Stephan, Councillor Tara Veer, Councillor Frank Wong, Councillor Dianne Wyntjes

**MOTION CARRIED**

Moved by Councillor Tara Veer, seconded by Councillor Dianne Wyntjes

**THIRD READING:** That Bylaw 3502/2013 be read a third time.

**IN FAVOUR:** Mayor Morris Flewwelling, Councillor Buck Buchanan, Councillor Lynne Mulder, Councillor Tara Veer, Councillor Frank Wong, Councillor Dianne Wyntjes

**OPPOSED:** Councillor Paul Harris, Councillor Chris Stephan

**MOTION CARRIED**



## 2. **ADJOURNMENT**

Moved by Councillor Buck Buchanan, seconded by Councillor Lynne Mulder

Resolved that Council of The City of Red Deer hereby agrees to adjourn the May 6, 2013 Special Meeting of Red Deer City Council at 5:16 p.m.

**IN FAVOUR:** Mayor Morris Flewwelling, Councillor Buck Buchanan, Councillor Paul Harris, Councillor Lynne Mulder, Councillor Chris Stephan, Councillor Tara Veer, Councillor Frank Wong, Councillor Dianne Wyntjes

**MOTION CARRIED**

---

MAYOR

---

CITY CLERK



## **UNAPPROVED M I N U T E S**

**of the Red Deer City Council Regular Meeting  
held on Monday, May 13, 2013  
commenced at 2:05 p.m.**

**Present:**

Mayor Morris Flewwelling  
Councillor Buck Buchanan  
Councillor Paul Harris  
Councillor Cindy Jefferies  
Councillor Lynne Mulder  
Councillor Chris Stephan  
Councillor Tara Veer  
Councillor Frank Wong  
Councillor Dianne Wyntjes

City Manager, Craig Curtis  
Director of Community Services, Greg Scott  
Director of Corporate Services, Elaine Vincent  
Director of Planning Services, Kim Fowler  
Director of Human Resources, Kristy Svoboda  
Director of Communications & Strategic Planning, Julia Harvie-Shemko  
City Clerk, Frieda McDougall  
Corporate Meeting Coordinator, Christine Kenzie  
Corporate Meeting Coordinator, Bev Greter  
Engineering Services Manager, Frank Colosimo  
EL&P Manager, Jim Jorgensen  
Senior Planner, Orlando Toews  
Senior Planner, Jordan Furness  
Waste Management Superintendent, Janet Whitesell  
Culture Superintendent, Kristina Öberg



## **I. MINUTES**

### **I.1. Confirmation of the Minutes of the Monday, April 29, 2013 Regular Council Meeting.**

Moved by Councillor Lynne Mulder, seconded by Councillor Buck Buchanan

Resolved that Council of The City of Red Deer hereby approves the Minutes of the Monday, April 29, 2013 Regular Council Meeting as presented.

**IN FAVOUR:** Mayor Morris Flewwelling, Councillor Buck Buchanan, Councillor Paul Harris, Councillor Cindy Jefferies, Councillor Lynne Mulder, Councillor Chris Stephan, Councillor Tara Veer, Councillor Frank Wong, Councillor Dianne Wytjes

MOTION CARRIED

## **2. PRESENTATION**

### **2.1. Special Council Update: Red Deer Community Culture Vision**

Kristina Öberg, Culture Superintendent, provided an update on the Red Deer Community Culture Vision.

## **3. UNFINISHED BUSINESS**

### **3.1. Proposed Amendment - Northland Drive / 20 Avenue Functional Planning Study Final Report October 2008**

Moved by Councillor Paul Harris, seconded by Councillor Cindy Jefferies

Resolved that Council of The City of Red Deer having considered the report from Legislative & Governance Services dated April 30, 2013 re: Northland Drive / 20 Avenue Functional Planning Study Final Report October 2008 hereby agrees to lift from the table consideration of this report.





**IN FAVOUR:** Mayor Morris Flewwelling, Councillor Buck Buchanan, Councillor Paul Harris, Councillor Cindy Jefferies, Councillor Lynne Mulder, Councillor Chris Stephan, Councillor Tara Veer, Councillor Frank Wong, Councillor Dianne Wyntjes

**MOTION TO LIFT FROM THE TABLE CARRIED**

Moved by Councillor Paul Harris, seconded by Councillor Buck Buchanan

Resolved that Council of The City of Red Deer, having considered the report from the Engineering Services department dated April 2, 2013 re: Proposed Amendment, Northland Drive/20 Avenue Functional Planning Study Final Report October 2008 hereby approves two amendments to the North Highway Connector Functional Planning Study as follows:

- 1) Substitute a Roundabout design in place of a conventional intersection design for the intersection rebuild of 67 Street and 30 Avenue, as shown in the “Revised” Figures 5.6, 5.15 and 5.31;
- 2) Substitute a Roundabout design in place of a conventional intersection design for the intersection rebuild of 40 Avenue and 78 Street Crescent, as shown in the “Revised” Figures 5.3, 5.12 and 5.28.

**IN FAVOUR:** Mayor Morris Flewwelling, Councillor Buck Buchanan, Councillor Paul Harris, Councillor Cindy Jefferies, Councillor Lynne Mulder, Councillor Chris Stephan, Councillor Tara Veer, Councillor Frank Wong, Councillor Dianne Wyntjes

**MOTION CARRIED**

**3.2. Proposed 2013 Off-Site Levy Rates Bylaw 3498/2013**

Moved by Councillor Lynne Mulder, seconded by Councillor Dianne Wyntjes



**SECOND READING:** That Bylaw 3498/2013 (2013 Off-Site Levy Bylaw - to provide a uniform levy of off-site costs in respect of previously undeveloped land) be read a second time.

**IN FAVOUR:** Mayor Morris Flewwelling, Councillor Buck Buchanan, Councillor Paul Harris, Councillor Cindy Jefferies, Councillor Lynne Mulder, Councillor Tara Veer, Councillor Frank Wong, Councillor Dianne Wyntjes

**OPPOSED:** Councillor Chris Stephan

**MOTION CARRIED**

Moved by Councillor Lynne Mulder, seconded by Councillor Dianne Wyntjes

**THIRD READING:** That Bylaw 3498/2013 be read a third time.

**IN FAVOUR:** Mayor Morris Flewwelling, Councillor Buck Buchanan, Councillor Paul Harris, Councillor Cindy Jefferies, Councillor Lynne Mulder, Councillor Tara Veer, Councillor Frank Wong, Councillor Dianne Wyntjes

**OPPOSED:** Councillor Chris Stephan

**MOTION CARRIED**

### **3.3. Update re: Policy Framework for Capital Grants**

Moved by Councillor Dianne Wyntjes, seconded by Councillor Buck Buchanan

Resolved that Council of The City of Red Deer having considered the report from Legislative Services dated April 30, 2013 re: Policy Framework for Capital Grants hereby agrees to lift from the table consideration of this report.

**IN FAVOUR:** Mayor Morris Flewwelling, Councillor Buck Buchanan, Councillor Paul Harris, Councillor Cindy Jefferies, Councillor



Lynne Mulder, Councillor Chris Stephan, Councillor Tara Veer,  
Councillor Frank Wong, Councillor Dianne Wyntjes

#### MOTION TO LIFT FROM THE TABLE CARRIED

Moved by Councillor Lynne Mulder, seconded by Councillor Buck Buchanan

Resolved that Council of The City of Red Deer having considered the report from Legislative Services dated April 30, 2013 re: Policy Framework for Capital Grants, hereby agrees to table this report until up to December 31, 2013 to provide for the development of the policy in alignment with the principles as expressed by the Governance & Policy Committee.

**IN FAVOUR:** Mayor Morris Flewwelling, Councillor Buck Buchanan, Councillor Paul Harris, Councillor Cindy Jefferies, Councillor Lynne Mulder, Councillor Chris Stephan, Councillor Tara Veer, Councillor Frank Wong, Councillor Dianne Wyntjes

#### MOTION CARRIED

### 3.4. Waste Management Master Plan Final Report

Moved by Councillor Chris Stephan, seconded by Councillor Dianne Wyntjes

Resolved that Council, of The City of Red Deer, having considered the report from the Legislative Services Department, dated May 6, 2013, re: Waste Management Master Plan Final Report, hereby agrees to lift from the table consideration of the Waste Management Master Plan.

**IN FAVOUR:** Mayor Morris Flewwelling, Councillor Buck Buchanan, Councillor Chris Stephan, Councillor Cindy Jefferies, Councillor Dianne Wyntjes, Councillor Frank Wong, Councillor Lynne Mulder, Councillor Paul Harris, Councillor Tara Veer

#### MOTION TO LIFT FROM THE TABLE CARRIED



Moved by Councillor Tara Veer, seconded by Councillor Chris Stephan

Resolved that Council, of The City of Red Deer, having considered the report from the Environmental Services Department, dated April 29, 2013 re: Waste Management Master Plan Final Report, hereby endorses the Waste Management Master Plan Report as a planning document.

**IN FAVOUR:** Mayor Morris Flewwelling, Councillor Buck Buchanan, Councillor Paul Harris, Councillor Cindy Jefferies, Councillor Lynne Mulder, Councillor Chris Stephan, Councillor Tara Veer, Councillor Frank Wong, Councillor Dianne Wyntjes

MOTION CARRIED

#### 4. BYLAWS

##### 4.1. Smoke Free Bylaw Amendments

Moved by Councillor Dianne Wyntjes, seconded by Councillor Cindy Jefferies

Resolved that Council of The City of Red Deer having considered the report from the Community Services Division dated April 26, 2013 re: Smoke Free Bylaw Amendments, hereby agrees to lift from the table consideration of this report.

**IN FAVOUR:** Mayor Morris Flewwelling, Councillor Buck Buchanan, Councillor Paul Harris, Councillor Cindy Jefferies, Councillor Lynne Mulder, Councillor Chris Stephan, Councillor Tara Veer, Councillor Frank Wong, Councillor Dianne Wyntjes

MOTION TO LIFT FROM THE TABLE CARRIED

Moved by Councillor Tara Veer, seconded by Councillor Dianne Wyntjes

Resolved that Council of The City of Red Deer having considered the report from the Community Services Division dated April 26, 2013 re: Smoke Free Bylaw Amendments, hereby agrees to table consideration of this report to the Monday, June



10, 2013 Regular Council Meeting to allow Administration to receive stakeholder comments.

**IN FAVOUR:** Mayor Morris Flewwelling, Councillor Buck Buchanan, Councillor Paul Harris, Councillor Cindy Jefferies, Councillor Lynne Mulder, Councillor Chris Stephan, Councillor Tara Veer,

Councillor Frank Wong, Councillor Dianne Wyntjes

**MOTION CARRIED**

Council recessed at 4:15 p.m. and reconvened at 4:20 p.m.

#### **4.2. Election Bylaw Amendment 3491/B-2013**

Moved by Councillor Buck Buchanan, seconded by Councillor Paul Harris

**FIRST READING:** That Bylaw Amendment 3491/B-2013 (an Election Bylaw amendment to delete Section 11 & Schedule B) be read a first time.

**IN FAVOUR:** Mayor Morris Flewwelling, Councillor Buck Buchanan, Councillor Paul Harris, Councillor Cindy Jefferies, Councillor Lynne Mulder, Councillor Chris Stephan, Councillor Tara Veer, Councillor Frank Wong

**ABSENT:** Councillor Dianne Wyntjes

**MOTION CARRIED**

Councillor Dianne Wyntjes returned to Council Chambers at 4:25 p.m.



Moved by Councillor Buck Buchanan, seconded by Councillor Paul Harris

**SECOND READING:** That Bylaw Amendment 3491/B-2013 be read a second time.

**IN FAVOUR:** Mayor Morris Flewwelling, Councillor Buck Buchanan, Councillor Paul Harris, Councillor Cindy Jefferies, Councillor Lynne Mulder, Councillor Chris Stephan, Councillor Tara Veer, Councillor Frank Wong, Councillor Dianne Wyntjes

**MOTION CARRIED**

Moved by Councillor Lynne Mulder, seconded by Councillor Cindy Jefferies

**Resolved** that with the unanimous consent of the Council members present, that this Bylaw be presented for third reading.

**IN FAVOUR:** Mayor Morris Flewwelling, Councillor Buck Buchanan, Councillor Paul Harris, Councillor Cindy Jefferies, Councillor Lynne Mulder, Councillor Chris Stephan, Councillor Tara Veer, Councillor Frank Wong, Councillor Dianne Wyntjes

**MOTION CARRIED**

Moved by Councillor Buck Buchanan, seconded by Councillor Paul Harris

**THIRD READING:** That Bylaw Amendment 3491/B-2013 be read a third time.

**IN FAVOUR:** Mayor Morris Flewwelling, Councillor Buck Buchanan, Councillor Paul Harris, Councillor Cindy Jefferies, Councillor Lynne Mulder, Councillor Chris Stephan, Councillor Tara Veer, Councillor Frank Wong, Councillor Dianne Wyntjes

**MOTION CARRIED**

#### **4.3. Rezoning Phase 2 of Laredo Land Use Bylaw Amendment 3357/K-2013**



Moved by Councillor Chris Stephan, seconded by Councillor Lynne Mulder

**FIRST READING:** That Bylaw Amendment 3357/K-2013 (a Land Use Bylaw amendment – to rezone the next portion of the Laredo neighbourhood (the north half of the Lancaster/Vanier Neighbourhood Area Structure Plan) for a variety of residential lots and public open space) be read a first time.

**IN FAVOUR:** Mayor Morris Flewwelling, Councillor Buck Buchanan, Councillor Paul Harris, Councillor Cindy Jefferies, Councillor Lynne Mulder, Councillor Chris Stephan, Councillor Tara Veer, Councillor Dianne Wyntjes

**OPPOSED:** Councillor Frank Wong

MOTION CARRIED

**4.4. Municipal Development Plan Bylaw Amendment 3404/A-2013  
East Hill Major Area Structure Plan Bylaw 3499/2013  
Land Use Bylaw Amendment 3357/J-2013**

Councillor Buck Buchanan left Council Chambers at 5:40 p.m. and returned at 5:42 p.m.

Moved by Councillor Dianne Wyntjes, seconded by Councillor Chris Stephan

**FIRST READING:** That Bylaw Amendment 3404/A-2013 (an amendment to the Municipal Development Plan Bylaw 3404/2008 to include an updated map and revisions to Sections 7 and 10) be read a first time.

**IN FAVOUR:** Mayor Morris Flewwelling, Councillor Buck Buchanan, Councillor Paul Harris, Councillor Cindy Jefferies, Councillor Lynne Mulder, Councillor Chris Stephan, Councillor Tara Veer,



Councillor Frank Wong, Councillor Dianne Wyntjes

**MOTION CARRIED**

Moved by Councillor Cindy Jefferies, seconded by Councillor Tara Veer

**FIRST READING:** That Bylaw 3499/2013 (the New East Hill Major Area Structure Plan incorporating the 2009 annexation area) be read a first time.

Councillor Buck Buchanan left Chambers at 5:57 p.m. and returned at 5:58 p.m.

**IN FAVOUR:** Mayor Morris Flewwelling, Councillor Buck Buchanan, Councillor Cindy Jefferies, Councillor Lynne Mulder, Councillor Chris Stephan, Councillor Tara Veer, Councillor Frank Wong, Councillor Dianne Wyntjes

**OPPOSED:** Councillor Paul Harris

**MOTION CARRIED**

Moved by Councillor Tara Veer, seconded by Councillor Cindy Jefferies

**FIRST READING:** That Bylaw Amendment 3357/J-2013 (a Land Use Bylaw amendment to rezone AG and RI land to Future Urban Development (AI) in the New East Hill Major Area Structure Plan) be read a first time.

**IN FAVOUR:** Mayor Morris Flewwelling, Councillor Buck Buchanan, Councillor Paul Harris, Councillor Cindy Jefferies, Councillor Lynne Mulder, Councillor Chris Stephan, Councillor Tara Veer, Councillor Frank Wong, Councillor Dianne Wyntjes

**MOTION CARRIED**





## 5. **ADJOURNMENT**

Moved by Councillor Dianne Wyntjes, seconded by Councillor Chris Stephan

Resolved that Council of The City of Red Deer hereby agrees to adjourn the May 13, 2013 Regular Meeting of Red Deer City Council at 6:07 p.m.

### **IN FAVOUR:**

Mayor Morris Flewwelling, Councillor Buck Buchanan, Councillor Paul Harris, Councillor Cindy Jefferies, Councillor Lynne Mulder, Councillor Chris Stephan, Councillor Tara Veer, Councillor Frank Wong, Councillor Dianne Wyntjes

**MOTION CARRIED**

---

MAYOR

---

CITY CLERK



2013 05 23

## Red Deer Native Friendship Society: Cultural Centre and Housing Development Site Selection and Proposed Rezoning.

OFFICE OF THE CITY MANAGER

### Report Details

#### **Report Summary & Recommendation:**

---

A joint task force between The City and the Red Deer Native Friendship Society (RDNFS) was formed last November to select an appropriate site for a housing and aboriginal culture centre project.

The vision for the project includes the development of an integrated project including housing, a cultural centre and outdoor ceremonial space. The cultural centre would provide an additional feature linked to the Waskasoo Park Trail System.

The proposed site comprises a 3.5 acre area which would be transferred to the RDNFS and a leased area to accommodate the ceremonial grounds.

In view of the unique combination of uses, the Planning Department has proposed a special use district entitled Public Service Residential (PSR).

It is recommended:

- That City Council consider the rezoning of a 3.5 acre site from P1 – Parks and Recreation District, to PSR – Public Service Residential District.
- That City Council provide the proposed site and lease area to the Red Deer Native Friendship Society for a nominal sum, subject to the approval of the sale and lease agreement by the City Solicitor and City Manager.



### **City Manager Comments:**

---

I strongly support the proposed site for the development of the Asooahum Centre, an aboriginal cultural centre and housing facility.

The joint committee (of which I was a member), evaluated over 20 sites across the city and unanimously selected this site as the most suitable.

The vision is to make the future centre a feature linked into the Waskasoo Park development. The site in question is a remnant parcel which was formerly a buffer to the industrial area on the west side of Riverside Drive. With the realignment of Riverside Drive the site is now adjacent to the balance of the park system but still separated by a power line and easement along the previous road right of way.

During the planning of Waskasoo Park, this site was identified as “park-development” to accommodate future recreation and park facilities such as roads, parks areas and interpretive buildings. This is different than sites the plan identified as “park conservation areas” and are these are further designated as A2 environmental preservation in the Land Use Bylaw. . The City has over the past few years acquired additional natural areas such as the escarpment east of the College and south of RiverBend.

I consider that the proposal will ultimately enhance and not detract from the park system. It will in fact fill a gap in the interpretive program in terms of celebrating and interpreting aboriginal culture. The Kerry Wood Nature Centre interprets the natural history of the area, Fort Normandeau primarily interprets relatively recent settlement; this proposed centre provides an excellent counterpoint.

I recommend that City Council approve the proposed site and proceed to first reading of the Bylaw with a Public Hearing to follow.

Craig Curtis  
City Manager

### **Proposed Resolution:**

---

Resolved that Council of The City of Red Deer having considered the report dated May 23, 2013 from the City Manager's Office re: Red Deer Native Friendship Society: Cultural Centre and Housing Development Site Selection and Proposed Rezoning, hereby approves the proposed site and lease area to the Red Deer Native Friendship Society for a nominal sum, subject to the approval of the sale and lease agreement by the City Solicitor and City Manager.



## Background:

---

In 2008 detailed discussions began with the Government of Alberta and the Red Deer Native Friendship Society (RDNFS) to secure a site for a joint housing and culture centre project. In 2010 the Province gave verbal approval for a 4 acre affordable housing site within lands formerly part of the Michener Centre within the Clearview Ridge Neighbourhood Area Structure Plan (NASP). The site was transferred to The City in 2011. The City then drafted amendments to the NASP and the Land Use Bylaw to accommodate the project.

On October 15, 2012, City Council denied the amendments following a public hearing during which a number of residents within Clearview Ridge objected to the changes in the NASP. Following the decision City Council adopted the following resolution:

***“Resolved that Council of The City of Red Deer having considered the report from the Planning Department, dated October 4, 2012 re: Clearview North NASP Amendment 3217/F-2012 and Land Use Bylaw Amendment 3357/Q-2012 hereby agree as follows:***

***Council direct Administration to develop a plan to resolve concerns with respect to this site and work to advance the objectives of the Red Deer Native Friendship Centre and the urban aboriginal community with respect to affordable housing and a cultural centre with a plan to be brought back for Council’s consideration within 4 weeks’ time.”***

The plan developed by Administration was to form a Site Selection Joint Task Force composed of members of the RDNFS and The City of Red Deer. The task force was immediately formed including four members of the RDNFS, two members of City Council and two members from City Administration. The group has met weekly since November.

The team established the goal of finding an alternative site within the city. The task began by clearly defining the vision and objectives of the project. Based on this an evaluation guide was developed and selection criteria were established.

Once the team had a common understanding of the projects’ needs and objectives, over 20 sites were identified and evaluated. These sites varied from greenfield sites to urban downtown locations in both public and private ownership.

The team ultimately selected a 1.4 ha (3.5 acre) parcel adjacent to the Lions Campground together with a leased area for ceremonial events and activities.

## PROJECT VISION



The vision of the Assoahum centre project includes the joint development of housing , a cultural centre and outdoor ceremonial space. The project would be phased as funding is only available for a portion of the housing development.

The cultural centre is proposed to showcase aboriginal culture in Red Deer and offer programming space for the community. Funding for this portion of the project has not yet been secured and with a confirmed site the funding will be easier to secure.

The housing component is planned to initially include approximately sixteen units with a maximum of forty units on site. The development will include a meeting space and an office for the Site Manager. The Site Manager would be there to support the residents. The housing needs to be accessible for those with mobility challenges including the elderly.

The outdoor space would be for ceremonial and outdoor programming including community gatherings, a community garden and a fire pit. The link to water is an important element in this vision.

The committee believes that this development will benefit the community and the park system as a whole. The cultural centre has the potential to be a major enhancement of the interpretive program. Just as Kerry Wood Nature Centre showcases our local natural history, the new centre will celebrate and interpret local aboriginal culture. In the medium / long term it can create tourism opportunities and economic development in the area.

## **Analysis:**

---

### **PROPOSED SITE**

The proposed site comprises of a 1.4 ha area which would be transferred to the RDNFS for the development of the housing and culture centre. The adjacent public utility lot and a portion of the Lions Campground tenting area would be leased to accommodate the ceremonial grounds. In the interim prior to the development of the cultural centre the portion of the camping area would be leased back to The City and continue to be used for tenting. This portion of the campground has traditionally had less use than the RV sites which comprise the majority of the campground.

There is a total of nineteen tenting location within the leased portion of the Assoahum centre site. Based on past usage they are used only 50% of the time. There are similar amount of tenting sites on the other side of Lions Campground that will not be affected. Tenting within the leased area will be retained until such time as the culture centre portion of this project is developed. During this time The City will be investigating the need for tenting and camping within Red Deer and preparing a plan to address future needs.

The site is a remnant portion which was only joined with the balance of the park system when Riverside Drive was realigned. It remains separated by an easement and a power line along the previous road alignment.



The advantages of this site include the following:

- The site is well connected with roads and trails and a regular transit stop adjacent to the site.
- The site provides an outstanding environmental setting for the development. The cultural centre can become an attraction and an additional feature within the Waskasoo Park System.
- The development is consistent with the recommendations in the Waskasoo Park Master Plan. The parcel was not identified as environmentally significant and was shown as “park-development area” not “park-conservation area”. Park “development” is defined to include intensive recreation development as well as major park facilities and structures, (Waskasoo Park Master Plan, page 55). It is acknowledged that there are a number of major trees on site as well as scrub poplar surrounding formerly disturbed areas. It is the intent of the RDNFS to preserve important natural features within its development plan.
- The ceremonial activities on site will be at a significant distance from other residential development to ensure that there is no perceived or actual conflict.

## **SITE DEVELOPMENT**

There are various steps which must be followed in approval of this site for the RDNFS project.

## **REZONING**

It is proposed that the site be rezoned from PI – Parks and Recreation to PSR – Public Service Residential. This special zone is proposed to accommodate the unique combination of uses on the site. A draft Bylaw is attached for Council’s consideration.

## **SALE & LEASE AGREEMENTS**

It is proposed that the 3.5 acre site be sold to the RDNFS for a nominal sum and that a long term lease be developed for the balance of the area. This agreement will be drafted by The City Solicitor.

## **SERVICING**

A detailed site servicing review of the site has been undertaken by Stantec which demonstrates that the site can be serviced at a reasonable cost. The primary development is above the floodplain and analysis has confirmed it is above the 2005 flood elevation. The leased area falls within the floodplain and flood fringe in extreme conditions and will remain as an undeveloped outdoor programming area. Access to the site can be obtained from Riverside Drive. It is proposed that offsite costs could be charged to the portion of the site used for residential development (2 acres). Based on 2012 rates, this would equate to approximately \$100,000/acre.



## **APPROVAL PROCESS**

The development of this site requires a two-step approval process.

### **Step 1**

The rezoning will be considered by City Council through its normal process including notification of property owners within 100 metres of the site and an advertised public hearing.

### **Step 2**

If the zoning is approved, the RDNFS develops its plan for the site adhering to the restrictions within the zoning. This particular site falls within the setback of an historic abandoned landfill site. This is consistent with the majority of sites within the Riverside Light Industrial Area and Riverside Meadows. For residential development the Development Authority could not approve the development and the approval process must be considered by the Subdivision and Development Appeal Board (SDAB). This is consistent with a number of approvals since the abandoned landfill sites across the city have been identified.

If the zoning is adopted, the SDAB will consider the environmental aspects related to the landfill. In this case a detailed site analysis of the site has been undertaken which has shown no presence of methane gas and no concerns for residential development. This information would be provided to the SDAB in support of development approval.

## **Recommendation:**

---

It is recommended:

- That City Council consider the rezoning of a 3.5 acre site from P1 – Parks and Recreation District, to PSR – Public Service Residential District.
- That City Council provide the proposed site and lease area to the Red Deer Native Friendship Society for a nominal sum, subject to the approval of the sale and lease agreement by the City Solicitor and City Manager.



Task Force Members:

---

Paul Harris

---

Bettylyn Baker

---

Tara Veer

---

Rodney Soonias

---

Craig Curtis

---

Jennifer Vanderschaeghe

---

Lisa Perkins

---

Tanya Schur





May 24, 2013

## Red Deer Native Friendship Society Culture Centre and Housing Project

Background: The Red Deer Native Friendship Society (RDNFS) is looking to build a combination housing/cultural unit in the city of Red Deer. Negotiations between the RDNFS, The City of Red Deer, and The Province of Alberta have been taking place since 2008.

In 2012, The Province of Alberta sold a four acre parcel of land to The City of Red Deer for \$1 on the condition that the land is used for housing. For this type of development to go in to the area, a change in zoning had to occur and only could occur when an application for a request to change came forward. The RDNFS applied to have the zoning changed so they could build a combination housing/cultural centre.

The public engagement process was conducted using normal city processes for a request for rezoning.

The request for zoning change on October 15, 2012 was not approved by City Council.

On October 15, 2012, Red Deer City Council directed administration to work with the RDNFS and the urban aboriginal community with respect to identifying a location for the Culture Centre and Housing Project.

### 1. What is the vision for the culture centre and housing project?

The RDNFS culture centre and housing project envisions a co-located housing and culture site including outdoor space for programs and ceremonial uses. This site will be used to celebrate aboriginal culture in Red Deer as well as offer outdoor programming such as a community garden. It is important that the location be accessible to community amenities and accessible for those with mobility challenges including the elders. It is a housing and culture centre for people moving into our community or for people who already live here but want to connect with the aboriginal cultural.

### 2. Does this facility have a name?

The facility has recently been named the Asooahum Centre. Asooahum is an aboriginal word that defined that act of crossing over. This act of crossing over is significant because the culture centre and housing will be used for people to cross over into aboriginal culture and create an accessible place to experience aboriginal culture.

### 3. How will the Asooahum Centre benefit the community?

The Asooahum Centre has a long term benefit for the entire community whether you're an aboriginal person moving into our community or you've been here for many years and want to connect with our elders and existing aboriginal community in Red Deer. The cultural portion of the centre is an enhancement to the Waskasoo Park System. Just as Kerry Wood Nature Centre showcases and interprets our local nature, the Asooahum Centre will celebrate and interpret



local aboriginal culture. This attraction is a visible community asset and will create tourism opportunities and offer economic development.

The City has the best interests of the entire community in mind in moving forward with any project. We believe this project has widespread economic, social and cultural benefit. The Asooahum Centre is truly an investment in the community as an enhancement to our Wasaksoo park system and a visible cultural asset.

**4. Who is responsible for this project?**

The City of Red Deer and the RDNFS Centre have created a joint steering committee with the goal of finding a suitable site for the Asooahum Centre. This joint steering committee includes two city councilors, two senior members of City administration and four members of the RDNFS. The committee has met weekly since November 2012 to explore suitable sites. The RDNFS is entirely responsible for development of the Asooahum Centre in accordance with standard City processes.

**5. What is the current status of the Asooahum Centre?**

Since October 15, 2012, the steering committee has worked with City staff to identify appropriate site for this project. Over 20 sites were explored as possible options for the Asooahum Centre. These were reviewed and a City owned site on Riverside Drive was chosen as the most suitable location that aligns the vision of the Asooahum Centre and the long term vision for City planning. This site was selected as the Asooahum Centre is an asset to the existing park node, it is an appropriate size and it recognized the need to be connected to nature. This site needs to be rezoned and will be subject to an application for rezoning in accordance with the process outlined in the Municipal Government Act (MGA) for rezoning.

**6. What is the proposed new zoning?**

The joint steering committee put forward an application to rezone the parcel located at 4615 Riverside Drive from PI – Parks and Recreation to Public Service Residential (PSR) for the development of residential use and a cultural centre with, performance, display, meeting and related office spaces.

The section of land is located at 4615 Riverside Drive. This 1.404 ha (3.47 acre) piece of land is adjacent to, on the northeast side, Lion's Campground.

**7. Was this the only piece of land considered?**

The committee explored over 20 potential sites ranging from greenfield, developed, downtown, suburban, public, and private, before selecting the site located at 4615 Riverside Drive. The committee believes this site presents the best solution for reaching the vision of the Asooahum Centre.

**8. Is Lions Campground and the surrounding trails still accessible?**

Lions campground, the surrounding park system and trails will still be fully accessible. The Asooahum Centre would be considered an asset to the City's park system and enhance the Riverside area. The parcel of land next to the trail will remain as part of the park system.



**9. How will area businesses be affected?**

Businesses in the area will be consulted with during the process to ensure that they have an understanding of the project and the ability to provide any feedback. We are aware that certain businesses in this area have been considering or applied for different uses, reflecting the natural evolution in this area and The City has approved a study to review the zoning in the area to potentially accommodate greater diversity of use.

**10. How can I provide feedback?**

We have done our best to provide the community with up to date information on this project as it moves forward. Public consultation is a priority for us, and this project is no exception.

As required by land use bylaw (LUB) requirements, The City is consulting all land owners located within a one-hundred metre radius of the area being proposed for rezoning. Local stakeholders will be contacted for provide feedback and a public hearing will be held for the public to provide any comments on the rezoning. The Red Deer Native Friendship Society will also seek input from the general public during a design charette once zoning has been approved.

**11. What happens after public consultation?**

There are many steps in moving forward with any development in our community. In this case, the rezoning is the first step to enable the development of the Asooahum Centre with operational agreements and development permits also required. If approved, this project is expected to move forward in a phased approach with the first phase including the housing portion of the project. This phase is expected to be complete this year.

The land chosen requires an amendment to Land Use Bylaw and therefore requires three readings by Council. It is anticipated that the report to City Council asking for First Reading of the amending bylaw will be presented May 27, 2013. If First Reading is given, the proposed amending bylaw must be advertised and a public hearing must be held by council prior to Council's consideration of Second and Third Reading (adoption). If the bylaw is adopted, the RDNFS will need to go through the permitting process to begin construction. The dates for construction and completion have not been finalized.

**12. What will the building look like?**

Our bylaws will ensure that the facility looks and feels complementary to the surrounding environment. Throughout the process, the construction of the building will go through the appropriate permit process. However, the public will also have opportunities to give their feedback on the development and what it looks like at a design charette. The architect for the RDNFS will do an evaluation of the site and ensure that natural features are preserved within the development concept.

**13. Will camping at Lions Campground be impacted?**

We do not expect camping to be affected by the rezoning and development of the proposed Asooahum Centre. The first phase of the proposed development is on the northeast side of the site, and therefore would not impact these sites at this time. Upon future development, in subsequent phases, The City is committed to looking at future camping needs for our growing community, and will expand and ensure adequate camping for residents and visitors is available..



**14. What happens now to the land in Clearview Ridge?**

Our goal was to find the right site for the Asooahum Centre. Now that a site is selected, we can start to negotiate with the province about the future of the land in Clearview Ridge, which is currently owned by The City.

**15. How can I find out more?**

Information about the project can be found on The City's website at [www.reddeer.ca](http://www.reddeer.ca). For more information or to provide comments, please contact Lisa Perkins at 403-342-8154.

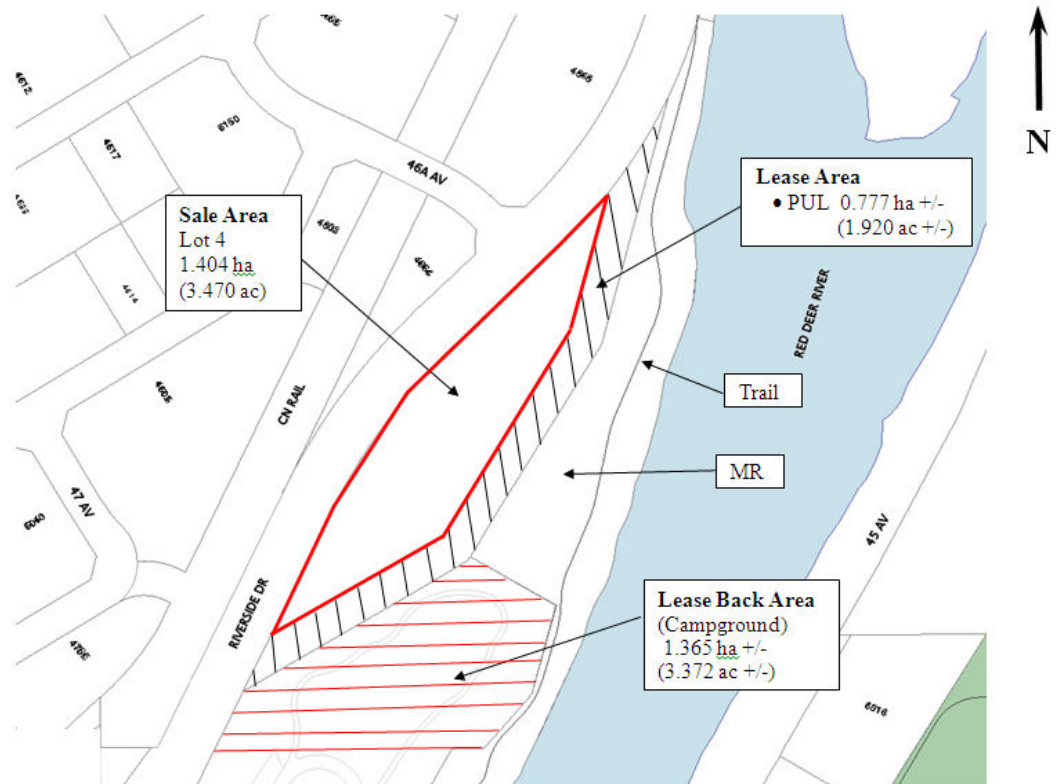
- end -

For more information, please contact:

The City of Red Deer  
Communications & Strategic Planning  
403-342-8147



## Approximate Area Calculations – March 18, 2013





May 22, 2013

Redesignation to PSR - Public Service Residential District  
4615 Riverside Drive (Lot 4, Block 8, Plan 892 2959)  
Bylaw Amendment No. 3357/M-2013

Planning Department

**Report Summary & Recommendation:**

---

Bylaw Amendment 3357/M-2013 proposes to redesignate Lot 4, Block 8, Plan 892 2959, which is a 1.40 hectare (3.46 acre) City owned parcel from P1 - Parks and Recreation District, to a new land use district: PSR - Public Service Residential. The proposed redesignation would provide for the development of residential and a cultural centre in a manner that is compatible with adjacent uses and natural areas.

One on one consultation with landowners within a 100m radius is currently being undertaken. A summary report will be brought forward to Council prior to the public hearing.

The Planning department recommends the proposed redesignation. The proposed PSR district provides an opportunity for the creation of a comprehensive cultural centre and housing development that will not only serve the needs of the Red Deer Native Friendship Society (RDNFS), but will benefit the community as a whole as the cultural centre will be an amenity within the City's Waskasoo Park system that is available to the broader community. This central location provides reasonable access to transit; parks and trails; employment; and shopping at Parkland Mall and Gaetz Avenue. The Environmental Site Assessment report indicates that there is no major hindrance to potential development of this site.

Planning department recommends Council give first reading of proposed Land Use Bylaw Amendment No. 3357/M-2013.

**City Manager Comments:**

---

I support the recommendation that Council consider first reading of Land Use Bylaw Amendment 3357/M-2013. A Public Hearing would then be held at 6:00 p.m. on Monday, June 10, 2013 during Council's regular meeting.

Craig Curtis  
City Manager

**Proposed Resolution:**

---

The Council consider giving first reading to Land Use Bylaw Amendment 3357/M-2013.

**Background:**

On October 15, 2012 Council passed a resolution directing administration to, among other things, “*work to advance the objectives of the Red Deer Native Friendship Centre and the urban aboriginal community with respect to affordable housing and a cultural centre...*” In response a committee made up of two councilors, senior administration, and representatives from the Red Deer Native Friendship Society was formed and began meeting regularly to find a suitable site that would address the direction given by Council.

The committee reviewed a number of potential sites and ultimately selected this site as the preferred location for the development of housing and a cultural centre. The committee has requested that the site be redesignated from PI – Parks and Recreation district to a new land use district that will enable the development of a cultural centre along with multiple family and/or multi-attached residential uses.

The cultural centre is a facility that provides for a variety of cultural and artistic programs and social activities. Offices and the day care on this site will be ancillary to the cultural centre and housing development.

There is no area structure plan (ASP) or area redevelopment plan (ARP) in place to guide development in this area. The Municipal Development Plan (MDP) shows generalized land uses and boundaries. It shows this area as “Open Space – Major”.

The Land Use Bylaw currently designates this site as PI – Parks and Recreation District. The PI district accommodates a variety of parks uses as well as community centres and facilities.

The site is part of the Waskasoo Park Master Plan, which shows it as ‘park development area’ (map 22). The site is not shown as ‘park conservation area’ which would be zoned A2-Environmental Preservation in the Land Use Bylaw. The Waskasoo Park Master Plan proposes that more intensive recreation development be developed within areas shown as park development areas like the subject parcel. The subject parcel is not part of the development plan for Lions Campground.

The subject site is located within the 300 metre setback from what is currently identified as a former historic landfill site to the northwest, near the intersection of 62 Street and 46A Avenue. Historic landfills can be found in several developed locations in the city such as Riverside Meadows, Village Mall and Riverside Light Industrial Area. These historic landfills are not the same as the complex waste management facilities of today. The development process is modified for sites within the 300 metre landfill setback.



The landfill setback requires the Development Authority to initially deny the development permit, which can then be appealed to the Subdivision and Development Appeal Board (SDAB). The SDAB has the authority to approve the development considering the land use district requirements and results of the environmental analysis. This process has been followed on a number of recent projects in Riverside Meadows and the Village Mall.

Landowners within 100 metres of the development have been individually notified of the proposed rezoning. They will also receive official notice of the public hearing if Council proceeds with first reading.

### **Discussion:**

---

The proposal by RDNFS is unique in that it includes a mix of uses that are not currently provided for in the Land Use Bylaw. A new district has been created to provide for this particular combination of uses. The stated purpose of the proposed PSR - Public Service Residential Direct is, "... to provide for the development of a cultural centre and residential uses on Lot 4, Block 8, Plan 892 2959 in a manner that is compatible with adjacent uses and natural areas."

The new district was circulated to Administration for comment. It was identified that access to the Public Utility Lot (PUL) will need to be retained at the development permit stage.

A separate report with the results of the one on one consultation will be prepared for Council prior to the public hearing.

### **Analysis:**

---

The combination of residences and a cultural centre on one site is unique to Red Deer. The RDNFS considers residential integral to the overall vision of what the cultural centre is and how it will function. The cultural centre will support the residents' in their adjustment to urban life in Red Deer. This central location provides access to transit; parks and trails; employment; and shopping at Parkland Mall and Gaetz Avenue.

From a planning and land use perspective, the Planning department is supportive of the redesignation. The cultural centre will be available for use by the broader community; therefore, the community will gain an amenity. This amenity is also being developed on an identified park development area in the Waskasoo Park Master Plan where major park facilities are to be located. This is consistent with the current land use district, P1 – Parks and Recreation, which includes such discretionary uses as, "community centre" and "day care."

Testing of the impact of the landfill on this site was directed by the Environmental Services department. The tests have been analyzed and the Environment Site Assessment indicates that there is no major hindrance to potential development of this site.



## Bylaw No. 3357/ M-2013

Being a Bylaw to amend Bylaw No. 3357/2006, the Land Use Bylaw of The City of Red Deer as described herein.

COUNCIL OF THE CITY OF RED DEER, ALBERTA, ENACTS AS FOLLOWS:

Bylaw No. 3357/2006 is hereby amended as follows:

- 1 Part 7: Overlay and Other Districts and Regulations is amended by adding the following new district:

### “7.12 Public Service Residential (See Map N17)

#### General Purpose

PSR

The purpose of this District is to provide for the development of a cultural centre and/or residential uses on Lot 4, Block 8, Plan 892 2959 in a manner that is compatible with adjacent uses and natural areas. In this district “cultural centre” means a facility that provides for a variety of cultural and artistic programs and activities and social gatherings.

#### (1) PSR Permitted and Discretionary Use Table

(a) Permitted Uses	
<ul style="list-style-type: none"> <li>(i) No more than forty (40) dwellings units in total comprised of either or both:               <ul style="list-style-type: none"> <li>1) Multi-attached residential building.</li> <li>2) Multiple family residential building.</li> </ul> </li> <li>(ii) Cultural Centre</li> <li>(iii) Day care facility, ancillary to an on-site use (i) and/or (ii) above.</li> <li>(iv) Offices ancillary to an on-site use (i) and/or (ii) above.</li> <li>(v) Temporary building.</li> <li>(vi) Accessory buildings.</li> <li>(vii) Home occupations that in the opinion of the Development Officer will not generate traffic subject to section 4.7(8).</li> <li>(viii) Signs (subject to section 3.3 and 3.4):               <ul style="list-style-type: none"> <li>1) fascia signs</li> <li>2) free standing sign</li> <li>3) portable signs, and</li> <li>4) projecting signs</li> </ul> </li> </ul>	
(b) Discretionary Uses	
<ul style="list-style-type: none"> <li>(i) Accessory uses.</li> <li>(ii) Home occupations that will generate additional traffic subject to section 4.7(8)</li> <li>(iii) Offices for community oriented groups</li> <li>(iv) Parks, picnic areas or open space facilities for use by the general public, playgrounds or tot lots.</li> <li>(v) Utilities</li> </ul>	

**(2) PSR Development Regulations**

<b>Regulations</b>	<b>Requirements</b>
Lot Area Minimum	1.4 hectares
Building Footprint Maximum for Cultural Centre	930 m <sup>2</sup>
Building Height Maximum for Cultural Centre	Maximum 4 storeys
Front Yard Minimum	4.0 m
Side Yard Minimum	1.5 m or as required by the Alberta Building Code, whichever is greater
Rear Yard Minimum	1.5 m or as required by the Alberta Building Code, whichever is greater
Landscaped Area	Subject to section 3.6
Parking Spaces: <ul style="list-style-type: none"> <li>• Residential:</li> <li>• Other uses:</li> </ul>	1 stall per dwelling unit and subject to section 3.2 Subject to sections 3.1 and 3.2
Loading	One loading space subject to section 3.7(2)

**(3) Site Development**

- (a) Within the PSR - Public Service Residential District the site plan, the relationship between buildings, structures and open space, the architectural treatment of buildings, the provision and architecture of landscaped open space, and the parking layout, shall be subject to approval by the Development Authority.
- (b) Subject to subsection (2) above the development of Multi-attached and Multiple family buildings will be regulated by the R3 Residential development regulations.
- 2 The land shown in cross-hatching in the sketch attached as Land Use District Map 12/2013 to this Bylaw is redesignated from P1 - Parks and Recreation District to PSR - Public Service Residential District.
- 3 That "Land Use District Map N17" contained within "Schedule A" of the Land Use Bylaw is hereby amended in accordance with Land Use District Map 12/2013 attached hereto and forming part of this bylaw.

READ A FIRST TIME IN OPEN COUNCIL this                      day of                      2013.  
 READ A SECOND TIME IN OPEN COUNCIL this                      day of                      2013.  
 READ A THIRD TIME IN OPEN COUNCIL this                      day of                      2013.  
 AND SIGNED BY THE MAYOR AND CITY CLERK this                      day of                      2013.

---

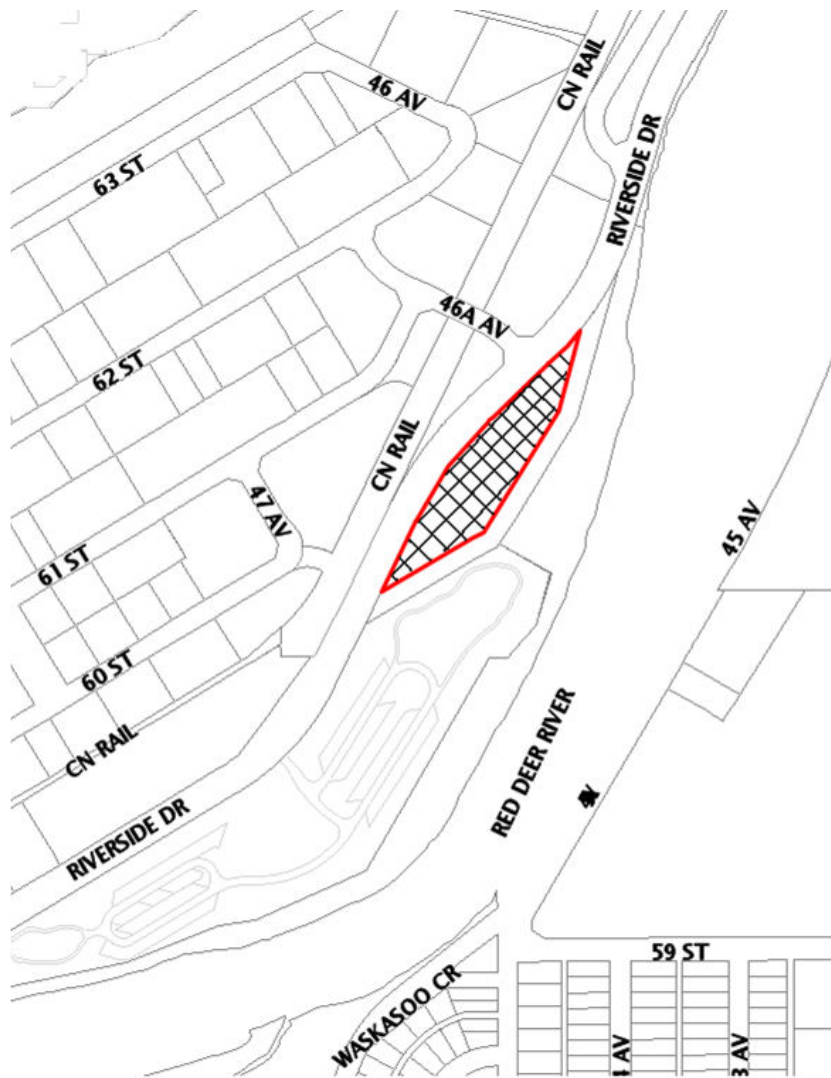
 MAYOR

---

 CITY CLERK



*Proposed Amendment to Land Use Bylaw 3357/2006*



Change District from:



P1 to PSR

Affected District:

P1 – Parks and Recreation District  
PSR – Public Service Residential

**Proposed Amendment**  
Map: 12 / 2013  
Bylaw: 3357 / M - 2013  
Date: May 23, 2013



May 14, 2013

## River Bend Golf & Recreation Society – Sustainability Final Report – Loan Bylaw Amendment 3391/A-2013

### Consideration of Second and Third Reading

Legislative Services

#### **Report Summary & Recommendation:**

---

##### **Summary:**

The attached report is being brought forward from the Monday, April 15, 2013 Council Meeting.

##### **Recommendation:**

That Council consider giving second and third readings to Loan Bylaw Amendment 3391/A-2013.

#### **City Manager Comments:**

---

Council's consideration of second and third reading of Loan Bylaw Amendment 3391/A-2013 is requested.

Craig Curtis  
City Manager

### Report Details

#### **Background:**

---

At the Monday, April 15, 2013 Regular Council Meeting, Council gave first reading to Loan Bylaw Amendment 3391/A-2013, a bylaw to modify the repayment schedule for River Bend Golf and Recreation Society.

In accordance with Sections 231, 265 and 606 of the Municipal Government Act, this bylaw is required to be advertised for two consecutive weeks and allow for a 15 day petition period. Advertisements were placed in the Red Deer Advocate on April 26, 2013 and May 3, 2013 with no comments being received.



March 20, 2013

## River Bend Golf and Recreation Society

### Sustainability Final Report

RECREATION, PARKS & CULTURE

#### **Report Summary & Recommendation:**

---

Over the last number of years golf courses across Canada have been under significant financial stresses and pressures. Factors contributing to this include:

1. significant market downturn – less discretionary dollars,
2. unpredictable weather resulting in lost tee times,
3. rising operational costs.

These same pressures have impacted the River Bend Golf and Recreation Area operation and resulted in the River Bend Golf and Recreation Society being challenged to meet various financial obligations including the building loan and license fee programs.

In March of 2011 Council deferred the River Bend Golf and Recreation Society (RBGRS) loan payment, including interest with a corresponding amendment to the loan agreement. At that time administration was requested to report back to Council regarding the long term sustainability of the RBGRS prior to 2012.

In December 2011 this item was tabled pending the completion of an operational audit. An information report and update related to the operational audit and recommendations were considered by Council in June 2012 and tabled providing administration additional time to work with the RBGRS in developing a long term sustainability plan.

In 2012 City staff and the RBGRS Board worked with KPMG Consulting in the completion of an operational audit. This audit has provided support and direction for the development of the proposed longer term sustainability plan.

Further, in February 2013, the following tabling resolution was presented and passed:

Resolved that Council of The City of Red Deer, having considered the report from the Recreation, Parks and Culture department, dated January 21, 2013 hereby agrees to table consideration of the River Bend Golf & Recreation Society – Operational Audit Final Report for up to three months for further discussions with the River Bend Golf and Recreation Society and to prepare the final report.

As a result of this work and in support of the proposed sustainability plan administration recommends the following:



1. The City of Red Deer enters into a new three year Agreement (2013-2015) with the River Bend Golf and Recreation Society for the operation of the River Bend Golf and Recreation Area.
2. The City continue the Fee for Service Program for the recreation facilities as follows:
  - a. 2014 - \$144,200.00
  - b. 2015 - \$148,526.00

This cost is for the recreation trails and the operation of the popular Discovery Canyon.

3. The City agrees to defer the debt payments on the building loan for the period of the contract. During the planning of Waskasoo Park and the early years of operation, city administration opposed expanding the clubhouse building as it was felt that the operating costs could not be sustained. However, in 2004 the expansion was approved by Council with a loan from The City which was intended to be supported by increased operating revenue. With the downturn in the economy revenue projections could not be achieved.
4. The new agreement no longer includes an annual License Fee payment. The RBGRS Board will budget for minor capital as part of operational budget.
5. Council approves the write off of the 2011 & 2012 license fees totaling approximately \$337,800.
6. Council approves the removal of the 2013 license fee component from the 2013 operating budget (Business Unit 706).
7. Property Taxes continue to be paid as we agreed not to undercut the other private courses.

### **City Manager Comments:**

---

I support the recommendation of administration to consider first reading of this bylaw. Following first reading, this bylaw will be advertised for two weeks and come back to Council for consideration of second and third reading in six weeks time. This timeframe will allow for the required 15 days for public comment following the required advertising period.

Greg Scott  
Acting City Manager

### **Proposed Resolutions**

---

Resolved that Council of The City of Red Deer having considered the report from the Recreation, Parks & Culture department dated March 20, 2013 re: River Bend Golf and Recreation Society Sustainability Final Report hereby agrees to lift from the table consideration of this report.



Resolved that Council of The City of Red Deer, having considered the report from the Recreation, Parks & Culture department dated March 20, 2013 re: River Bend Golf and Recreation Society, Sustainability Final Report hereby agrees that:

1. The City of Red Deer enters into a new three year Agreement (2013-2015) with the River Bend Golf and Recreation Society for the operation of the River Bend Golf and Recreation Area.
2. The City continue the Fee for Service Program for the recreation facilities as follows:
  - a. 2014 - \$144,200.00
  - b. 2015 - \$148,526.00

This cost is for the recreation trails and the operation of the popular Discovery Canyon.

3. The City agrees to defer the debt payments on the building loan for the period of the contract. During the planning of Waskasoo Park and the early years of operation, city administration opposed expanding the clubhouse building as it was felt that the operating costs could not be sustained. However, in 2004 the expansion was approved by Council with a loan from The City which was intended to be supported by increased operating revenue. With the downturn in the economy revenue projections could not be achieved.
4. The new agreement no longer includes an annual License Fee payment. The RBGRS Board will budget for minor capital as part of operational budget.
5. Council approves the write off of the 2011 & 2012 license fees totaling approximately \$337,800.
6. Council approves the removal of the 2013 license fee component from the 2013 operating budget (Business Unit 706).
7. Property Taxes continue to be paid as we agreed not to undercut the other private courses.

That Council consider giving first reading to Loan Receivable Bylaw 3500/2013.

## Report Details

### **Background:**

The River Bend Golf and Recreation Area was developed in 1987 as part of the Waskasoo Park system in the City of Red Deer. The facility includes a golf course, cross country ski trails, a water park, restaurant and catering services, a pro shop and other non-golf amenities. Approximately 58% of the total 420 acres is related to the golf course while 42% is related to non-golf amenities. The land and amenities are owned by The City, while the operation is managed through an agreement with the not-for-profit River Bend Golf and Recreation Society. The original vision for the overall operation was to be self-sustaining and in addition pay an annual licensing fee to The City.



The Society's financial challenges date back to as early as 2001, but by 2007 the Society was challenged to meet their financial obligations to The City. A number of factors contributed to this financial instability including: reduced rounds of golf due to poor weather conditions for successive years, deflated economic conditions, aging infrastructure, increased property taxes since 2001, increase in overall costs, etc.

In 2004 the Society received a capital loan from The City to expand and renovate the Golf Clubhouse. Beginning in 2008, the Society was unable to make its annual loan payment to The City.

In March 2011 Council approved a motion to defer RBGRS' outstanding loan payments.

***March 21, 2011: "Resolved that Council of The City of Red Deer having considered the report from the Recreation, Parks & Culture Manager, Financial Services Manager and Recreation Superintendent, dated March 8, 2011, re: River Bend Golf & Recreation Society, hereby agrees that in order to assist the River Bend Golf and Recreation Society to return the City owned golf course operation to self sustainability, and to ensure that the non-golf recreation amenities continue to be offered to the community:***

- 1. Deferral of the loan payments for 2008-2010, including interest, pending both parties signing an amendment to the loan agreement for payments to commence 2012;***
- 2. Deferral of the loan payment for 2011, including interest, pending both parties signing an amendment to the loan agreement for payments to recommence in 2012 with this item to be brought back for Council's consideration prior to 2012;***

***Subject to annual review by Council."***

At this same meeting, Council approved fee for service funding to offset the operating costs of the non-golf recreational amenities.

***"Resolved that Council of The City of Red Deer having considered the report from the Recreation, Parks & Culture Manager, Financial Services Manager and Recreation Superintendent, dated March 8, 2011, Re: River Bend Golf & Recreation Society, hereby agrees that in order to assist the River Bend Golf and Recreation Society to return the City owned golf course operation to self sustainability; and to ensure that the non-golf recreation amenities continue to be offered to the community, The City will pay for the upkeep of the non-golf amenities portion of the operation in the amount of \$140,000, through a fee for service contract, for each of the years 2011, 2012 and 2013, funded by the Tax Stabilization Reserve, as one-time funding each respective year, subject to annual review by Council."***

In 2011, The City engaged KPMG to conduct an operational audit of RBGRS, analyzing the current operational model in respect to comparable public golf and recreation facilities and to examine current financial systems, processes and identify challenges. One of the key considerations in this audit was the need to clearly separate the golf and non-golf functions.





Throughout 2012, City Administration worked closely with RBGRS to address the recommendations from the report, implement new and improved processes and systems, and develop a new agreement that would support the long term sustainability of RBGRS.

### **Discussion:**

---

The intent in moving forward is to bring the golf course back to a self sustainable operation. The operation of the non-golf amenities continues to require City support. In addition, attention and stewardship of the aging physical assets requires discussion.

RBGRS will continue to address and implement the recommendations in the KPMG audit as well as progress toward completion of the actions outlined in the Business Plan adopted by their Board in late 2012, all of which contribute to their long term sustainability.

Further, in 2012, a lifecycle assessment for the River Bend Golf and Recreation Area was conducted with the report providing the framework for inclusion into the 10 year capital planning for both RBGRS and The City.

Administration is recommending a new agreement with the RBGRS. Two separate agreements have been drafted separating the operation of the River Bend Golf and Recreation Area from the Society's financial obligations to The City. The agreements incorporated many of the recommendations in the KPMG audit as well as the ongoing discussions with RBGRS.

A key requirement of the new agreements is that RBGRS clearly separate the golf and non-golf activities and provide separate financial accounting for each. The agreements also outline roles and responsibilities as follows:

#### Non-Golf Amenities/Activities:

- RBGRS is responsible for the operation of the non-golf amenities
- The City provides an annual Fee for Service for the operation of the non-golf related amenities (2014 - \$144,200; 2015 - \$148,526). Note: 2013 Fee for Service of \$140,000 was approved in the 2013 operating budget.
- The City is responsible for the capital costs related to these amenities

#### Golf Related Amenities/Activities:

- RBGRS is responsible for the operation of these amenities including minor infrastructure
- The City is responsible for the capital costs related to city owned assets (i.e. Clubhouse)
- RBGRS retain their own reserve and is responsible for the capital costs related to the golf course amenities



RBGRS is required to submit monthly and annual financial reconciliations of both the golf and non-golf operational revenues and expenditures as well as an annual reconciliation of the RBGRS reserve account.

The RBGRS reviewed the draft agreements and they were supported at their March 19, 2013 Board meeting.

**“MINUTES for the regular meeting of THE RIVER BEND GOLF AND RECREATION SOCIETY (RED DEER) BOARD held on Tuesday, March 19, 2013**

Motion 1:32 Moved by: Dennis Moffat Seconded by: Harry Numrich

To accept the Exclusive Licensing Agreement draft as presented.

Carried 7 in favor 0 opposed

Motion 1:33 Moved by: Don Young Seconded by: Harry Numrich

To accept the Funding Agreement draft as presented.

Carried 7 in favor 0 opposed”

When analyzing RBGRS' financial statements over the past eight years it is clear they are still struggling to meet their financial obligations to The City. Administration is recommending the following financial support during the three year agreement:

1. Further deferral of the loan payment for 2012-2015, including interest, pending both parties signing an amendment to the loan agreement for payments to recommence 2016.
2. RBGRS no longer be required to submit an annual license fee to the City. Rather, RBGRS be required to set up a reserve that would be used for the capital upgrades related to the golf assets.
3. Administration and RBGRS will work together to develop 10 year Capital Plans for both the Golf and Non-Golf capital assets. Administration will bring this forward for consideration in the 2014 capital budget planning.

### **Analysis:**

Administration still maintains that an Agreement with the RBGRS as the management body for the River Bend Golf and Recreation Area is the best option. In the past year, many changes have already been implemented by the Society that has improved their operating and financial position.

The financial implications of Administration's recommendations are as follows:

1. Deferral of the loan payments for the three years equates to \$420,000.
2. RBGRS has outstanding license fees for 2011(\$162,720) and 2012 (\$175,080 unaudited amount). It is recommended that these license fees (total of \$337,800) be written off in 2013 as uncollectible.



3. In the new agreement, RBGRS is not required to submit a license fee (2013). These fees are a budgeted revenue item with an offsetting transfer to reserves. Both the license fee revenue and the transfer to reserves should be removed from the 2013 operating budget. There is no impact to the tax rate.
4. The 2013 Fee for Service of \$140,000 has already been approved through the 2013 Operating Budget. Through the new Agreement, Council would be committing to continuing this Fee for Service Program for another two years for a total of \$144,200 in 2014 and \$148,526 in 2015. A Funding Adjustment Recommendation (FAR) request would be submitted indicating that this amount is a contractual commitment.

The City is committed to work with and support the RGBRS through the terms of the new 3 year agreement and will continue to keep senior management and Council updated as necessary.

Financial Services Comments:

Financial Services has worked closely with Recreation, Parks & Culture during the operational audit and drafting of the new three year agreement with the River Bend Golf and Recreation Society. We support the recommendations being made to Council.

The deferral of the loan payments for 2012 – 15 will require an amendment to be made to the existing borrowing bylaw.



March 26, 2013

## River Bend Golf & Recreation Society – Financial Report Re: Loan Bylaw Amendment 3391/A-2013

FINANCIAL SERVICES

### **Background:**

---

In the March 20, 2013 report from RPC Manager, Shelley Gagnon, it is recommended that City Council approve the deferral of loan payments by River Bend Golf & Recreation Society to the City of Red Deer as follows:

*Council defer the loan payments for 2012 – 2015, including interest, pending both parties signing an amendment to the loan agreement for payments to commence 2016.*

This Council Resolution requires an amendment to the loan bylaw to recognize the deferral of payments and that the next loan payment will recommence in 2016.

### **Discussion:**

---

Section 606 of the MGA requires that the bylaw be advertised for 2 consecutive weeks before second and third readings.

The amended loan agreement will be signed by both parties prior to second and third readings coming back to Council.

### **Analysis:**

---

That Council approves first reading to Loan Bylaw Amendment 3391/A-2013.

## BYLAW NO. 3391/A-2013

Being a bylaw to amend Bylaw No. 3391/2007, which amendment shall authorize The City of Red Deer to change the repayment schedule for a loan previously made to the River Bend Golf & Recreation Society.

Based on negotiations between the River Bend Golf and Recreation Society and the City, it has been mutually agreed to modify the terms of the loan to the Society by deferring payments until 2016.

## COUNCIL OF THE CITY OF RED DEER, ALBERTA, ENACTS AS FOLLOWS:

- 1 Section 1( e ) of the Bylaw is deleted and replaced as follows:
  - e. **Repayment:** \$140,000 to be paid annually on December 1, until loan is repaid, with no payments required from the date of this bylaw until December 1, 2016.
- 2 In all other respects, Bylaw No, 3391/2007 is hereby ratified and confirmed.

READ A FIRST TIME IN OPEN COUNCIL this	15 <sup>th</sup>	day of	April	2013.
READ A SECOND TIME IN OPEN COUNCIL this		day of		2013.
READ A THIRD TIME IN OPEN COUNCIL this		day of		2013.
AND SIGNED BY THE MAYOR AND CLERK this		day of		2013.

---

MAYOR

---

CITY CLERK

**FILE COPY**



**Council Decision – May 27, 2013**

**DATE:** May 28, 2013  
**TO:** Shelley Gagnon, Recreation, Parks & Culture Manager  
**FROM:** Frieda McDougall, Legislative Services Manager  
**SUBJECT:** River Bend Golf & Recreation Society – Sustainability Report –  
Loan Bylaw Amendment 3391/A-2013

---

**Reference Report:**

Legislative Services, dated May 14, 2013 and Recreation, Parks & Culture, dated March 20, 2013.

**Bylaw Readings:**

At the Monday, May 27, 2013 Council Meeting, Council gave second and third readings to Loan Bylaw Amendment 3391/A-2013, a bylaw to modify the repayment schedule for River Bend Golf and Recreation Society. A copy of the bylaw is attached.

**Report back to Council:** No

A handwritten signature in blue ink, appearing to read 'F. McDougall'.

Frieda McDougall  
Legislative Services Manager

/attach.

c: Director of Community Services  
Director of Corporate Services  
Financial Services Manager  
Revenue & Assessment Manager

**BYLAW AUTHORIZING AMENDMENT TO RIVER BEND LOAN  
BYLAW AMENDMENT 3391/A-2013**

**DESCRIPTION:** A bylaw which authorizes The City of Red Deer to change the repayment schedule for the River Bend Golf & Recreation Society.

FIRST READING: April 15, 2013

FIRST PUBLICATION: April 26, 2013

SECOND PUBLICATION: May 3, 2013

SECOND READING: May 27, 2013

THIRD READING: May 27, 2013

LETTERS REQUIRED TO PROPERTY OWNERS: YES ☐ NO ☒

DEPOSIT: YES ☐ \$ \_\_\_\_\_ NO ☒

**COST OF ADVERTISING RESPONSIBILITY OF:** **The City of Red Deer**  
**ACTUAL COST OF ADVERTISING:**

\$ \_\_\_\_\_ X 2

TOTAL: \$ \_\_\_\_\_

MAP PREPARATION: \$ \_\_\_\_\_

TOTAL COST: \$ \_\_\_\_\_

LESS DEPOSIT RECEIVED: \$ \_\_\_\_\_

AMOUNT OWING/ (REFUND): \$ \_\_\_\_\_

INVOICE NO.: \_\_\_\_\_

BATCH NO.: \_\_\_\_\_

(Advertising Revenue to 180.5901)

### **Bylaw Authorizing Amendment to River Bend Loan**

Bylaw Amendment 3391/A-2013 proposes to amend Bylaw 3391/2007 which authorizes The City of Red Deer to change the repayment schedule for the River Bend Golf & Recreation Society. A copy of the proposed bylaw may be inspected by the public at Legislative Services, 2<sup>nd</sup> Floor of City Hall, during regular office hours.

The electors may submit a petition calling for a vote of the electors to determine whether the proposed bylaw should be passed. The petition must meet the formal requirements of Sections 221-226 of the Municipal Government Act and be filed with the Manager, Legislative Services within 15 days after the last date the proposed bylaw is advertised. The last date of advertisement for this bylaw is Friday, **May 3, 2013**. Any petition will be public information. The bylaw will be considered by Red Deer City Council at the Monday, **May 27, 2013** Council Meeting. If you have any questions regarding the petition process or the use of the petition please contact the Manager, Legislative Services at 403-342-8132.

*Advertisements to be placed in the Red Deer Advocate on Friday, April 26, 2013 and Friday, May 3, 2013*





May 13, 2013

## Plebiscite Question

Legislative Services

### Report Summary & Recommendation:

---

At its meeting of April 29, 2013 Council considered a report on Ward Versus At-Large System of Representation. One of the components considered in that report was the wording of the question to be placed on the municipal election ballot. Council requested additional review be undertaken with respect to the wording.

Based on further consultation with legal counsel with respect to the legalities of the wording and our Communications department with respect to plain language, the following question is recommended for the 2013 municipal election ballot:

Do you want the city of Red Deer divided into wards?

\_\_\_\_\_ Yes, I want to be able to vote for the candidates who run in the area I live in (my ward).

\_\_\_\_\_ No, I want to keep voting for candidates for the whole city, not just the area where I live.

### City Manager Comments:

---

I support the wording as presented by Administration.

Craig Curtis  
City Manager

### Proposed Resolution:

---

Resolved that Council of The City of Red Deer, having considered the report from the Legislative Services department dated May 13, 2013 re: Plebiscite Question hereby endorses the form of question to be placed on the 2013 municipal election ballot as follows:

Do you want the city of Red Deer divided into wards?

\_\_\_\_\_ Yes, I want to be able to vote for the candidates who run in the area I live in (my ward).

\_\_\_\_\_ No, I want to keep voting for candidates for the whole city, not just the area where I live.



## Report Details

### Background:

---

The report to Council on the April 29, 2013 Agenda provides the background context to this item and is attached for information.

### Legislation:

---

Section 236 of the Municipal Government Act (MGA) reads as follows:

- (1) A Council may provide for the submission of a question to be voted on by the electors on any matter over which the municipality has jurisdiction.
- (2) A vote of the electors under subsection (1) does not bind Council.

[emphasis added]

A vote of electors on a question must be conducted in accordance with the Local Authorities Election Act (LAEA) which states that Council must, by resolution, determine the wording to be used on the ballot. The LAEA then provides further direction as follows:

Section 62 On receiving the ballots that an elector is entitled to receive from a deputy, the elector shall forthwith proceed into the voting compartment provided and shall mark each of the elector's ballots

- (b) in the case of a ballot for a bylaw or question, by placing an "X" within the division of the paper marked "for" or "against", or within the division of the paper marked "yes" or "no",

whichever way the elector desires to vote.

Section 88(2) In the case of a vote on a bylaw or question, a deputy shall count the number of ballots marked for and against the bylaw, or in the affirmative or negative on the question...

These provisions provide guidance on how a question must be constructed.

### Discussion:

---

There is no perfect plebiscite question. While some wording is clearly preferable, the proposed revised wording attempts to strike a balance between plain-language drafting and simplicity with clarity and certainty.

The proposed question incorporates Council's feedback and attempts to take a more simplified approach to the question, as follows:

1. words 'are you in favour of' have been replaced with 'do you support' to assist with reader comprehension;
2. the reference to 'council passing a bylaw' has been eliminated to shorten the question;



3. the words 'dividing the city of Red Deer into wards' has been retained as this concept is central to the question being posed; and
4. the phrase 'for municipal election purposes' has been deleted to simplify the question.

A brief explanatory statement after 'YES' and 'NO' has been retained as it is advisable to provide some context for the question being posed as there is no guarantee that The City's educational campaign will reach all electors.

Specifically in regards to a 'YES' vote:

1. the phrase 'I want to be able to vote for' has been chosen to indicate that a 'YES' vote is a vote for change in that currently an elector is not able to vote for candidates running in a ward;
2. the term 'candidates' was chosen as an individual elector can only vote for a particular candidate – it is the electorate in each ward that elects councillors; and
3. the phrase 'the area I live in (my ward)' provide a definition for 'ward' that is easy to comprehend.

Specifically in regards to a 'NO' vote:

1. the phrase 'I want to keep voting for' has been chosen to indicate that a 'NO' vote is a vote to maintain the status quo;
2. as noted previously, the term 'candidates' clarifies the roll of an individual elector in voting for a particular candidate while the electorate elects councillors;
3. the phrase 'the whole city' was chosen over the phrase 'the entire city' from a reading comprehension standpoint; and
4. the phrase 'the area where I live' is again intended to provide definition to the term 'ward.'

## **Analysis:**

---

The question on the ballot can only go so far to properly put the issue in context to assist an elector in casting an informed vote. We will rely heavily on our educational campaign in advance of the vote to help ensure that the outcome of the plebiscite accurately represent the true will of the electorate.

We believe that the question as proposed:

- is easier to read and understand;
- will assist the electorate in making an informed vote; and
- will assist The City in understanding the will of the electorate.



Report originally presented at the  
Monday, April 29, 2013 Council  
Meeting

April 15, 2013

## Ward versus At-Large System of Representation

Legislative Services

Communications & Strategic Planning

### Report Summary & Recommendation:

---

At its meeting of March 18, 2013 council directed administration prepare a report, within six weeks, outlining the costs and plans associated with the development of an education, communication and awareness strategy related to adding a question about wards on the ballot in the next municipal election.

On March 18, 2013, City Council also put forward a Notice of Motion to amend the dialogue charter to include discussion around the exploration of systems of representation.

As a result, this report responds to both the reconsideration of the Notice of Motion re: Implementation of a Municipal Ward System and the Notice of Motion re: Amendment to Dialogue Charter to include exploration of systems of representation.

Based on the above information, Legislative Services with Communications & Strategic Planning recommends:

1. Endorse amendments to the Dialogue Charter as a reasonable interpretation of the strategic direction.
2. Adopt the question as presented.
3. Approve the total budget of \$35,000 related to the education and awareness campaign, ballot printing and legal advertising to be funded from the Tax Stabilization Reserve.

### City Manager Comments:

---

I support the recommendations as outlined by administration.

Craig Curtis  
City Manager



## Proposed Resolutions:

Resolved that Council of The City of Red Deer hereby agrees to lift from the table consideration of the Notice of Motion submitted by Councillors' Harris and Mulder re: Amendment to Dialogue Charter to Include Exploration of Systems of Representation tabled at the Monday, April 15, 2013 Council Meeting.

-----

Resolved that council of The City of Red Deer, having considered the report from the Legislative Services and Communications & Strategic Planning departments dated April 15, 2013 re: Ward versus At-Large System of Representation hereby endorses the following additions to the Dialogue Charter as a reasonable interpretation of the Strategic Direction:

- Section 2: Outcomes
  - *Community feels Council is providing meaningful and appropriate representation.*
  - *Gain greater community involvement in Council and administration's decision making and public input processes.*
- Section 3: Key Strategies
  - *Define engagement for The City of Red Deer, including an exploration on how Council can best represent the community.*
- Strategy 2: Define engagement based on chosen framework
  - *Strategy: Hold conversations regarding how Council can best represent the public.*
  - *Strategy: Educate the public on a ward or at-large representation system and the addition of a question related to this on the October 2013 election ballot.*
  - *Organizational support: Legislative & Governance Services (committees and representation)*
  - *Financial resources: \$35,000 (ward/at-large education and plebiscite)*
  - *Outcomes: Increased understanding around Council representation*
  - *Outcomes: Public feels an increased sense of empowerment in City decision making*
  - *Outcomes: Public feels an increased sense of representation by Council.*

-----

Resolved that Council of The City of Red Deer, having considered the report from the Legislative Services and Communications & Strategic Planning departments dated April 15, 2013 re: Ward versus At-Large System of Representation hereby endorses the form of question to be placed on the 2013 municipal election ballot as follows:

Are you in favour of Council passing a bylaw dividing the City of Red Deer into wards for municipal election purposes?

\_\_\_\_ YES (a 'yes' vote means you support changing to an electoral system where the City is divided into electoral divisions (called 'wards') and you must be a resident in the ward in order to vote for a councillor in that ward and councillors are elected for each ward, unless otherwise provided for in the bylaw)



\_\_\_\_\_ NO (a 'no' vote means that you support maintaining the current at-large electoral system where you may vote for councillors for the entire City regardless of where you reside in the City).

-----  
Resolved that Council of The City of Red Deer, having considered the report from the Legislative Services and Communications & Strategic Planning departments dated April 15, 2013 re: Ward versus At-Large System of Representation, hereby approves the following expenditures to be funded from the Tax Stabilization Reserve (TSR):

Communications, education and awareness about wards versus at large systems of representation	\$30,000
Plebiscite is carried out in conjunction with the 2013 Municipal Election	\$5,000

## Report Details

### Background:

---

During the creation of the 2010-2012 Strategic Direction, Council determined the need to enhance engagement and relationships. In response, Administration developed the dialogue charter, which was accepted by the Governance and Policy Committee as reasonable interpretation of their strategic direction on December 19, 2011. The charter is comprised of two main sections – public engagement and advocacy. At this time we have completed an environmental scan, considered a framework for engagement, and are in the beginning stages of holding community conversations.

Over the last number of election cycles questions have arisen with respect to the viability of establishing a ward system within the City. On November 28, 2011 Council considered a report on Council roles and remuneration of which one part responded to the question of wards raised following the 2010 election. At that meeting Council passed the following resolution:

Resolved that Council of The City of Red Deer, having considered the report from the Legislative & Governance Services Manager and the Office of the City Manager dated November 18, 2011 re: Council Roles and Remuneration hereby agrees to the following:

- I. Ward System, Option C
  - c) That Council confirm their previous direction for the completion of a report to consider wards as an option for the 2013 election and the report to come to Council in mid 2012 for decision.



In response to this direction the Election: At Large versus Ward System of Voting report was presented to Council at its meeting of April 30, 2012. Following debate of the options as presented the following resolution was passed:

Resolved that Council of The City of Red Deer, having considered the report from the Legislative & Governance Services department dated April 2, 2012, re: Election: At Large versus Ward System of Voting hereby supports:

Option 3: Affirm at large representation

A subsequent Notice of Motion was introduced on February 4, 2013 requesting a plebiscite on this question was defeated; however, on March 18, 2013 a subsequent reconsideration motion was put forward the result of which directed administration to prepare a report outlining the costs and plans associated with the development of an education, communication and awareness strategy on wards related to adding a question about wards on the ballot in the next municipal election.

## **Legislation:**

---

Section 236 of the Municipal Government Act (MGA) reads as follows:

- (1) A Council may provide for the submission of a question to be voted on by the electors on any matter over which the municipality has jurisdiction.
- (2) A vote of the electors under subsection (1) does not bind Council.

[emphasis added]

A vote of electors on a question must be conducted in accordance with the Local Authorities Election Act (LAEA) which states that Council must, by resolution, determine the wording to be used on the ballot. The LAEA then provides further direction as follows:

Section 62 On receiving the ballots that an elector is entitled to receive from a deputy, the elector shall forthwith proceed into the voting compartment provided and shall mark each of the elector's ballots

- (b) in the case of a ballot for a bylaw or question, by placing an "X" within the division of the paper marked "for" or "against", or within the division of the paper marked "yes" or "no",

whichever way the elector desires to vote.

Section 88(2) In the case of a vote on a bylaw or question, a deputy shall count the number of ballots marked for and against the bylaw, or in the affirmative or negative on the question...

These provisions provide guidance on how a question must be constructed.



## Discussion:

---

### Dialogue charter

While the effectiveness of Council representation was subtly incorporated within the original approved charter, the proposed amendment more clearly identifies the connections between representation and dialogue, and includes the education process on wards versus at-large representation systems and the fall plebiscite. The following changes, in italics, are proposed

- Section 2: Outcomes
  - *Community feels Council is providing meaningful and appropriate representation.*
  - *Gain greater community involvement in Council and administration's decision making and public input processes.*
- Section 3: Key Strategies
  - *Define engagement for The City of Red Deer, including an exploration on how Council can best represent the community.*
- Strategy 2: Define engagement based on chosen framework
  - *Strategy: Hold conversations regarding how Council can best represent the public.*
  - *Strategy: Educate the public on a ward or at-large representation system and the addition of a question related to this on the October 2013 election ballot.*
  - *Organizational support: Legislative & Governance Services (committees and representation)*
  - *Financial resources: \$35,000 (ward/at-large education and plebiscite)*
  - *Outcomes: Increased understanding around Council representation*
  - *Outcomes: Public feels an increased sense of empowerment in City decision making*
  - *Outcomes: Public feels an increased sense of representation by Council.*

Timelines have also been amended slightly.

We believe this amendment to the dialogue charter reflects a reasonable interpretation of the strategic direction.

### Power of a Plebiscite

It is important to understand that a plebiscite is simply one method of Council soliciting public input on a question posed. However, while it may not be binding on a Council, if a vote of the electors on a question results in a clear majority either for or against the question it would likely be unadvisable to ignore the results.

### Education and Awareness

Communications will be carried out around the inclusion of a plebiscite question on the ballot as part of the 2013 Municipal Election. We want people to know there will be a question on the ballot seeking their opinion on wards versus at-large systems, and we also want them to know they can find out more about wards and at-large systems as part of a series of educational opportunities that will occur before they go to the polls on October 21, 2013.





In the interest of remaining unbiased and ensuring The City is not seen to favour one system over another, Communications & Strategic Planning recommends a third party facilitate the education on wards versus at-large systems with Communications and Strategic Planning working closely with the facilitators to raise awareness about education opportunities.

### **Question Construction**

The question, as constructed, was done so in conjunction with legal counsel. Proper construction is important so that the question is easily understood, is not leading, does not favour a particular response, and the outcome of which will provide clear direction to Council. For Council's information, excerpted below is advice provided by legal counsel with regard to the question as proposed:

It is important to carefully and accurately articulate the issue Council is seeking electoral input on in framing the question for the vote of the electors. A poorly drafted question could lead to skewed ballot results and potentially costly litigation. Questions framed in the negative or in a manner that favours a particular response (i.e. a leading question) are inappropriate and should be avoided.

Our proposed wording allows an elector to cast a vote either in the affirmative or the negative, which is consistent with a strict interpretation of the LAEA. The question is premised on the at-large electoral system being the status quo in the City and is framed as seeking the views of the electorate on whether Council should take positive steps to enact a bylaw to depart from the status quo. The explanatory provision included next to the division of the ballot marked 'yes' and 'no' are intended to assist electors by defining, in very general terms, ward and at-large electoral systems and by clarifying what the status quo is in the City (an elector who is not well versed in the relative pros and cons of each system may nonetheless be able to say with confidence whether they are in fact content with the status quo).

If the City is not satisfied with our proposed wording of the plebiscite question above we recommend that the City obtain a further legal opinion on any revised wording brought forward by City administration or a Councillor *prior* to Council passing a resolution adopting the wording of the question. Although a section 236 vote on a question is not binding upon Council, in our opinion, the wording of the question is critical to the success of this exercise of the democratic process and any attempts to word-smith the question should be carefully scrutinized from a legal perspective to limit the City's exposure to skewed ballot results and potentially costly litigation.

Based on the preceding, following is the question being proposed for inclusion on the 2013 municipal election ballot:

Are you in favour of Council passing a bylaw dividing the City of Red Deer into wards for municipal election purposes?

\_\_\_\_ YES (a 'yes' vote means you support changing to an electoral system where the City is divided into electoral divisions (called 'wards') and you must be a resident in the ward in order to vote for a councillor in that ward and councillors are elected for each ward, unless otherwise provided for in the bylaw)



\_\_\_\_\_ NO (a 'no' vote means that you support maintaining the current at-large electoral system where you may vote for councillors for the entire City regardless of where you reside in the City).

### **Advertising**

The Local Authorities Election Act requires the advertising of a notice of advance vote and election and requires such advertising include the notice of a vote on a bylaw or question. The entire text of the question as presented on the ballot will be included in all advertising related to the election. This is legal advertising and is unique from any education campaign that might be held in this regard.

### **Ballots**

The number of candidates running for the offices of Mayor, Councillor, or School Trustee will determine whether the 'Question' can be added to the ballot or will require a stand alone ballot. This will not be determined until Nomination Day

### **Budget Summary**

The estimated budget implications are as follows:

<b>Approach</b>	<b>Estimated Cost</b>	<b>Funding Source</b>
Amending the dialogue charter to include systems of representation	\$0	N/A
Communications, education and awareness about wards versus at large systems of representation	\$30,000	Funded from the Tax Stabilization Reserve (TSR)
Plebiscite is carried out in conjunction with the 2013 Municipal Election	\$5,000	Funded from the Tax Stabilization Reserve (TSR)

### **Analysis:**

---

The dialogue charter reflects both the larger question of Council representation as well as the question regarding wards verses at-large representation. This enables the public to give feedback to Council in both areas thereby enabling Council to represent the community more effectively.



If City Council moves forward with implementation of the proposed education and awareness campaign, notification about all education opportunities and information about the plebiscite will be broadly publicized for all Red Deerians.

Supporting this facilitated education process demonstrates Council's commitment to enhance community capacity by enabling people to be informed and influence City Council processes and decisions, specifically as it relates to a decision about wards versus at large systems of representation.

The construction of the proposed question responds to the requirements of the Local Authorities Election Act in that it can be responded to in the affirmative or the negative by selecting the "yes" or the "no" choices on the ballot. Additionally, as noted in the legal opinion, the explanatory provisions included next to the division of the ballot marked 'yes' and 'no' are intended to assist electors by defining, in very general terms, ward and at-large electoral systems and by clarifying what the status quo is in the City (an elector who is not well versed in the relative pros and cons of each system may nonetheless be able to say with confidence whether they are in fact content with the status quo). As such, we support the question as constructed.

An increase of \$5,000 for election expenses is being requested to cover cost related to advertising and printing though this would not cover costs if an additional ballot is required. \$30,000 is requested to cover costs associated with the education and awareness campaign to be conducted in advance of the 2013 Municipal Election. There is no cost to amend the Dialogue charter.



May 27, 2013

Value for Money Audits: Electric, Water/Wastewater Utilities – Administrative Response

---

### **Report Summary and Recommendations**

A Value for Money (VFM)/Operational Audit was performed on three Utilities including Water, Wastewater and Electrical. This report highlights the results of the Audits and the administrative response to the recommendations in the Audits. Council of The City of Red Deer is being asked to endorse the recommendation that relates to Council and receive for information the action plan that is being implemented by City Administration. The Audit Committee is being provided updates on a semi-annual basis to measure the progress on the priority action list.

### **City Manager Comments:**

I support the recommendation of the Audit Committee and of Administration. The VFM Audits highlight that we have efficient utility services that are providing value for money and further shows where enhancements can continue to improve on the excellent services that are being provided by the Utilities. I endorse Council approving the recommendation specific to Council and the recommended reporting structure of operational progress on the Priority Action List being provided to the Audit Committee on a semi-annual basis.

Craig Curtis  
City Manager

### **Proposed Resolution:**

Resolved that Council of The City of Red Deer having considered the report from the Corporate Services Division re: Value for Money Audits: Electric, Water/Wastewater Utilities – Administrative Response dated May 27, 2013, hereby accepts the report as information and approves:

- 1) the Priority Action List contained in the report as Appendix B as the planning document for the implementation of action items arising from the audit; and
- 2) as a specific action item for Council, recommendation 1.4.3, Revenue and Rate Approach – Rate Setting, which states: “Clear rate setting philosophies should be

identified and prioritized by Council, which reconciles the often conflicting objectives of Utility revenue stability and conservation pricing”;

- 3) that the Audit Committee provide oversight to the progress reporting on implementation of the Priority Action List through semi-annual reporting as provided by the City Manager.

## **Background**

In January of 2011, City Council approved VFM Audits, in the amount of \$150,000 with the initial areas of focus being the water, wastewater and electrical utilities. The intent of the VFM Audits was to assist in the establishment of meaningful baselines for ongoing measurements of performance, efficiency and effectiveness from both a financial and operational perspective. The VFM Audits would help define what efficiency, effectiveness and best practices should be by doing a thorough comparison with similar municipalities' utility operations and provide supporting documentation to substantiate the recommendations.

A Steering Committee for this project was established and included the following members: City Manager, Development Services Director, Corporate Services Director and Corporate Transformation Director.

The project team members included the managers from; Electric Light & Power (EL&P), Environmental Services, Revenue & Assessment and Financial Services. It changed slightly for the Water/Wastewater Utility report with the removal of the EL&P Manager and the addition of the Divisional Controller, Development Services.

The Project Sponsor (champion) for this project was the City Manager, while the Divisional Strategist, Corporate Services was the Project Manager.

Grant Thornton was selected as the successful contractor and officially began to perform the audits on October 31, 2011. The tentative schedule was to have all three audits completed by August 20, 2012 however the audits were not completed until October 26, 2012. Grant Thornton presented their audit reports to the Audit Committee on January 17, 2013. Since the audit reports were tabled at the Audit Committee in January, Administration has been working on the development of an action plan to address the findings in the VFM Audits.

At the April 10, 2013 Audit Committee meeting, the Audit Committee endorsed the action plan prepared by Administration including the 27 priority items for strategic focus, and recommends the report be referred for Councils adoption of the areas of implementation.

## **Discussion**

The Audit reports highlight that all three Utilities were providing value for money. There were 87 recommendations in total provided by Grant Thornton. The reports further broke down those recommendations into the following areas:

**Corporate Findings**

- Strategic and Business Planning
- Enterprise Risk Management
- Financial Management and Rate Model
- Performance Monitoring and Reporting

**Departmental Findings**

- Budgeting and Capital Planning
- Employee and Workplace Management
- Operations and Maintenance
- Financial Management and Rate Model
- Infrastructure and Asset Management
- Customer and Stakeholder Relationships
- Performance Monitoring and Reporting
- Regulatory Compliance and Reporting

Upon review, Administration was able to develop an action list of 27 priority items to be completed. Development of the Priority Action List considered impact and effort, operational capacity, commitments to Strategic Charter work and corporate priorities, and timelines established by work and project plans. Attached to this report is Appendix A: Complete list of recommendations from the Audit with the Corporate response and Appendix B: the Priority Action List arising from the Corporate review of the recommendations. The full Value for Money Audits are attached as Appendix C.

The specific recommendations that apply to Council of The City of Red Deer are as follows:

Business Attribute: Revenue and Rate Approach

**Recommendation 1.4.3**

Clear rate setting philosophies should be identified and prioritized by Council, which reconciles the often conflicting objectives of Utility revenue stability and conservation pricing.

Response: These responsibilities were completed in the establishment of the Utility Policy. The Utility Policy has a review period of 5 years already built into the Policy.

**Recommendations**

In alignment with our governance framework the actions involving Council will be referred to the Council table for adoption while the balance of the recommendations are included for the information of Council as they are the responsibility of the City Manager to implement. Administration requests that Council of The City of Red Deer accept this report as information and that the Priority Action List contained in the report as Appendix B be endorsed as the planning document for the implementation of action items arising from the audit and further that the specific action item related to Council be accepted as presented; and that the Audit Committee provide oversight to the progress reporting on implementation of the priority action list through semi-annual reporting by the City Manager.

Value for Money Audit - Administrative Response

Complete List of Recommendations

APPENDIX A

Organizational Alignment
Council
Corporation (as a whole)
Division/Department
a) Organization Design/Structure/Staffing
b) Infrastructure Asset Management
c) Management Execution
d) Customer Citizen Stakeholder Engagement

Common recommendations for all three utilities
Electric
Water Wastewater

Value For Money Audit Recommendations - Common to the Three Utilities				
#	VFM Audit Recommendation	Administrative Response		
		Organizational Alignment	Actions / Remarks	Recommended Priority
BUSINESS ATTRIBUTE - Strategic and Business Planning				
1.1.1-1.1.1	In alignment with the City's efforts both utilities EL&P and Envs should work to improve their annual Service Plan by including linkages to operating and capital budgets and performance measures		Linkages currently exist between both departments service plans and the operating and capital budgets as well as performance measures. Continual improvements are expected through the budget planning process and Effectiveness Charter implementation.	ELP - High ENVS - Medium  CORP - Ongoing
BUSINESS ATTRIBUTE - Enterprise Risk Management				
1.3.1-1.3.1	The City should develop a best practice Enterprise Risk Management (ERM) framework and support departments in its application.		Development of various procedures are either complete or are in progress. Corporate Services will develop a broader risk management framework for the Corporation	ELP - High ENVS - Medium  CORP - Q4 2014 ONGOING ELP - Corp ENVS - Ongoing
BUSINESS ATTRIBUTE - Revenue and Rate Approach				
1.4.1-1.4.1	All City utilities should continue to play an active role in the Rate Model Review and ultimately implement the resulting fiscal policies and rate model.		Utility policy complete and corporate procedures being finalized; updated financial and rate models have been implemented. Some procedures are in draft form.	High  CORP - ONGOING ELP - complete ENVS - 3Q 2013

BUSINESS ATTRIBUTE - Budgeting and Capital Planning					
1.5.1-1.5.1	Financial Services should work with all departments to develop a fiscal policy to appropriately fund forecasted capital funding requirements (through debt and reserves) and develop a system for capital and operational planning that ensure all users are working in the most current version of the program and which facilitates consolidation of information		Utility policy complete and corporate procedures being finalized; updated financial and rate models have been implemented. Some procedures are in draft form.	ELP - High ENVS - Low	CORP - ONGOIN ELP - 2013 complete ENVS - 2015
BUSINESS ATTRIBUTE - Organizational Structure and Staffing					
2.2.2-2.2.3	The City should work with the utilities to determine the need for and establish internal Service Level Agreements (SLAs) between the Corporate Services functions and the departments to which they provide services. In the absence of formal SLA's, metrics such as target service delivery times and quality (where measurable) should be established, monitored and tracked over time.		Some service level agreements have been established for some departments. Others are being reviewed / considered, and should be developed where significant services are provided. Departmental service levels need further definition to facilitate section SLAs. This could require additional department commitment as the process matures.	Medium	CORP - Q4 2014 ongoing
BUSINESS ATTRIBUTE - Working Environment					
2.4.1-2.4.1	Continue with City-wide efforts to emphasize the safe and efficient completion of work. Continue to track and report on all safety incidents to support a culture of safety among all staff		Several initiatives are in place: monthly management field visits, improved training, and other measures are established. All safety incidents are reported and investigated in compliance with the Corporate Safety Program. Safety Program includes an annual safety audit which requires departmental follow up and implementation	ELP - Medium ENVS - Low	CORP - ONGOING
BUSINESS ATTRIBUTE - Operating Risk and Business Continuity					
2.8.1-2.8.1	Corporate Services, in conjunction with the utilities and within the broader ERM approach currently being developed by the City, should develop business continuity plans for a wider range of scenarios and identify mitigation strategies that can be implemented in the short term to support these plans.		Corporately, business continuity planning (BCP) is underway. Additions/improvements are likely to be made as initial planning is better defined. Additional resources may be required to finalize BCP's.	ELP - Medium ENVS - Low	CORP - Q4 2014 ELP 2013-2014 ENVS - 2014, 2015, ongoing



2.8.2-2.8.2	The utilities should review all activities and functions to determine if there are other emergency scenarios for which key risks can be identified and mitigation activities can be implemented.		Refer to 2.8.1 above	ELP - Medium ENVS - Low	see 2.8.1 above
BUSINESS ATTRIBUTE - Citizen Engagement/Partnership and Stakeholder Relations					
3.1.1 - 3.3.1	The utilities should work with Communications to develop a citizen and stakeholder engagement assessment and plan to inform potentially affected citizens and stakeholders about new developments and programs and to listen to and address their concerns where possible.	Corporate Division/Department	CORPORATE - Unsure of the focus of recommendation eg, for change management, education or awareness; requires broader discussion through effectiveness and dialogue charter. Website and Citizen Relationship Management strategies are under development ELP - Public consultation phase of new substation development is in progress as per AUC requirements. Communications department providing assistance ENVS - Citizens and stakeholders are engaged when significant changes are made to programs.	ELP - Medium/Low ENVS - Low	CORP - Q4 2014 ELP - Q2 2013 ENVS - ongoing
BUSINESS ATTRIBUTE - Performance Monitoring and Reporting					
4.1.1-4.1.1	Building on efforts currently underway, the City should develop a performance management framework that can be applied to all departments and sections in the City, with both general and specific measures as well as a roll-up to department level dashboards and a City-wide dashboard.	Corporate Division/Department	CORPORATE - There will be Corporate reporting requirements in addition to the departmental regulatory reporting requirements ELP - Effectiveness Charter will be the driver. Value for Money Audit is first step. Also related to 1.1.2. ENVS - National Water and Wastewater Benchmarking is utilized to evaluate performance against dozens of other municipalities across Canada. Performance measures have been identified within the budget and quarterly reporting processes.	High	CORP - Q4 2015 ELP - VFM complete ENVS - ongoing
BUSINESS ATTRIBUTE - Financial Reporting					
4.3.1-4.3.1	The issues identified in the Representation Letter should be linked to strategies in the annual Service Plan, ERM and operational risk planning.		Applicability of risks can be considered as part of the normal budget process.	Medium	CORP - ONGOING ELP - ongoing ENVS - 2013 and ongoing



1.3.2	The Water utility should continue with efforts to complete the Drinking Water Safety Plan risk assessment by the end of 2012.		Drinking Water Safety Plan is well underway (due Dec'2013). This plan is expected to identify a number of initiatives to manage/reduce risk, which may result in additional resource requirements.	Medium	3rd Quarter 2013 and ongoing
1.3.3	The Water utility should continue to develop the environmental risk management plan currently in progress.		Enterprise Risk Management framework to be developed corporately. Additional resources will be required to develop risk management plans and implement mitigative measures identified. Consultation with other utilities may be beneficial with respect to their Enterprise Risk Management plans.	Medium	2014 framework, 2015 plan, implementation 2016+ ongoing
1.3.4	Leveraging the risk management template created by the Water utility, the Wastewater utility should develop similar risk management plan for its operations.		The Drinking Water Safety Plan can be considered when developing a wastewater risk management plan, although the risks are very different. Further consideration can be given to this as part of #1.3.3.	Medium	see 1.3.3 above
BUSINESS ATTRIBUTE - Revenue and Rate Approach					
1.4.2	The utilities should consider engaging in a formal cost of service analysis every three years to ensure a full understanding of all costs as they pertain to the different customer classes, particularly regional customers.		Cost of service analysis was conducted as part of the rate model project. Reevaluation of the rate model should be conducted every 5 years. Allocation methods and data integrity from other sources should be reviewed every year.	High	Complete
1.4.3	Clear rate-setting philosophies should be identified and prioritized by Council, which reconcile the often conflicting objectives of utility revenue stability and conservation pricing. Current initiatives are underway to address this.		Utility Policy has been completed.	High	Complete

BUSINESS ATTRIBUTE - Budgeting and Capital Planning					
1.5.2	While they are separate entities, the Water and Wastewater utilities should consider capital investment and rate increases holistically, as they appear to the customer as one function. Where there are options to defer capital investments between the two and smooth the impact on the customer the utilities should take advantage of this.		This has been considered as part of Utility Policy development and will be considered as part of the annual budget process.	High	Annually
1.5.3	Consideration should be given, when engaging in capital construction with multi-generational benefit, to matching the timing of the cost with the duration of the benefit of the asset. Recognizing that the City and utilities face constraints on the level of debt they can utilize for these projects, the utilities should endeavour to strike the right balance in the use of reserves funded by current customers to fund assets that will continue to benefit customers well into the future.		Use of debt is covered in Utility Policy approved by Council and is considered annually as part of the budget and rate modeling processes.	Medium	Annually
BUSINESS ATTRIBUTE - Service Lines and Programs					
2.1.1	Certain areas of the department's website (i.e. the department mandate, information regarding upgrades to the WWTP) appear to require updating to align with current documentation or processes. It is recommended that website content be reviewed and updated where required, and that this responsibility be assigned to a specific individual within each section represented on the site.		CORPORATE - web site redevelopment is currently taking place which will provide tools to improve data currency and provide a more user-friendly environment for the public.	Low	2014, Ongoing
2.1.2	Given that the system is relatively new and that most replacements are with PVC pipe, the Water utility should engage in further investigation to understand water loss and unmetered water consumption and to move forward with opportunities to meter water trucks appropriate (e.g. install meters on water trucks used by Parks, Recreation and Culture).		This is an extensive and complex issue that the Water Utility is working on. Metering and use estimation is done for some construction and maintenance activities. Requirements can be added to other activities (e.g. developers and contractors). Additional resources and assistance from Engineering Services will be required to advance at a faster pace.	High	Ongoing

BUSINESS ATTRIBUTE - Organization Structure and Staffing					
2.2.1	The Wastewater utility should continue with the process of formalizing the Performance Reporting Coordinator position to support the utility Superintendent in the development and analysis of performance monitoring and reporting processes.		Position has recently been filled (without creating any additional FTE's).	Medium	Complete
BUSINESS ATTRIBUTE - Employee Management					
2.3.1	Engage in a review and update of all job descriptions that have not been prepared or evaluated within the past two years.		Job descriptions are updated as positions change and evolve. Additional resources required to increase pace of updates.	Low	Ongoing
2.3.2	Develop a clear and specific succession plan that addresses upcoming retirements and potential knowledge gaps that may arise. This is particularly important for the Water utility, where issues of succession are more immediate.		Probable retirement dates for key staff have been identified. A succession plan is being developed and training/recruitment strategies will be identified for the coming 5-year period.	High	4th Quarter 2013 and ongoing
2.3.3	Ensure that all staff, management and operational, have access to role-specific and appropriate training and tools to facilitate their successful performance of their position requirements.		Focused training needs (particularly in risk areas) and training resources to be identified (e.g. institutions, organizations, City sources, etc). Regulatory requirements for certification must be maintained.	High	2014 and ongoing
2.3.4	The City should consider adding FTEs in the distribution and collection areas, as both benchmarking results and staff comments suggest that these areas have historically been and currently are understaffed.		Current staffing levels are adequate to maintain regulatory/approved service levels. Further assessment required if service level expectations change.	Medium	2014 and on-going
2.3.5	In the Wastewater utility, trends in the ratios of population and Mega Liters (ML) of treated wastewater per FTE have been going down due to increases in utility FTEs, which could be at least partially due to increasing processing and regulatory requirements. The trend has reversed in 2010, but efforts should continue in looking for areas to improve efficiencies.		Further discussion and site visits to take place with similar utilities (benchmark partners) to assess the similarities and differences in plant operations. Operations & Maintenance (O&M) practices to be evaluated to seek efficiency improvements.	High	2014 and ongoing
2.3.6	For the Wastewater utility, safety training hours should be maintained at a consistent level to ensure a safe work environment.		Safe work practices to be refreshed and training needs assessed. Identification of core training is on-going.	Medium	2015 and ongoing



BUSINESS ATTRIBUTE - Working Environment					
2.4.2	The utilities should work with IT and the Human Resources department to assess the ability to create a staffing turnover report that more accurately demonstrates turnover of permanent staff and eliminate turnover “noise” resulting from the coming and going of seasonal staff.		Further research to be done for next year's Benchmarking report	Low	Q3, 2013
BUSINESS ATTRIBUTE - Operations and Maintenance Planning and Execution					
2.5.1	The Water and Wastewater utilities could consider engaging in weekly or bi-weekly, scheduled meetings with C&M staff to ensure longer term projects and C&M staff allocation are understood by all groups.		Monthly meetings planned to occur with the three sections Superintendents. Additional focus with respect to resource sharing has occurred recently and will continue to take place.	High	Ongoing
2.5.2	Both utilities should investigate why WTP and WWTP O&M costs have been trending upward and compare unfavourably to peer groups.		Further discussion and site visits to take place with similar utilities (benchmark partners) to assess the similarities and differences in plant operations. Operations & Maintenance (O&M) practices to be evaluated to seek efficiency improvements.	High	2013 and 2014
BUSINESS ATTRIBUTE - Financial Management and Rate Model					
2.6.1	Consider creating additional account codes to differentiate capital costs incurred that are driven by regulatory requirements (e.g. enhanced treatment processes).		This is identified by description in the Capital Budget sheets. It could be further delineated in our corporate financial system if desired, but may be of marginal benefit post budget approval.	Low	Ongoing
2.6.2	Given the disaggregated utility model employed by the City, it could be beneficial for the engineering, planning, financial services, and utility groups to engage in a greater degree of coordinated budgeting and financial planning.		Current budget processes do provide for significant interaction between departments, depending on specific project/program needs. The approval of the Utility Policy by Council has clarified responsibilities/needs.	Medium	Ongoing
2.6.3	Senior staff should be involved and informed (to an appropriate level) regarding the rate model and rate development process to ensure a full understanding of the factors contributing to rates.		Broader understanding has occurred through the development of the Utility Policy. Procedures and rate models. Continued improvement will come through utilization of the models in the budget process and improvements to budget documents (e.g. Funding Adjustment Recommendation template more suited to self-funded businesses).	Medium	Ongoing

BUSINESS ATTRIBUTE - Infrastructure and Asset Management						
2.7.1	Continue to work with the data produced by the Hansen system to refine parameters and improve the consistency and reliability of the output and its relevance to utility assets.		The corporate work management system reporting to be evaluated annually by Performance Coordinators. System improvements to be considered as part of evaluation. Reporting templates need to be developed in conjunction with ITS. May take several years to develop sufficient data to provide useful reports.	Medium	2014 and ongoing	
2.7.2	Develop strategic asset management plans for all linear assets, including a long term maintenance replacement plan for pipes, valves, etc. These plans typically include current infrastructure, expected growth, and replacement plans and cost associated with this.		Corporate asset management system under development to assist in this evaluation. To be considered as part of the budget process.	High	2nd Quarter 2013 and ongoing	
BUSINESS ATTRIBUTE - Customer Relationship Management						
3.2.1	The utilities should take steps to begin the design of a program to facilitate the tracking and reporting of response times to emergencies, non-emergencies, return to service, customer inquiries and customer satisfaction.		The corporate work management system provides tracking for some of this information. Reporting can be provided for annual evaluation.	High	2014 and ongoing	
BUSINESS ATTRIBUTE - Partnerships and Stakeholder Relations						
3.3.2	In conjunction with tracking customer response times, the utilities should also consider tracking and reporting on response times for stakeholder inquiries and concerns.		Can be tracked in the corporate work management system. Annual customer survey evaluates customer satisfaction and is reviewed to identify opportunities for further improvement.	Low	Ongoing	
BUSINESS ATTRIBUTE - Regional and Other Integrated Planning						
3.4.1	Continue to monitor deviations between expected and actual consumption of water and flow of wastewater from regional customers to ensure that associated capital planning is appropriate given actual usage of the treatment plants and pipe infrastructure.		Regional partners are consulted annually with respect to flow projections; such information being considered as part of the budget process.	Medium	2nd Quarter 2013 and ongoing	

BUSINESS ATTRIBUTE - Performance Monitoring and Reporting					
4.1.2	The utilities should develop Water and Wastewater specific scorecards, potentially building on the Balanced Scorecard template, to identify and track specific operational metrics that are key indicators of performance.		National Water and Wastewater Benchmarking is utilized to evaluate performance against dozens of other municipalities across Canada. Performance measures have been identified within the budget and quarterly reporting processes.	High	Ongoing
4.1.3	Given the magnitude of effort that goes into preparing and submitting the AECOM benchmark data, a greater level of analysis should be undertaken once results are obtained to understand trends and differences and identify areas where improvements could be made.		Performance Coordinators within each Utility to be tasked with thorough evaluation of annual benchmark data and reporting significant information to Utility Superintendents and ENVS Manager.	High	Annually
BUSINESS ATTRIBUTE - Regulatory Compliance and Reporting					
4.2.1	As part of the Rate Model Review Project, the Water and Wastewater utilities and City management should strive to educate Council about the utilities and how they operate under the utility rate model.		Workshops with City Council have taken place as part of the Utility Policy and Rate Model projects	High	Complete
4.2.2	Monitoring and reporting on regulatory compliance should be included as part of overall utility reporting to City management.		Annual Reports can be developed and presented to CLT. Will be considered as part of the Effectiveness Charter.	High	3rd Quarter 2013 and ongoing
BUSINESS ATTRIBUTE - Financial Reporting					
4.3.2	Consider more finely segmenting capital costs to facilitate a better understanding of those driven by internal or capacity requirements and those driven by changing regulatory standards.		This is identified by description in the Capital Budget sheets. It could be further delineated in corporate financial system if desired, but may be of marginal benefit post budget approval.	Medium	Ongoing



Value For Money Audit Recommendations - Electric Utility						
#	VFM Audit Recommendation	Administrative Response		Actions / Remarks	Recommended Priority	Timeline for Completion
		Organizational Alignment				
BUSINESS ATTRIBUTE - Strategic and Business Planning						
1.1.2	EL&P should track and benchmark electric-utility-specific metrics independently and outside the scope of the Service Plan.			Some benchmarking in place (CEA Reliability Statistics, PCB compliance). Other metrics are being considered and will be implemented if appropriate.	High	Ongoing
1.1.3	Clear rate-setting philosophies should be identified by Council which reconcile the often conflicting objectives of utility revenue stability and conservation pricing.			Utility policy completed. Corporate procedure being finalized.	High	2013 complete
BUSINESS ATTRIBUTE - Sustainability Planning						
1.2.1	EL&P should explore ways to more directly link its own business planning to the City's Environmental Master Plan (EMP).			Some aspects of the EMP are in place as normal operations (green energy purchase in place, participation in GHG reporting, LED streetlight program and others), other aspects are on hold, and others are being investigated further. Direction required if more formal reporting desired.	Medium	Ongoing
1.2.2	EL&P should continue to track and report on the percentage of electricity arising from renewable energy sources that flows through its system.			Currently, percentage of green energy purchased for municipal use is reported (25% in 2013). Number of micro-gen participants in Red Deer service area is tracked. Total Alberta system info is available through regulatory sites. Direction required if more formal reporting desired.	Medium	Ongoing
BUSINESS ATTRIBUTE - Budgeting and Capital Planning						
1.5.2	Based on projected growth, contingencies for additional staff resources should be built into subsequent operating budgets.			This is part of the department's annual budget process.	Low	Ongoing
1.5.3	The budgeting process should emphasize consideration of previous years' actual revenues and expenditures rather than focusing on budgeted numbers.			The department continues to improve ties to past actual revenues and expenditures in the budget and planning processes.	Medium	Ongoing
BUSINESS ATTRIBUTE - Organization Structure and Staffing						
2.2.1	The utility accountant position should assume a larger role in the budgeting and financial management activities carried out in the utility.			Appropriate involvement and ownership of budget and planning process by appropriate staff is ongoing.	Medium	Ongoing

2.2.2	Responsibility for general office management and supervision of general administration staff would be more appropriately assigned to the utility Manager.		This is not supported by the department.	Low	N/A
2.2.4	In conjunction with corporate procurement, EL&P should review its tendering and contract management practices to ensure that a consistent process is being followed and contracts are structured to maximize contractor performance.		Tendering and contract management for the Corporation is maintained through the Purchasing section of Financial Services. These practices are reviewed regularly to identify opportunities for further improvement	Low	Ongoing
2.2.5	The City and Council should consider EL&P's request to hire a Safety Coordinator and a lead for the Market Support section.		Safety Position approved;recruitment will follow finalization of job description Market Support: to be evaluated and addressed through normal budget process	Medium	Safety: Q2 2013 Market Support: none
BUSINESS ATTRIBUTE - Employee Management					
2.3.1	EL&P should further review workflow and overtime worked to determine trends in workloads and to identify current and future pressure points, and should take immediate steps to assess the workloads of the two General Foremen and address any capacity issues as necessary.		Total departmental workload and capacity are being evaluated and defined as part of the budget process.	Medium	2013 / 2014
2.3.2	EL&P, in conjunction with HR, should ensure that all job descriptions are updated and that as many positions as possible are transitioned to using the design ladder approach.		Job descriptions are updated as needed on an ongoing basis. Design Ladder has been implemented for Designer positions - other applications of Ladder concept may be evaluated in the future if appropriate.	Low	None established
2.3.3	EL&P should identify training goals and standards and management should commit to ensuring that adequate time is made available for employees to participate in this training.		Some training requirements are established however, enhancement to overall department requirements is being investigated. Recruitment of approved Safety Coordinator position (Item 2.2.5 above) will aid in progressing with this.	Low	2014
2.3.4	All supervisors of employees should be carrying out (at a minimum) annual face-to-face employee evaluations using the City's process and templates.		This is being re-established as a priority.	Medium	2013
2.3.5	The utility and HR should continue to review municipal and industry compensation benchmarks to ensure it remains competitive on this front.		Ongoing	Medium	Ongoing

2.3.6	EL&P should immediately begin work to implement a succession plan to address upcoming retirements within the utility workforce.		Succession planning is an ongoing operational consideration. Processes, documentation, training and orientation improvements are underway and will be keys to success. While retirements and general turnover rates are not expected to be unusually high, increased competition for qualified, experienced staff is anticipated.	Medium	Ongoing
2.3.7	EL&P should develop a "disaster plan" to ensure business continuity in the event that one or several key resources leaves on short notice or becomes suddenly unavailable.		Pandemic and labour interruption plans have been developed but will be reviewed and updated. Corporately, disaster planning / business continuity planning is underway.	Medium	2013 - 2014 planning updates
BUSINESS ATTRIBUTE - Operations and Maintenance Planning and Execution					
2.5.1	EL&P should develop an operations and maintenance planning approach that is linked to an asset management system.		A corporate work management system is in place and processes are being developed. Full benefits have not yet been realized.	High	2013 - 2014
2.5.2	EL&P should identify and document a best practice approach to project management, which puts in place protocols and templates to be followed for every project.		In progress to some extent. Incorporating training and tools as the need develops.	High	Ongoing; 2014+ for development of best practices
BUSINESS ATTRIBUTE - Financial Management and Rate Model					
2.6.1	Acceptance of a revised Utility Fiscal Policy will provide the utility with the needed direction for effective financial management and rate setting.		Utility policy complete; corporate procedures being finalized; updated financial and rate models have been implemented.	High	2013 complete
2.6.2	The City should continue to allow EL&P to build reserves without capping the amount held in reserves or requiring that the utility pay a special dividend to the City.		Utility policy complete; corporate procedures being finalized; updated financial and rate models have been implemented.	High	2013 complete
BUSINESS ATTRIBUTE - Infrastructure and Asset Management					
2.7.1	Introduce new asset tracking metrics to gain a better understanding of asset condition and priority maintenance activities.		A corporate work management system is in place and processes are being developed. Full benefits have not yet been realized.	Medium	Per 2.5.1
2.7.2	Continue with current initiatives to apply the asset management plan and address identified asset management concerns.		Ongoing corporate asset management strategy.	High	Unknown

BUSINESS ATTRIBUTE - Customer Relationship Management					
3.2.1	As part of a citizen engagement strategy, EL&P should communicate not only when outages occur and how long they are expected to last, but should also provide information about the number and length of outages (trends and comparisons to others) which are quite favourable.		The two departments continue to collaborate on outage information & communication. Good process in place but ongoing refinements expected. EL&P currently reports on Canadian Electric Association reliability statistics as part of quarterly reports and budget process.	Medium	Ongoing
3.2.2	EL&P should make an effort to meet with large customers to identify any strategies to minimize or mitigate disruptions.		To begin this year and develop ongoing relationships.	Low	Start: 2013 Ongoing
3.2.3	EL&P should undertake a comprehensive cost-benefit analysis of the developer services activities that considers all direct and indirect costs associated with the activity, including opportunity costs such as staff effort directed at external projects rather than internal maintenance needs.		Process started as part of 2013 budget but intent would be to formalize in 2013 / 2014. Closely related to 1.5.2, 2.2.1, 2.3.1 and others.	Medium	2013 - 2014
BUSINESS ATTRIBUTE - Partnerships and Stakeholder Relations					
3.3.1	EL&P should consider working with Communications to develop a stakeholder engagement assessment and plan, which should be linked with the citizen engagement strategy.		Corporately, the Dialogue Charter is underway and will relate directly to this recommendation. EL&P will continue to address this as needed for various projects.	Low	Unknown
BUSINESS ATTRIBUTE - Regional and Other Integrated Planning					
3.4.1	EL&P should consider developing a regional expansion strategy, aligned with projected City growth, that identifies communication and stakeholder engagement strategies to facilitate this growth.		Expansion of service area will continue to be driven by development. No additional effort is considered for expansion beyond this constraint at this time.	Low	As needed
BUSINESS ATTRIBUTE - Regulatory Compliance and Reporting					
4.2.1	EL&P and City management should strive to educate Council about the utility and how it operates under the utility rate model.		Plans are in place to provide orientation to new Councils in preparation for their role as EL&P's Regulator.	High	Start: 2013 Ongoing

Value for Money Administrative Response  
Priority Action List

Appendix B

Business Attribute		Findings	Recommendations	Administration Response
COMMON	1.1.1 Strategic and Business Planning			
	Recommended Priority: HIGH to MEDIUM	<ul style="list-style-type: none"><li>• The City is moving towards a vision – driven planning framework</li><li>• Differing opinions on weighting of fixed and variable fees and the impact on conservation and utility infrastructure</li><li>• Department Service Plans flow into the corporate plan<ul style="list-style-type: none"><li>• No direct link to prior years strategies and initiatives</li><li>• Financial resources not attached to actions</li><li>• Limited metrics and targets</li></ul></li></ul>	<ul style="list-style-type: none"><li>• In alignment with the City's efforts both utilities EL&amp;P and Envs should work to improve their annual Service Plan by including linkages to operating and capital budgets and performance measures</li></ul>	<ul style="list-style-type: none"><li>• Linkages currently exist between both departments' service plans and the operating and capital budgets as well as performance measures. Continual improvements are expected through the budget planning process and Effectiveness Charter implementation.</li></ul>
	Timeline: CORP - ONGOING			
COMMON	1.3.1 Enterprise Risk Management			
	Recommended Priority: HIGH to MEDIUM	<ul style="list-style-type: none"><li>• ERM is a work in progress for the City and is being led by Financial Services</li></ul>	<ul style="list-style-type: none"><li>• The City should develop a best practice Enterprise Risk Management (ERM) framework and support departments in its application</li></ul>	<ul style="list-style-type: none"><li>• Development of various procedures are either complete or are in progress. Corporate Services will develop a broader risk management framework for the Corporation</li></ul>
	Timeline: CORP - ONGOING			
COMMON	1.4.1 Revenue and Rate Approach			
	Recommended Priority: HIGH	<ul style="list-style-type: none"><li>• Red Deer is currently undertaking a Rate Model Review Project, including an overall rate approach, rate model and utility fiscal policy</li><li>• There is a dynamic tension between resource conservation and utility infrastructure maintenance, which impacts opinions on the appropriate rate approach</li></ul>	<ul style="list-style-type: none"><li>• All City utilities should continue to play an active role in the Rate Model Review and ultimately implement the resulting fiscal policies and rate model.</li></ul>	<ul style="list-style-type: none"><li>• Utility policy complete and corporate procedures being finalized; updated financial and rate models have been implemented. Some procedures are in draft form.</li></ul>
	Timeline: CORP - ONGOING			



Business Attribute

Findings

Recommendations

Administration Response

COMMON

<b>1.5.1 Budgeting and Capital Planning</b>
<b>Recommended Priority:</b> HIGH to LOW
<b>Timeline:</b> CORP - ONGOING

<ul style="list-style-type: none"><li>Consistent, City-wide budget process is effective</li><li>Long-term capital planning is effective in providing direction on growth and resource and funding requirements</li><li>Significant capital growth in expected for all three utilities over the next decade (funded primarily by reserves and debt)</li></ul>	<ul style="list-style-type: none"><li>Financial Services should work with all departments to develop a fiscal policy to appropriately fund forecasted capital funding requirements (through debt and reserves) and develop a system for capital and operational planning that ensure all users are working in the most current version of the program and which facilitates consolidation of information</li></ul>	<ul style="list-style-type: none"><li>Utility policy complete and corporate procedures being finalized; updated financial and rate models have been implemented. Some procedures are in draft form.</li></ul>
--	--	---

COMMON

<b>2.2.2/2.2.3 Organizational Structure and Staffing</b>
<b>Recommended Priority:</b> MEDIUM
<b>Timeline:</b> CORP – Q4 2013 ONGOING

<ul style="list-style-type: none"><li>A disaggregated model for utility operations, however, it seems to work because of strong communication and individual initiative of staff members.</li></ul>	<ul style="list-style-type: none"><li>The City should work with the utilities to determine the need for and establish internal Service Level Agreements (SLAs) between the Corporate Services functions and the departments to which they provide services. In the absence of formal SLA's, metrics such as target service delivery times and quality (where measurable) should be established, monitored and tracked over time.</li></ul>	<ul style="list-style-type: none"><li>Some service level agreements (SLA) have been established for some departments. Others are being reviewed / considered, and should be developed where significant services are provided. Departmental service levels need further definition to facilitate section SLAs. This could require additional department commitment as the process matures.</li></ul>
---	--	--

COMMON

<b>2.4.1 Working Environment</b>
<b>Recommended Priority:</b> MEDIUM to LOW
<b>Timeline:</b> CORP - ONGOING

<ul style="list-style-type: none"><li>No formal system for tracking and monitoring corporate-wide performance</li></ul>	<ul style="list-style-type: none"><li>Continue with City-wide efforts to emphasize the safe and efficient completion of work. Both utilities should continue to track and report on all safety incidents to support a culture of safety among all staff</li></ul>	<ul style="list-style-type: none"><li>Several initiatives are in place: monthly management field visits, improved training, and other measures are established.</li><li>All safety incidents are reported and investigated in compliance with the Corporate Safety Program. Safety Program includes an annual safety audit which requires departmental follow up and implementation.</li></ul>
---	---	--

Business Attribute		Findings	Recommendations	Administration Response
COMMON	<b>2.8.1 Operating Risk and Business Continuity</b>	<ul style="list-style-type: none"><li>Utilities have developed appropriate response plans that take into consideration emergency situations.</li><li>City does not have a formalized corporate plan, however, the planning being carried out by the utilities aligns with the City's general guidelines.</li></ul>	<ul style="list-style-type: none"><li>Corporate Services, in conjunction with the utilities and within the broader ERM approach currently being developed by the City, should develop business continuity plans for a wider range of scenarios and identify mitigation strategies that can be implemented in the short term to support these plans</li></ul>	<ul style="list-style-type: none"><li>Corporately, business continuity planning (BCP) is underway.</li><li>Additions/improvements are likely to be made as initial planning is better defined.</li><li>Additional resources may be required to finalize BCP's.</li></ul>
	<b>Recommended Priority:</b> MEDIUM to LOW	<b>Timeline:</b> CORP – Q4 2014		
COMMON	<b>2.8.2 Operating Risk and Business Continuity</b>	<ul style="list-style-type: none"><li>Utilities have developed appropriate response plans that take into consideration emergency situations.</li><li>City does not have a formalized corporate plan; however, the planning being carried out by the utilities aligns with the City's general guidelines.</li></ul>	<ul style="list-style-type: none"><li>The Utilities should review all activities and functions to determine if there are other emergency scenarios for which key risks can be identified and mitigation activities can be implemented</li></ul>	<ul style="list-style-type: none"><li>Corporately, business continuity planning (BCP) is underway.</li><li>Additions/improvements are likely to be made as initial planning is better defined.</li><li>Additional resources may be required to finalize BCP's.</li></ul>
	<b>Recommended Priority:</b> MEDIUM to LOW	<b>Timeline:</b> CORP – Q4 2014		

COMMON

Business Attribute

3.1.1/3.3.1 Citizen Engagement/  
Partnership and  
Stakeholder Relations

<b>Recommended Priority:</b> MEDIUM to LOW
<b>Timeline:</b> CORP – Q4 2014 ELP – Q2 2013.04.05 ENVS - ONGOING

Findings

<ul style="list-style-type: none"><li>• Social Media is used to support customer communications</li><li>• Strong relationships with ENMAX and developers</li><li>• Utilities actively engage in regional planning and partnerships with regional customers</li><li>• Customer and stakeholder response metrics are not tracked or reported</li><li>• No formal regional expansion strategy in place</li></ul>
---

<ul style="list-style-type: none"><li>• The utilities should work with Communications to develop a citizen and stakeholder engagement assessment and plan to inform potentially affected citizens and stakeholders about new developments and programs and to listen to and address their concerns where possible.</li></ul>
--

<ul style="list-style-type: none"><li>• CORPORATE - Unsure of the focus of recommendation eg, for change management, education or awareness; requires broader discussion through effectiveness and dialogue charters. Website and Citizen Relationship Management strategies are under development</li><li>• ELP - Public consultation phase of new substation development is in progress as per AUC requirements. Communications department providing assistance</li><li>• ENVS - Citizens and stakeholders are engaged when significant changes are made to programs.</li></ul>
---

Recommendations

Administration Response

4.1.1 Performance

Monitoring and Reporting

<b>Recommended Priority:</b> HIGH
<b>Timeline:</b> CORP – Q4 2015 ELP – VFM COMPLETE ENVS - ONGOING

<ul style="list-style-type: none"><li>• No formal system for tracking and monitoring corporate-wide performance</li><li>• ELP – Key electric utility reliability statistics are collected</li><li>• ENVS – participates in the AECOM national water and wastewater benchmarking initiative and generally compare very well</li></ul>
--

<ul style="list-style-type: none"><li>• Building on efforts currently underway, the City should develop a performance management framework that can be applied to all departments and sections in the City, with both general and specific measures as well as a roll-up to department level dashboards and a City-wide dashboard.</li></ul>
--

<ul style="list-style-type: none"><li>• CORPORATE - There will be Corporate reporting requirements in addition to the departmental regulatory reporting requirements</li><li>• ELP - Effectiveness Charter will be the driver. Value for Money Audit is first step. Also related to 1.1.2.</li><li>• ENVS - National Water and Wastewater Benchmarking is utilized to evaluate performance against dozens of other municipalities across Canada. Performance measures have been identified within the budget and quarterly reporting processes.</li></ul>
---

COMMON



COMMON	<b>Recommended Priority:</b> MEDIUM
	<b>Timeline:</b> CORP - ONGOING

4.3.1 Financial Reporting

<ul style="list-style-type: none"><li>• A large portion of annual costs are non-discretionary</li><li>• Demonstrate good control over discretionary expenditures</li><li>• Operating and capital reserves are in place</li></ul>	<ul style="list-style-type: none"><li>• The issues identified in the Representation Letter should be linked to strategies in the annual Service Plan, ERM and operational risk planning.</li></ul>	<ul style="list-style-type: none"><li>• Applicability can be considered as part of the normal budget process as risks are identified..</li></ul>
--	--	--

Business Attribute

Findings

Recommendations

Administration Response

Departmental W/W
1.1.1 Strategic and Business Planning
Recommended Priority: MEDIUM
Timeline: ONGOING

<ul style="list-style-type: none"><li>• The City is moving towards a vision – driven planning framework</li><li>• Differing opinions on weighting of fixed and variable fees and the impact on conservation and utility infrastructure</li><li>• Department Service Plans flow into the corporate plan<ul style="list-style-type: none"><li>• No direct link to prior years strategies and initiatives</li><li>• Financial resources not attached to actions</li></ul></li><li>• Limited metrics and targets</li></ul>	<ul style="list-style-type: none"><li>• In alignment with the City's efforts both utilities EL&amp;P and ENVS should work to improve their annual Service Plan by including linkages to operating and capital budgets and performance measures</li></ul>	<ul style="list-style-type: none"><li>• Performance measures have been added to 2013 Service Plans</li><li>• 2014 Funding Adjustment Recommendations will be modified for self-supporting BU's to improve budget linkages</li><li>• Continual improvements are expected through the budget planning process and Effectiveness Charter implementation.</li></ul>
--	--	---

Departmental W/W
1.3.1 Enterprise Risk Management
Recommended Priority: MEDIUM
Timeline: ONGOING

<ul style="list-style-type: none"><li>• ERM is a work in progress for the City and is being led by Financial Services</li></ul>	<ul style="list-style-type: none"><li>• The City should develop a best practice Enterprise Risk Management (ERM) framework and support departments in its application.</li></ul>	<ul style="list-style-type: none"><li>• ENVS has various procedures to address risk management and are working on others:<ul style="list-style-type: none"><li>• Business Continuity Planning</li><li>• Drinking Water Safety Plan</li><li>• Various Standard Operating Procedures</li></ul></li><li>• Corporate Services will develop a broader risk management framework for the corporation</li></ul>
---	--	--

Departmental W/W
1.4.3 Revenue and Rate Model
Recommended Priority: HIGH
Timeline: COMPLETE

<ul style="list-style-type: none"><li>• Red Deer is currently undertaking a Rate Model Review Project, including an overall rate approach, rate model and utility fiscal policy</li><li>• There is a dynamic tension between resource conservation and utility infrastructure maintenance, which impacts opinions on the appropriate rate approach</li></ul>	<ul style="list-style-type: none"><li>• Clear rate-setting philosophies should be identified and prioritized by Council, which reconcile the often conflicting objectives of utility revenue stability and conservation pricing. Current initiatives are underway to address this.</li></ul>	<ul style="list-style-type: none"><li>• Utility Policy was adopted by Council last fall; policy implementation is in transition.</li><li>• New rate models are being developed and used for 2013 budgets and utility bylaw rates.</li><li>• Utility Procedures are in draft form and expected to be complete later this year.</li></ul>
--	--	---

Business Attribute		Findings		Recommendations		Administration Response	
Departmental W/W/W	2.1.2 Service Lines and Programs	Recommended Priority: HIGH	Timeline: ONGOING	<ul style="list-style-type: none"><li>Average monthly water consumption has declined</li><li>Water loss as a percent of plant flow has been trending upward</li></ul>	<ul style="list-style-type: none"><li>Given that the system is relatively new and that most replacements are with PVC pipe, the Water utility should engage in further investigation to understand water loss and unmetered water consumption and to move forward with opportunities to meter water where appropriate (e.g. install meters on water trucks used by Parks, Recreation and Culture).</li></ul>	<ul style="list-style-type: none"><li>This is an extensive and complex issue that the Water Utility is working on.</li><li>Metering and water use estimation is done for some construction and operational activities.</li><li>Metering requirements will be added to other activities over time (e.g. developers, contractors).</li><li>Additional resources would be required to advance at a faster pace.</li></ul>	
	2.3.2 Employee Management	Recommended Priority: HIGH	Timeline: Q4 2013 and ONGOING	<ul style="list-style-type: none"><li>Staffing levels have increased due to capacity upgrading and additional regulatory requirements</li><li>Utility personnel costs are comparable with benchmarks</li><li>A number of employees are approaching retirement</li></ul>	<ul style="list-style-type: none"><li>Develop a clear and specific succession plan that addresses upcoming retirements and potential knowledge gaps that may arise. This is particularly important for the Water utility, where issues of succession are more immediate.</li></ul>	<ul style="list-style-type: none"><li>Probable retirement dates for key staff have been identified.</li><li>Potential successors and retention, training and recruitment strategies to be identified for upcoming 5 years.</li></ul>	
	2.5.2 Operations and Maintenance	Recommended Priority: HIGH	Timeline: 2013 to 2014	<ul style="list-style-type: none"><li>Operating costs appear reasonable</li><li>Operational metrics compare well with benchmark utilities</li><li>Treatment plant operations and maintenance costs have been higher than benchmark utilities</li></ul>	<ul style="list-style-type: none"><li>Both utilities should investigate why WTP and WWTP operating and maintenance costs have been trending upward and compare unfavorably to peer groups</li></ul>	<ul style="list-style-type: none"><li>Evaluation of data with benchmark consultant has been done. Note – distribution and collection of operations and maintenance (O&amp;M) costs are less than peer groups.</li><li>Further discussions and site visits to take place with peer utilities to assess the similarities and differences in plant operations.</li><li>O&amp;M practices to be evaluated to seek efficiency improvements.</li></ul>	

Business Attribute		Findings		Recommendations		Administration Response	
Departmental W/W	<b>1.4.2 Revenue and Rate Approach – cost of service</b>	<b>Recommended Priority:</b> HIGH	<ul style="list-style-type: none"><li>Review of rate model is currently underway</li><li>When consider rates it is important to compare those of similar operations, in particular the non-discretionary fees.</li></ul>	<ul style="list-style-type: none"><li>The utilities should consider engaging in a formal cost of services analysis every three years to ensure a full understanding of all costs as they pertain to the different customer classes, particularly regional customers</li></ul>	<ul style="list-style-type: none"><li>Cost of service analysis was conducted as part of the rate model review. Re-evaluation of the rate model should be conducted every five years. Allocation methods and data integrity from other sources should be reviewed every year.</li></ul>		
	<b>Timeline:</b> COMPLETE						
Departmental W/W	<b>1.4.3 Revenue and Rate Approach – rate setting</b>	<b>Recommended Priority:</b> HIGH	<ul style="list-style-type: none"><li>Review of rate model is currently underway</li><li>When consider rates it is important to compare those of similar operations, in particular the non-discretionary fees.</li></ul>	<ul style="list-style-type: none"><li>Clear rate-setting philosophies should be identified and prioritized by Council, which reconcile the often conflicting objectives of utility revenue stability and conservation pricing. Current initiatives are underway to address this.</li></ul>	<ul style="list-style-type: none"><li>Utility Policy has been completed.</li></ul>		
	<b>Timeline:</b> COMPLETE						
Departmental W/W	<b>2.2.1 Organization Structure and Staffing</b>	<b>Recommended Priority:</b> MEDIUM	<ul style="list-style-type: none"><li>Organizational structure between the Water and Wastewater utilities are relatively consistent.</li><li>A disaggregated model for utility operations, however, it seems to work because of strong communication and individual initiative of staff members.</li></ul>	<ul style="list-style-type: none"><li>The Wastewater utility should continue with the process of formalizing the Performance Reporting Coordinator position to support the Utility</li></ul>	<ul style="list-style-type: none"><li>Performance Reporting Coordinator position filled.</li></ul>		
	<b>Timeline:</b> COMPLETE						

Business Attribute		Findings		Recommendations	Administration Response
Departmental W/WW	4.2.1 Regulatory Compliance and Reporting				
	Recommended Priority: MEDIUM				
	Timeline: COMPLETE				
		<ul style="list-style-type: none"><li>Compare will on regulatory compliance metrics</li><li>Positive feedback from provincial regulator in regards to interaction and compliance with standards</li></ul>			
		<ul style="list-style-type: none"><li>As part of the Rate Model Review Project, the Water and Wastewater utilities and City management should strive to educate Council about the utilities and how they operating under the utility rate model.</li></ul>			
		<ul style="list-style-type: none"><li>Workshops with City Council have taken place as part of the Utility Policy and Rate Model Projects</li></ul>			

Business Attribute		Findings	Recommendations	Administration Response
Departmental E.L.&P	<b>2.3.1 Employee Management - Workloads</b>  <b>Recommended Priority:</b> MEDIUM  <b>Timeline:</b> 2013 to 2014	<ul style="list-style-type: none"><li>• Current number and types of staff support effective and efficient operations</li><li>• Some functions could benefit from additional staff resources</li><li>• Low turnover and employee absences</li></ul>	<ul style="list-style-type: none"><li>• EL&amp;P should further review workflow and overtime worked to determine trends in workloads and to identify current and future pressure points, and should take immediate steps to assess the workloads of the two General Foremen and address any capacity issues as necessary.</li></ul>	<p>Total department workload and capacity are being evaluating and defined as part of the budget process.</p> <ul style="list-style-type: none"><li>• Focus on staffing.</li><li>• Determine departmental capacity baseline.</li><li>• Address bottlenecks.</li><li>• Normal operations.</li><li>• Addressed in 2013 &amp; 2014.</li></ul>
	<b>2.3.6 Employee Management – Succession Planning</b>  <b>Recommended Priority:</b> MEDIUM  <b>Timeline:</b> ONGOING	<ul style="list-style-type: none"><li>• Current number and types of staff support effective and efficient operations</li><li>• Some functions could benefit from additional staff resources</li><li>• Low turnover and employee absences</li></ul>	<ul style="list-style-type: none"><li>• EL&amp;P should immediately begin work to implement a succession plan to address upcoming retirements within the utility workforce.</li></ul>	<p>Succession planning is an ongoing operational consideration. While retirements and general turnover rates are not expected to be unusually high, increased competition for qualified, experienced staff is anticipated.</p> <ul style="list-style-type: none"><li>• Focus on staffing.</li><li>• Succession planning is always a key consideration</li><li>• Addressing departmental processes, training, orientation and documentation.</li><li>• Normal operations.</li><li>• Ongoing.</li></ul>
Departmental E.L.&P	<b>2.4.1 Working Environment - Safety</b>  <b>Recommended Priority:</b> MEDIUM  <b>Timeline:</b> ONGOING	<ul style="list-style-type: none"><li>• Safety record is comparable to other City departments</li></ul>	<ul style="list-style-type: none"><li>• Continue with City-wide efforts to emphasize the safe and efficient completion of work.</li><li>• Continue to track and report on all safety incidents to support a culture of safety among all staff</li></ul>	<p>Monthly management field visits, improved training and other measures are established</p> <ul style="list-style-type: none"><li>• Focus on safety.</li><li>• Always first priority.</li><li>• Continuing with several successful initiatives in place.</li><li>• Normal operations.</li><li>• Ongoing.</li></ul>

o. 611.

City of Red Deer City Council Regular Meeting, 2013/05/27

Business Attribute		Findings		Recommendations		Administration Response	
Departmental E.L.&P	<b>2.5.1 Operations and Maintenance</b>		<ul style="list-style-type: none"><li>No formal operations and maintenance plans or documented project management process; currently supported by annual planning, day-to-day work order process and informal communication activities and expenditures</li></ul>	<ul style="list-style-type: none"><li>EL&amp;P should develop an operations and maintenance planning approach that is linked to an asset management system.</li></ul>	<ul style="list-style-type: none"><li>A corporate work management system is in place and processes are being developed.</li><li>Focus on assets and operations.</li><li>Continued commitment to Hansen work management system and corporate asset management initiatives.</li><li>Processes are evolving and expanding into normal operations.</li><li>2013 &amp; 2014 continue with development.</li></ul>		
	<b>3.2.2 Customer, Citizen, Stakeholder Relations</b>					<ul style="list-style-type: none"><li>EL&amp;P should make an effort to meet with large customers to identify any strategies to minimize or mitigate disruptions.</li></ul>	<ul style="list-style-type: none"><li>To begin this year and develop ongoing relationship</li><li>Focus on customers.</li><li>Improve engagement in general service provision / operations.</li><li>Begin in 2013.</li><li>Ongoing.</li></ul>
	<b>4.2.1 Regulatory Compliance and Reporting</b>						
		<ul style="list-style-type: none"><li>EL&amp;P and City management should strive to educate Council about the utility and how it operates under the utility rate model</li></ul>					
			<ul style="list-style-type: none"><li>Social media is used to support customer communications</li><li>Strong relationships with ENMAX and developers</li><li>No formal regional expansion strategy in place</li></ul>				
		<ul style="list-style-type: none"><li>Social media is used to support customer communications</li><li>Strong relationships with ENMAX and developers</li><li>No formal regional expansion strategy in place</li></ul>	<ul style="list-style-type: none"><li>EL&amp;P should make an effort to meet with large customers to identify any strategies to minimize or mitigate disruptions.</li></ul>	<ul style="list-style-type: none"><li>To begin this year and develop ongoing relationship</li><li>Focus on customers.</li><li>Improve engagement in general service provision / operations.</li><li>Begin in 2013.</li><li>Ongoing.</li></ul>			
		<ul style="list-style-type: none"><li>Social media is used to support customer communications</li><li>Strong relationships with ENMAX and developers</li><li>No formal regional expansion strategy in place</li></ul>	<ul style="list-style-type: none"><li>EL&amp;P should make an effort to meet with large customers to identify any strategies to minimize or mitigate disruptions.</li></ul>	<ul style="list-style-type: none"><li>To begin this year and develop ongoing relationship</li><li>Focus on customers.</li><li>Improve engagement in general service provision / operations.</li><li>Begin in 2013.</li><li>Ongoing.</li></ul>			
		<ul style="list-style-type: none"><li>Social media is used to support customer communications</li><li>Strong relationships with ENMAX and developers</li><li>No formal regional expansion strategy in place</li></ul>	<ul style="list-style-type: none"><li>EL&amp;P should make an effort to meet with large customers to identify any strategies to minimize or mitigate disruptions.</li></ul>	<ul style="list-style-type: none"><li>To begin this year and develop ongoing relationship</li><li>Focus on customers.</li><li>Improve engagement in general service provision / operations.</li><li>Begin in 2013.</li><li>Ongoing.</li></ul>			
		<ul style="list-style-type: none"><li>Social media is used to support customer communications</li><li>Strong relationships with ENMAX and developers</li><li>No formal regional expansion strategy in place</li></ul>	<ul style="list-style-type: none"><li>EL&amp;P should make an effort to meet with large customers to identify any strategies to minimize or mitigate disruptions.</li></ul>	<ul style="list-style-type: none"><li>To begin this year and develop ongoing relationship</li><li>Focus on customers.</li><li>Improve engagement in general service provision / operations.</li><li>Begin in 2013.</li><li>Ongoing.</li></ul>			
		<ul style="list-style-type: none"><li>Social media is used to support customer communications</li><li>Strong relationships with ENMAX and developers</li><li>No formal regional expansion strategy in place</li></ul>	<ul style="list-style-type: none"><li>EL&amp;P should make an effort to meet with large customers to identify any strategies to minimize or mitigate disruptions.</li></ul>	<ul style="list-style-type: none"><li>To begin this year and develop ongoing relationship</li><li>Focus on customers.</li><li>Improve engagement in general service provision / operations.</li><li>Begin in 2013.</li><li>Ongoing.</li></ul>			
		<ul style="list-style-type: none"><li>Social media is used to support customer communications</li><li>Strong relationships with ENMAX and developers</li><li>No formal regional expansion strategy in place</li></ul>	<ul style="list-style-type: none"><li>EL&amp;P should make an effort to meet with large customers to identify any strategies to minimize or mitigate disruptions.</li></ul>	<ul style="list-style-type: none"><li>To begin this year and develop ongoing relationship</li><li>Focus on customers.</li><li>Improve engagement in general service provision / operations.</li><li>Begin in 2013.</li><li>Ongoing.</li></ul>			
		<ul style="list-style-type: none"><li>Social media is used to support customer communications</li><li>Strong relationships with ENMAX and developers</li><li>No formal regional expansion strategy in place</li></ul>	<ul style="list-style-type: none"><li>EL&amp;P should make an effort to meet with large customers to identify any strategies to minimize or mitigate disruptions.</li></ul>	<ul style="list-style-type: none"><li>To begin this year and develop ongoing relationship</li><li>Focus on customers.</li><li>Improve engagement in general service provision / operations.</li><li>Begin in 2013.</li><li>Ongoing.</li></ul>			
		<ul style="list-style-type: none"><li>Social media is used to support customer communications</li><li>Strong relationships with ENMAX and developers</li><li>No formal regional expansion strategy in place</li></ul>	<ul style="list-style-type: none"><li>EL&amp;P should make an effort to meet with large customers to identify any strategies to minimize or mitigate disruptions.</li></ul>	<ul style="list-style-type: none"><li>To begin this year and develop ongoing relationship</li><li>Focus on customers.</li><li>Improve engagement in general service provision / operations.</li><li>Begin in 2013.</li><li>Ongoing.</li></ul>			
		<ul style="list-style-type: none"><li>Social media is used to support customer communications</li><li>Strong relationships with ENMAX and developers</li><li>No formal regional expansion strategy in place</li></ul>	<ul style="list-style-type: none"><li>EL&amp;P should make an effort to meet with large customers to identify any strategies to minimize or mitigate disruptions.</li></ul>	<ul style="list-style-type: none"><li>To begin this year and develop ongoing relationship</li><li>Focus on customers.</li><li>Improve engagement in general service provision / operations.</li><li>Begin in 2013.</li><li>Ongoing.</li></ul>			
		<ul style="list-style-type: none"><li>Social media is used to support customer communications</li><li>Strong relationships with ENMAX and developers</li><li>No formal regional expansion strategy in place</li></ul>	<ul style="list-style-type: none"><li>EL&amp;P should make an effort to meet with large customers to identify any strategies to minimize or mitigate disruptions.</li></ul>	<ul style="list-style-type: none"><li>To begin this year and develop ongoing relationship</li><li>Focus on customers.</li><li>Improve engagement in general service provision / operations.</li><li>Begin in 2013.</li><li>Ongoing.</li></ul>			
		<ul style="list-style-type: none"><li>Social media is used to support customer communications</li><li>Strong relationships with ENMAX and developers</li><li>No formal regional expansion strategy in place</li></ul>	<ul style="list-style-type: none"><li>EL&amp;P should make an effort to meet with large customers to identify any strategies to minimize or mitigate disruptions.</li></ul>	<ul style="list-style-type: none"><li>To begin this year and develop ongoing relationship</li><li>Focus on customers.</li><li>Improve engagement in general service provision / operations.</li><li>Begin in 2013.</li><li>Ongoing.</li></ul>			
		<ul style="list-style-type: none"><li>Social media is used to support customer communications</li><li>Strong relationships with ENMAX and developers</li><li>No formal regional expansion strategy in place</li></ul>	<ul style="list-style-type: none"><li>EL&amp;P should make an effort to meet with large customers to identify any strategies to minimize or mitigate disruptions.</li></ul>	<ul style="list-style-type: none"><li>To begin this year and develop ongoing relationship</li><li>Focus on customers.</li><li>Improve engagement in general service provision / operations.</li><li>Begin in 2013.</li><li>Ongoing.</li></ul>			
		<ul style="list-style-type: none"><li>Social media is used to support customer communications</li><li>Strong relationships with ENMAX and developers</li><li>No formal regional expansion strategy in place</li></ul>	<ul style="list-style-type: none"><li>EL&amp;P should make an effort to meet with large customers to identify any strategies to minimize or mitigate disruptions.</li></ul>	<ul style="list-style-type: none"><li>To begin this year and develop ongoing relationship</li><li>Focus on customers.</li><li>Improve engagement in general service provision / operations.</li><li>Begin in 2013.</li><li>Ongoing.</li></ul>			
		<ul style="list-style-type: none"><li>Social media is used to support customer communications</li><li>Strong relationships with ENMAX and developers</li><li>No formal regional expansion strategy in place</li></ul>	<ul style="list-style-type: none"><li>EL&amp;P should make an effort to meet with large customers to identify any strategies to minimize or mitigate disruptions.</li></ul>	<ul style="list-style-type: none"><li>To begin this year and develop ongoing relationship</li><li>Focus on customers.</li><li>Improve engagement in general service provision / operations.</li><li>Begin in 2013.</li><li>Ongoing.</li></ul>			
		<ul style="list-style-type: none"><li>Social media is used to support customer communications</li><li>Strong relationships with ENMAX and developers</li><li>No formal regional expansion strategy in place</li></ul>	<ul style="list-style-type: none"><li>EL&amp;P should make an effort to meet with large customers to identify any strategies to minimize or mitigate disruptions.</li></ul>	<ul style="list-style-type: none"><li>To begin this year and develop ongoing relationship</li><li>Focus on customers.</li><li>Improve engagement in general service provision / operations.</li><li>Begin in 2013.</li><li>Ongoing.</li></ul>			
		<ul style="list-style-type: none"><li>Social media is used to support customer communications</li><li>Strong relationships with ENMAX and developers</li><li>No formal regional expansion strategy in place</li></ul>	<ul style="list-style-type: none"><li>EL&amp;P should make an effort to meet with large customers to identify any strategies to minimize or mitigate disruptions.</li></ul>	<ul style="list-style-type: none"><li>To begin this year and develop ongoing relationship</li><li>Focus on customers.</li><li>Improve engagement in general service provision / operations.</li><li>Begin in 2013.</li><li>Ongoing.</li></ul>			
		<ul style="list-style-type: none"><li>Social media is used to support customer communications</li><li>Strong relationships with ENMAX and developers</li><li>No formal regional expansion strategy in place</li></ul>	<ul style="list-style-type: none"><li>EL&amp;P should make an effort to meet with large customers to identify any strategies to minimize or mitigate disruptions.</li></ul>	<ul style="list-style-type: none"><li>To begin this year and develop ongoing relationship</li><li>Focus on customers.</li><li>Improve engagement in general service provision / operations.</li><li>Begin in 2013.</li><li>Ongoing.</li></ul>			
		<ul style="list-style-type: none"><li>Social media is used to support customer communications</li><li>Strong relationships with ENMAX and developers</li><li>No formal regional expansion strategy in place</li></ul>	<ul style="list-style-type: none"><li>EL&amp;P should make an effort to meet with large customers to identify any strategies to minimize or mitigate disruptions.</li></ul>	<ul style="list-style-type: none"><li>To begin this year and develop ongoing relationship</li><li>Focus on customers.</li><li>Improve engagement in general service provision / operations.</li><li>Begin in 2013.</li><li>Ongoing.</li></ul>			
		<ul style="list-style-type: none"><li>Social media is used to support customer communications</li><li>Strong relationships with ENMAX and developers</li><li>No formal regional expansion strategy in place</li></ul>	<ul style="list-style-type: none"><li>EL&amp;P should make an effort to meet with large customers to identify any strategies to minimize or mitigate disruptions.</li></ul>	<ul style="list-style-type: none"><li>To begin this year and develop ongoing relationship</li><li>Focus on customers.</li><li>Improve engagement in general service provision / operations.</li><li>Begin in 2013.</li><li>Ongoing.</li></ul>			
		<ul style="list-style-type: none"><li>Social media is used to support customer communications</li><li>Strong relationships with ENMAX and developers</li><li>No formal regional expansion strategy in place</li></ul>	<ul style="list-style-type: none"><li>EL&amp;P should make an effort to meet with large customers to identify any strategies to minimize or mitigate disruptions.</li></ul>	<ul style="list-style-type: none"><li>To begin this year and develop ongoing relationship</li><li>Focus on customers.</li><li>Improve engagement in general service provision / operations.</li><li>Begin in 2013.</li><li>Ongoing.</li></ul>			
		<ul style="list-style-type: none"><li>Social media is used to support customer communications</li><li>Strong relationships with ENMAX and developers</li><li>No formal regional expansion strategy in place</li></ul>	<ul style="list-style-type: none"><li>EL&amp;P should make an effort to meet with large customers to identify any strategies to minimize or mitigate disruptions.</li></ul>	<ul style="list-style-type: none"><li>To begin this year and develop ongoing relationship</li><li>Focus on customers.</li><li>Improve engagement in general service provision / operations.</li><li>Begin in 2013.</li><li>Ongoing.</li></ul>			
		<ul style="list-style-type: none"><li>Social media is used to support customer communications</li><li>Strong relationships with ENMAX and developers</li><li>No formal regional expansion strategy in place</li></ul>	<ul style="list-style-type: none"><li>EL&amp;P should make an effort to meet with large customers to identify any strategies to minimize or mitigate disruptions.</li></ul>	<ul style="list-style-type: none"><li>To begin this year and develop ongoing relationship</li><li>Focus on customers.</li><li>Improve engagement in general service provision / operations.</li><li>Begin in 2013.</li><li>Ongoing.</li></ul>			
		<ul style="list-style-type: none"><li>Social media is used to support customer communications</li><li>Strong relationships with ENMAX and developers</li><li>No formal regional expansion strategy in place</li></ul>	<ul style="list-style-type: none"><li>EL&amp;P should make an effort to meet with large customers to identify any strategies to minimize or mitigate disruptions.</li></ul>	<ul style="list-style-type: none"><li>To begin this year and develop ongoing relationship</li><li>Focus on customers.</li><li>Improve engagement in general service provision / operations.</li><li>Begin in 2013.</li><li>Ongoing.</li></ul>			
		<ul style="list-style-type: none"><li>Social media is used to support customer communications</li><li>Strong relationships with ENMAX and developers</li><li>No formal regional expansion strategy in place</li></ul>	<ul style="list-style-type: none"><li>EL&amp;P should make an effort to meet with large customers to identify any strategies to minimize or mitigate disruptions.</li></ul>	<ul style="list-style-type: none"><li>To begin this year and develop ongoing relationship</li><li>Focus on customers.</li><li>Improve engagement in general service provision / operations.</li><li>Begin in 2013.</li><li>Ongoing.</li></ul>			
		<ul style="list-style-type: none"><li>Social media is used to support customer communications</li><li>Strong relationships with ENMAX and developers</li><li>No formal regional expansion strategy in place</li></ul>	<ul style="list-style-type: none"><li>EL&amp;P should make an effort to meet with large customers to identify any strategies to minimize or mitigate disruptions.</li></ul>	<ul style="list-style-type: none"><li>To begin this year and develop ongoing relationship</li><li>Focus on customers.</li><li>Improve engagement in general service provision / operations.</li><li>Begin in 2013.</li><li>Ongoing.</li></ul>			
		<ul style="list-style-type: none"><li>Social media is used to support customer communications</li><li>Strong relationships with ENMAX and developers</li><li>No formal regional expansion strategy in place</li></ul>	<ul style="list-style-type: none"><li>EL&amp;P should make an effort to meet with large customers to identify any strategies to minimize or mitigate disruptions.</li></ul>	<ul style="list-style-type: none"><li>To begin this year and develop ongoing relationship</li><li>Focus on customers.</li><li>Improve engagement in general service provision / operations.</li><li>Begin in 2013.</li><li>Ongoing.</li></ul>			
		<ul style="list-style-type: none"><li>Social media is used to support customer communications</li><li>Strong relationships with ENMAX and developers</li><li>No formal regional expansion strategy in place</li></ul>	<ul style="list-style-type: none"><li>EL&amp;P should make an effort to meet with large customers to identify any strategies to minimize or mitigate disruptions.</li></ul>	<ul style="list-style-type: none"><li>To begin this year and develop ongoing relationship</li><li>Focus on customers.</li><li>Improve engagement in general service provision / operations.</li><li>Begin in 2013.</li><li>Ongoing.</li></ul>			
		<ul style="list-style-type: none"><li>Social media is used to support customer communications</li><li>Strong relationships with ENMAX and developers</li><li>No formal regional expansion strategy in place</li></ul>	<ul style="list-style-type: none"><li>EL&amp;P should make an effort to meet with large customers to identify any strategies to minimize or mitigate disruptions.</li></ul>	<ul style="list-style-type: none"><li>To begin this year and develop ongoing relationship</li><li>Focus on customers.</li><li>Improve engagement in general service provision / operations.</li><li>Begin in 2013.</li><li>Ongoing.</li></ul>			
		<ul style="list-style-type: none"><li>Social media is used to support customer communications</li><li>Strong relationships with ENMAX and developers</li><li>No formal regional expansion strategy in place</li></ul>	<ul style="list-style-type: none"><li>EL&amp;P should make an effort to meet with large customers to identify any strategies to minimize or mitigate disruptions.</li></ul>	<ul style="list-style-type: none"><li>To begin this year and develop ongoing relationship</li><li>Focus on customers.</li><li>Improve engagement in general service provision / operations.</li><li>Begin in 2013.</li><li>Ongoing.</li></ul>			
		<ul style="list-style-type: none"><li>Social media is used to support customer communications</li><li>Strong relationships with ENMAX and developers</li><li>No formal regional expansion strategy in place</li></ul>	<ul style="list-style-type: none"><li>EL&amp;P should make an effort to meet with large customers to identify any strategies to minimize or mitigate disruptions.</li></ul>	<ul style="list-style-type: none"><li>To begin this year and develop ongoing relationship</li><li>Focus on customers.</li><li>Improve engagement in general service provision / operations.</li><li>Begin in 2013.</li><li>Ongoing.</li></ul>			
		<ul style="list-style-type: none"><li>Social media is used to support customer communications</li><li>Strong relationships with ENMAX and developers</li><li>No formal regional expansion strategy in place</li></ul>	<ul style="list-style-type: none"><li>EL&amp;P should make an effort to meet with large customers to identify any strategies to minimize or mitigate disruptions.</li></ul>	<ul style="list-style-type: none"><li>To begin this year and develop ongoing relationship</li><li>Focus on customers.</li><li>Improve engagement in general service provision / operations.</li><li>Begin in 2013.</li><li>Ongoing.</li></ul>			
		<ul style="list-style-type: none"><li>Social media is used to support customer communications</li><li>Strong relationships with ENMAX and developers</li><li>No formal regional expansion strategy in place</li></ul>	<ul style="list-style-type: none"><li>EL&amp;P should make an effort to meet with large customers to identify any strategies to minimize or mitigate disruptions.</li></ul>	<ul style="list-style-type: none"><li>To begin this year and develop ongoing relationship</li><li>Focus on customers.</li><li>Improve engagement in general service provision / operations.</li><li>Begin in 2013.</li><li>Ongoing.</li></ul>			
		<ul style="list-style-type: none"><li>Social media is used to support customer communications</li><li>Strong relationships with ENMAX and developers</li><li>No formal regional expansion strategy in place</li></ul>	<ul style="list-style-type: none"><li>EL&amp;P should make an effort to meet with large customers to identify any strategies to minimize or mitigate disruptions.</li></ul>	<ul style="list-style-type: none"><li>To begin this year and develop ongoing relationship</li><li>Focus on customers.</li><li>Improve engagement in general service provision / operations.</li><li>Begin in 2013.</li><li>Ongoing.</li></ul>			
		<ul style="list-style-type: none"><li>Social media is used to support customer communications</li><li>Strong relationships with ENMAX and developers</li><li>No formal regional expansion strategy in place</li></ul>	<ul style="list-style-type: none"><li>EL&amp;P should make an effort to meet with large customers to identify any strategies to minimize or mitigate disruptions.</li></ul>	<ul style="list-style-type: none"><li>To begin this year and develop ongoing relationship</li><li>Focus on customers.</li><li>Improve engagement in general service provision / operations.</li><li>Begin in 2013.</li><li>Ongoing.</li></ul>			
		<ul style="list-style-type: none"><li>Social media is used to support customer communications</li><li>Strong relationships with ENMAX and developers</li><li>No formal regional expansion strategy in place</li></ul>	<ul style="list-style-type: none"><li>EL&amp;P should make an effort to meet with large customers to identify any strategies to minimize or mitigate disruptions.</li></ul>	<ul style="list-style-type: none"><li>To begin this year and develop ongoing relationship</li><li>Focus on customers.</li><li>Improve engagement in general service provision / operations.</li><li>Begin in 2013.</li><li>Ongoing.</li></ul>			
		<ul style="list-style-type: none"><li>Social media is used to support customer communications</li><li>Strong relationships with ENMAX and developers</li><li>No formal regional expansion strategy in place</li></ul>	<ul style="list-style-type: none"><li>EL&amp;P should make an effort to meet with large customers to identify any strategies to minimize or mitigate disruptions.</li></ul>	<ul style="list-style-type: none"><li>To begin this year and develop ongoing relationship</li><li>Focus on customers.</li><li>Improve engagement in general service provision / operations.</li><li>Begin in 2013.</li><li>Ongoing.</li></ul>			
		<ul style="list-style-type: none"><li>Social media is used to support customer communications</li><li>Strong relationships with ENMAX and developers</li><li>No formal regional expansion strategy in place</li></ul>	<ul style="list-style-type: none"><li>EL&amp;P should make an effort to meet with large customers to identify any strategies to minimize or mitigate disruptions.</li></ul>	<ul style="list-style-type: none"><li>To begin this year and develop ongoing relationship</li><li>Focus on customers.</li><li>Improve engagement in general service provision / operations.</li><li>Begin in 2013.</li><li>Ongoing.</li></ul>			
		<ul style="list-style-type: none"><li>Social media is used to support customer communications</li><li>Strong relationships with ENMAX and developers</li><li>No formal regional expansion strategy in place</li></ul>	<ul style="list-style-type: none"><li>EL&amp;P should make an effort to meet with large customers to identify any strategies to minimize or mitigate disruptions.</li></ul>	<ul style="list-style-type: none"><li>To begin this year and develop ongoing relationship</li><li>Focus on customers.</li><li>Improve engagement in general service provision / operations.</li><li>Begin in 2013.</li><li>Ongoing.</li></ul>			
		<ul style="list-style-type: none"><li>Social media is used to support customer communications</li><li>Strong relationships with ENMAX and developers</li><li>No formal regional expansion strategy in place</li></ul>	<ul style="list-style-type: none"><li>EL&amp;P should make an effort to meet with large customers to identify any strategies to minimize or mitigate disruptions.</li></ul>	<ul style="list-style-type: none"><li>To begin this year and develop ongoing relationship</li><li>Focus on customers.</li><li>Improve engagement in general service provision / operations.</li><li>Begin in 2013.</li><li>Ongoing.</li></ul>			
		<ul style="list-style-type: none"><li>Social media is used to support customer communications</li><li>Strong relationships with ENMAX and developers</li><li>No formal regional expansion strategy in place</li></ul>	<ul style="list-style-type: none"><li>EL&amp;P should make an effort to meet with large customers to identify any strategies to minimize or mitigate disruptions.</li></ul>	<ul style="list-style-type: none"><li>To begin this year and develop ongoing relationship</li><li>Focus on customers.</li><li>Improve engagement in general service provision / operations.</li><li>Begin in 2013.</li><li>Ongoing.</li></ul>			
		<ul style="list-style-type: none"><li>Social media is used to support customer communications</li><li>Strong relationships with ENMAX and developers</li><li>No formal regional expansion strategy in place</li></ul>	<ul style="list-style-type: none"><li>EL&amp;P should make an effort to meet with large customers to identify any strategies to minimize or mitigate disruptions.</li></ul>	<ul style="list-style-type: none"><li>To begin this year and develop ongoing relationship</li><li>Focus on customers.</li><li>Improve engagement in general service provision / operations.</li><li>Begin in 2013.</li><li>Ongoing.</li></ul>			
		<ul style="list-style-type: none"><li>Social media is used to support customer communications</li><li>Strong relationships with ENMAX and developers</li><li>No formal regional expansion strategy in place</li></ul>	<ul style="list-style-type: none"><li>EL&amp;P should make an effort to meet with large customers to identify any strategies to minimize or mitigate disruptions.</li></ul>	<ul style="list-style-type: none"><li>To begin this year and develop ongoing relationship</li><li>Focus on customers.</li><li>Improve engagement in general service provision / operations.</li><li>Begin in 2013.</li><li>Ongoing.</li></ul>			
		<ul style="list-style-type: none"><li>Social media is used to support customer communications</li><li>Strong relationships with ENMAX and developers</li><li>No formal regional expansion strategy in place</li></ul>	<ul style="list-style-type: none"><li>EL&amp;P should make an effort to meet with large customers to identify any strategies to minimize or mitigate disruptions.</li></ul>	<ul style="list-style-type: none"><li>To begin this year and develop ongoing relationship</li><li>Focus on customers.</li><li>Improve engagement in general service provision / operations.</li><li>Begin in 2013.</li><li>Ongoing.</li></ul>			
		<ul style="list-style-type: none"><li>Social media is used to support customer communications</li><li>Strong relationships with ENMAX and developers</li><li>No formal regional expansion strategy in place</li></ul>	<ul style="list-style-type: none"><li>EL&amp;P should make an effort to meet with large customers to identify any strategies to minimize or mitigate disruptions.</li></ul>	<ul style="list-style-type: none"><li>To begin this year and develop ongoing relationship</li><li>Focus on customers.</li><li>Improve engagement in general service provision / operations.</li><li>Begin in 2013.</li><li>Ongoing.</li></ul>			
		<ul style="list-style-type: none"><li>Social media is used to support customer communications</li><li>Strong relationships with ENMAX and developers</li><li>No formal regional expansion strategy in place</li></ul>	<ul style="list-style-type: none"><li>EL&amp;P should make an effort to meet with large customers to identify any strategies to minimize or mitigate disruptions.</li></ul>	<ul style="list-style-type: none"><li>To begin this year and develop ongoing relationship</li><li>Focus on customers.</li><li>Improve engagement in general service provision / operations.</li><li>Begin in 2013.</li><li>Ongoing.</li></ul>			
		<ul style="list-style-type: none"><li>Social media is used to support customer communications</li><li>Strong relationships with ENMAX and developers</li><li>No formal regional expansion strategy in place</li></ul>	<ul style="list-style-type: none"><li>EL&amp;P should make an effort to meet with large customers to identify any strategies to minimize or mitigate disruptions.</li></ul>	<ul style="list-style-type: none"><li>To begin this year and develop ongoing relationship</li><li>Focus on customers.</li><li>Improve engagement in general service provision / operations.</li><li>Begin in 2013.</li><li>Ongoing.</li></ul>			
		<ul style="list-style-type: none"><li>Social media is used to support customer communications</li><li>Strong relationships with ENMAX and developers</li><li>No formal regional expansion strategy in place</li></ul>	<ul style="list-style-type: none"><li>EL&amp;P should make an effort to meet with large customers to identify any strategies to minimize or mitigate disruptions.</li></ul>	<ul style="list-style-type: none"><li>To begin this year and develop ongoing relationship</li><li>Focus on customers.</li><li>Improve engagement in general service provision / operations.</li><li>Begin in 2013.</li><li>Ongoing.</li></ul>			
		<ul style="list-style-type: none"><li>Social media is used to support customer communications</li><li>Strong relationships with ENMAX and developers</li><li>No formal regional expansion strategy in place</li></ul>	<ul style="list-style-type: none"><li>EL&amp;P should make an effort to meet with large customers to identify any strategies to minimize or mitigate disruptions.</li></ul>	<ul style="list-style-type: none"><li>To begin this year and develop ongoing relationship</li><li>Focus on customers.</li><li>Improve engagement in general service provision / operations.</li><li>Begin in 2013.</li><li>Ongoing.</li></ul>			
		<ul style="list-style-type: none"><li>Social media is used to support customer communications</li><li>Strong relationships with ENMAX and developers</li><li>No formal regional expansion strategy in place</li></ul>	<ul style="list-style-type: none"><li>EL&amp;P should make an effort to meet with large customers to identify any strategies to minimize or mitigate disruptions.</li></ul>	<ul style="list-style-type: none"><li>To begin this year and develop ongoing relationship</li><li>Focus on customers.</li><li>Improve engagement in general service provision / operations.</li><li>Begin in 2013.</li><li>Ongoing.</li></ul>			
		<ul style="list-style-type: none"><li>Social media is used to support customer communications</li><li>Strong relationships with ENMAX and developers</li><li>No formal regional expansion strategy in place</li></ul>	<ul style="list-style-type: none"><li>EL&amp;P should make an effort to meet with large customers to identify any strategies to minimize or mitigate disruptions.</li></ul>	<ul style="list-style-type: none"><li>To begin this year and develop ongoing relationship</li><li>Focus on customers.</li><li>Improve engagement in general service provision / operations.</li><li>Begin in 2013.</li><li>Ongoing.</li></ul>			
		<ul style="list-style-type: none"><li>Social media is used to support customer communications</li><li>Strong relationships with ENMAX and developers</li><li>No formal regional expansion strategy in place</li></ul>	<ul style="list-style-type: none"><li>EL&amp;P should make an effort to meet with large customers to identify any strategies to minimize or mitigate disruptions.</li></ul>	<ul style="list-style-type: none"><li>To begin this year and develop ongoing relationship</li><li>Focus on customers.</li><li>Improve engagement in general service provision / operations.</li><li>Begin in 2013.</li><li>Ongoing.</li></ul>			
		<ul style="list-style-type: none"><li>Social media is used to support customer communications</li><li>Strong relationships with ENMAX and developers</li><li>No formal regional expansion strategy in place</li></ul>	<ul style="list-style-type: none"><li>EL&amp;P should make an effort to meet with large customers to identify any strategies to minimize or mitigate disruptions.</li></ul>	<ul style="list-style-type: none"><li>To begin this year and develop ongoing relationship</li><li>Focus on customers.</li><li>Improve engagement in general service provision / operations.</li><li>Begin in 2013.</li><li>Ongoing.</li></ul>			
		<ul style="list-style-type: none"><li>Social media is used to support customer communications</li><li>Strong relationships with ENMAX and developers</li><li>No formal regional expansion strategy in place</li></ul>	<ul style="list-style-type: none"><li>EL&amp;P should make an effort to meet with large customers to identify any strategies to minimize or mitigate disruptions.</li></ul>	<ul style="list-style-type: none"><li>To begin this year and develop ongoing relationship</li><li>Focus on customers.</li><li>Improve engagement in general service provision / operations.</li><li>Begin in 2013.</li><li>Ongoing.</li></ul>			
		<ul style="list-style-type: none"><li>Social media is used to support customer communications</li><li>Strong relationships with ENMAX and developers</li><li>No formal regional expansion strategy in place</li></ul>	<ul style="list-style-type: none"><li>EL&amp;P should make an effort to meet with large customers to identify any strategies to minimize or mitigate disruptions.</li></ul>	<ul style="list-style-type: none"><li>To begin this year and develop ongoing relationship</li><li>Focus on customers.</li><li>Improve engagement in general service provision / operations.</li><li>Begin in 2013.</li><li>Ongoing.</li></ul>			
		<ul style="list-style-type: none"><li>Social media is used to support customer communications</li><li>Strong relationships with ENMAX and developers</li><li>No formal regional expansion strategy in place</li></ul>	<ul style="list-style-type: none"><li>EL&amp;P should make an effort to meet with large customers to identify any strategies to minimize or mitigate disruptions.</li></ul>	<ul style="list-style-type: none"><li>To begin this year and develop ongoing relationship</li><li>Focus on customers.</li><li>Improve engagement in general service provision / operations.</li><li>Begin in 2013.</li><li>Ongoing.</li></ul>			
		<ul style="list-style-type: none"><li>Social media is used to support customer communications</li><li>Strong relationships with ENMAX and developers</li><li>No formal regional expansion strategy in place</li></ul>	<ul style="list-style-type: none"><li>EL&amp;P should make an effort to meet with large customers to identify any strategies to minimize or mitigate disruptions.</li></ul>	<ul style="list-style-type: none"><li>To begin this year and develop ongoing relationship</li><li>Focus on customers.</li><li>Improve engagement in general service provision / operations.</li><li>Begin in 2013.</li><li>Ongoing.</li></ul>			
		<ul style="list-style-type: none"><li>Social media is used to support customer communications</li><li>Strong relationships with ENMAX and developers</li><li>No formal regional expansion strategy in place</li></ul>	<ul style="list-style-type: none"><li>EL&amp;P should make an effort to meet with large customers to identify any strategies to minimize or mitigate disruptions.</li></ul>	<ul style="list-style-type: none"><li>To begin this year and develop ongoing relationship</li><li>Focus on customers.</li><li>Improve engagement in general service provision / operations.</li><li>Begin in 2013.</li><li>Ongoing.</li></ul>			
		<ul style="list-style-type: none"><li>Social media is used to support customer communications</li><li>Strong relationships with ENMAX and developers</li><li>No formal regional expansion strategy in place</li></ul>	<ul style="list-style-type: none"><li>EL&amp;P should make an effort to meet with large customers to identify any strategies to minimize or mitigate disruptions.</li></ul>	<ul style="list-style-type: none"><li>To begin this year and develop ongoing relationship</li><li>Focus on customers.</li><li>Improve engagement in general service provision / operations.</li><li>Begin in 2013.</li><li>Ongoing.</li></ul>			
		<ul style="list-style-type: none"><li>Social media is used to support customer communications</li><li>Strong relationships with ENMAX and developers</li><li>No formal regional expansion strategy in place</li></ul>	<ul style="list-style-type: none"><li>EL&amp;P should make an effort to meet with large customers to identify any strategies to minimize or mitigate disruptions.</li></ul>	<ul style="list-style-type: none"><li>To begin this year and develop ongoing relationship</li><li>Focus on customers.</li><li>Improve engagement in general service provision / operations.</li><li>Begin in 2013.</li><li>Ongoing.</li></ul>			
		<ul style="list-style-type: none"><li>Social media is used to support customer communications</li><li>Strong relationships with ENMAX and developers</li><li>No formal regional expansion strategy in place</li></ul>	<ul style="list-style-type: none"><li>EL&amp;P should make an effort to meet with large customers to identify any strategies to minimize or mitigate disruptions.</li></ul>	<ul style="list-style-type: none"><li>To begin this year and develop ongoing relationship</li><li>Focus on customers.</li><li>Improve engagement in general service provision / operations.</li><li>Begin in 2013.</li><li>Ongoing.</li></ul>			
		<ul style="list-style-type: none"><li>Social media is used to support customer communications</li><li>Strong relationships with ENMAX and developers</li><li>No formal regional expansion strategy in place</li></ul>	<ul style="list-style-type: none"><li>EL&amp;P should make an effort to meet with large customers to identify any strategies to minimize or mitigate disruptions.</li></ul>	<ul style="list-style-type: none"><li>To begin this year and develop ongoing relationship</li><li>Focus on customers.</li><li>Improve engagement in general service provision / operations.</li><li>Begin in 2013.</li><li>Ongoing.</li></ul>			
		<ul style="list-style-type: none"><li>Social media is used to support customer communications</li><li>Strong relationships with ENMAX and developers</li><li>No formal regional expansion strategy in place</li></ul>	<ul style="list-style-type: none"><li>EL&amp;P should make an effort to meet with large customers to identify any strategies to minimize or mitigate disruptions.</li></ul>	<ul style="list-style-type: none"><li>To begin this year and develop ongoing relationship</li><li>Focus on customers.</li><li>Improve engagement in general service provision / operations.</li><li>Begin in 2013.</li><li>Ongoing.</li></ul>			
		<ul style="list-style-type: none"><li>Social media is used to support customer communications</li><li>Strong relationships with ENMAX and developers</li><li>No formal regional expansion strategy in place</li></ul>	<ul style="list-style-type: none"><li>EL&amp;P should make an effort to meet with large customers to identify any strategies to minimize or mitigate disruptions.</li></ul>	<ul style="list-style-type: none"><li>To begin this year and develop ongoing relationship</li><li>Focus on customers.</li><li>Improve engagement in general service provision / operations.</li><li>Begin in 2013.</li><li>Ongoing.</li></ul>			
		<ul style="list-style-type: none"><li>Social media is used to support customer communications</li><li>Strong relationships with ENMAX and developers</li><li>No formal regional expansion strategy in place</li></ul>	<ul style="list-style-type: none"><li>EL&amp;P should make an effort to meet with large customers to identify any strategies to minimize or mitigate disruptions.</li></ul>	<ul style="list-style-type: none"><li>To begin this year and develop ongoing relationship</li><li>Focus on customers.</li><li>Improve engagement in general service provision / operations.</li><li>Begin in 2013.</li><li>Ongoing.</li></ul>			
		<ul style="list-style-type: none"><li>Social media is used to support customer communications</li><li>Strong relationships with ENMAX and developers</li><li>No formal regional expansion strategy in place</li></ul>	<ul style="list-style-type: none"><li>EL&amp;P should make an effort to meet with large customers to identify any strategies to minimize or mitigate disruptions.</li></ul>	<ul style="list-style-type: none"><li>To begin this year and develop ongoing relationship</li><li>Focus on customers.</li><li>Improve engagement in general service provision / operations.</li><li>Begin in 2013.</li><li>Ongoing.</li></ul>			



Value for Money Administrative Response

Priority Action List - Summary

Dashboard Status: on schedule, on budget; manageable changes occurring; major delays or changes occurring; complete

ACTION PRIORITIES					Quarterly Reporting	
	Actions	Target Completion Date	Quarterly Dashboard Status	Comments		
1.1.1.	Improve linkages to budget	Ongoing				
1.3.1.	Address risk management	Ongoing				
1.4.1.	Utility Policy and procedure development - rate model	Q4 2014				
1.5.1.	Utility Policy and procedure development - fiscal planning	Ongoing				
2.2.2. + 2.2.3.	Development of Service Level Agreements	Ongoing				
2.4.1.	Safe work practices	Q4 2014				
2.8.1.	Business continuity planning	Ongoing				
2.8.2.	Other emergency scenarios	Q4 2014				
3.1.1. + 3.3.1.	Citizen Engagement	Q4 2014				
4.1.1.	Performance Management	Q4 2014				
4.3.1.	Financial Reporting	Q4 2015				
		Ongoing				
1.1.1.	Strategic and Business Planning	Q4 2014				
1.3.1.	Risk Management Plan	Ongoing				
1.4.3.	Utility Policy implementation, Procedure development	Q4 2013				
2.1.2.	Water metering and use estimation	Ongoing				
2.3.2.	Employee Management - Succession Planning	Q4 2013				
2.5.2.	Operations and Maintenance	Q4 2014				
1.4.2.	Rate Model Review	COMPLETE	✓			
1.4.3.	Utility Policy	COMPLETE	✓			
2.2.1.	Performance Reporting Coordinator	COMPLETE	✓			
4.2.1.	Rate Model Review - Council	COMPLETE	✓			
2.3.1	Employee Management - Workflow	Q4 2014				
2.3.6.	Employee Management - Succession Planning	Ongoing				
2.4.1.	Safe Work Practices	Ongoing				
2.5.1.	Operations and maintenance linked to asset management	Q4 2014				
3.2.2.	Customer Relationship Management	Ongoing				
4.2.1.	Regulatory Compliance and Reporting - Council	Ongoing				





## AUDIT COMMITTEE

DATE: April 10, 2013  
TO: City Council  
FROM: Audit Committee  
SUBJECT: Value for Money Audit Recommendations Report

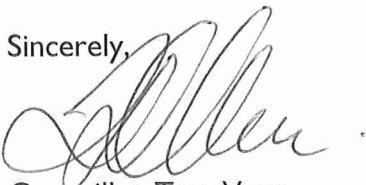
---

At the April 10, 2013 meeting of the Audit Committee, the Audit Committee reviewed the Value for Money Audit Recommendations Report dated April 10, 2103. After review, the Audit Committee introduced and passed the following motion:

**“Resolved** that the Audit Committee, having considered the Value for Money Audit Recommendations Report dated April 10, 2013 hereby endorses the 27 priority items identified by administration for strategic focus and recommends Council’s adoption of these areas for implementation.”

The above is submitted for Council’s consideration.

Sincerely,



Councillor Tara Veer  
Chairperson, Audit Committee

c: M. Andrew, Corporate Controller  
D. Krejci, Financial Services Manager



May 14, 2013

## Integrated Movement Study – Mobility Playbook

Legislative Services

### **Report Summary & Recommendation:**

---

#### Summary:

The attached report is being brought forward from the Monday, March 18, 2013 Council Meeting.

#### **Recommendation:**

That Council consider the recommendations of this report at the Monday, May 27, 2013 Council Meeting.

### **City Manager Comments:**

---

The Mobility Playbook has been developed as a result of the Integrated Movement Study. The Integrated Movement Study involved hundreds of residents and received thousands of comments through events, presentations and surveys.

The recommendations propose a number of clear strategies designed to shift the modal split in the community as the city grows. The proposals provide for choice and The City's role is as a facilitator through a variety of actions.

The final plan includes a new "play" related to creating a balanced road network. This responds to some community input which considered that the future direction for road users was not adequately addressed.

I strongly support the revised plan. It is important to recognize that vehicle traffic will continue to be the primary means of transportation within the city. However, a small shift in the modal split (by choice) will have economic, social and health benefits for the community as a whole. As seen in other communities, different choices can be encouraged through more convenient public transit and better integration between land use planning, trails and transit routes.

I recommend that City Council approve the plan as a framework for future transportation planning. Upon approval of this plan, work will begin on updating The City's master plans for roads, trails and transit.

Craig Curtis  
City Manager



## **Resolutions:**

---

Resolved that, Council of The City of Red Deer, having considered the report from the Legislative Services department dated May 14, 2013 re: Integrated Movement Study – Mobility Playbook hereby agrees to lift from the table consideration of this report.

Resolved that Council of The City of Red Deer, having considered the report from the Development Services Division dated May 27, 2013 re: Integrated Movement Study – Mobility Playbook, hereby endorses the Mobility Playbook as a planning document.

## **Report Details**

### **Background:**

---

At the Monday, March 18, 2013 Regular Council Meeting, the following tabling motion was introduced and passed:

Resolved that Council of The City of Red Deer having considered the report From the Development Services Division, dated March 7, 2013, re: Integrated Movement Study - Draft Mobility Playbook, hereby agrees to table this item for final consideration at the Monday, May 27, 2013 Council Meeting.

This item is now before Council for its consideration.



05/27/2013

## Integrated Movement Study – Mobility Playbook

Development Services

### **Report Summary & Recommendation:**

---

The draft Mobility Playbook was available to the public for feedback, and was promoted for review through a variety of methods and opportunities.

Through the consultation process, administration received 252 completed feedback forms, and also spoke with hundreds of people at the various activities. Overall, there was general support for the Mobility Playbook – both its vision for Red Deer, and the shift in the way we do transportation planning.

As a result from the feedback, an additional 'Play' has been developed – *Create a Balanced Network*. This strategic recommendation recognizes the key role driving plays in how people move through Red Deer.

The summary results of the public consultation have been compiled and analyzed, and are attached to this report, along with the final Mobility Playbook.

### **Recommendation:**

It is recommended that Council adopt the Mobility Playbook as a planning tool.



## Report Details

### Background:

---

Council identified the need for planning principles that support a variety of transportation options in The City's 2009-2011 Strategic plan. A strategy charter was developed outlining desired outcomes, driving factors, phases, and a general scope required to meet the objective of "ensuring that planning and development for growth supports our distinctive character and quality of life."

Several things lead to this work becoming important to pursue:

- Numerous stakeholder groups expressed a desire to improve the way we move around the city;
- Increasing requests to better accommodate many ways of moving such as walking, biking, transit and automobile;
- An increase in active transportation options as an effort to promote healthy lifestyles;
- Continual increasing capital and operating costs related to the current roadway infrastructure;
- Environmental considerations; and,
- The desire to facilitate choice for our residents.

The Movement Charter, adopted by Council in 2011, developed strategies to help achieve this theme/goal, one of which was the Integrated Movement Study. This led to the development of the Mobility Playbook, which is to provide an umbrella of direction to future related master plans.

Council's 2012-2014 Strategic Direction provided confirmation of this direction through the following:

*"Our deliberate decision to create viable alternatives to single occupant vehicle travel in our transportation network encourages healthy active lifestyles, environmental stewardship, supports safety for people of all ages, increases use of our public and green spaces, and integrates our sidewalks, trails, bike lanes, transit service, rail, and roads with our built environment."*

The City of Red Deer hired 8-80 Cities & Gehl Architects to produce the Mobility Playbook as a planning tool to help The City create a more balanced, sustainable and integrated transportation system for all Red Deerians. The Mobility Playbook interprets Council's Strategic Direction, and identifies strategies and actions to provide more mobility choice. In particular, this document will inform the upcoming revisions to the Transportation, Trails and Transit Master Plans.



### Discussion:

The City undertook a multi-faceted approach to get feedback from the public on the draft Mobility Playbook.

## Draft Mobility Playbook - Public Consultation

<b>Connecting with Citizens in Person</b>		
<b>Activity</b>	<b>Date</b>	<b>Target</b>
Traveling Roadshow - Dawe Centre	Wednesday, March 27, 2013	Citizens
Public Open House - Red Deer Lodge	Wednesday, April 03, 2013	Citizens
ReThink Red Deer - Red Deer College	Saturday, April 06, 2013	Citizens
Traveling Roadshow - Collicut Centre	Wednesday, April 10, 2013	Citizens
Let's Talk at the Mall	Saturday, April 20, 2013	Citizens
<b>Connecting with Networks</b>		
<b>Activity</b>	<b>Date</b>	<b>Target</b>
Red Deer Public School Board	March 19th, 2013	RDPSB Members
Past participants of the Integrated Movement Study	Monday, March 25, 2013	Citizens, stakeholders
Social Planning Weekly Update - ~220 recipients	Tuesday, April 02, 2013	Community Organizations, Community boards, other levels of government, citizens
School Boards - promotional material was sent to school board Community Relations staff; to be distributed to all schools	Wednesday, April 03, 2013	Parents, teachers, students



Rotary Club - presentation to members	Monday, April 15, 2013	Rotarians
Environmental Advisory Committee	Wednesday, April 17, 2013	Members of the EAC
<b>Online Presence</b>		
<b>Activity</b>	<b>Date</b>	<b>Target</b>
City of Red Deer Website	March 19 <sup>th</sup> - April 24 <sup>th</sup>	Citizens
CoRD YouTube	March 19 <sup>th</sup> – April 24 <sup>th</sup>	Citizens
CoRD Twitter Campaign	April 10 <sup>th</sup> – April 24 <sup>th</sup>	Twitter Users
<b>Promotional Materials throughout the Community</b>		
<b>Activity</b>	<b>Date</b>	<b>Target</b>
Traveling Roadshow - Dawe Centre	Wednesday, March 27, 2013	Citizens
Public Open House – Red Deer Lodge	Wednesday, April 03, 2013	Citizens
ReThink Red Deer - Red Deer College	Saturday, April 06, 2013	Citizens
Insert promotional materials in newspapers at Mr. Lube	April 9 <sup>th</sup> - April 11 <sup>th</sup>	Motorists
Traveling Roadshow - Collicut Centre	Wednesday, April 10, 2013	Citizens
Distributing promotional material at coffee shops (including Tim Horton's)	April 15 <sup>th</sup> - April 19 <sup>th</sup>	Citizens
Let's Talk at the Mall	Sunday, April 21, 2013	Citizens



## Analysis:

---

The Mobility Playbook was available on The City of Red Deer website ([www.reddeer.ca/whatmovesyou](http://www.reddeer.ca/whatmovesyou)), along with a feedback form participants could fill out online. The feedback form was online from March 19<sup>th</sup> to April 24<sup>th</sup>, 2013. The City received 252 completed feedback forms. An important component to the public consultation process was the production of a video that explained the key elements of the Mobility Playbook. The video was on The City of Red Deer website.

Citizens were encouraged to watch the video, read the Playbook, and respond to the following:

1. Does the mobility playbook create a vision for a Red Deer you want to live in?
2. Please comment why.
3. The draft mobility playbook proposes a shift in the way we do transportation planning to accommodate a balance between walking, driving, transit and cycling. Do you think the Mobility Playbook reflects a shift that works for Red Deer?
4. Please comment why.

The key findings from analyzing the data are as follows:

### ***Does the Mobility Playbook create a vision for a Red Deer you want to live in? Why?***

The response to this question was:

- 35% strongly agreed
- 36% agreed
- 14% neutral
- 9% disagreed
- 7% strongly disagreed

Eighty five per cent of respondents were either favourable or neutral in their response to this question. This result means that a relatively small minority of respondents (16%) disagreed that the Mobility Playbook creates a vision for a Red Deer that they want to live in, and reflects that overall the Mobility Playbook was agreed with in terms of creating a vision for Red Deer. This result indicates that the majority of comments were generally positive in nature, when discussing the Mobility Playbook vision.

Overall, there were two distinct arguments that ran throughout all the comments.

- There was a majority of respondents who agreed with the vision providing a more balanced provision of mobility options, including cycling, walking, transit and cars. A balanced provision would reduce the dominance that cars currently hold in transportation options and would provide more consideration and provision for other transportation modes.





- The second general argument provided by a minority of respondents was that a vast majority of people in Red Deer drive cars, and cars are necessary to get places quickly and conveniently, especially in bad weather, and they should continue to take top priority in transportation provision and nothing should reduce their use of roads, in particular cycle lanes that encroach on vehicle space.

Respondents, who agreed with the first question, generally liked that the Mobility Playbook catered for a range of transportation options and in particular supported active transportation (cycling and walking). Respondents supported this approach for a range of reasons: efficiency, cost, health, sustainability, enjoyment, assists building communities and caters for more lifestyle types (age, economic status) and transportation needs (short and long trips).

A commonly commented-on issue by those in favour of the dominance of car use was the problems caused by reducing motorized vehicle space on roads to provide cycle lanes. They believed that cyclists should be separated from car traffic. On this last point, both those who agreed and disagreed with the Mobility Playbook vision, held similar opinions; bicycles and cars should be separated.

Across both groups, a common view was that it is fine for other transportation users to have provision provided for them as long as it doesn't create a reduction in another area. The most common example was not losing motorized vehicle lane space for cycle lanes. The opinion of car users was that if cycle lanes are to be provided then they should use additional space, and not be taken from existing road space.

A number of respondents wanted the plan to be *true* to Red Deer. The most obvious example of this was the weather. It was stated on numerous occasions that whatever is provided needs to be realistic for the harsh winters that Red Deer experiences. It was commented that bike lanes would not be used all year round and would otherwise be empty or if used, would be dangerous. Another point made about the local context was that many people work in industries that require them to use personal motor vehicles to travel to work and these people expect to be able to use cars in their free-time also.

The trails and transit system were most positively identified aspects of Red Deer transportation across the board – in terms of respondents who agreed, disagreed or were neutral about both of the questions asked. More frequent services, direct routes and more bus shelters were suggested for transit as was an enhanced and connected trail system.

There were a large number of comments on the cycle lanes and many references to the 2012 commuter bike pilot project. Many respondents desired separate cycle lanes and were apprehensive towards closing the main road off for cyclists, or losing road width and space to cyclists.

Safety and accessibility comments were threaded throughout the topics but were particularly common in relation to the sharing of space – bikes on roads, but also if bikes lanes were put on sidewalks. Comments relating to ensuring side streets, trails and transit stops are accessible and designed with those who are mobility impaired, were also commented on.

There were a few specific comments on the planning process. Some were positive about what had been produced, although a few requested more detail in the Playbook and video.



Some considered the best way to implement the plan and stated that efforts need to be made to bring the whole community along and there needs to be care ensuring that things are done successfully and with caution.

**The draft Mobility Playbook proposes a shift in the way we do transportation planning to accommodate a balance between walking, driving, transit and cycling. Do you think the draft Mobility Playbook reflects a shift that works for Red Deer?**

The response to this question was:

- 29% strongly agreed
- 33% agreed
- 15% neutral
- 12% disagreed
- 12% strongly disagreed

The comments made to this question were generally consistent with the first question.

Overall, there was an increased proportion of respondents who disagreed with the statement (24%), when compared with the first question, but still a significant majority of respondents were either neutral or positive (77%) toward the statement. This result shows that the majority of respondents do believe that the Mobility Playbook proposes a shift that could work for Red Deer.

There was strong support for separating bicycles and cars. Again, this was from those who agreed and disagreed with the statement in this question. The reason for this opinion was to ensure safety for cyclists and to reduce congestion for cars as a result of not losing car lanes.

Transportation choice was again a strong theme. One of the things that would increase walking was thought to be improvements in sidewalks; widening sidewalks was mentioned a number of times. Providing the opportunity for residents to choose from a number of transportation options depending on their circumstances and the purpose of a particular journey was considered important by many respondents.

The link between land-use planning and transportation was made a number of times. These comments generally stated that reducing sprawl and being smart about where business is located relative to residents would reduce transportation requirements because people would be required to travel less distance on a daily basis.

Although overall this group was in the minority of respondents, there was a great deal of consistency in the comments made by people in favour of retaining cars as the key consideration in transportation planning. Many commented that cars needed to have greater emphasis than is stated in the Playbook, or that the cycling and walking priority was too strong. These comments often referred to the weather and the need to be in a car to travel. Respondents often stated that cars are the most practical option for the majority of the population.

Education was discussed as a response to this question by a number of respondents. They thought that for the shift required to happen people need to be educated in what the



positive outcomes from transportation change would be. A culture change, in the way that the community considers transportation collectively was also discussed as being needed if change is to occur.

A thorough analysis of the comments – completed by an independent third party - is attached to this report as **Appendix A**. A full list of the comments to both questions is submitted as **Appendix B**.

### **SUMMARY OF COMMENTS – SPEAKER SERIES**

During the speaker series, administration received a lot of information from citizens about what moves them. All of the comments and feedback were considered in preparing the Playbook. A summary of the comments received is attached to this report as **Appendix C**.

### **FINAL MOBILITY PLAYBOOK**

Through the consultation process, administration received 252 completed feedback forms, and also spoke with hundreds of people at the various activities undertaken to connect with citizens. One of the key things heard was the desire to see the driver recognized in the Playbook. If the Mobility Playbook is The City's ambition to have a more balanced modal split, and to see an integrated plan for all modes of travel, then elevating what was learned about the needs of drivers and vehicles is an important addition to the document.

Elements of this were initially built throughout the draft Mobility Playbook, but we see now an additional play – *Create a Balanced Network*. It is here where a context-sensitive approach and street typologies are identified as a key recommendation for our transportation planning. Driving will continue to play a key role in how people move in the city.

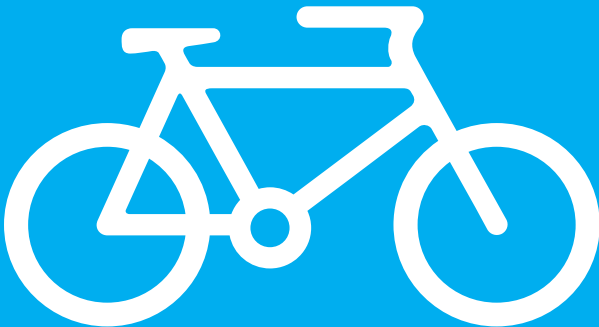
The page related to drivers specifically was also re-written to reflect feedback received, and to demonstrate the role of driving in Red Deer and the related quality criteria.

The changes to the Mobility Playbook reflect the key findings derived from the feedback forms and the face-to-face interactions with citizens.

READY/SET/GO!

# MOBILITY PLAYBOOK

RED DEER





HEATHER (& FAMILY)  
ENVIRONMENTAL SPECIALIST,

*"We moved to our neighbourhood because of the trails. We use them for running, biking and for walking with the family."*

*"The best way for me to describe Red Deer is - It is easy. It is easy to get around, easy to meet people, easy to go out running, easy to have good food or a drink. It has everything a big city has but it is easier here."*

*"Red Deer is a good city for myself because I'm raising a family. It's not too big where you can still travel and not have to sit in traffic. I'll probably stay in Red Deer the rest of my life."*

*"Red Deer is a medium city with a small town feel. I think Red Deer is successful for small business because it has a strong sense of community and the lifestyle benefits help attract people here."*

*"Red Deer is an active city with all of our bike trails and our biking lanes along our main roads and all of the walking trails. It's very interesting [to live here] because you can be in the forest yet you can still be in the city."*

*"One of the great things about living in this city is the Red Deer Transit System that helps me get around. It is a great service for everyone and especially for people in wheelchairs."*

CALEIGH,  
MIDDLE SCHOOL STUDENT



ROB,  
FIELD SUPERVISOR,  
OIL & GAS INDUSTRY



WES,  
RED DEERIAN SINCE 1984



SHANNON,  
PUBLIC SERVICE EMPLOYEE

KEEGAN,  
LOCAL BUSINESS OWNER,  
MANUFACTURING  
INDUSTRY





**What is the Mobility Playbook?**

The Red Deer Mobility Playbook is a user-friendly tool for action and positive change in Red Deer. This document is the result of a partnership project between 8-80 Cities, Gehl Architects and The City of Red Deer to identify the strategies and actions needed to provide Red Deerians with more mobility choices, and as such a better quality of life.

The document is inspired by a traditional sports playbook and has three chapters:  
**ready** - why Red Deer is ready for integrated mobility;  
**set** - existing opportunities and challenges; and  
**go!** - the key plays that in unison will help The City create a more balanced, sustainable and integrated transportation system for all Red Deerians.

**How did we get here?**

The Mobility Playbook is one of many outcomes of the Integrated Movement Study (IMS) which has used a multi-faceted approach to engage Red Deerians. The City of Red Deer coordinated “speaker series” events and workshops with the community on the topics of walkability, placemaking, transit, and complete streets from September 2011 to May 2012. The City rolled out a comprehensive transit survey, collected extensive feedback on the Commuter Bike Pilot Project, and the Ross St. Experiment. In addition to city-led initiatives, 8-80 Cities conducted focus groups and workshops with community members, including elected officials, city staff, older adults, business leaders, newcomers, children, and parents, to help inform the creation of the Mobility Playbook.

CONSULTANT TEAM:

**GEHL ARCHITECTS**  
URBAN QUALITY CONSULTANTS

**Gehl Architects**  
Copenhagen, Denmark  
[www.gehlarchitects.dk](http://www.gehlarchitects.dk)

with **Kontoret arkitekter**  
[www.kontoretarkitekter.se](http://www.kontoretarkitekter.se)



**8-80 Cities**  
Toronto, Canada  
[www.8-80cities.org](http://www.8-80cities.org)

The IMS team has spoken with close to 2000 people and collected even more ideas. Thank you to all that participated. To find out more about the IMS engagement process visit:

**[www.reddeer.ca/whatmovesyou](http://www.reddeer.ca/whatmovesyou).**





# READY //

A black and white photograph showing a man walking towards the camera on the left side of a paved path. He is wearing a dark jacket and light-colored pants. On the right side of the path, two cyclists are riding away from the camera. They are wearing helmets and casual cycling gear. The background features trees and a residential street. Overlaid on the center of the image is the text "/SET/GO!" in a large, white, sans-serif font.

/SET/GO!



READY/SET/GO!

# A QUALITY CITY, A GROWING CITY

Red Deer is a fantastic city celebrated for its great quality of life, strong economy, and beautiful landscape. The 2012 Ipsos Reid survey of the community found that 98% of residents report quality of life here as good or very good. Being at the heart of the Alberta growth corridor, a city of learning and a social hub for its surroundings, it has a lot to offer. This success is leading to huge growth in Red Deer. It is set to double in size in 20 years. This presents new challenges and

opportunities for the city. Where people live, how they move around in the city and quality of life are intrinsically linked, so it is necessary to adopt an integrated approach. It is key to build on Red Deer’s assets like short commuting distances and access to nature, while addressing problems such as a lack of independent mobility for nondrivers. It is crucial to act now while the city is growing. Red Deer is ready.

## THE TOP THINGS RED DEERIANS HAVE TOLD US THEY VALUE MOST IN THEIR CITY \*

\*2008 & 2012 IPSOS REID RESULTS



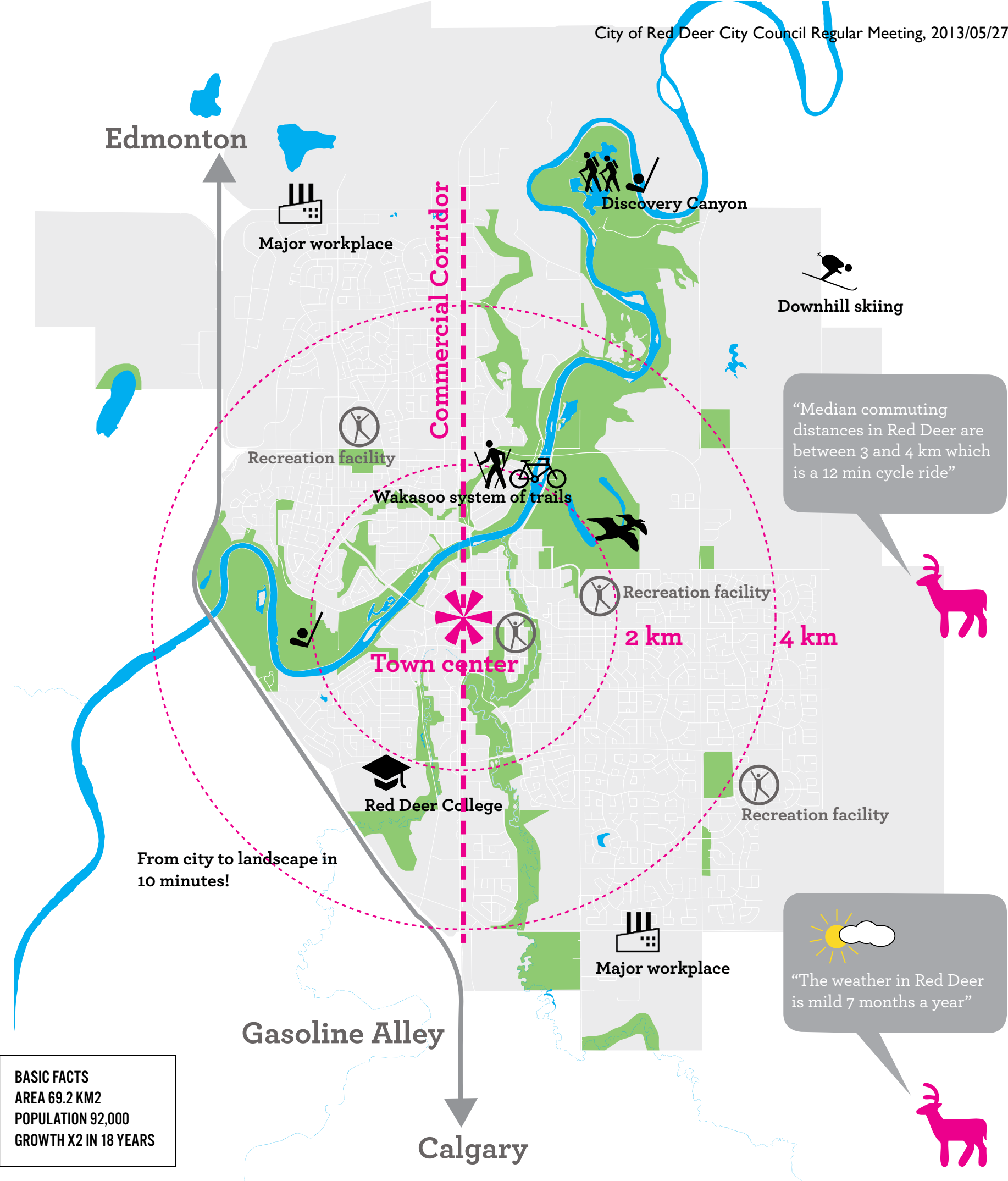
**01. The overall quality of life**  
This was ranked as the most important aspect of living in Red Deer. This encompasses many things: time with family, nature and financial security.



**02. Active living and recreation**  
Ranked as the second most important aspect of Red Deer life, the trails and the natural landscape are on Red Deer’s doorstep.



**03. Economy**  
As the third most important aspect of city life in Red Deer, the employment and affordability of the city is at the centre of what makes it great.



# TWICE AS MANY

RED DEER'S POPULATION WILL DOUBLE,  
WHICH IS A MAJOR OPPORTUNITY





# Y IN 18 YEARS.



READY/SET/GO!

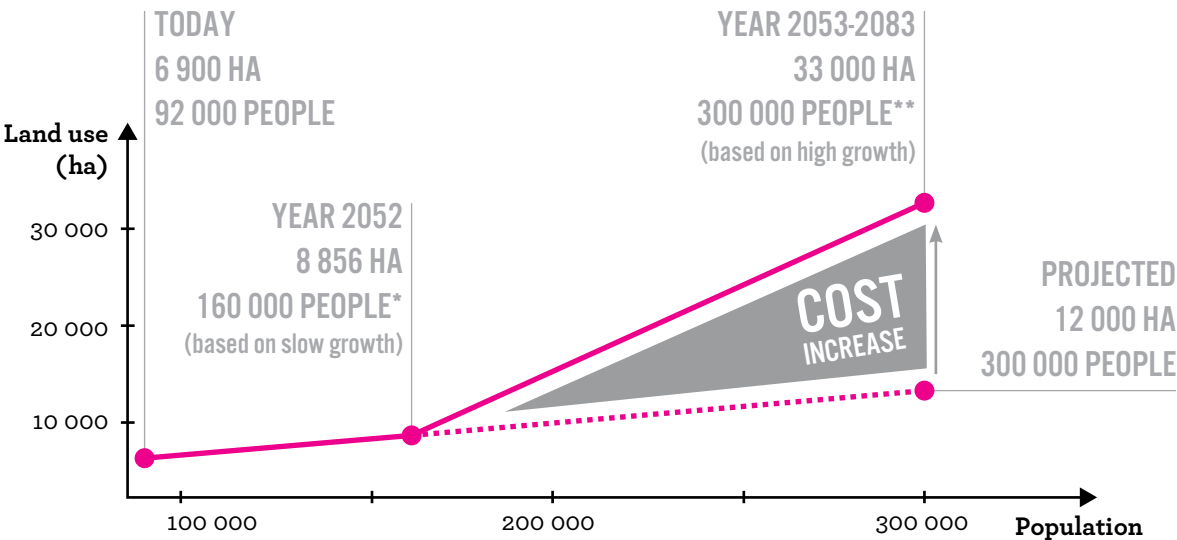
RISKS OF BUSINESS AS USUAL...

If Red Deer grows outwards then providing high quality roads, trails and transit for the whole area will become increasingly costly and difficult. The key to growth that supports mixed mobility is infill: creating mixed and lively street based urban development and intelligent growth along well served transit corridors. Linking land use and mobility is essential to the quality of life the city

can offer. Sprawl generates longer commutes, and poorly served neighbourhoods with fewer local amenities and hubs. The social connections that make a place feel ‘local’ are also discouraged when sprawling residential neighbourhoods are further and further away from the heart of the city.

TO ECONOMY

**Impact**  
Life in Red Deer would gradually become more and more expensive as housing, energy bills and (by the greatest proportion) transportation costs grew as a percentage of household income. The percentage of household income spent on fuel has risen 10 fold in 10 years. This trend is set to continue, leaving less income available for socializing and leisure.

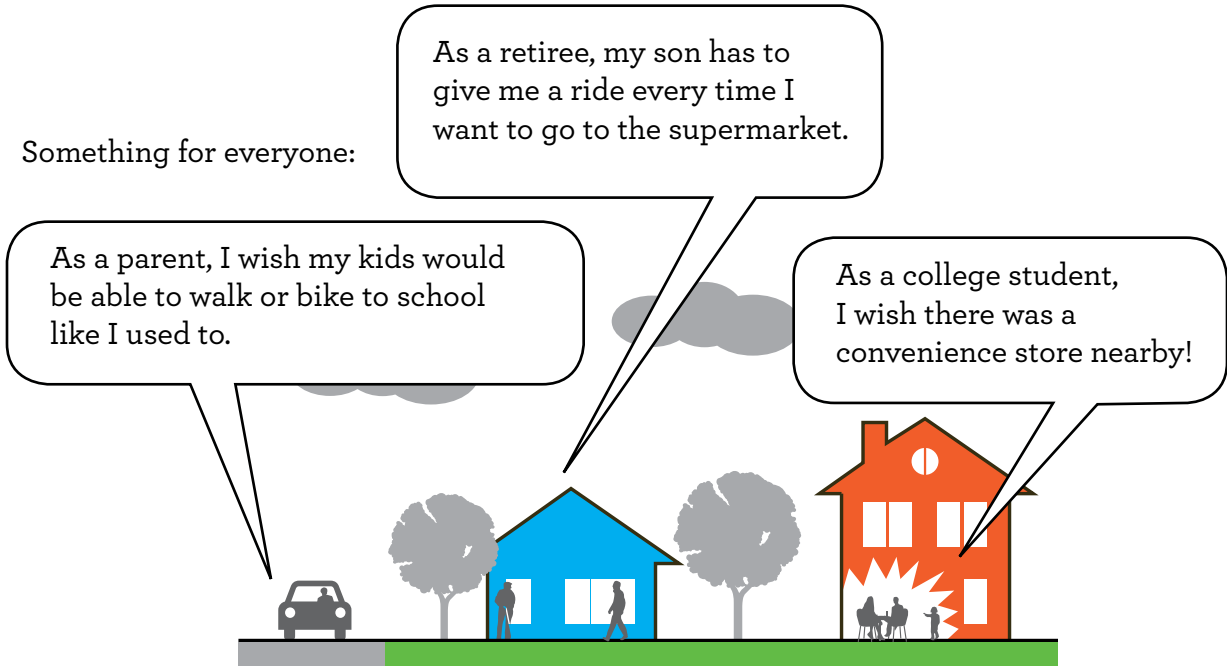


We see here two projections for growth in Red Deer, one from a growth study completed by The City, and one from a consultant doing a commercial opportunities study. While the rate of growth is debated what is certain is that Red Deer is growing, and The City must prepare with plans of how to manage that growth. If The City continues to grow outwards the cost of providing quality services, including transportation, increases rapidly.

\* CITY OF RED DEER GROWTH STUDY - 2004  
\*\* COMMERCIAL OPPORTUNITIES STUDY 2010: CORIOLIS CONSULTING CORP.

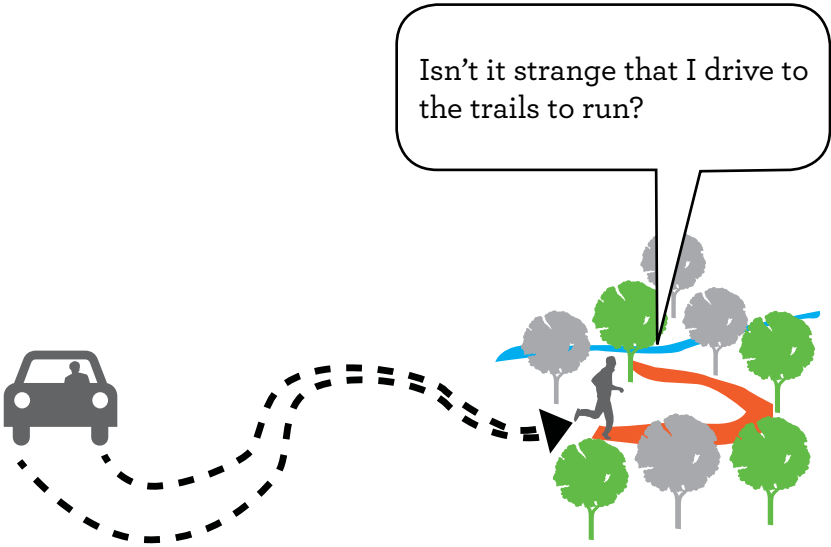
TO QUALITY OF LIFE

**Impact**  
The potential impact on quality of life is huge as Red Deer could potentially shift from being a compact, local city to a sprawling city of twice the population spread over two times the area. Commuting times would rise steeply taking time away in the day from recreation and time spent with family. Distance to amenities would most likely grow too as at increasingly low densities the City and other levels of government would struggle to provide as many nearby services to citizens such as schools and doctors. Integration of the new residents into the close knit Red Deer community would be challenging as there would be less concentrated public life in streets and outdoor spaces, resulting in social isolation. Non-drivers would become dependant on drivers, with a loss of independence.



TO ACTIVE LIVING AND RECREATION

**Impact**  
Time spent commuting and driving children to different parts of the city for school and activities would eat into recreation time. 60% of Albertans are already over-weight, and with fewer opportunities for easy access to outdoor recreation and active transportation, this would increase. With a larger area to provide infrastructure to, The City would struggle to afford, implement and maintain high quality infrastructure and public spaces residents are accustomed to.



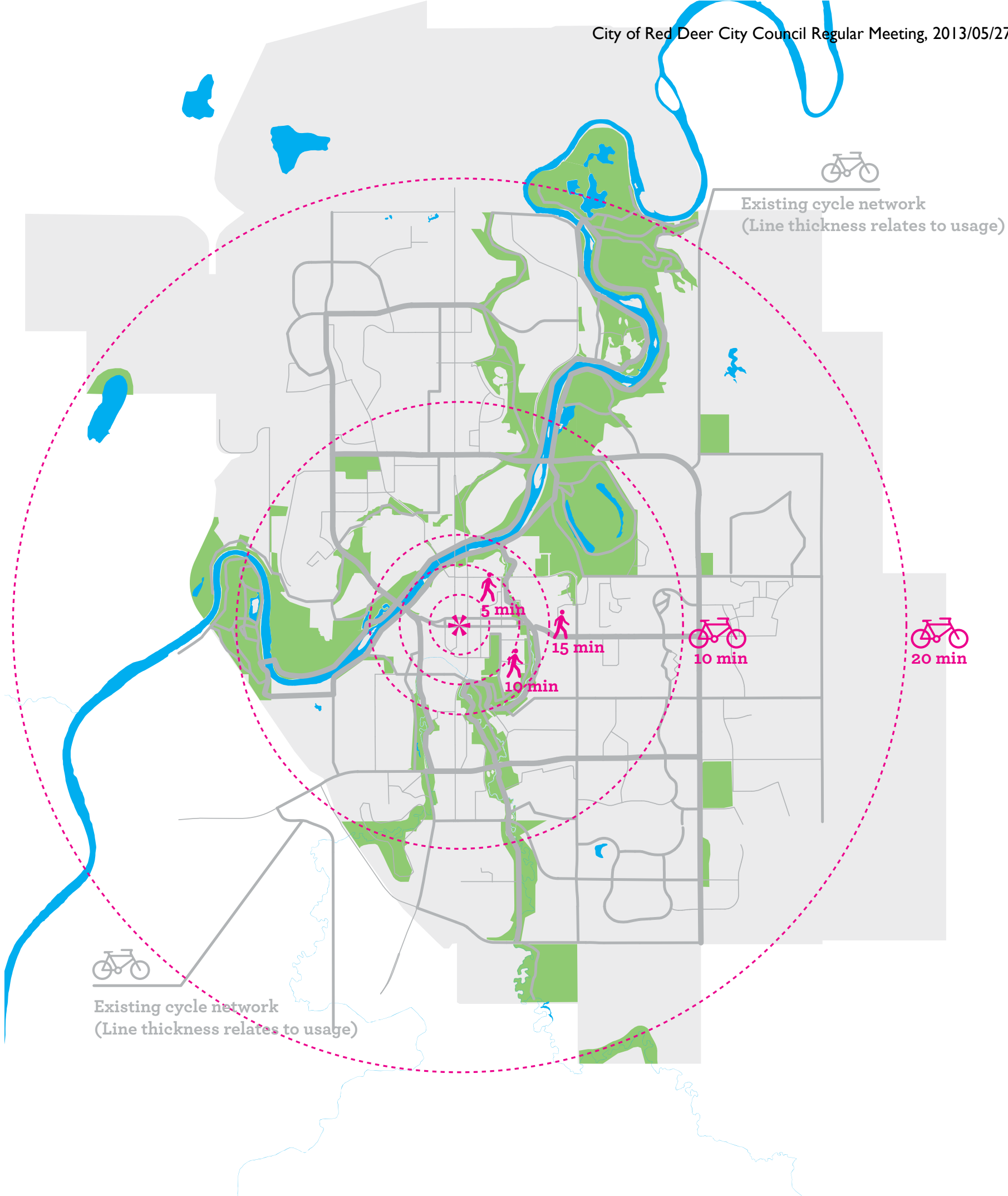
READY/SET/GO!

# RED DEER IS READY FOR CHANGE

There have been exciting changes recently with new downtown development, extensions to the trails network and exciting temporary pedestrian and community centred projects like the Ross Street Patio. These efforts, the voices we have listened to in the city and external factors all indicate that Red Deer is ready for wider changes, for bolder moves and even more exciting

possibilities for future improvements to mobility. With median commuting distances between 3 and 4km, 7 months of relatively mild weather per year and quality of life at the heart of community values, Red Deer is a clear contender for leading the way for mid-sized cities in providing healthy and sustainable mobility.









# READY

THE TIME TO ACT IS NOW



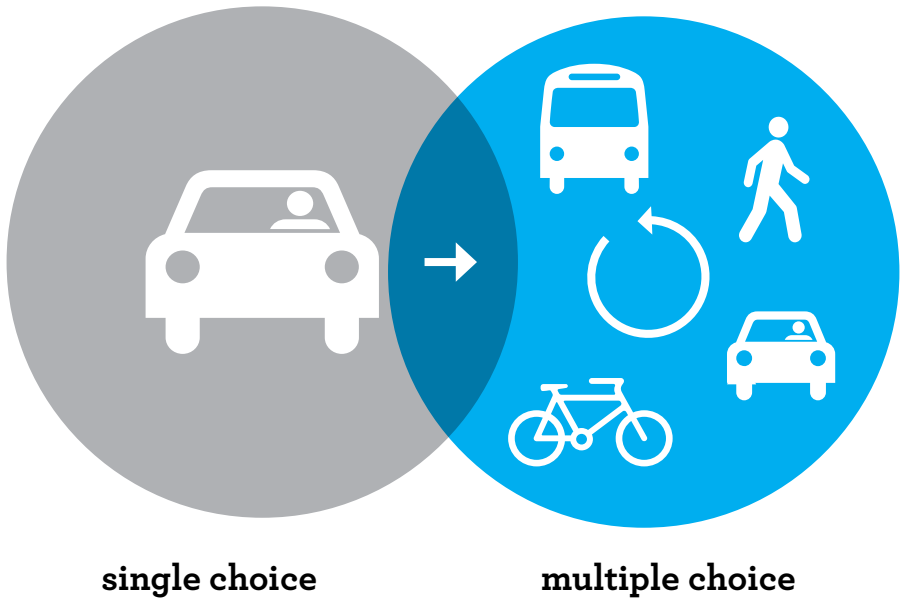
SET/GO!

READY/SET/GO!

# RED DEER IS TALKING THE TALK...NOW WE MUST WALK THE WALK.

Moving from single to multiple choices. Turning cost into profit for everyone. Creating choice in how we move around gives individuals the freedom to choose the mode they feel best suits each journey. With choice we can find the most efficient, most enjoyable and most logical way to make each journey based on cost, time and personal preference. The ability to choose the mode fit for purpose is what is lacking in Red Deer. There are very few options and this creates wasteful, inefficient and not necessarily enjoyable journey

choices. If we have choice then we can base our decision on a combination of factors, such as time of year, recreation or saving cash. Not everyone drives a car. Children, the elderly and disabled have the right to independent mobility too, but a system that is based predominantly on the car excludes these people, and limits opportunity for transport as part of a healthy lifestyle.



Some things to consider ...



pedestrians

Walking is part of every journey we make regardless of mode. Even when driving we walk from where we park to our final destination. In Red Deer, even this can be difficult because the roadways are built primarily for cars.



cyclists

Cycling could be the fastest and most convenient way to travel, with many secondary benefits to health and wellbeing. However to create this efficiency and feeling of comfort requires infrastructure and maintenance.



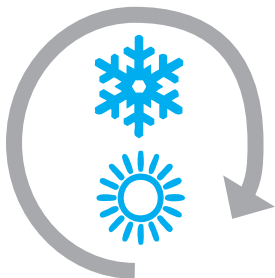
transit riders

Using transit can be a cost effective and sociable way to travel comfortably, especially in winter. Public transit creates independence for those who don't drive, generates public life in a city and decreases car congestion and traffic.



drivers

Driving is excellent for longer inter-city trips where other modes aren't viable, when there are a group of people travelling or the weather really doesn't permit being outside for long.



seasonal

Climate is a factor in determining how we choose to make a trip - however it does not determine definitively the way we should make that journey.



recreation

Integrating recreation with mobility through the trails, extending the networks to serve both recreation, housing and city areas.



how to grow

The length of time we are willing to spend travelling across the city using a number of modes should be a determining factor in how we let our cities grow. The cost of infrastructure is directly proportional to sprawl - the higher the density the cheaper to implement and improve infrastructure, and the more viable non-private car travel becomes.



amenity

Five-minute proximity to amenity is crucial in creating a sense of community, and giving the opportunity to create complete neighbourhoods with mixed mobility. Downtown Red Deer has a high ratio of amenities, but most neighbourhoods are very low.

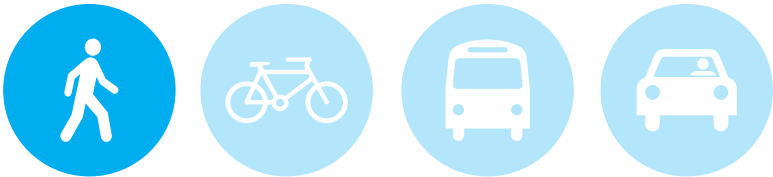


sharing

Whether it is sharing a ride or a car with your whole community, new ways networked on and offline has facilitated new ways to come together as a community.

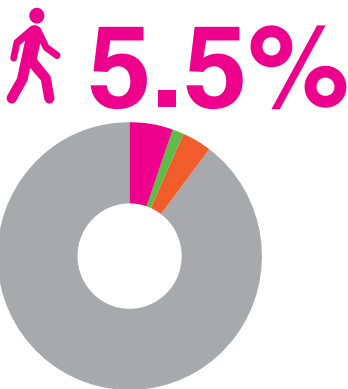
READY/SET/GO!

PEDESTRIANS



The City can do a lot to create more opportunities to walk. The highest priority should be providing basic provision for pedestrians. The recreation network is extensive and a major lifestyle advantage for Red Deer’s citizens but doesn’t link up with the places where people live. There is limited walking provision in residential areas. This is inadequate to invite much more than necessary pedestrian journeys. Also, low suburban density discourages walking often offering few attractions or amenities

to actually walk to. Downtown leads the way with new significant measures to encourage walking being implemented. These should be extended out to the rest of Red Deer to create a full pedestrian network. A mobility strategy must address the entire network considering the different stages of a journey. Every journey begins and ends with walking.



Situation today – only 5.5% of all trips are made by walking

TODAY

- Many arterial roads have two way traffic ,but only one side of walkway. The pedestrian is low priority.
- There is an extensive recreation network in Red Deer today.

CHALLENGES

- The under-developed network and lack of local amenity do not create an inviting public realm for people.
- Perceptions are it is unsafe to walk.
- Intersections aren’t pedestrian oriented.

POTENTIAL

- Turning cost into profit. Short car journeys are wasteful and damaging to health and well being. Getting people out in the fresh air has many co-benefits.
- Upgrading as roads are built to highest possible standard for pedestrians.
- Develop walking on both sides of arterial roads. Identify desire lines and construct facilities accordingly.

“Red Deer is not that big so if you have to go downtown you can just walk all the way.”

NEWCOMER FOCUS GROUP PARTICIPANT



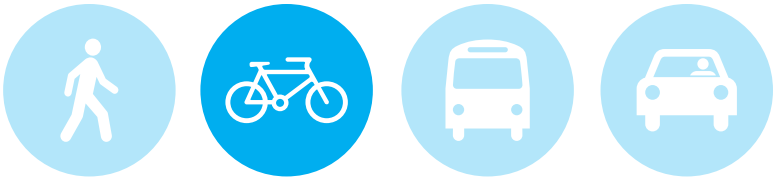


READY/SET/GO!

CYCLISTS

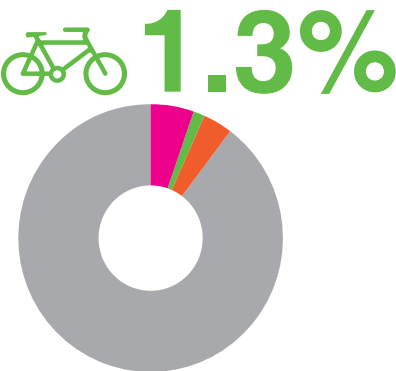
The recreation network is extensive and a major lifestyle advantage for Red Deer’s citizens. It could be the foundation for a new commuter network spanning the entire city. Commuter cyclists require direct routes that feel safe and are free from obstructions which requires a design speed of 15km/h. Currently, trails are either recreation routes (indirect but beautiful) or sidewalks (direct but obstructed and shared with pedestrians). A third option needs to be delivered. There is a conflict with walking on trails. Walking speed is around

5km/h and includes baby strollers, children, the elderly and other vulnerable users. Cycling can be up to 20km/h and has a high accident risk if undertaken on an urban sidewalk. The modes need to be separated if it is to become a realistic alternative to the car. Cycling has massive potential in compact Red Deer. It is independent, can be sexy, and allows for door-to-door travel. All of Red Deer is within a 20min cycle ride of downtown. Many cities worldwide would be envious of that fact. Leverage it.



TODAY

- People rave about the trails network. It is one of the things people love about Red Deer.
- The average Red Deer commute is an 11.5 min cycle.



Situation today – only 1.3% of all trips are made cycling

CHALLENGES

- Perceptions of cycling to do with climate, safety and an under-developed infrastructure network.
- In 2012 some on-street cycle lanes were removed due to opposition.

POTENTIAL

- Red Deer is a small compact city with enviable qualities to achieving mixed healthy mobility and lively city life.
- 66% of commutes are under 5 km. Many trips could be made by walking and cycling. Recreation while getting to work and school.
- Bicycle priority at intersections. Cycling should be acknowledged in the road system. A new hierarchy of trail design is needed as the current design standards do not acknowledge that there are multiple users and that cycling is 20km/h and walking 5km/h.

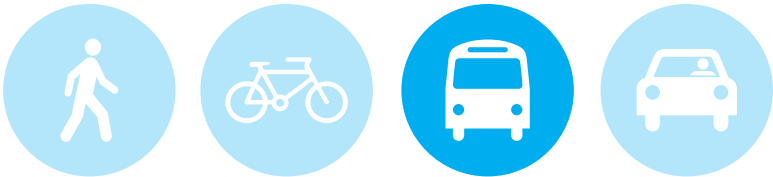
“The trail system is wow- it’s unbelievable here.”

FOCUS GROUP PARTICIPANT



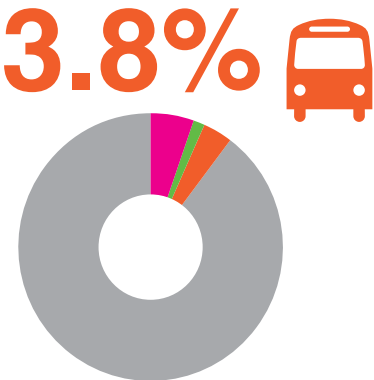
READY/SET/GO!

TRANSIT RIDERS



Currently there is extensive coverage at the expense of directness: Red Deer’s bus routes take circuitous routes that lengthen journey times. A more direct service would generate a more competitive alternative to the car. With a 30min headway the whole system is only sufficient to serve a ridership that is 90% captive. Captive transport riders are people who have no other alternative than to take

transit - this is mostly students and the elderly. To attract new, non-captive users, 30 minutes between services is too long. A more frequent, direct service would create a more attractive bus network. Rapid transit corridors would be an excellent way to create an easily understood and attractive network.



Situation today – 3.8% of current trips are made by bus

TODAY

- Transit is mostly used by those who have to use it in Red Deer: the young, the elderly and the disabled. It is indirect and infrequent.
- “More. Run more, run earlier, run later.” More was the most commonly used word by all respondents of the transit survey.

CHALLENGES

- Every journey begins and ends with walking so you need a good quality walking environment to support transit and high quality places to wait.
- Accounting for climate. Some of the coldest countries in the world have high ridership of transit systems.

POTENTIAL

- The transit network is infrequent and indirect. Red Deer’s grid offers an excellent logic that should link neighbourhoods and places of employment could be better targeted.
- Transit stops need to be designed with the weather in mind.

“If you could make the service faster and more frequent, I think that more people would use transit as a daily mode of transportation.”

TRANSIT SURVEY RESPONDENT

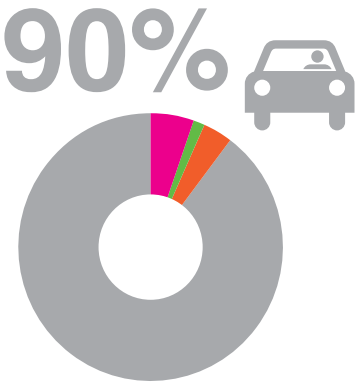
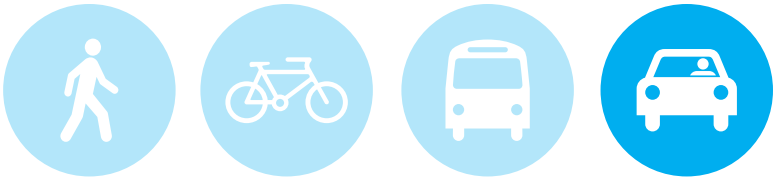


READY/SET/GO!

DRIVERS

Vehicles play a critical role in moving both people and goods in Red Deer today. While driving will continue to play a key role in the transportation system in Red Deer, putting vehicle mobility first on all streets discourages and limits opportunities for a more diversified and integrated mobility network. Despite policy stating otherwise all forecasts predict Red Deer will continue developing as a

car centric city. Significant incentives and policy changes will need to take place in order to promote alternative forms of mobility. Creating a road hierarchy in Red Deer acknowledging some roads need to accommodate large vehicles and faster speeds, while others don't, will help create a city with a more diversified and efficient transportation system for all users.



Situation today – 90% of all trips are made by car

TODAY

- Red Deer is a city built predominantly for the movement of cars with the exception of a few places downtown.
- Efficient vehicular movement is important for many of the City's key commercial sectors (oil and gas, petrochemicals, agriculture, manufacturing and construction).

CHALLENGES

- The ease of car use in Red Deer is a challenge to getting the financial and personal benefits of choosing appropriate mode for each journey, essentially becoming a smart - rather than default - driver.
- Some roads need to accommodate large vehicles and faster speeds, while other roads do not need to meet the same standards.

POTENTIAL

- Red Deer is a small compact city with enviable qualities to achieving balanced mobility - there is so much potential.
- Create a road hierarchy. Design beyond the peak hour. Not all roadways need to accommodate the peak load and volume when those peak hours only account for two hours of the day.

"I think we can be encouraged to car pool. Especially if people work in the same workplace."

FOCUS GROUP PARTICIPANT





READY/SET/GO!

# MOBILITY QUALITY CRITERIA



Together with citizens and city staff, a new quality criteria for pedestrians, cyclists, and transit riders in Red Deer. A mobility strategy is not simply about designing transportation systems and networks - it is ultimately about influencing people’s decisions. While planning is often done from a birds eye view - looking from above at complex systems and maps - it is important to also plan at eye-level. Through our focus groups and workshops with Red Deerians, the citizens helped to define the criteria that would make it more attractive for them to choose to walk, cycle, and/or take transit. Simply put, you said the choices must be safe, accessible, and enjoyable.

SAFE

- **Design for the most vulnerable user**  
The entire street section including intersections and crossings are designed for all ages and abilities.
- **Safety from crime/violence**  
Streets are well lit, provide easy sight lines and views, and are conducive to passive surveillance or “eyes on the street.”
- **Well Maintained**  
The surface of sidewalks and walking trails are well maintained, are cleared of snow and ice in the winter, and free of obstacles.

ACCESSIBLE

- **Access to information**  
Pedestrian oriented signage and wayfinding is easily available and intuitive, user-friendly maps on walking routes are available online and in certain key locations, and people in Red Deer are aware of their rights and responsibilities as a pedestrian.
- **Complete & interconnected network**  
Walking routes are integrated and connected including sidewalks, trails, and pathways in order to link key origins and destinations.
- **Mix of amenities and services**  
There is a mix of amenities and services within walking distance of residential and commercial districts.

ENJOYABLE

- **Design for the pedestrian experience**  
Streets have an inviting public realm and are aesthetically pleasing with attractive streetscaping.
- **Programs and activities**  
Streets are recognized as places for people to meet and gather with lively overlapping uses and activities.

FOR



• **Design for diversity of ages and skill levels**

Cycling infrastructure is designed to invite a diversity of riders including children and seniors. Lower speeds on residential & commercial streets and separating cyclists from traffic on roads 40km/h or more.

• **Safety from crime/violence**

There is secure bike parking provided at key destinations, streets are well lit, provide easy sight lines and views, and are conducive to passive surveillance.

• **Well Maintained**

The surface of cycle paths and trails are well maintained, are cleared of snow and ice in the winter, and free of obstacles.

• **Access to information**

There is special signage and wayfinding for cyclists, user-friendly maps on cycling routes are available online and in key locations, and people in Red Deer are aware of their rights and the responsibilities as a cyclist.

• **Complete & interconnected network**

On street cycle paths are integrated and connected with off street trails, in order to link key origins and destinations.

• **Mix of amenities and services**

There is a mix of amenities and services within cycling distance of residential and commercial districts.

• **Design for the cyclist experience**

Streets have support elements such as quality parking for cyclists and an inviting public realm, with attractive streetscaping.

• **Programs and activities**

Streets are recognized as places for people to meet and gather with lively overlapping uses and activities and, in some cases, special bike-friendly events.

FOR



• **Safety getting to the bus for all ages/abilities**

There are safe prioritized pedestrian connections to transit stations and stops that are accessible to people of all ages and abilities.

• **Safety on the bus**

The environment on the bus provides for passive surveillance by passengers and the driver and the bus are well equipped with necessary safety elements in the case of traffic accidents.

• **Access to information**

There is special signage and wayfinding for transit riders, user-friendly maps and schedule information on transit routes are available online and at transit stations and stops, and in some cases, real-time information on routes and schedules is available.

• **Affordable**

Riding the bus in Red Deer is a competitive and affordable option for people who cannot or choose not to drive.

• **Integrated system & optimal service**

Bus routes link key origins and destination in Red Deer, and service is appropriate to adjacent densities and land uses.

• **Positive experience getting to the bus**

Pedestrian connections to stations and stops are given priority, transit stations and stops offer quality shelters with comfortable seating and an inviting public realm.

• **Positive experience on the bus**

There is good customer service with helpful and friendly drivers and transit staff; the buses are clean and well maintained.

READY/SET/GO!

# HOW HIGH DO WE SET THE BAR?

Red Deer could be a best practice model for other small cities in the world.

Canada



Victoria, Canada

Is a small compact city on a peninsula with protected forest to the north. There are high levels of commuting into the city for work as well as a large retired community. The active transportation network serves these groups well. In 2003 a greenways network in the city was established which creates good safe routes through the city and into the surrounding natural beauty. Tourism around recreational cycling serves the city well as business growth in this area has been high.

North America



Davis, US

Davis has successfully leveraged its student population into cycling eventually developing a network spanning 95% of arterial streets, with 50 miles in total. It is a dense, low rise, compact city that directly tied its land use strategy to its transportation strategy. It has become known as the US cycling capital around which a recreation industry has boomed and they have a thriving downtown with local businesses and cycling events throughout the year.

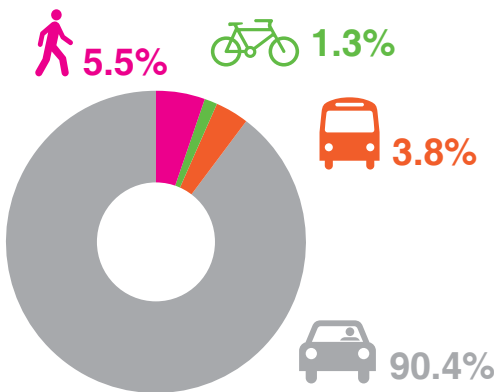
Global



Odense, Denmark

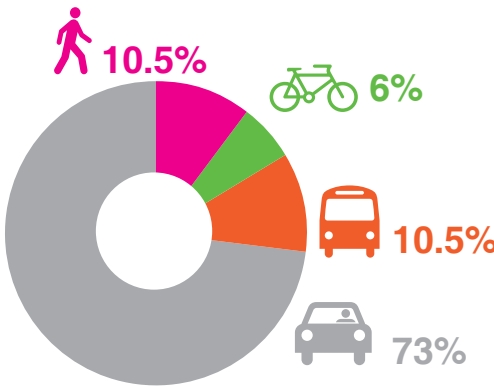
Is a city of double the population of Red Deer. It has relatively low density but has been built with cycling and active mobility front and centre of the city’s agenda. 80% of Odense’s children walk or cycle to school and there are 3m of cycle paths for every resident in the city. Between 1997 and 2001 they managed to increase cycling by 20%.

RED DEER  
AREA 69.2 KM2  
POPULATION 92 000  
DENSITY 1329 PEOPLE PER SQKM



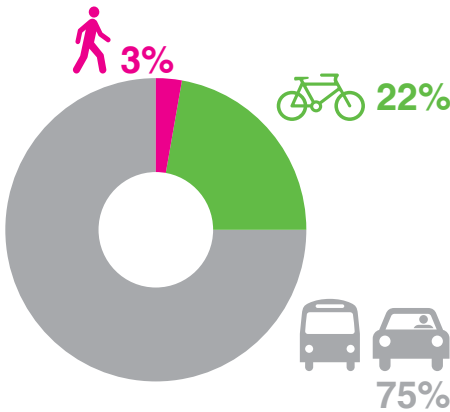
**How to....**  
The city created many plans outside of the silos of transportation, health etc. Active living greenways and green homes plans have helped them develop targeted projects and integrate different issues.

VICTORIA  
AREA 19.4 KM2  
POPULATION 80 000  
DENSITY 4109 PEOPLE PER SQKM



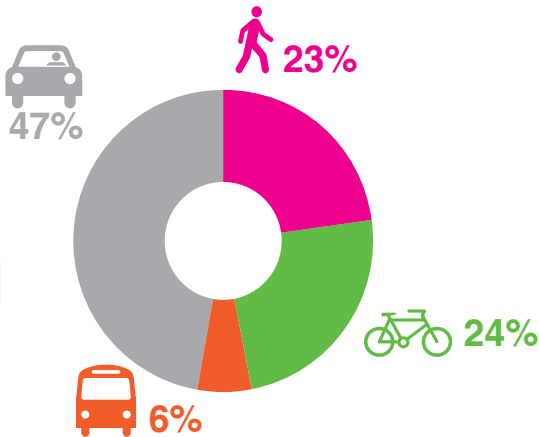
**How to....**  
Davis began by creating bicycle lanes separated by parked cars. As the city grew, all codes required bicycle infrastructure. The Davis greenway network was then developed as a multiuse trail network which accompanied a building boom.

DAVIS  
AREA 25.6 KM2  
POPULATION 65 740  
DENSITY 2560 PEOPLE PER SQKM



**How to....**  
The Odense bicycle strategy is updated every year and with any new road changes new improvements are implemented. The city also sets ambitious short-term targets and measures success.

ODENSE  
AREA 161 KM2  
POPULATION 191 610  
DENSITY 1190 PEOPLE PER SQKM





# READY/





# /SET/GO!

**READY/SET/GO!**

# 6 PLAYS

The six plays are the top priorities for making the most impact in the city of Red Deer's mobility behaviours. They cross silos of city departments and require joint thinking and action from politicians, city staff and citizens alike.

**PLAY 1** PUT PEDESTRIANS FIRST

**PLAY 2** CREATE A BALANCED NETWORK

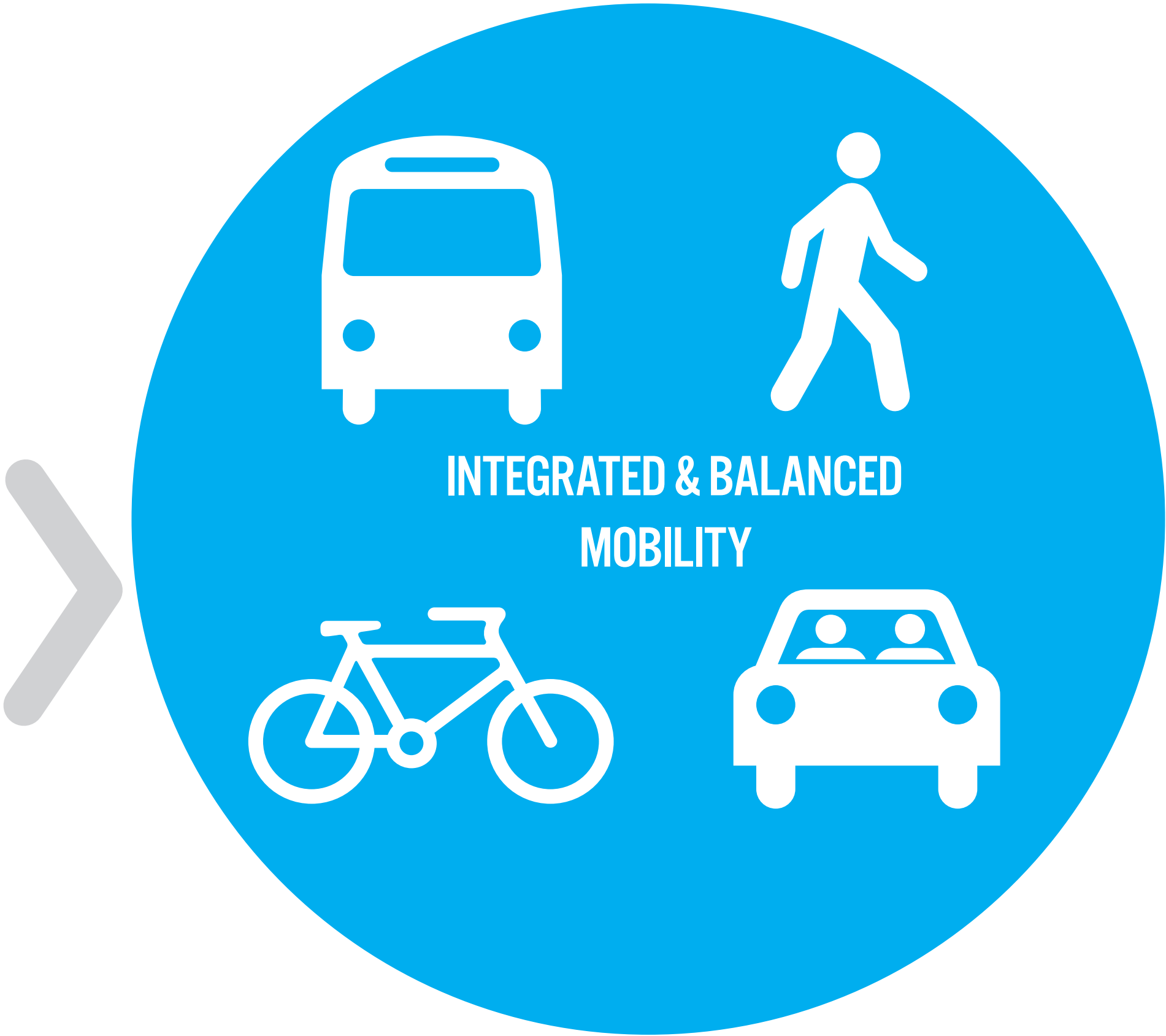
**PLAY 3** TIE LAND-USE AND MOBILITY TOGETHER

**PLAY 4** MAKE TRANSIT PART OF THE JOURNEY

**PLAY 5** CONNECT THE TRAILS

**PLAY 6** NURTURE A CULTURE OF CHANGE







READY/SET/GO!



“Walking and cycling lets  
you meet more people.”

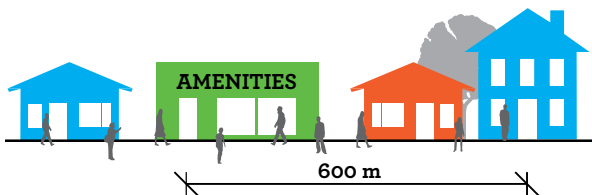
MIDDLE SCHOOL FOCUS GROUP PARTICIPANT



# PUT PEDESTRIANS FIRST /PLAY 1

As Red Deer grows in population it will be crucial to provide local neighbourhood streets and destinations that have a mix of uses and invite people to walk. Downtown Red Deer has a walkscore of 78, higher than many comparable North American downtowns. Walkscore, a rating system for pedestrian amenity, rates the proximity

of amenities for everyday life. In contrast, other Red Deer neighbourhoods when measured this way scored much lower at 35. Current commercial development recommendations suggest strip malls on the edge of town could act as neighbourhood centres. These would be car hubs not people hubs; what is needed is street-based local people-priority



## Human scale streets

Streets should be for people, not just cars. Our physical dimensions as humans, and the speed at which we move - 5km/hour - requires a street environment that is in keeping with these parameters. Visual stimuli, comfortable noise levels, benches to rest on and trees to shade us are all important.

## Create walkable hubs

Local neighbourhood hubs are crucial to sustaining a good quality of local life. It has been shown that amenities within 600m increase the likelihood of walking significantly. Hubs should offer continuous and direct routes to and around them for pedestrians.

## Build quality footpaths and maintain them

Inviting walking requires an offer of a pleasant and high quality walking environment. The width of the sidewalk, the material, how it behaves in different conditions and its life-cycle are all very important to consider. How well the sidewalk can be maintained and the frequency of this maintenance is also crucial to this.

## IN TEN YEARS...

Every Red Deerian can visit a local shop to buy milk on foot chatting to neighbours along the way and passing children cycling and walking to and from school.

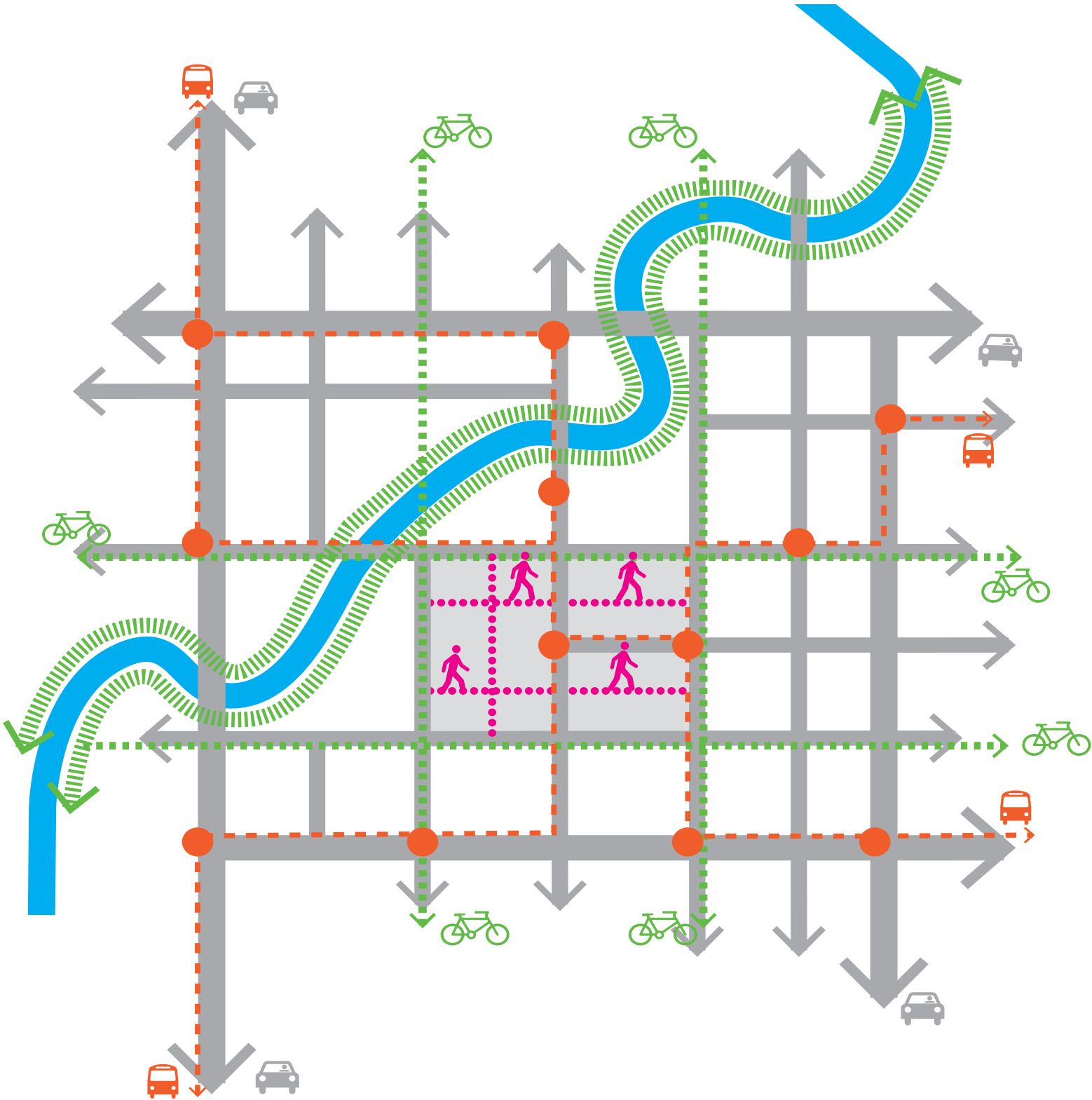
“Clear the side walks every day! It sometimes takes weeks before major roads are cleared (in winter).”

FOCUS GROUP PARTICIPANT





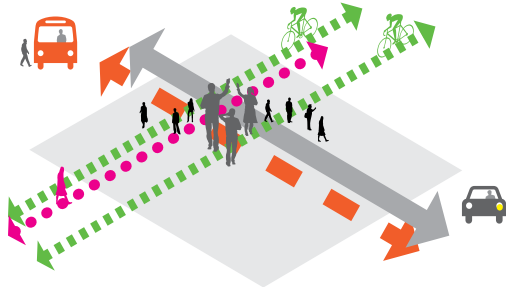
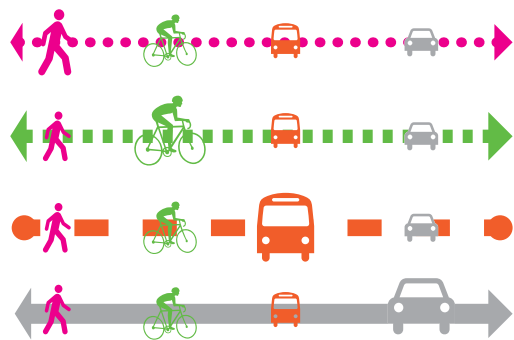
READY/SET/GO!



# CREATE A BALANCED NETWORK /PLAY 2

Different streets in Red Deer should have different priorities. Creating a balanced network of streets with different functions and priority uses creates opportunities to improve efficiency and safety while also reducing traffic congestion. Red Deer’s current street network puts a high priority on car mobility. A more balanced network will require

significant investments in priority for pedestrians, cyclists and transit riders. Driving will continue to play a key role in how people move in the city. A more diversified and context sensitive approach to mobility planning will provide more travel choices for residents.



## Define a set of street typologies based on the desired end users

While each street has their own unique character and qualities the current classification system for streets in Red Deer is not sensitive to these differences. A new framework that identifies categories of streets based on their unique functions and priority uses will be critical for future mobility planning.

## Balance the network with all users in mind

Red Deer needs a balanced network of streets that are designed and operated to enable safe, accessible and enjoyable travel for all users. Key nodes in the city such as employment, commercial, and service hubs need to be linked with multiple modes including walking, cycling, riding the bus, and driving.

## Ensure drivers have a place without infringing on quality for other modes

Driving will always play a key role in the transportation system in Red Deer. Despite some streets maintaining a certain level of service for vehicles, all streets must provide a good quality level of service for the most vulnerable road users.

## IN TEN YEARS...

Streets in Red Deer will be more diversified. Red Deer will maintain its reputation as being a city that is easy to move around in, despite the significant increase in population.

“Recognize that different people will have different reasons for choosing different modes of transportation.”

RESPONDENT TO ONLINE FEEDBACK FORM



READY/SET/GO!





# TIE LAND-USE AND MOBILITY TOGETHER /PLAY 3

Red Deer acknowledges in its Municipal Development Plan that growing intelligently can support mixed mobility by offering convenient connected places to live and work without the loss of landscape or easy access to it. Corridor densification would be an optimal way to absorb the incoming population while retaining the preexisting quality of life. A Commercial

Opportunities Study of the city identified that Red Deer needed more ambitious apartment targets, that they should be concentrated in selected locations that support other commercial and quality of life objectives. The City can support this by making it easier to acquire land downtown, along corridors and in new neighbourhood hubs.



## Enforce and incentivise minimum density targets

Red Deer has a minimum density standard of 14.8 units per hectare. This is too low to support a successful approach to integrated mobility. The City should consider increasing its minimum density in line with proven best practice in the range of 25-35 units per hectare. Assumed lot sizes should be reviewed and the percentage of multi family dwelling units increased.

## Establish new housing standards

Currently policy discourages narrow plot housing, with a maximum of 33% of total development area to be in this style. Provide incentives for density and have reduced off street parking requirements where housing is within 500m of transit corridors creating better value for developers. Higher density does not necessitate tall buildings. Low-rise density can be delivered when considering different types of housing geometries.

## Require Transit Oriented Development

Growth that can utilize existing infrastructure supports the provision of municipal services in a cost effective manner. Enforce proximity requirements to transit for new development, and link density targets to distance from transit making transit oriented development the most profitable.

## IN TEN YEARS...

All new residents are absorbed within the existing city boundary with increased density creating great walkability to the new shops and amenities and schools in the city. So many now live within 500m of transit it has increased bus frequency to 10mins.

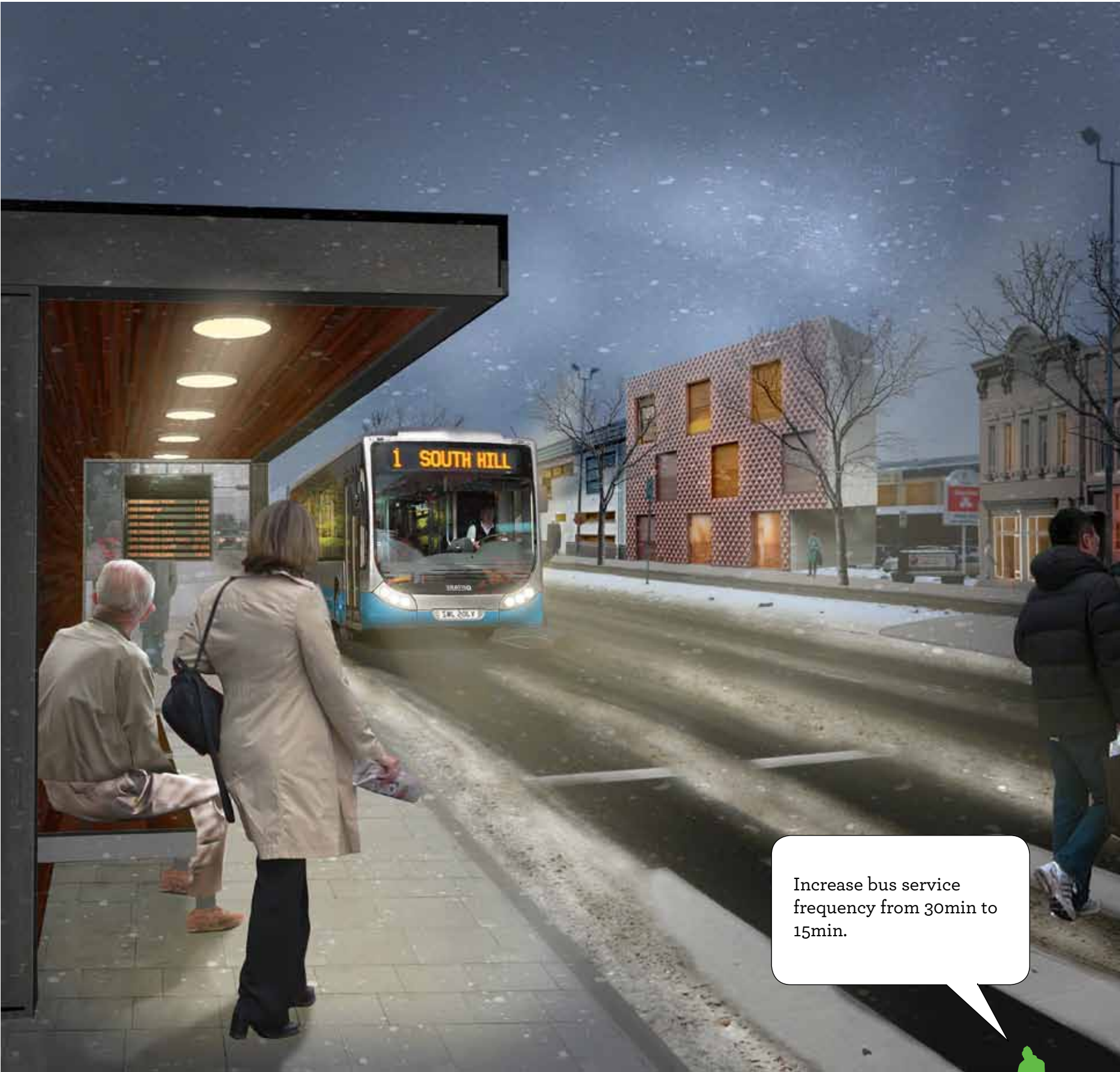
“Adopt planning principles that encourage multi-use.”

FOCUS GROUP PARTICIPANT



SOURCES; NEIGHBOURHOOD PLANNING GUIDELINES AND STANDARDS 2008, COMMERCIAL MARKET OPPORTUNITIES STUDY, CORIOLIS CONSULTING CORP 2010

READY/SET/GO!



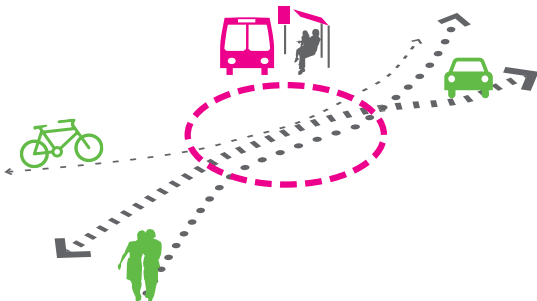
# MAKE TRANSIT PART OF THE JOURNEY /PLAY 4

Transit should offer convenient, direct routes frequently. Following the logic of the grid would allow this with maximum 500m walks to transit stops. A frequent (15min) interval and a rationalized direct service needs to be supported by a strong

micro network of pedestrian infrastructure and comfortable transit stops. Effective information on transit times, on the street, online and on smart phones would help in addition to informational campaigns directed at nondrivers.



**Place stops where other things are happening**  
Transit should link with hubs, centres of education and work. The network needs to be integrated to provide pleasant, seamless and logical journeys. Waiting for transit can also be time for shopping or social time if it is well placed so riders interact with other places and people.



**Ensure access for pedestrians, motorists, cyclists**  
Transit should act as a support to other modes, a cyclist should be able to put their bike on for a ride home or a motorist should rely on it if having a drink in town. Everyone should know the transit service routes and be occasional riders.



**Improve the waiting experience**  
Service information, protection from the elements and proximity are all important features of transit stops. Real time updates to smart phones can help make transit convenient and accessible; this should be integrated with climate protected stops.

**IN TEN YEARS...**  
Transit will benefit the majority of Red Deerians, with frequency approaching 15min intervals at busy times and a high proportion living close by, it will become a much more viable and convenient travel choice.

“It should be mandatory to connect sidewalks to transit stops.”

FOCUS GROUP PARTICIPANT

A small illustration of a person pushing a stroller, positioned below the quote box.



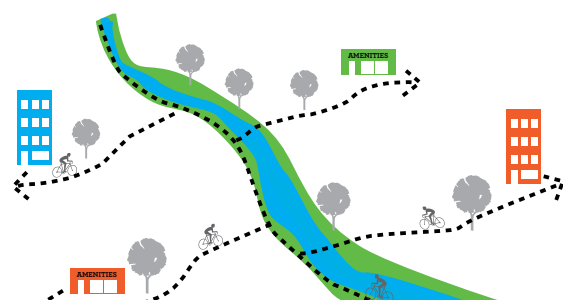
READY/SET/GO!



# CONNECT THE TRAILS /PLAY 5

The Red Deer river valley has an outstanding well loved trails network. People own bikes and use the trails. What is needed is an expansion of the trails into a network of greenways, on-street lanes and separated bikeways along arterial roads that would transform the network from a recreational one to

a full city network, helping people get to where they want to go. Well designed integrated cycle lanes and trails should be comfortable, convenient, connected and continuous.



**Tie urban network into recreation**  
The existing trail network can only reach its full potential if connected to an on-street network helping people be active and reach home and destinations. For cycling to be integrated into transportation options, direct, convenient routes must be available to employment and hubs. People cycle for pleasure, and they need to be encouraged to integrate this into their journey to work or school.

**Plan with the entire street section in mind**  
The proportion of space given to each mode should be addressed case by case on each road according to where it falls in the hierarchy of streets and its predominant use patterns. Cars, cyclists and pedestrians all move at different speeds and require different space; cycling and walking should be separated where appropriate.

**Create a Red Deer model for cycling**  
Every city is different and has different approaches to making cycling fun and part of the city’s identity. Red Deer should explore specific road markings, cycle furniture and events. Cycling is cultural and linked to self identity; in Copenhagen many people have a kid’s box at the front of the bike for their family, in London every hipster has a fixed gear bike, what will Red Deer’s cycle culture be?

## IN TEN YEARS...

Red Deer will be proud of its unique cycle culture, recreational and commuting which generates a fantastic public life for most of the year. It will be integrated into and support all the other outdoor pursuits the city loves.

“I would love to bike because it would keep me healthy and save me more money, but it needs to be safe!”

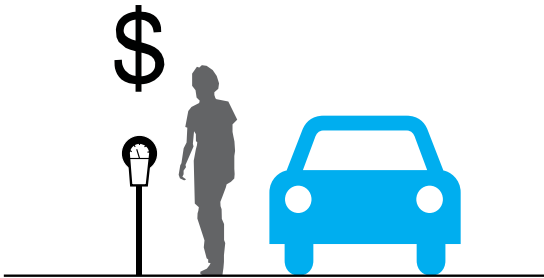
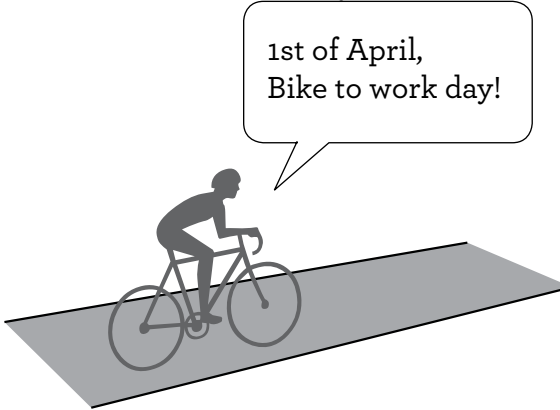
NEWCOMER FOCUS GROUP PARTICIPANT

READY/SET/GO!

NURTURE A CULTURE OF CHANGE /PLAY 6

Change is always possible, but default settings are very strong. It can be difficult to break habits, which is why creating good habits for the large numbers of new people arriving to Red Deer will be crucial. Newcomers to Red Deer offer an opportunity to start a wave of active transportation

enthusiasts. Information, invitations and marketing of the active-lifestyle in Red Deer can promote the city’s quality of life in city branding and invite positive behaviour. Change can be difficult but acknowledging that it will happen, and actively seeking to shape that change is the most positive way forward.



**Lead by example**  
The City of Red Deer is one of the largest employers in Red Deer. If it were to have programs, competitions, incentives and momentum for multi- modal employees it could create a significant shift for the city. There are many examples of employer programs to draw on and you have a captive audience, use it!

**Show that change is possible & desirable**  
Change can be fearful and uncomfortable if people feel their city or values are being challenged. Presenting the arguments for change in clear understandable ways attune with local people is crucial. Implementation of change must be accompanied by smart community and political work.

**Remove direct and indirect driving subsidies**  
Parking is free almost all over Red Deer while transit is relatively expensive. Make sure costs from the city reflect the long term quality of life and commercial objectives. Short term profits must be over-looked for long term gains.

**IN TEN YEARS...**  
Red Deerian’s were very proud of the city’s reputation as Canada’s leading small city for high quality of living, innovation and industry. A mixed society with mixed sectors of industry, knowledge and service economies the city is known for its forward thinking approach.

“Let the city be an example: The city as an organization incorporating alternative modes into how we do business.”

FOCUS GROUP PARTICIPANT





# TOOLS FOR CHANGE

Through speaking with community members three themes about how, and with who, the City of Red Deer can act emerged. These actions complement the five plays and strengthen the notion that we need a collaborative, multi-sectored approach to mobility with programs to support infrastructure and policy changes.

#1

## ENHANCE COMMUNICATION & TRANSPARENCY

People in Red Deer want to easily find information about their transportation choices and the City’s progress on mobility initiatives.



**TO DO:**

- Launch an interactive web page that is the go to place for mobility in Red Deer.
- Establish a simple set of metrics on pedestrians and cyclists and collect baseline information that will be used to inform decision making.
- Develop and implement a wayfinding strategy.

#2

## BUILD & MAINTAIN PARTNERSHIPS

In order to create a significant shift in travel behaviour in Red Deer, The City cannot act alone. Balanced mobility has to spill into various departments, sectors and organizations.



**TO DO:**

- Partner with Red Deer schools and school boards to support and expand programs that promote more walking, cycling and bussing to schools (e.g walking school bus, bike to school days).
- Work with school boards on siting locations for new schools that align with priorities to decrease dependency on driving to/from school.
- Partner with Alberta Health Services on a campaign to promote the health benefits of active transportation.

#3

## MOBILIZE PEOPLE WITH PROGRAMS

It’s about so much more than providing infrastructure, people need to be inspired to act.



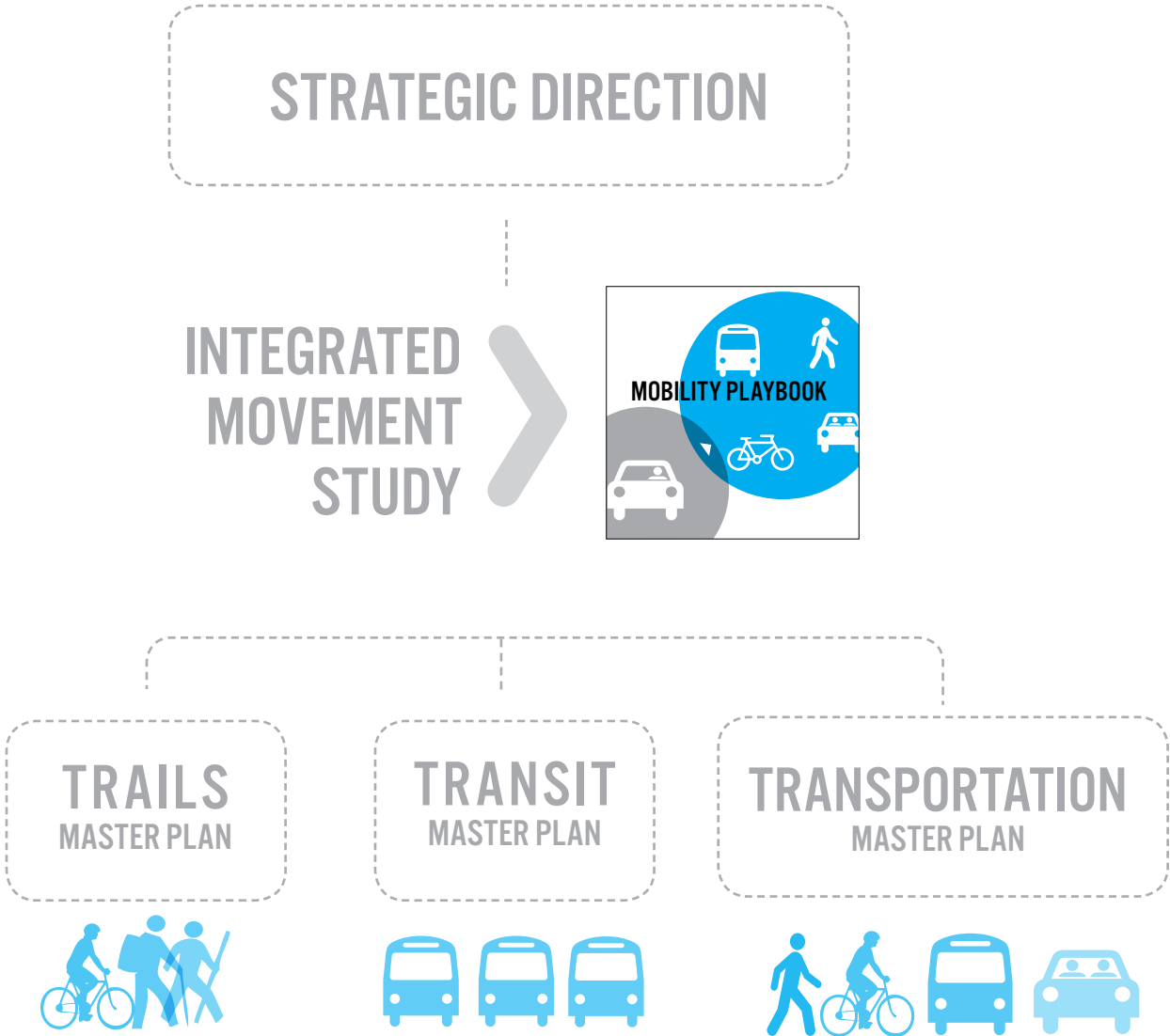
**TO DO:**

- Involve youth and other stakeholders in the design and implementation of events and programs that encourage walking, cycling and transit ridership.
- Continue to support and program the Ross St Patio and identify other pilot projects that prioritize streets as places.
- Deliver training programs on bicycle safety in cooperation with community partners.

READY/SET/GO!

NEXT STEPS

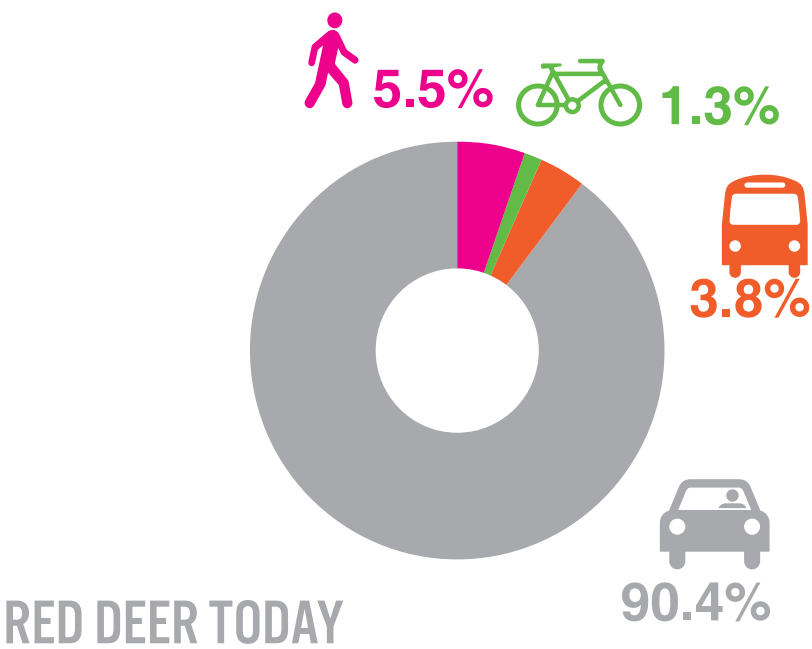
Council’s Strategic Direction informed the development and undertaking of the Integrated Movement Study and this Mobility Playbook. This document will inform subsequent planning documents that, while more technical and detailed in scope, will reflect the priorities and values identified in the Playbook.



PRIMARY METRIC

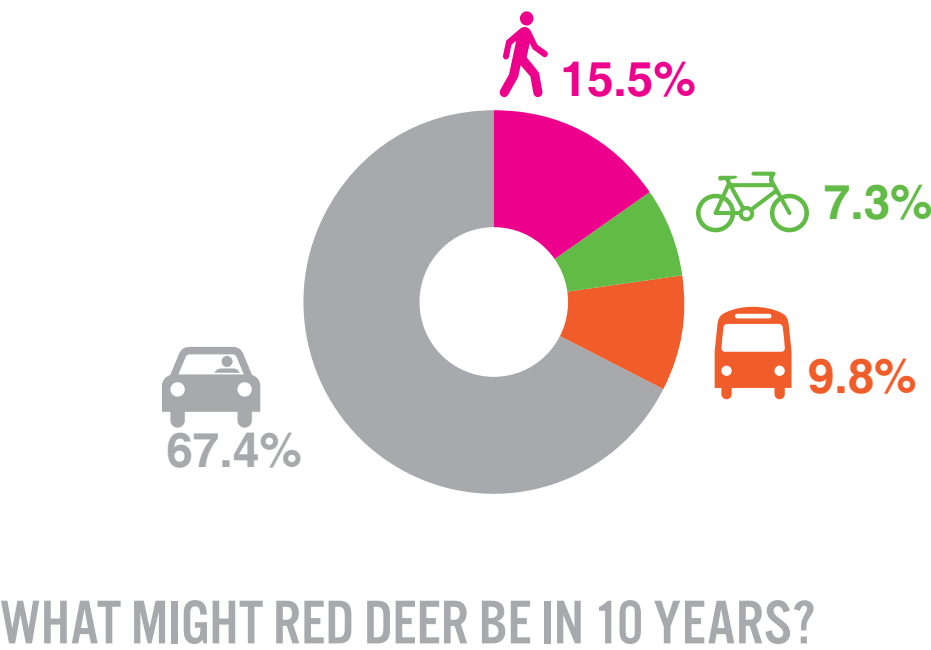
Modal Split - seasonal and frequent

The number one metric for measuring success in achieving more balanced and integrated mobility in Red Deer will be modal split. To be most effective The City should aim to set short, medium and longer term targets for modal split. Progress should be measured every year and measurements should be taken in both winter and summer to account for seasonal variation. Annual measurements will help to identify success and to identify where more needs to be done.



Future Red Deer: a city with multiple choices

By implementing the strategies identified in the five plays Red Deer can achieve its goal of creating a city that is safer, more sustainable, and offers more mobility choices to its citizens. Cities with the most success in creating balanced and integrated mobility set ambitious goals first, then follow through on actions with ongoing monitoring. Based on best practice of what has been achieved by other cities in Canada, North America and around the world. an achievable and balanced modal split for Red Deer in 10 years would have similar proportions to the one here, with suitable modes being chosen for each journey.



# READY/SET/GO!

## TOOLS FOR CHANGE

Red Deer – a safer, healthier more convenient and affordable city. This is the potential outcome of a balanced modal split. This measure doesn't capture all the value added by mixed mobility. We suggest some that reflect what Red Deerians most care about in their city, over-all quality of life, active living and recreation and economy.

Regular measuring supports project evaluation, the targeting of resources effectively and an excellent evidence base from which decision makers and politicians can create policy. Measuring the correct indicators is crucial in supporting the city and culture you want, shifting from thinking about systems to people.

## OTHER CONSIDERATIONS

### **Measuring road safety and perceptions of safety**

- Aim to reduce actual accident numbers and the fear of road traffic accidents for pedestrians.

### **Choices survey**

- Asking why people make the transportation choices they do to help direct improvements



COMPLEMENTARY METRICS



**Overall quality of life:  
Liveability Index**

Quality of life can be measured in many different ways. The City has done a great job at measuring this with seven annual municipal quality of life surveys conducted by Ipsos Reid. The City should address the metrics used in these surveys and consider devising a pioneering liveability index for small cities using some of the qualities identified by Red Deerian’s as crucial to their quality of life. Living close to school, knowing neighbours and opportunities for active outdoor living are aspects of city life that some indices have begun to address. Look at global best practice to find ones that best suit the priorities of Red Deerians.



**Active living and recreation:  
Health and Obesity**

Keeping a finger on the pulse of Red Deerian’s health is another metric that should be used to measure how well The City is serving its citizens need to stay active. Alberta’s adults are 66% overweight or obese as are 21% of children and young people. The City of Red Deer should seek to gather data on its own rates and measure change over time. Supporting walk to school initiatives with quantified results can be a powerful tool in wider change.



**Economy:  
Growth and Affordability**

Red Deer is currently at the heart of Canada’s leading economic growth area. It is important that The City measure how much of this growth is being captured and felt in the improvement of the quality of the everyday lives of Red Deerians. This should be measured by looking at employment levels as well as household incomes in relation to the cost of housing, running a car and general housekeeping. An ambition to maintain or decrease the costs of living in line with inflation would allow Red Deerians to enjoy the fruits of growth and save for a prosperous future. Building affordability into new areas of the city is crucial to building in this resilience and is directly linked to house price and car dependency.

COST OF OBESITY IN ALBERTA, 2005 AVAILABLE [HTTP://WWW.ALBERTAHEALTHSERVICES.CA](http://www.albertahealthservices.ca)

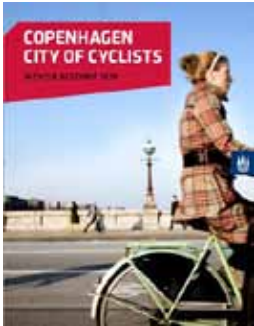
READY/SET/GO!

MOBILITY ACCOUNT(ABILITY)

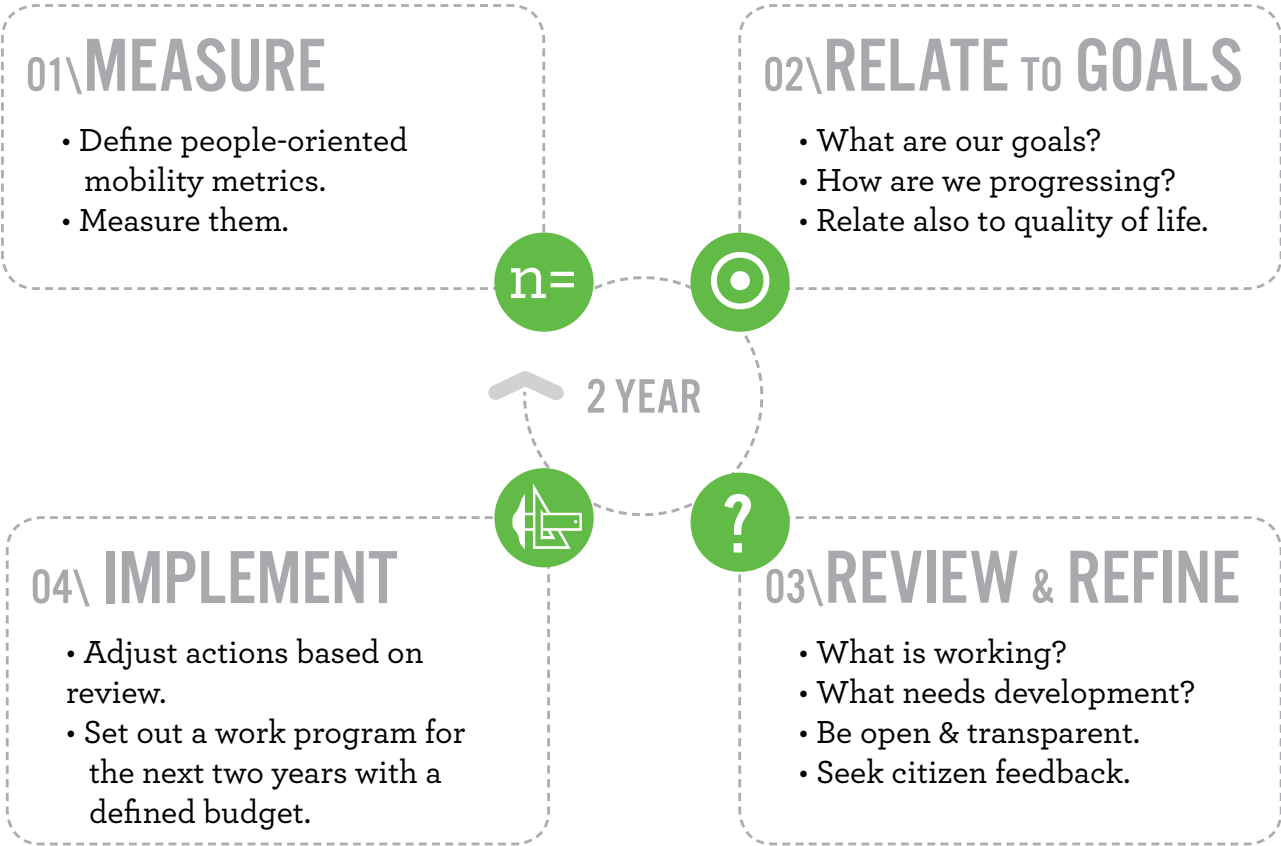
There is no magic bullet for creating mobility choice. Implementation is sensitive to unique social, political and cultural forces.

To keep Red Deer focused on its mobility goals, The City should establish a feedback loop as shown here, with a two year cycle.

To record and guide progress we recommend the establishment of a Biannual Red Deer Mobility Account, similar to the one Copenhagen keeps for cycling (shown here). This would be the key piece of documentation that tracks Red Deer’s progress towards greater mobility choice, and a historical record of how it was achieved.



Copenhagen Bicycle Account  
[www.cycling-embassy.dk](http://www.cycling-embassy.dk)









# Appendix A:

## The City of Red Deer: Integrated Movement Study

summary and analysis of public comment



**Global Research**  
Turning Information Into Insight

**01 MAY 2013**

Table of contents

**Introduction..... 2**  
    Analysis method.....2  
    Reading this report .....2  
**Key findings..... 4**  
**Mobility Playbook vision creation ..... 7**  
    Agreed and why.....8  
    Neutral and why ..... 133  
    Disagreed and why ..... 155  
**Draft Mobility Playbook reflects a shift that works for Red Deer..... 177**  
    Agreed and why..... 188  
    Neutral and Why..... 234  
    Disagreed and Why..... 256  
**Transportation mode discussions ..... 289**



## Introduction

This Report analyzes two open-ended questions that were asked of Red Deer residents in response to the Integrated Movement Study. The questions focused respondents to consider the Mobility Playbook and asked:

- Does the Mobility Playbook create a vision for a Red Deer you want to live in? Why?
- The draft Mobility Playbook proposes a shift in the way we do transportation planning to accommodate a balance between walking, driving, transit and cycling. Do you think the draft Mobility Playbook reflects a shift that works for Red Deer?

Five agree to disagree options were provided, along with an opportunity to explain answers with written text. Written answers were normally a few sentences in length and some were up to half a page of text. In total 252 people completed surveys providing a good amount of information to analyze under each of the question responses. The open-ended questioning approach provides a good insight into the thoughts of Red Deer residents on mobility issues.

## Analysis method

All comments were entered into text analysis software, which assisted analysts in sorting information into themes. For this project it was decided to combine the comments of those who generally agreed (strongly agree, agree), were neutral, or disagreed (strongly disagree, disagree) with the two questions to make three groups of comments. The comments within each group were then analyzed so it was possible to compare the opinions of those who agreed with the two question statements with those who were neutral and those who disagreed. The ideas and opinions that came out of the comments created themes in this report. All comments were read multiple times and each comment was placed in at least one theme. Comments that expressed opinions on more than one topic were included in multiple themes.

The number of comments included in each theme is stated under each theme heading. This provides an indication of the relative level of interest in each theme.

Once all the comments were grouped into themes, the main points were summarised into the discussions contained in each section of this report.

Charts were also created representing the level of agreement in percentage terms with the two statements. These charts are at the start of the first two main sections of the report.

## Reading this report

In the first two sections, the comments provided by respondents under the two questions are categorised into themes and discussed. In most cases, the most commonly commented on themes are discussed first in each section, through to the least commonly commented on themes.

The last section is a general discussion of overall responses on each of the main Red Deer transportation modes combined from both questions. The comments were combined into one section because a significant number of comments discussed particular transportation modes in detail, and there was a lot of commonality across all of the comments.

*In each section, the italicised text presents direct quotes from respondents.*

## Key findings

### *Does the Mobility Playbook create a vision for a Red Deer you want to live in? Why?*

The response to this question was:

- 35% strongly agreed
- 36% agreed
- 14% neutral
- 9% disagreed
- 7% strongly disagreed

Eighty five percent of respondents were either favourable or neutral in their response to this question. This result means that a relatively small minority of respondents (16%) disagreed that the Mobility Playbook creates a vision for a Red Deer that they want to live in, and reflects that overall the Mobility Playbook was agreed with in terms of creating a vision for Red Deer. This result indicates that the majority of comments were generally positive in nature, when discussing the Mobility Playbook vision.

Based on the comments provided by respondents, the body of this report contains detailed discussion of the ideas and opinions provided, below is a summary of the main findings.

Overall, there were two distinct arguments that ran throughout all the comments.

- There was a majority of respondents who agreed with the vision providing a more balanced provision of mobility options, including cycling, walking, transit and cars. A balanced provision would reduce the dominance that cars currently hold in transportation options and would provide more consideration and provision for other transportation modes.
- The second general argument provided by a minority of respondents was that a vast majority of people in Red Deer drive cars, and cars are necessary to get places quickly and conveniently, especially in bad weather, and they should continue to take top priority in transportation provision and nothing should reduce their use of roads, in particular cycle lanes that encroach on vehicle space.

Respondents who agreed with the first question, generally liked that the Mobility Playbook catered for a range of transportation options and in particular supported active transportation (cycling and walking). Respondents supported this approach for a range of reasons: efficiency, cost, health, sustainability, enjoyment, assists building communities and caters for more lifestyle types (age, economic status) and transportation needs (short and long trips).

A commonly commented on issue by those in favour of the dominance of car use was the problems caused by reducing motorized vehicle space on roads to provide cycle lanes. They believed that cyclists should be separated from car traffic. On this last point, both those who agreed and disagreed with the Mobility Playbook vision, held similar opinions; cycles and cars should be separated.

Across both groups, a common view was that it is ok for other transportation users to have provision provided for them as long as it doesn't create a reduction in another area. The most common example was not losing motorized vehicle lane space for cycle lanes. The opinion of car users was that if cycle lanes are to be provided then they should use additional space, and not be taken from existing road space.

A number of respondents wanted the plan to be *true* to Red Deer. The most obvious example of this was the weather. It was stated on numerous occasions that whatever is provided needs to be realistic for the harsh winters that Red Deer experiences. It was commented that bike lanes would not be used all year round and would otherwise be empty or if used, would be dangerous. Another point made about the local context was that many people work in industries that require them to use personal motor vehicles to travel to work and these people expect to be able to use cars in their free-time also.

The trails and transit system were most positively identified aspects of Red Deer transportation across the board – in terms of respondents who agreed, disagreed or were neutral about both of the questions asked. More frequent services, direct routes and more bus shelters were suggested for transit as was an enhanced and connected trail system.

There were a large number of comments on the bike lanes on streets issue and many references to the 2012 bike lane trial. Many respondents desired separate cycle lanes and were apprehensive towards closing the main road off for cyclists, or losing road width and space to cyclists.

Safety and accessibility comments were threaded throughout the topics but were particularly common in relation to the sharing of space – bikes on roads, but also if bikes lanes were put on sidewalks. Comments relating to ensuring side streets, trails and transit stops are accessible and designed with those who are mobility impaired, were also commented on.

There were a few specific comments on the planning process. Some were positive about what had been produced, although a few requested more detail in the Playbook and video. Some considered the best way to implement the plan and stated that efforts need to be made to bring the whole community along and there needs to be care ensuring that things are done successfully and with caution, particularly if those who sit on the fence are to be won over to a new form of transportation provision.

**The draft Mobility Playbook proposes a shift in the way we do transportation planning to accommodate a balance between walking, driving, transit and cycling. Do you think the draft Mobility Playbook reflects a shift that works for Red Deer?**

The response to this question was:

- 29% strongly agreed
- 33% agreed
- 15% neutral
- 12% disagreed
- 12% strongly disagreed

The comments made to this question were generally consistent with the first question. Where there was significant difference, or when themes were emphasised in a different way they are covered in this discussion.

Overall, there was an increased proportion of respondents who disagreed with the statement (24%), when compared with the first question, but still a significant majority of respondents were either neutral or positive (77%) toward the statement. This result shows that the majority of respondents do believe that the Mobility Playbook proposes a shift that works for Red Deer.

There was strong support for separating bicycles and cars. Again, this was from those who agreed and disagreed with the statement in this question. The reason for this opinion was to ensure safety for cyclists and to reduce congestion for cars as a result of not losing car lanes.

Transportation choice was again a strong theme. One of the things that would increase walking was thought to be improvements in sidewalks; widening sidewalks was mentioned a number of times. Providing the opportunity for residents to choose from a number of transportation options depending on their circumstances and the purpose of a particular journey was considered important by many respondents.

The link between land-use planning and transportation was made a number of times. These comments generally stated that reducing sprawl and being smart about where business is located relative to residents would reduce transportation requirements because people would be required to travel less distance on a daily basis.

Although overall this group was in the minority of respondents, there was a great deal of consistency in the comments made by people in favour of retaining cars as the key consideration in transportation planning. Many commented that cars needed to have greater emphasis than is stated in the Playbook, or that the cycling and walking priority was too strong. These comments often referred to the weather and the need to be in a car to travel. Respondents often stated that cars are the most practical option for the majority of the population.

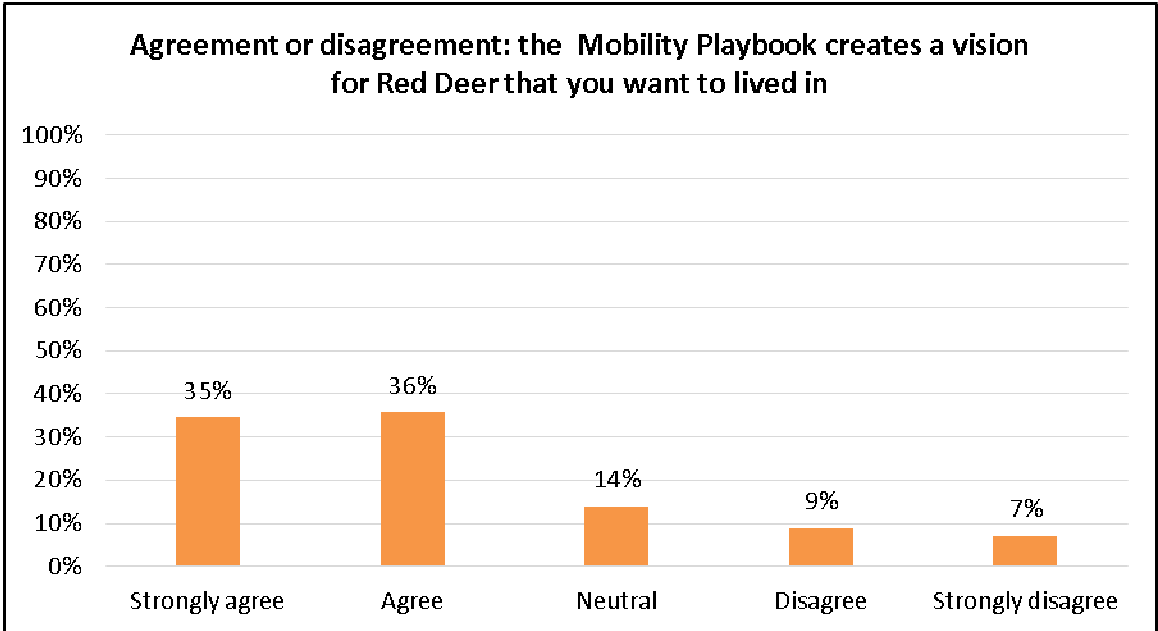
Education was discussed as a response to this question by a number of respondents. They thought that for the shift required to happen people need to be educated in what the positive outcomes from transportation change would be. A culture change, in the way that the community considers transportation collectively was also discussed as being needed if change is to occur.

## Mobility Playbook vision creation

Respondents were asked: *Does the Mobility Playbook create a vision for a Red Deer you want to live in? Why?* Respondents were able to state if they strongly agreed, agreed, neutral, disagreed or strongly disagreed with the statement, and then were asked to state why. Comments from those who agreed or strongly agreed have been combined to create one group for the analysis below, neutral comments have been left in their own group and disagreed and strongly disagreed have been combined to create a disagreed comments group.

This section presents the reasons for agreeing, being neutral or disagreeing with the Mobility Playbook vision.

This chart represents respondents’ agreement and disagreement with the question stated above.



- 71% agreed
- 14% neutral
- 16% disagreed

NOTE: Percentages don’t add to 100% because of rounding.



## AGREED AND WHY

### Vision, planning for the future, process, and Mobility Playbook & video

Comments 69

A number of respondents appreciated how the Mobility Playbook, video and whole process considers and plans for the future. Some stated that there is a need to plan for population growth and they appreciated that this is being done. They also appreciated the process that had taken place to prepare the plan. These two comments discuss considering the future.

*... With the city's population increasing as projected, we need to see how we can get some of the car's off the road. Additionally, we need to start educating and providing incentives to those cycling so that it's safe and is seen as an attractive alternative. Currently, I feel like when I'm riding my bike anywhere around a road, I'm taking my life in my hands!*

*I like how you've thought of the future.*

The vision was positively affirmed by a number of respondents. They stated that the vision looks good and it is a good thing to aspire to. This respondent thought that the vision had got it right.

*As far as visions go, this one is excellent, and seemingly attainable. Too often, plans are too grandiose or too short-sighted. It is nice to see something that actually looks like it can work in Red Deer.*

There were a number of comments that stated that the Mobility Playbook moves the city in the right direction. Respondents made comments that the right decisions were being made to improve things. The comment below also went on to state how the city can continue to move in the right direction.

*I think it is critical for a growing city to consider all transportation options within a city. ...I approve of the direction that is being taken to produce bike lanes and walkways to make these modes more attractive options in our city. Keeping communication open for input and suggestions between Council and citizens is key.*

A few respondents stated that they liked the material that had been produced.

*I like the video that was done/attached, it offers many different ways of "moving" in the city. I walk, and use the trails in our city.*

### Transportation choice

Comments 59

A frequent reason for support was because the overall vision will provide greater transportation choice – enabling residents to cycle, walk, bus or drive. This comment was about having more choices.

*I like the idea of looking at other ways to get around Red Deer instead of the automobile.*

Respondents commented that it is important to have choices which include a range of transportation options. The result of this would be more options for individuals to choose from and also for different groups of people (e.g. young, older, car owner or not). Options would also be available depending on specific travel needs, such as short local trips or longer journeys. It was important for people that all the options are easily accessed and available.

*It recognizes that different people will have different reasons for choosing different modes of transportation from time to time and considers the needs of all users and various modes.*

Outcomes that would result, according to respondents who thought more choice was important, were a better balance of options, including healthy active options that would create a better city and a better life for individuals. The alternative approach that respondents were responding to was a single focus on cars – they wanted cars to be just one of the options available to people. This is a comment from a respondent related to providing more transportation choice.

*Adding beauty and safety to the walking, biking and transit routes shows caring and respect for our community and its citizens as a whole. I welcome more opportunities to live an active, outdoor lifestyle during all seasons of the year. And what a great way to stay fit.*

## Cycling and pedestrian

### Comments 94

Many respondents liked that the vision incorporated a move toward being more bike and pedestrian friendly by making cycling and walking a higher priority and through providing more lanes, trails and sidewalks for cycling and walking. There were a lot of comments, cautions and suggestions around bike lanes – these are discussed in the ‘bike lanes’ topic below.

*It is great to see the City aspire to be more walkable and bicycle friendly*

*The vision is going in the right direction. I would like to see a stronger move towards pedestrian and cyclists.*

*I am a walker, and the emphasis on pedestrian traffic definitely gets my vote!*

*This year I will be making the switch from a car commuter to a commuter cyclist, partly by choice and a desire and love of exercise and being outdoors, and partly because I believe that the city will and is moving in the right direction to support all modes of transportation. I know many people in my age group (20's) who are choosing not to drive, and to see the city working to accommodate their needs is fantastic! I loved every part of this playbook - wow!*

Many respondents commented that being more pedestrian and cycle friendly caters for more lifestyle types, encourages fitness, active transportation and is healthy, pleasurable and has various benefits for people.

*Greater pedestrian and cycling opportunities encourage community participation.*

*Absolutely! I want to live in a city that encourages people to live active, healthy lifestyles. Having the option to be able to walk, cycle, run to work for play or to do everyday chores is critical.*

*I like a couple of factors of the vision: 1) A diversity of transportation, built on a variety of options 2) I find the automobile to be one factor in personal/family isolation or community disconnection. Walking or cycling includes personal interaction, no matter how brief, with other people, and that builds community.*

*I agree that we need to honor everyone, and that encouraging fitness by making it easy, safe, and appealing to walk and cycle is a great idea.*

Many respondents commented that the diversity of transportation options is more sustainable, particularly the emphasis on active and public transportation. A number of respondents also made references to the future.

*Our past and present reliance on private motor vehicles is not sustainable in the long term (due to limited supplies of both energy and parking space) and the sooner we can start moving toward a sustainable model, the less painful the transition will be.*

*Not only is it critical for our physical well being, but also for environmental reasons. Having less motorized vehicles on the road or in designated areas only would support healthier air, land and water.*

*I think it is very important that the City Plans wisely for the future, in order to grow sustainably. Right now it is challenging to move around red deer without a vehicle, the future needs to accommodate pedestrians. The cost of keeping roadways and vehicle infrastructure maintained is huge and needs to be managed wisely with the addition of pedestrian focused transportation etc.*

A more detailed discussion of cycling and pedestrian issues from all of the comments provided to do with cycling and walking is provided in the *Transportation mode discussion* section that follows.

## Transit

### Comments 33

Respondents liked the suggestions made around improving the transit system, particularly more frequent services. Direct routes, routes that go to more places, as well as bus shelters that are logically placed and a notification system on schedules/late or cancelled buses were also suggested.

*I think increased Transit frequency is a must in this plan - every 15 min at peak times, and more express routes. This is a Red Deer I want to live in, but I want changes to come at a reasonable pace and not divide my wonderful city into two camps that hate each other.*

*Agree with more frequent transit. You may have to consider smaller buses at some times because they may not be full.*

Further suggestions for improvement were common and these are discussed in the *Transportation mode discussion* section, below.

## Trails

### Comments 29

The existing trails were commonly described as being loved and the proposed connecting of trails was strongly supported. Respondents also generally advocated putting more time and money into their development.

*I really like the idea of not having to use my car all the time. I love our trail system and like the idea of it's integration.*

*The trail system in Red Deer is one of the best things that I love about it, would love to see them expanded and connected more.*

*I Love the trails in Red Deer. I strongly believe that we should put more time thought and money into the designing of our residential and commercial walks as well. Which is what it looks like you are also thinking. I would like to see a more healthy growing environment for the trees and other shrubs and plant species with also making commutes and leisurely walks more pleasurable*

*I LOVE using the bike trails. Although I usually jog on them, it would be so great if they all interconnected so that I didn't have to drive to get to them :) I really like the idea of having well lit trails because it would make pedestrians feel safer and more comfortable going on them.*

Specific suggestions and comments for trails are presented in the *Transportation mode discussion*, below.

### **Safety and accessibility**

#### **Comments 31**

Cycle safety and ensuring people are not hurt by cars was the most common topic discussed to do with safety. Fear of being hurt was a reason given by some people for currently not biking or discouraging their children from doing so.

*... Additionally, we need to start educating and providing incentives to those cycling so that it's safe and is seen as an attractive alternative. Currently, I feel like when I'm riding my bike anywhere around a road, I'm taking my life in my hands!*

There were also comments discussing walking safety and the need to provide good sidewalks for people to walk safely.

There were comments made about providing for all groups in the community.

*We need to create a city for everyone - drivers, walkers, cyclists and riders. The driver on the road focus has led to sprawl and discriminates against those who are too young to drive, too old to drive or those who would prefer not to drive. It also hinders the quick and efficient movement of those who simply can't afford a car.*

### **Cars and roads**

#### **Comments 16**

A number of the comments in this section were about getting away from the need to use cars. Although, others commented that cars are still a very important transportation option. Some stated that there is a need to provide for vehicle traffic by maintaining corridors and that if cycling and walking are going to be added to roads this should be additional space and should not take away from road space. This was one assessment of what has been done in the past to cater for walking and cycling.

*Integrating the bike lanes into the existing trail system would be smart, as would widening existing side walks or creating a new side walk as opposed to taking up a lane on already busy roads. This was dangerous, confusing and realistically made no sense. Therefore I am very happy to see that City Council is making an effort to get feedback before making and further changes.*

### **Sustainability**

#### **Comments 16**

One of the positive outcomes from the proposed change that was discussed was planning for a sustainable future. This was specifically to do with reducing reliance on fossil fuels. This comment summed up many of the comments in this area.

*Partially I believe there has to be a shift due to gas prices, insurance costs, parking and space in our downtown as well as being environmentally responsible.*

### **Other comments**

#### **Comments 24**

*Other* comments touched on a number of topics. These included: land use planning (increasing density to reduce sprawl); locating businesses close to where people live; planning for lifestyles

and communities; communication and education will be important into the future; implementing the mobility plan in a cost-effective manner.

## NEUTRAL AND WHY

### Cycle lanes

#### Comments 12

A number of respondents who were neutral, commented on bike lanes. Generally they expressed apprehension around the inclusion of bike lanes on roads with vehicles. Specific suggestions have been incorporated into the *bike lanes* topic, in the *Transportation mode discussions* section later in this report. This was one representative comment about the cycle lane trial.

*The ideals sound good, but the bike lane project leaves me very hesitant to show support for many of the recommendations as they seem to want to force a certain lifestyle rather than accommodate it.*

### Transit

#### Comments 8

Some respondents commented that transit is important and needs to be improved with upgraded facilities. Others stated that they don't or it is impractical for them to use transit because of their personal situation. This is what it would take for one respondent to catch the bus.

*Make more direct routes so I don't have to go downtown and switch buses to get to/from work and I will gladly leave the car at home*

### Safety and accessibility

#### Comments 7

A number of comments were to do with equal access for the disabled and that there needs to be more provision for this segment of the community.

*You make no mention of taxi service or the Action Bus. In fact, you make no mention of disabled people at all. This is an inexcusable oversight.*

*Looks nice but not if you have to walk with a disability. Sometimes you have to walk on a make shift wooden sidewalk because they extend their store front so much!*

There were other general comments to do with the need for improved cycle safety and the danger of walking after dark.

### Cars

#### Comments 6

The few comments in this section stated that it is more practical to use a car for many of their transportation needs. One respondent described a Mom's life this way.

*Your utopian vision of walking to a local shop to pick up milk, chatting with neighbours along the way, and having school children walk to and from school is also fiction. The Moms I know are busy. They go on a big grocery run (which they need a car to haul the load - you can't do this kind of shopping and take it home on a bus, bicycle, or in hand). They rush from work to school to pick up the kids and rush them around to various activities (hockey, dance, music lessons, you name it), and rush some more to make supper or pick up supper from the grocery store or some take-out place. They need the car to haul not only the kids, but the hockey bags, the musical instruments, etc. Until you can convince families to withhold their children from extracurricular activities, you will not change their need for using a car. Lack of time is the*

*single biggest factor that will prevent Red Deerians from adopting a lifestyle of walking, bicycling, and using transit until they lose their license.*

## Weather

**Comments 6**

The comments made in this section predominantly discussed the fact that people can't practically use active transportation all year round because of the weather.

*We have 6 months of winter like conditions in which roadways are covered up and markings non existant for both local residence and people visiting. If you can't read the roadway's line how do you know where you should be. Further to this it is unsafe for bikes to ride in teh same winter conditions and roadways as vechiles travel.*

## Mobility Playbook and process

**Comments 6**

Some respondents were dubious about the Playbook having enough detail in it to show that the concept would really work. Some thought it better that local people plan the city because they know what locals go through. This was one person's mixed response.

*It is a nice dream, not sure how practical it is.*

## Other

**Comments 21**

There were a number of *other* comments that covered a broad range of issues. The relationship between housing style and type and transportation issues was mentioned by a couple of respondents. With the need for more density in development to reduce sprawl and transportation pressure. This is one comment discussing land use planning.

*The playbook mentions a more dense Red Deer, but all the new developments are single family homes and duplexes. The action does not match the stated ideal. Red Deer needs more high rise apartments. Red Deer also needs to fill in empty and under used lots before using up more farm land.*

A counter to this argument was also provided.

*When you can reach out your window and touch the neighbor's wall, you're not really in a private home. When the sunlight reflecting off your window can melt your neighbor's siding, are you really detached, or is that just an illusion?*

A couple of comments suggested that the population was too small to make it happen and others thought it would be too expensive.



## DISAGREED AND WHY

### Cycling and walking

Comments 16

A number of respondents did not like the emphasis on cycling, particularly having cycle lanes as part of roads. References to the past failure of doing so and comments that lessons need to be learnt from that were common.

*why can't things remain the same.....cyclists unless motorized....stay off the roads where there are motorized vehicles....build a bike path -- along the sidewalk...up on the curb side...not on the road!!!! My vision of Red Deer is not based on bike lanes....but will be based on tax dollars if more and more money is spent stupidly!!!! Seriously...this is far from rocket science!!!!....We have been cycling around for a great number of years...but not on the roads where there is too much congested traffic already...nevermind adding bikes to it!!!!!!*

*I would agree we need to accommodate the four modes of transportation, but not the way it was done with the current bike lanes. To eliminate vehicle lanes for the sake of bike lanes is like going back to the horse and buggy days.*

### Cars

Comments 15

A number of respondents commented that cars are and will remain the primary transportation option and that the plan needs to cater for this.

*The whole plan has as its foundation an anti-car philosophy. But automobile is the first choice of the overwhelming majority of Red Deerians. Bike paths are nice but mostly recreational. This plan sacrifices the necessary (automobile) on the altar of nice (bikes and walking paths). There was not a single plan presented for improving the movement of automobile traffic. This is what people want, need, and use. They are telling you what they want by their actions (cars)...apart from any surveys such as this.*

*Since the city was built to accommodate vehicles and not cycles trying to retrofit does not work.*

### Weather

Comments 9

A number of respondents raised the issue of the weather as a reason why there should not be an emphasis on cycling in particular.

*I'm sorry, but no matter how much you dream, you are not going to replace vehicles in this City - especially when we have 6 months of winter every year.*

*We endure long winters which further supports car usage. Few people choose to walk or bike when it's really cold outside.*

### Mobility Play Book and process

Comments 16

There were a number of comments relating to the process to create the Mobility Playbook and the end products. Some respondents were frustrated as they thought the Mobility Playbook and video did not have much substance or that the vision was unrealistic – because of the reasons discussed above. A few comments expressed concern around spending public money.

*For future planning and projects, I am not averse to this approach. However, it will cost a significant amount of money to create this. I would like to know more about the project before endorsing this. I may like to see my tax dollars being directed toward other important initiatives.*

*Why didn't we start with education, collaboration and a positive go forward movement? This secret campaign has certainly backfired.*

*...This video's verbal content was great and the right idea is there. The quality of the film need creativity and esthetics Sorry. It looks like Berlin.*

## **Transit**

### **Comments 5**

There were a few comments on differing topics about transit. These included positive support for what was suggested in the plan, such as covered shelters; the challenge of getting to them though in cold weather and a couple of comments stating that the respondent didn't use the transit system.

## **Other**

### **Comments 11**

There was a broad range of *other* comments. These included: increased lighting in the city will not increase safety for young people; improving the future shouldn't be based on reducing current accessibility; sidewalks are needed downtown but not everywhere; cars are needed to shop because people don't shop daily and instead have a large amount to take home when they do.

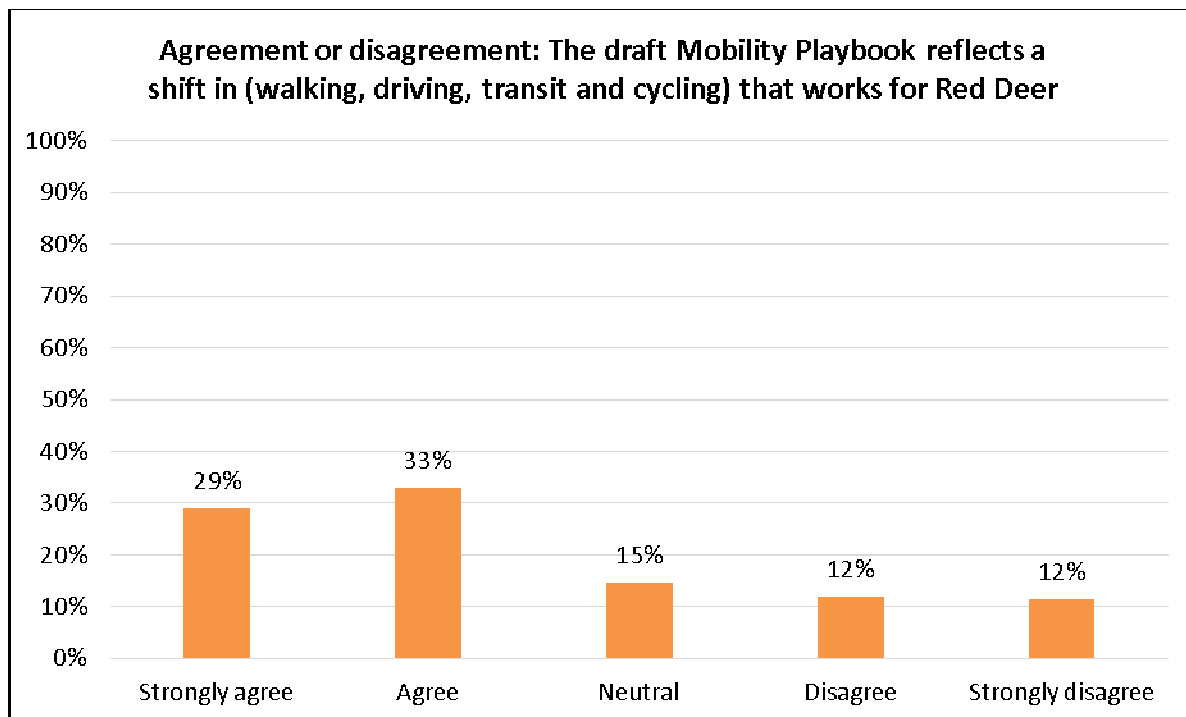
## Draft Mobility Playbook reflects a shift that works for Red Deer

Respondents were asked: *The draft mobility playbook proposes a shift in the way we do transportation planning to accommodate a balance between walking, driving, transit and cycling. Do you think the draft Mobility Playbook reflects a shift that works for Red Deer?*

Respondents were able to state if they strongly agreed, agreed, neutral, disagreed or strongly disagreed with the statement, and then were asked to state why. In the same way as the previous section's comments were grouped, those who agreed or strongly agreed have been combined to create one group for the analysis below, neutral comments have been left in their own group and disagreed and strongly disagreed have been combined to create a disagreed comments group.

This section presents the overall reasons for agreeing and disagreeing on whether the Mobility Playbook represents a shift that works for Red Deer or not.

This chart represents the agreement and disagreement with the question stated above.



- 62% agreed
- 15% neutral
- 24% disagreed

NOTE: Percentages don't add to 100% because of rounding.

## AGREED AND WHY

### Bikes (and bike lanes)

Comments 48

There was a large number of comments from those who agreed that the Mobility Playbook makes the shift that works for Red Deer, that bikes need to be separated from cars. Many stated that the plans in the Mobility Playbook to separate bikes from cars is a good outcome and is necessary to increase cycling. Many stated that it is too dangerous to cycle near to cars and some stated that drivers don't respect cyclists. Respondents were critical of the painted cycle lane pilot and thought that it didn't work. This comment from a cyclist was what they appreciated about the plan.

*As a cyclist, the focus on both lane separation and connectivity to the river path was appreciated.*

Some stated that there needs to be a greater mix of cycling and pedestrian opportunities and not just provision for cars. This comment summed up why some people don't cycle or use other forms of transportation other than private vehicles.

*Although I would like to "strongly agree" with this question, it will likely be very difficult to make the shift away from automobile-centric thinking in Red Deer. Some of the reasons I have heard for resistance to try alternative (non-car) transportation are: "I'm busy and it takes too long", "it's not safe", "it's too far to walk/bike", and "I'm not a bus person". To counteract the standard excuses, alternative transportation would ideally be convenient, safe, fun and "cool" (maybe local celebrities could get involved by participating in and promoting the walk/bus/cycle options?).*

### Walking and pedestrians

Comments 33

The main theme of the comments to do with walking and pedestrians was that the plan to improve the provision of sidewalks, and to improve the situation for pedestrians generally was greatly appreciated. Generally respondents stated that improvement was needed and it would move toward making a balance of provision between providing for cars and providing for those who want to use different forms of transportation, such as walking. Some stated that the improvement is needed to encourage more to walk.

*I think that it is important to realise how many people there are who would like to walk or ride transit who don't because the system just isn't all that effective currently. I think that the plans in the playbook offer a better alternative to the system in Red Deer. Really the way things are is not very well designed for anyone other than motorists.*

Providing wider sidewalks, as outlined in the Playbook, was positively commented on by a number of respondents.

*I think that Red Deer will accept a shift as a whole as long as a balance is found between pedestrian centered methods of transportation and vehicles. Previous attempts at this seem to have discounted the "driver" which was not received well within our vehicle centered City. However, I do believe that once a pedestrian friendly shift is planned and executed well it will be accepted and loved as much as our already existing trail system, which at one time was controversial itself.*

## Transportation choice

Comments 28

There was a significant number of people who wanted choice and balanced provision of opportunities. Generally they stated that there is an over-emphasis on cars and too little provision for every other form of transportation. By making a shift in provision it was generally expressed that this would benefit everyone. The outcome from a more balanced provision would assist people's desire to be more active and would improve the quality of communities by having greater interaction between people. There were a number of quotes that summed up the opinions on this topic.

*I think it definitely works for Red Deer as we need more options than just driving in our own motor vehicles everywhere. If the infrastructure is planned properly it is much cheaper than retrofitting roadways that were only designed for motor vehicle traffic. "If you build it they will come" applies in this instance: as we have more pedways, bike lanes, and increased public transit people WILL use it. They can't see the benefit until it is there.*

*This draft seems to meet everyone's needs. Keeping in mind. There are more cars than bikes!! Scrap 40th ave bike lane!! But I do like the wide sidewalks.*

*I think that there is too much focus on vehicle transportation and not enough on pedestrian, biking and public transit. However, I believe that all modes of transportation need to be taken into consideration when determining the best way to address these areas.*

*How we get around our city should be flexible - time of year, purpose of trip. This new balance being presented allows me to exercise that flexibility. Right now I have little choices or little examples of what is possible.*

*Designing primarily for cars poses a threat to pedestrian and cycling safety, as well as making public transit a less than favourable option. We should not punish those who choose not to drive, or can not drive, by making walking, cycling and transit inconvenient options. The mobility Playbook reflects a direction that will benefit everyone.*

## Transit

Comments 24

The respondents who commented on transit were generally in favour of its inclusion in the mix, but stated that it needs to be improved to get more people to use it. Some stated that they think the current transit service is poor. The suggestions for improvement included more frequent buses (from every 30 to every 15 minutes); better shelters for people waiting for buses; and more frequent and better routes.

*I like what Red Deer has done in the past couple of years in implementing bike routes and clearing trails in the winter. I do think continuing looking for new ways, like increased transit times and encouraging walking and cycling routes, is something that Red Deer should do.*

Some stated that improving transit would improve the balance of the overall transport system.

*I think that it is important to realise how many people there are who would like to walk or ride transit who don't because the system just isn't all that effective currently. I think that the plans in the playbook offer a better alternative to the system in Red Deer. Really the way things are is not very well designed for anyone other than motorists.*

## Cars

Comments 16

The comments in this section specifically discussed the need to move some people out of cars by providing a more balanced set of options. It was stated that the change would not happen overnight though as the majority of people still drive cars and there would need to be a slow culture change. One person made the simple statement that there are more cars than bikes. Red Deer culture was also discussed, particularly that many work in the fuel industry and need cars to get to work and they use these in their free time.

*Yes, we do have to make a shift away from the vehicle. However, this will not happen overnight in our community. It will require a significant culture change that could take a couple of decades to really take hold.*

The general situation for cars was stated by some to be not too bad but this was considered an opportunity to plan for the future. Providing a future that didn't primarily provide just for cars and provided for users as well came through quite strongly.

*Moving away from making the car the most desirable transportation is a great decision for the City of Red Deer, and will help to save infrastructure costs and make Red Deer a more desirable city to live in.*

## Education

### Comments 15

As was mentioned above the need to educate people in order for them to consider possible change as a good thing was considered important. In particular, respondents stated that car drivers will need education.

*If you build it and educate, they will come. We must work together in all sectors to allow everyday people to get from point a to point b easily and safely.*

Along with education of the benefits of change, there were also comments about the need for a culture change for this to be able to be implemented successfully.

*Yes the shift would be good for Red Deer. Not sure if public opinion and City Councils would stand behind it when it actually comes to the tangibles. But good start. A lot of cultural shift has to occur.*

*Yes, it will be hard, as change is not easy for people. It takes work and money. In the long term it will become the norm. People are beginning to realize that they need to drive less and walk more (or cycle). Children are learning that they can do this to and from school. We need to encourage this as they become adults and provide safe routes all year round.*

It was also stated that things need to be implemented well to ensure success and buy in to the overall approach.

*I would agree. It is going to take some time to get people's mind sets changed. Therefore whatever does get implemented will have to be done thoughtfully or you will get a negative response like for the bike lanes on the roadways. Then you will have to work twice as hard to convince people.*

## Safety and accessibility

### Comments 12

There were a number of comments from respondents who stated that they would use more active forms of transportation if they were safer. There was a number of things that people considered not safe (additional to the safety related to mixing cycle lanes and cars already discussed). These included danger on paths at night; the need for lights at bus stops at night; ice and snow on trails and roads.

*the paths are not safe at night, and the converted streets do tend to make it an obstacle for traffic.*

*We need to have maximum protection no matter what mode of transportation we choose. I do not cycle when the roads or trails are icy or snow - covered. Otherwise I will drive my hybrid vehicle or walk for the exercise. So yes I am for any planning that improves the safety aspect of our streets.*

Increasing access by providing for all was also discussed by a few respondents.

*Again, considering the diverse mobility needs of our city's population it is extremely important to maintain a balance of options for all. Most of all, I implore you, please keep all sidewalks clear for Red Deer's less mobile citizens so that they are not housebound or dependent on others for their transportation.*

## **Downtown**

### **Comments 8**

There were a few comments that discussed specifically what should happen downtown. In general these comments were in favour of creating a pleasant downtown environment through things such as widened sidewalks and seats.

*It's a good start. I love what you've done with downtown, making it an area to walk around and not just drive every where*

Comments made by a few respondents supported increased density in the central city.

*I would like to see additional land use planning/bylaws that would increase density in the downtown core (and other areas?) and allow for alternative housing types that would make self powered commuting more viable.*

## **Planning and process**

### **Comments 7**

Comments were made that there is need for more detail, but generally it was believed that the plan is heading in the right direction. It was stated that there is a need to balance the needs of today with those of the future.

*I believe that future economics is going to cause more people to need alternatives to owning and using cars on a regular day to day basis. Although we live in a wealthy resource based economic region of Canada, we should plan to have good options for all levels of wealth in our community. This addresses that. If we build it well it will be used.*

There were a couple of comments about who should inform decisions. While it was stated that it is good to get ideas from elsewhere there were also comments that stated there is a need to get the ideas of local citizens when creating plans. It was also stated that it is important to keep people informed of what is happening.

*It makes sense to look at what works elsewhere. Not everyone in Red Deer has had the opportunity or interest in researching other cities "best practices". It's not that their opinions should be discounted, but perhaps they should not have as much influence as city planners who have been educated in planning, and who have been actively researching what really works. I think there are some people afraid of changing habits who will actually benefit greatly from this new plan, as will their children. We need to be thinking about implications not only for this population but for those in the future*



*Yes, asking Red Deer citizens how they feel and what they want is a huge step in the right direction before just doing and trying out new ideas without input!*

## Weather

**Comments 4**

There was a small number of weather related comments in this section. One person made the observation that there would be congestion when everyone is forced to drive during bad weather. Others stated that more effort needs to be put into dealing with winter weather, particularly snow.

## Other

**Comments 36**

A few respondents provided a reasonably detailed discussion of why it is important to undertake land use planning in conjunction with transportation planning. This argument being that there is a need for greater housing density around areas where there is good transportation provision in order to reduce urban sprawl.

*I think the Playbook hits home on the point that we can't sustain the type of development that we are currently pursuing. By looking down the road in Calgary, we see what urban sprawl becomes if it goes unchecked. This not only impacts the city's financial ability to provide services to taxpayers, but also takes away from the environment we live in. Red Deer has the chance to get ahead of sprawl, and create an interesting and vibrant city. This playbook is a great first step on a long journey. I would caution though that this change must be all-encompassing. We simply cannot create change in downtown, but allow our developing neighborhoods on the city's edge to continue developing as they have been. This playbook should also reach out to land use policy, and ensure that we encourage higher-density multi-use spaces on the edges of Red Deer. We must hold the entire city to a higher standard.*

There was discussion by a couple of respondents that implementation needs to happen carefully, to increase the likelihood of uptake by more of the community, especially those who are on the fence between those who think cars are a superior option for transportation and those who think a broader range of options should be considered and provided for.

*I think this will work for Red Deer IF it's done slowly and methodically and with care and attention paid to those who are not completely on board. Any big changes should be presented in a way that addresses and respects the opinions and concerns of those who don't agree. Proper listening and respect can sway those on the fence toward supporting and trying out the shifts being put forward. Shoving the changes through or brushing off the concerns of the vehicle-centric will harm the whole effort. I'm with you, as long as it's implemented with care. I want to take transit to work but the current routes and timing make it difficult. I want to live in a healthy, cohesive city where people aren't divided into two angry camps.*

## NEUTRAL AND WHY

### Cars (and bike lanes)

**Comments 16**

A number of the comments stated that cars are the majority and should be catered for. The majority of comments to do with cars commented on the need to remove the bike lanes so that cars are not restricted. Some commented that if there are to be bike lanes then they should be separated from cars and should be provided in space that isn't already used by cars.

*It sounds good, but the first step will be to get rid of the bike paths that have ruined the road system in our city. I would never ride on them or allow my children to ride on them...someone is going to get killed. PLEASE, this is not anything against bikers, we just need separate trails for them off the road, an extra sidewalk for example.*

*I think the protected bike lanes are a step in the right direction but I do not feel they should take away a lane of vehicle traffic. If they can't be put in without removing vehicle mobility then the bike lanes need to go elsewhere and they certainly shouldn't interfere with traffic on the busiest streets in the city and especially in front of schools where busses have to stop and load.*

### Trails

**Comments 9**

Those who commented on the cycle trails were very enthusiastic about them. There was mixed comments on how they are incorporated with a commuter network. Some stated that they should be developed further with lighting for example and incorporated with a commuter network, while one respondent stated that they should not be used for commuter riding.

*We have fabulous park trails - can we not incorporate the bike lanes as an extension of the trails to get people where they want to go. The sidewalks if build wider can incorporate the bike / pedestrian traffic and have the vehicles on the roadways. I really like the down town concept with the larger sidewalks and the "walkability" concept. The Ross Patio was a great initiative that I'm hoping will return - nice friendly feel to the down town, makes you want to go downtown, feels safer with more people around.*

*I love some of the ideas, I think lighting on our trail systems would be fantastic, Red Deer has the best bike trail system I've ever seen and I think the focus should be on keeping those trails safe*

### Transit

**Comments 7**

Respondent comments on the transit system identified areas where it can be improved, including frequency and better routes. The general premise was that more people should be using the transit system and for this to happen standards need to rise.

**Weather****Comments 5**

Weather was again discussed as being an element that influences travel options. Comments were made about how long the winter lasts, and the limited amount of acceptable weather months for active travel.

*... some parts I agree with and others not - fundamentally I agree with the concept - I think we need to be careful which community we compare ourselves to - not Vancouver which doesn't have the same winter weather.*

**Process****Comments 12**

A few respondents commented on the process suggesting that more community input was needed particularly from drivers and persons who have lived in the community for a long time. One respondent stated that it is just the start of the conversation with the community. A number of respondents expressed concern or doubt over the buy in of the shift towards alternatives to car transportation.

*I think it's a step in the right direction. I don't think most Red Deerians are open minded enough to think about options that don't include driving. They may use the trail system for leisure, but not as a way to get from place to place, and I think they will have a hard time thinking about using transit as not just for people who "can't afford" to drive.*

A few respondents commented positively on what has been produced, while some stated that more detail is needed in the Mobility Playbook and video.

*...everyone will be very thankful when people start flocking and staying within this city because are planners have been forward thinking.*

*I don't feel the video was clear enough to answer this*

**Other****Comments 9**

There was a range of other individual comments. Two stated the need to fix roads, specifically pot holes. One comment stated the need to manage land use so that people don't have to travel too far between where they live and work. The Ross Patio was heralded as a great initiative for the downtown.

## DISAGREED AND WHY

### Cars (and bike lanes)

#### Comments 38

There was general consistency in the comments in this section. Many respondents, who disagreed in their response, commented that cars needed to have greater emphasis than is stated in the Playbook, or that the cycling and walking priority was too strong. These comments often referred to the weather and the need to be in a car to travel. Respondents often stated that the most practical option for the majority of the population. A number of these respondents thought that cars should be prioritized ahead of all other modes of transport.

*We are a society of drivers and vehicles. We pay our taxes to pay for our roads and we'd like to use them. There are sidewalks for pedestrians and always have been. I ride my bike on the sidewalks. It is too dangerous for bikes to be on the road and I think it's ridiculous to promote that.*

Some stated directly or implied that driving cars is the way that things are done in Red Deer.

*The shift in transportation us must come from the citizens and not from the money wasting plan. We want to drive out (sic) own automobiles, on roads, with multi lanes without potholes... just ask! This is our culture!*

A number of these respondents also stated that roads should not be taken up by cycle lanes and referred to the recent painting of lanes on roads. They thought that congestion shouldn't be added to by taking space away from cars.

*As you said, Red Deer is a growing community. If you are planning new roads then make the plan at the grass routes level to incorporate a bike path. NOT change a two lane road into a 1 lane and have a bike path---that is crazy! This is Alberta, Canada-we have snow. Why have a designated bike path that might get 2-4 bikes on it during the bad months.*

### Transit

#### Comments 12

A number of respondents who disagreed overall that the Playbook reflects a shift that works for Red Deer, agreed with the focus on transit – increasing frequency, providing more stops and shelter.

*I wouldn't mind seeing additional transit though. I have attempted transit and in order to get to and from work, I would have to be on a bus for 1 hr 45 minutes as compared to 30 minutes in a car.*

There were two respondents who commented that the transit system would not be a ride of choice due to taking too long and the city being too small to have large city transit, and the service being unsafe. Further, more specific transit comments have been incorporated into the *Transportation mode discussions* section.

### Weather

#### Comments 12

Almost all of the comments on needing to focus on cars more, or remove the focus on cycling, also commented on the winter reality of Red Deer and the implications this has for active transportation.

*In a city of more and more younger dynamic mobile people - people that need to drive for work and to work, people that depend on their vehicles more and more your vision is out of step with how Red Deer is really evolving. ...We have more months of winter here in our climate which makes the mobility vision impractical.*

*Most consideration should be given to driving in our city because of the weather we encounter. I don't care how convenient it is to bike, walk, or wait for buses when it is -15 or colder outside, I will chose to drive. If driving lanes are cut down on busy streets and traffic is affected to create bike/pedestrian lanes that will rarely get used (especially in the winter) most citizens will be irritated to say the least.*

*Bike paths (and for the most part), pedestrians, are not winter friendly. People still need their cars to go from "A" to "B".*

## Trails

### Comments 11

A number of respondents who disagreed overall that the Playbook will result in a shift that works, agreed with the focus on trails, or commented along the lines of focusing the interests of those who want to walk and cycle, on using trails. A few suggested for more focus on trails. One respondent disagreed with more lights on trails due to light pollution. Further, specific comments have been incorporated into the *Transportation mode discussions* section.

*The people that are interested in walking and cycling are already using the fantastic trail system that exists in the City. The trail system is one of the things I heard about the most when I moved to the City.*

*Create more trails and off road space for people to enjoy in good weather but acknowledge that we don't have a climate conducive to large scale pedestrian or bike traffic*

## Plan preparation

### Comments 8

A few respondents questioned the amount of money that had been spent on developing this plan. Others questioned how much it is going to cost to implement the plans.

*We are already over our head in debt....how will we possibly pull this off financially?*

Other comments questioned planning that is currently happening and stated that there should be bike lanes put into new roads currently being built, but they aren't. Another respondent stated that for this plan to be successful there needs to be a culture of change.

*I believe in the planning in the "Go" plays chosen/stated, the Play #5 - Nurture a culture of change should be a "first priority", especially for the people who do not see the need for a change. Leaving it until the last of the 5 Plays is too late. We need to have the population realize there needs to be change. We need to establish the culture of change, then the other plays become viable*

## Other

### Comments 15

A few respondents who disagreed made comments that the council should focus its efforts elsewhere. A number of respondents commented their preference to focus on road or side walk maintenance and repair.

*Worry about fixing the streets and roads and keeping them clean and clutter free and pothole free.....*

*I would rather see other initiatives addressed such as road and side walk clearing in winter.*

A few respondents commented on needing to focus more on downtown, parking issues in particular, were identified.

*Taking out parking downtown, has encouraged me to go downtown less, because walking is an issue for me parking is of prime importance. Maybe future areas could have wider sidewalks and not hinder the movement of traffic*

Land use was again commented on.

*More importantly, probably we need to change the way we develop our city. Until people work close to the neighbourhood they live in, the issues we face today will persist. But adding industrial, commercial, and other service industries into our residential areas is not a move I would favour. Most people don't even want schools there anymore.*

## Transportation mode discussions

There were a number of comments across all response options that were discussions or suggestions on very similar topics – predominantly the different transportation modes that are currently used in Red Deer. These topics are presented below to provide a summary of these comments, rather than having individual discussions spread through the previous six sections of this report.

### The Transit System

As noted earlier, there was support for the emphasis placed on the transit system made in the plan, particularly increasing the frequency of service. A few respondents also commented that a transit service that is reliable and efficient is desirable and that better frequency and service would increase use.

*More frequent transit system, which is the biggest issue, and wider sidewalks are key to downtown, and residential as well. We would take transit more often if there were direct routes, eg: up and down Gaetz and not turning off, as that's where most people need to go. If we could take the Ross St bus to the Gaetz bus, we would. See Vancouver's system. Also there should be sidewalks on both sides of the road. Eg: 30th Ave, 40th Ave, 32nd St, 19th St, etc.*

Other suggestions included: a yearly bus pass, ensure buses are warm, consider possible future rapid transit lines, have part time busses during summer going to destinations that are not usually on routes, providing teaching for drivers on how to use new road systems, running buses later into the evening and having a longer schedule on Sundays.

Ensuring the transit service is accessible to everyone, particularly mobility impaired persons was commented on a few times. The following (shortened) quote illustrates the reality of what bussing is like for someone with limited mobility:

*As an example with limited mobility and extreme fatigue i see a different view. From downtown, if one were to take bus #10 and get off at the home depot (assuming the driver has pulled up to the curb and lowers the bus) they step off into grass (or a snow hill, or a mud puddle) walk 5 steps, cross a path, and proceed down a hill (iced or muddy) terminating in a tall curb (in the winter a large hill of parking lot snow is next) crossing the giant parking lot and the next one can go to Walmart (bcz hey seniors and disabled are on a budget) after shopping, now carrying bags, the closest stop that takes one downtown is back the way you came (across two lots, and up a small hill) heading right to cross at the lights half a block away.....You have finally crossed, and again you need to choose between a high step or extra steps. This side of the road has no pathway, in summer the grass doesn't grow, there are potholes and the busbench is on a steep hill. In midseason it is mud, in winter there is usually a polished path of snow leading to the bench....Busses here are 1/2 hr apart, so you have 15 minutes to wait (assuming the bus is on time) out in the elements. When the bus arrives the driver overshoots and you have to rush another 8 feet on sideways incline. While waiting you decided to stop at bower mall. You choose at the food court stop and step off onto a sidewalk. You walk a block back towards home depot just to cross the road, and then cover half a block in the direction you came from to the mall. All of this has assumed you were not run over, startled or otherwise traumatized by cyclists, skateboarders or rollerbladers. Do get the hint?*

A few respondents commented that they did not believe the transit system would be utilized despite improvements, due to people not wanting to be waiting for busses in the winter weather and that overall bus use is too slow – walking to bus stop, waiting, sometimes having to transfer then walking to destination.



One person raised the following issue:

*No mention of bus stop safety/cleanliness. Some are horribly dangerous in winter due to the CITY NOT CLEARING ICE/SNOW (ie. Horn St. & Taylor Drive this winter). Some bus stops get flooded in spring. The City is not doing itself any favors by overlooking these problems, as it means people like me will opt to either take a taxi or just not go anywhere.*

### Cycle Lanes

Cycle lanes were supported overall, although many references were made to the on-street cycle lanes that were put in and then removed and general caution given to do it right this time.

*Trails and bike paths are good but not when they cause havoc on the roads. 40 th Avenue is a debacle thanks to the bike lane pilot. Don't do this to city thoroughfares again!*

*I think the bike lanes were a great idea, they were just rolled out badly and that affected the program.*

*The bikes are an issue at present. Painting a little strip occasionally along an existing road is NOT the way to go. It changes continuously and neither bikers or vehicles know where to drive. Bike paths need to be off the main roadways. The road on 55th street now is such a mess after painting, removing and repainting that is is not possible to know where the lanes actually are. It needs to be totally repaved and lined properly. Then there is 40th Ave!! No idea where to drive, it is a wonder there is not more accidents.*

*I support bike lanes. I think they will work well IF we are ALL prepared to try to make them do so by willingness to share the road and quit complaining while we get used to having them.*

Safety issues were brought up a number of times – safety of cyclists if lanes are on the road, or safety of pedestrians if cyclists are on the footpath. A number of respondents commented on having experienced deliberate negative behaviour from car drivers, when cycling and a number expressed they were too scared to cycle, because of the risk of being hit. Safety was the main reason given by people for not cycling.

*As a citizen that wants to be more active and drive less this appeals to me and yet my experience in the past year is that as a cyclists I was terrified because of the lack of acceptance from vehicles to share the road and the refusal of pedestrians to share the paths.*

*I agree with adding bike lanes but maybe we can widen walking paths in order to help with this need so the drivers don't get as bent out of shape when bike lanes impede on their driving lanes.*

Another recommended.

*Additionally, we need to start educating and providing incentives to those cycling so that it's safe and is seen as an attractive alternative. Currently, I feel like when I'm riding my bike anywhere around a road, I'm taking my life in my hands! Drivers just aren't looking for me (or are trying to make a point by driving aggressively to 'scare me' off the road). Can we do better than the current plan? Absolutely, but I think it's a good start and would make most people happy.*

Generally respondents did not want cycle lanes on the road and many respondents explicitly commented not to take road space away for them.

*Yes, stop shrinking our road space for bike paths.....make bike and walking paths part of the sidewalk system!*

*Traffic is at best becoming a congested nightmare, reducing road space does nothing to help that obvious reality. Learn from the disaster that was the "bike path" fiasco.*

A number of respondents suggested separate/dedicated bike lanes generally as well as providing some specific, although varied, suggestions for how this would work.

*I also noted the picture of bike lanes - the bike lane in the concept was separate and distinct from the road. Super love this.*

*Separate bike lanes achieve this for motorists, cyclists, and pedestrians. The bike lanes should be used by cyclists, rollerbladers, skateboarders, and those on mobility scooters*

A few respondents suggested incorporating bike lanes into trails or into the sidewalk.

*Integrating the bike lanes into the existing trail system would be smart, as would widening existing side walks or creating a new side walk as opposed to taking up a lane on already busy roads. This was dangerous, confusing and realistically made no sense. Therefore I am very happy to see that City Council is making an effort to get feedback before making and further changes.*

Caution against mixing cyclists in with pedestrians was expressed by a few respondents,

*We need among other things those dedicated bike lanes. As a pedestrian/transit user exclusively--partly by necessity, partly by choice--I'm VERY tired of getting run down by cyclists on sidewalks. (They are not called sideRIDES, are they?)*

*Attempting to mix vehicles with pedestrians, cyclists skateboarders or any other mode of transportation is neither safe or effecient.*

A few respondents commented that they liked the idea of a barrier, plants/flower beds or grassed areas to separate the bike lanes from the road.

*I like how in the video you had the bike lanes with plantings/flower beds to protect them (the bike riders) from the regular flow of traffic. This is a good idea, but the streets would likely need to be wider.*

## Trails

A few comments were made that suggested linking trails more widely.

*I think that if we start adding sidewalks / trails on both sides of roads, ensure transit stops are properly connected to sidewalks and that shelters are somewhat pleasant places, and designing proper trail / parks / commercial area linkages in new developments we will be taking fantastic first steps. As we improve on these relatively simple things, the user experience will improve, acceptance will follow, and demand will be created without feeling we are being forced to accept a particular agenda. Thinking long term and being patient will be keys to success.*

*I walk, and use the trails in our city. It would be great if the trails were linked to the regular sidewalks so you could move between both easily. Perhaps this is already done, if it is I haven't discovered them yet!!*

*Integrating the bike lanes into the existing trail system would be smart...*

*I love the idea of living in a city that I can walk to a neighbourhood restaurant or pub, be connected to the large park system without having to walk or ride a bike on traffic focused roads, and take transit as a viable means of getting around the city. These are the types of amenities that I look for when I am travelling to another city as a tourist...wouldn't it be great to build on what we already have here in our beautiful city and live like we do when we are on vacation.*

A few respondents provided specific trail connection suggestions:

*Connecting trails is a good idea - the Pines escarpment could be better connected by a trail system that links to the Three Mile Bend Trails and to the other North side communities. Currently the 67 St. pedestrian walkway from Gaetz to the bridge isn't shovelled in the winter, but the South side of that same walkway is. I'm not sure why - I would think Gaetz and the malls at 67 St. would be a high pedestrian traffic corridor.*

*Downtown for instance; I enjoy the new "little Gaetz" idea! The sidewalks are wider, the extra lighting is great, the traffic calming bulbs with trees and plant material are plant quite well...this environment is inviting and calmer. Okay, I mean yes it does and even more trees and plant material. If these concepts could extend into some of the other areas (much more ideally) that would be Great!*

A few comments around safety and access – in terms of lighting, winter weather and disabled persons were made.

*Currently Red Deer needs to improve ease of access to walking. I run and at times must run on roads because there are no sidewalks available or they are poorly maintained in the winter (icy). I also do not feel safe on trails.*

*I really like the idea of having well lit trails because it would make pedestrians feel safer and more comfortable going on them. Strongly*

*Because if you make the trails accessible and sidewalks more easier to walk on it would be more comfortable for everyone. Including people with mobile disabilities.*

## **Cars**

A large number of the comments about cars were to do with vehicles being the most common form of transportation currently used in Red Deer and that they need to be provided for. Some who commented that there is not enough diversity in transportation provision in Red Deer stated that there is too much emphasis on cars.

Those who stated that cars are the fastest way to get anywhere didn't want to lose vehicle lanes to cycle lanes

The need to improve provision for cars was discussed by some. This included keeping lanes as free as possible. Improving light sequencing; fixing potholes; and clearing roads of snow. This statement was from someone who thought that there needs to be more done for car travel.

*The whole plan has as its foundation an anti-car philosophy. But automobile is the first choice of the overwhelming majority of Red Deerians. Bike paths are nice but mostly recreational. This plan sacrifices the necessary (automobile) on the altar of nice (bikes and walking paths). There was not a single plan presented for improving the movement of automobile traffic. This is what people want, need, and use. They are telling you what they want by their actions (cars)...apart from any surveys such as this.*

## **Safety and Accessibility**

Safety and accessibility ran across all topics and was also often the sole comment that was made.

Primarily safety issues were brought up in the context of shared roads or sidewalk spaces between different transportation modes – cars, cyclists, pedestrians, skaters, mobility users etc.

*Everyone should be able to get around in whatever way they choose, but it should be a safe environment for all. My main concern is bikers getting injured. I like the idea of a barrier for the bike lanes.*

Accessibility for disabled and mobility impaired persons, those who cannot afford to drive, elderly and children was desired for the various transportation options, particularly for transit users and pedestrians (walkways and trails).

*I currently see too much in the way of cars as the focus for streets. Too much isolation for individuals who aren't car-centric. Older folks, folks with disabilities, stay at home parents, etc. need environments where they are free to access services and interact with others and be a part of community (in fact, we all need this).*

*Most of all it has a lot of bike lanes and pedestrian walkways that are spacious and accessible by wheelchair.*

*Because if you make the trails accessible and sidewalks more easier to walk on it would be more comfortable for everyone. Including people with mobile disabilities.*

A few respondents commented on safety on walkways in terms of lighting and snow/ice conditions as well as general road safety in winter conditions.

*Further to this it is unsafe for bikes to ride in teh same winter conditions and roadways as vechiles travel.*

## APPENDIX B

### FULL LIST OF COMMENTS RECEIVED, FEEDBACK FORM (ONLINE AND HARD COPY)

**Does the mobility playbook create a vision for a Red Deer you want to live in?**

**Please comment why**

<ul style="list-style-type: none"> <li>Because I live here already and I sure am not moving.</li> </ul>
<ul style="list-style-type: none"> <li>As someone without a car I rely heavily on the walking trails and transit system. As it is currently, the transit system is not effective enough to rely on. I also think that the fact that there is no option of a yearly bus pass drives people away. It's inconvenient to have to purchase a buss pass monthly.</li> </ul>
<ul style="list-style-type: none"> <li>Some aspects are cool, but I think a better co-ordinated system needs to be put into place right away as well</li> </ul>
<ul style="list-style-type: none"> <li>It would definitely be nice for 4 months of the year, but is it worth the money to create this when we live with such extreme weather conditions that keep us inside much of the year?</li> </ul>
<ul style="list-style-type: none"> <li>More frequent transit would be good for me. If buses were to run later in the evening also a longer schedule on Sundays.</li> </ul>
<ul style="list-style-type: none"> <li>It would be very nice to have a city where we can alk safely but maintain our major vehicle corridors. I don't use the transit system because of wait times as well as the routes don't seem to be efficient, ie where I need to go. I know there's been an improvement in the recent past because my nephew uses the bus every day. Because I am nearing 50, I now in the future I will have to rely on transit. I would really like it to be efficient so i can still set out and still have my freedom.</li> </ul>
<ul style="list-style-type: none"> <li>Makes things easier cutting down fuel cost making the city greener and more vibrant. Giving it more of a community feel in the big city. Giving more options and different routes to work.</li> </ul>
<ul style="list-style-type: none"> <li>Everyone should be able to get around in whatever way they choose, but it should be a safe environment for all. My main concern is bikers getting injured. I like the idea of a barrier for the bike lanes. People taking the bus should be warm and have a way to be notified if buses will be late/cancelled etc. Drivers should have some way of being warned and taught how to drive with new conditions of roades/lanes.</li> </ul>
<ul style="list-style-type: none"> <li>I am not sure we need to spend significant dollars on a study that links European cities and Victoria. We live in a far different climate than those places. I have a problem using consultants that don't live here and don't know what we have or go through. We should have enough local people that can intelligently plan our new subdivisions well and more cycle/pedestrian friendly.</li> </ul>
<ul style="list-style-type: none"> <li>Red Deer has a great opportunity now to plan for the future needs of our infrastructure, and plan it right (now) for our present and future needs.</li> </ul>
<ul style="list-style-type: none"> <li>For someone like me that doesn't drive.</li> </ul>
<ul style="list-style-type: none"> <li>Environmental protection, reduced carbon footprint. Healthier modes of transit, especially kids. Not everyone can afford a car. A growing Red Deer will become too crowded for just cars.</li> </ul>
<ul style="list-style-type: none"> <li>I'm an active traveller (walking, cycling). I also drive. I thkn red deer's citizens have access to these options, and it is worth while to consider alternative modes of travel within current infrastructure (retrofitting if warranted) and planning for the future. I support the city's efforts to promote and support active travel and living.</li> </ul>
<ul style="list-style-type: none"> <li>n/a</li> </ul>

<ul style="list-style-type: none"> <li>• We need a part time bus during the summer to 'destination' (when people cannot get there currently) nodes. Does not need to run all evening, just when people want to get there.</li> </ul>
<ul style="list-style-type: none"> <li>• Absolutely! I want to live in a city that encourages people to live active, healthy lifestyles. Having the option to be able to walk, cycle, run to work for play or to do everyday chores is critical. Not only is it critical for our physical well being, but also for environmental reasons. Having less motorized vehicles on the road or in designated areas only would support healthier air, land and water. Making our city more accessible and safe for active transportation is critical to the health of our people and environment.</li> </ul>
<ul style="list-style-type: none"> <li>• Reducing road sides and creating more room for pedestrians is that last thing we want to do. Also the transit system in place currently is working. No one who owns a vehicle is going to stop driving to use transit. Unless gas prices rise. However with our current reliance on fossil fuels declining, I can not see this being an issue.</li> </ul>
<ul style="list-style-type: none"> <li>• Currently Red Deer needs to improve ease of access to walking. I run and at times must run on roads because there are no sidewalks available or they are poorly maintained in the winter (icy). I also do not feel safe on trails.</li> </ul>
<ul style="list-style-type: none"> <li>• Having worked on the cycling master plan, I was happy to see a divided strip for bikes - for safety. I've been disheartened by the frankly bullying attitude of some motorists in the paper and on the street since the attempt to institute the lanes project and have even had cars deliberately come too close to me. I suspect many bikers are now afraid to use these lanes - I certainly am. Unfortunately too many people have a sense of entitlement.</li> </ul>
<ul style="list-style-type: none"> <li>• Jeremy is very informed and quickly settled many concerns I and my family and friends have been annoyed/concerned about for many years. We feel this mobility plan is an amazing and rare bit of foresight on the part of Red Deer. This presents a future vision of a city that is "open" and truly inviting to people who want and need to be active in Red Deer.</li> </ul>
<ul style="list-style-type: none"> <li>• I like the idea of trying something different than traditional roadways, but I didn't get a strong impression of what the specifics of the mobility plan entailed.</li> </ul>
<ul style="list-style-type: none"> <li>• I can see what the city is trying to do with these bike lanes, but reality sets in in our daily work/school/extra-curricular activities. For the select few that actually ride a bike to work or school (in our few months of summer), they can use our many paths that aren't on the road. I feel everyone would be much safer and we would not be wasting ALL of our tax \$\$\$ on painting and repainting lines that hardly anyone is using. We do live in AB, not BC. As for our lights, we REALLY need to have a better system. Please STOP putting up more sets of lights. We have NO flow to our traffic. There are a lot of intersections that could use round-a-bouts and a lot of intersections that could do without a set of lights. People just need to adjust which way they are coming out of neighbourhoods so that they would not get held up waiting to cross or turn at the intersection.</li> </ul>
<ul style="list-style-type: none"> <li>• It is great to see the City aspire to be more walkable and bicycle friendly</li> </ul>
<ul style="list-style-type: none"> <li>• I do believe you are trying to move in the right direction. I think some of the proposed changes do look wonderful such as what you vision is for the downtown area and more frequent bussing with sheltered bus stops. I do however have concern regarding the bike lanes, please see section 4.</li> </ul>
<ul style="list-style-type: none"> <li>• I'm thrilled to see this direction in planning for our city. Thank you to those who have such vision and foresight. I'd love to see an attractive walkable/bikeable downtown where people can gather, mingle and get where they need to go on foot. Plants and design features that are aesthetically pleasing are important in creating an environment where people want to be. This improves the lives of Red Deerians, and creates tourist appeal. My favourite cities to visit are beautiful, and lively: full of foot traffic. It's also known that the more people who are out</li> </ul>

and about, the safer the area. Fast traffic in the downtown core detract from a feeling of safety and health for families. Walking and biking options for commuters encourage a more diverse, lively, healthy community. I'm also excited to see a more comprehensive bussing plan in underway. There are people who can't afford to keep a vehicle, who are unable to drive. Alternate transit methods take into account the needs of parts of the population that are otherwise neglected. I'm not sure what night lighting would look like for pedestrians/cyclists. I can picture that in the downtown core.
<ul style="list-style-type: none"> <li>• Walkability - yes Bike lanes as is - no Incorporate bike lanes in areas that are an extension of our current trail system - expand sidewalk areas to keep bike riders safer and off the roads. - yes.</li> </ul>
<ul style="list-style-type: none"> <li>• .</li> </ul>
<ul style="list-style-type: none"> <li>• I like the idea of integrating a variety of mobility choices to make it easier to communicate. In particular I like the idea of commuter bike lanes. In my vision these lanes are different than the paths through the parks. These lanes allow quicker and more efficient access to my work location. I like the idea of sharing the space we have with pedestrians, cars, bikes and public transit.</li> </ul>
<ul style="list-style-type: none"> <li>• The population needs to have choices as long as everyone abides by and respects each other and the rules of the road or trails.</li> </ul>
<ul style="list-style-type: none"> <li>• We all need to be more environmentally aware, and increase our activity level where possible.</li> </ul>
<ul style="list-style-type: none"> <li>• I like to see how there's an increase in the number of walking and cycling paths. I currently live in Lancaster and I feel that when these neighbourhoods were originally planned, there was not a lot of focus on providing attractive jogging paths. It's also quite a long, boring bike ride or jog to get to any prettier trails. It's nice to see this area of infrastructure being a focus in the future. I also like seeing a better cycling culture in Red Deer be encouraged. With the city's population increasing as projected, we need to see how we can get some of the car's off the road. Additionally, we need to start educating and providing incentives to those cycling so that it's safe and is seen as an attractive alternative. Currently, I feel like when I'm riding my bike anywhere around a road, I'm taking my life in my hands! Drivers just aren't looking for me (or are trying to make a point by driving aggressively to 'scare me' off the road). Can we do better than the current plan? Absolutely, but I think it's a good start and would make most people happy.</li> </ul>
<ul style="list-style-type: none"> <li>• Yes, we need to take the emphasis off of driving, and more towards a combination of all three.</li> </ul>
<ul style="list-style-type: none"> <li>• this city needs to focus on getting past "feel good rhetoric" and start dealing with the reality of the issues facing the city. traffic is at best becoming a congested nightmare, reducing road space does nothing to help that obvious reality. Learn from the disaster that was the "bike path" fiasco.</li> </ul>
<ul style="list-style-type: none"> <li>• I do not believe that the answer to growth is more roads and cars. I want to be able to walk and cycle, and I prefer that to driving. I appreciate the existing road system for ease of access across town in winter - but I don't think we should encourage the expectation that the easiest way to get around is always by driving. People will never choose alternative transport as long as the easiest route is taking a personal vehicle.</li> </ul>
<ul style="list-style-type: none"> <li>• I like a couple of factors of the vision: 1) A diversity of transportation, built on a variety of options 2) I find the automobile to be one factor in personal/family isolation or community disconnection. Walking or cycling includes personal interaction, no matter how brief, with other people, and that builds community.</li> </ul>
<ul style="list-style-type: none"> <li>• It touches on many modes of transportation and doesn't just focus on vehicles.</li> </ul>



<ul style="list-style-type: none"> <li>• I get around by car. I watch the video and I still see the direction of taking away road space for bike lanes</li> </ul>
<ul style="list-style-type: none"> <li>• integrated, interactive places create great communities..... something truly desired here.</li> </ul>
<ul style="list-style-type: none"> <li>• When I worked, I walked to work. I work 12 hour shifts and so could only safely walk when there was some light. My shift was from 0730 - 0800 PM. If I got off at 08:30 PM, it was a good shift. So, I would drive my car to work, park underground and then walk back and forth for my 2 - 3 shift period. On my last shift, I would drive home. If I had a bad shift, I could always drive. My 40 minute walk was a reat relaxer and good exercise. Staff worried when it was dark for my safety and therefore,I only walked when there was light.</li> </ul>
<ul style="list-style-type: none"> <li>• I really like the idea of bike and pedestrian trails that connect to neighbourhoods and main streets so they can be used to get from one place to another (rather than just to go for a walk or bike ride). I don't think I would use the bus even if it was more often. It's too slow by the time I walk to the bus stop, wait for the bus, sometimes have to transfer and then walk to my destination from the bus stop.</li> </ul>
<ul style="list-style-type: none"> <li>• I like the idea of looking at other ways to get around Red Deer instead of the automobile. I use the trail system and biking trails often. Other uses of transportation is really a promotion of good health.</li> </ul>
<ul style="list-style-type: none"> <li>• I agree that we need to honor everyone, and that encouraging fitness by making it easy, safe, and appealing to walk and cycle is a great idea. And the better the transit system, the more likely people are to use it.</li> </ul>
<ul style="list-style-type: none"> <li>• I want a Red Deer that puts pedestrians and cyclist first. The alternative of urban sprawl and isolated communities does not appeal to me.</li> </ul>
<ul style="list-style-type: none"> <li>• Sounds like the mobility playbook envisions a retirement, recreation trype of city which may be OK for retirees and vacationers and leisure acyivities, but this does not take in to consideration that Red Deer is becoming a city of young people, more and more young dynamic highly mobile people.</li> </ul>
<ul style="list-style-type: none"> <li>• The vision is going in the right direction. I would like to see a stronger move towards pedestrian and cyclists.</li> </ul>
<ul style="list-style-type: none"> <li>• Because it's obvious. Look to Copenhagen, Amsterdam and other modern European cities; if you allow people to get outside and bike/walk, they will, and their quality of life will liekly improve. I don't want to worry about cars (being hit by them, their noise and smell, etc.) when I'm relaxing with my family. If this means we must create proper bicyle lanes and pedestrian only streets downtown, then do it. Just do it right. Maybe hire somebody who has successfully done it before.</li> </ul>
<ul style="list-style-type: none"> <li>• I think it is critical for a growing city to consider all transportation options within a city. Making walking, bussing and biking viable, safe, convenient options is cost-effective in the long run and makes for healthier citizens. I approve of the direction that is being taken to produce bike lanes and walkways to make these modes more attractive options in our city. Keeping communication open for input and suggestions between Council and citizens is key.</li> </ul>
<ul style="list-style-type: none"> <li>• Acknowledges that Red Deer has grown to be too "car-oriented" and needs to adjust to the way we move, not the way traffic engineers think we ought to move. City council decided in 1985 to include on-street bike trails in all new neighbourhoods, and into existing street upgrades. We've had a great deal growth since then, but that planning was never done, and now we have a mess.</li> </ul>
<ul style="list-style-type: none"> <li>• Bike trails need to be bike trails. Cutting roadway lanes down to accomadate a few bikes is not thinking things fully throught. We have 6 months of winter like conditions in which roadways</li> </ul>

are covered up and markings non existant for both local residence and people visiting. If you can't read the roadway's line how do you know where you should be. Further to this it is unsafe for bikes to ride in teh same winter conditions and roadways as vechiles travel. The city should expand the roadways with a narrow cement divider so bikes remain seperate and safe. I know you may think this is someone that thinks old school but I am not. The reason you cut roadways is to save money. The money that is saved could be the difference in icy roads and deaths to bikers. Look at how many vechile accidents occur in a given winter. I like riding the bike trails and they are great. Roadways riding is very unsafe from my experience.
<ul style="list-style-type: none"> <li>One of the best things about Red Deer is the ease of getting around, and the mobility playbook seems like a good way to help prioritize modes of transportation other than the car.</li> </ul>
<ul style="list-style-type: none"> <li>Time spent travelling outside of a car promotes quality family time. Greater pedestrian and cycling opportunities encourage community participation.</li> </ul>
<ul style="list-style-type: none"> <li>Get rid of the bike lanes, Also instead of more empty busses running around except during school runs which the jam in as many students as the can, why don't we have small busses like Calgary. Use the bigger busses for busy routes where they might just get filled up and for the schools.</li> </ul>
<ul style="list-style-type: none"> <li>Because you are working to better Red Deer. The idea of what you are trying to achieve is very good, but does it actually work for Red Deer.</li> </ul>
<ul style="list-style-type: none"> <li>in theory great idea. Closing down existing lanes on main roads is not a great idea. Maybe other less busy roads could be used</li> </ul>
<ul style="list-style-type: none"> <li>Please refer to comment #4.</li> </ul>
<ul style="list-style-type: none"> <li>good visuals</li> </ul>
<ul style="list-style-type: none"> <li>Will be more friendly and vibrant city</li> </ul>
<ul style="list-style-type: none"> <li>I do not want Sprawl. I want my kids to be able to bike to school, and I to work. I also noted the picture of bike lanes - the bike lane in the concept was separate and distinct from the road. Super love this. ***Note - the vid talks about commercial hubs, or something... I saw this in the old Red Deer 300,000 plan years ago - YES YES YES - we need more commercial hubs, on the east! A huge problem with traffic is that so many people plug the east west lanes commuting. I would like to see a total moratorium on South Point Common and their crappy parking lots, and entrance death trap intersections!</li> </ul>
<ul style="list-style-type: none"> <li>Love it. Having gone to school in Edmonton, I appreciate the pedestrian-first concept and have experienced it firsthand in parts of downtown there. I think implementing that concept here in Red Deer would add liveliness to our city. As someone who has worked in population/public health, I am also a strong believer in making active transportation the easy choice, which implementation of the playbook ideas would achieve. In terms of public transit - again, I've been a user of Edmonton's fantastic transit system in the past. Although don't use city transit and primarily drive my car, I currently carry this idea that Red Deer's transit system is too much of a hassle to use, and I am certainly in favour of improving the convenience and frequency of routes. If I'm interpreting the playbook correctly, my one concern is that if local pedestrian-friendly hubs with sitting areas (+ shops?) are created, will there be parts of town dynamic enough to draw all people together?</li> </ul>
<ul style="list-style-type: none"> <li>I LOVE using the bike trails. Although I usually jog on them, it would be so great if they all interconnected so that I didn't have to drive to get to them :) I really like the idea of having well lit trails because it would make pedestrians feel safer and more comfortable going on them.</li> </ul>
<ul style="list-style-type: none"> <li>Such a great idea! I would love to live in a city that plans to be sustainable.</li> </ul>

<ul style="list-style-type: none"> <li>Walking and cycling in Red Deer is not pleasant. Some streets don't even have side-walks. Many have them only on one side. Parts of the trail system in the parks are closed in the winter - in particular the stairs - although koodos to Parks for clearing most of the trail in winter. Drivers are less and less respectful of crosswalks. But the saddest part is the attitude of City traffic engineers who place pedestrians and cyclist at the bottom on the priority list. Originally Alexander Way didn't even have bike lanes planned. I hear that this is changed now. When we asked for a crosswalk at 47 Avenue on Alexander Way, we were told to tell our kids to walk a block north to the traffic lights and then walk back a block. I feel that dealing with city engineers attitude is likely the biggest challenge our city faces.</li> </ul>
<ul style="list-style-type: none"> <li>No. You're trying to make Red Deer something it's not. Your urban planners are not thinking in line with your transportation planning. It all needs to sync up and it needs to match the needs of the people rather than try to create needs that don't exist. See Venu as an example - touted as an urban dream for people, the owners quickly realized people don't want to live in condos, they want houses. Single family houses with garages for all their vehicles and motorized toys. While you may not want this to be the Red Deer you live in, that's how people are choosing to live. The City Manager and planners need to think carefully about what they do moving forward because a lot of people are starting to notice the lack of community understanding.</li> </ul>
<ul style="list-style-type: none"> <li>not sure</li> </ul>
<ul style="list-style-type: none"> <li>We live in a city that is snowy/icy for 4-5 months of the year. It is dangerous to bike or walk during that time. We need to make sure the roadways are a priority during that time and transit areas are a priority. Right now it is hard to find parking downtown to do routine things. For instance chiropratics, shopping. You either spend money on transit or money on parking when you find a spot. Increasing lighting will still not encourage me to bring my children downtown. That will not increase the safety for them. Even increasing sidewalks would not encourage me to bring them downtown. Including more trees. Please stop focusing on downtown and increase the suburban paths and bike ways.</li> </ul>
<ul style="list-style-type: none"> <li>It is a nice dream, not sure how practical it is. Putting bike lanes near busy streets is very dangerous. I have heard several cyclist say they would never ride on them as too close to cars.</li> </ul>
<ul style="list-style-type: none"> <li>Improvement is usually always a good thing.</li> </ul>
<ul style="list-style-type: none"> <li>There is a vision that was created publicly.</li> </ul>
<ul style="list-style-type: none"> <li>I value sustainability. Also I value quality of life. Sitting in traffic is not a good quality of life. I want to minimize the amount of driving I need to do in order to live here. But please plan carefully. Not all streets can be converted to bike lanes.</li> </ul>
<ul style="list-style-type: none"> <li>I like the idea of making our sidewalks downtown more pedestrian friendly by providing lots of sitting places, coffee chairs and tables, etc. That being said, I rarely go downtown because I'm not partial to the heavy traffic and noise. I thought at one point the City of RD was planning some subdivisions which were self-contained. That is, homes built ontop of small businesses, etc, to eliminate commuting for work. What happened to that idea? I find it grievous that many jobs are at the NW corner of RD, but much of the housing is in the SE corner.</li> </ul>
<ul style="list-style-type: none"> <li>I like the planning for lifestyles</li> </ul>
<ul style="list-style-type: none"> <li>So far, downtown is much more inviting. I agree with adding bike lanes but maybe we can widen walking paths in order to help with this need so the drivers don't get as bent out of shape when bike lanes impede on their driving lanes</li> </ul>
<ul style="list-style-type: none"> <li>It'll depend on getting #2 right</li> </ul>
<ul style="list-style-type: none"> <li>You can't make a city less excessable for the condition we need now for the hope of what we will need in the future.</li> </ul>

<ul style="list-style-type: none"> <li>• I want the option of convenient transit, with direct routes at multiple times of the day (not just rush hour, and during the week), as well as a trail system that I can use to walk or bike myself and with my family, that is safe, comfortable and convenient.</li> </ul>
<ul style="list-style-type: none"> <li>• As a citizen that wants to be more active and drive less this appeals to me and yet my experience in the past year is that as a cyclist I was terrified because of the lack of acceptance from vehicles to share the road and the refusal of pedestrians to share the paths.</li> </ul>
<ul style="list-style-type: none"> <li>• Mobility for everyone is extremely important as the needs of Red Deer's inhabitants are multi-levelled.</li> </ul>
<ul style="list-style-type: none"> <li>• We need among other things those dedicated bike lanes. As a pedestrian/transit user exclusively--partly by necessity, partly by choice--I'm VERY tired of getting run down by cyclists on sidewalks. (They are not called sideRIDES, are they?)</li> </ul>
<ul style="list-style-type: none"> <li>• Love it! It's the kind of city I can picture myself living in for a long time because it supports my active lifestyle.</li> </ul>
<ul style="list-style-type: none"> <li>• My impression is that the playbook lacks demographic balance and consequently does not depict the Red Deer that will actually exist.</li> </ul>
<ul style="list-style-type: none"> <li>• Big emphasis on improving pedestrian accessibility. Making wider sidewalks everywhere and building biking trails and lanes for easy commuting</li> </ul>
<ul style="list-style-type: none"> <li>• I am cautiously optimistic about some aspects of the Playbook and a little hesitant about the overall tone. I like improving the focus on alternate modes of movement, but it still does feel like a "war on cars" document. There is a feel of social engineering in that it seems like we are being told how we should choose to live our lives. I am in favour of ensuring infrastructure is in place to facilitate other forms of transportation but the reality is that if you take something away (road space for example) then there will be significant resistance because you have "taken away". There are lots of opportunities to make changes to improve options for alternate transportation with minimal or no impact to what we have today. An example might be how our trails system came to be - we have heard that there was opposition at first but rapid buy in when they were built. I am sure that it was a far easier sell since the trails did not take away from anything and were an enhancement that improved enjoyment of natural areas. I'm not sure that implementing on street bike lanes (for example) really accomplishes moving toward integrated movement and may actually deter progress since it does not enhance the experience for anyone (cyclist or motorist). There are better ways to be considered that will gain greater buy in without felling we are being told to accept a particular way to live. I think that if we start adding sidewalks / trails on both sides of roads, ensure transit stops are properly connected to sidewalks and that shelters are somewhat pleasant places, and designing proper trail / parks / commercial area linkages in new developments we will be taking fantastic first steps. As we improve on these relatively simple things, the user experience will improve, acceptance will follow, and demand will be created without feeling we are being forced to accept a particular agenda. Thinking long term and being patient will be keys to success.</li> </ul>
<ul style="list-style-type: none"> <li>• Your emphasis on pedestrian first, and by extension bicycle as well, being of higher priority than vehicle traffic is wrong and misguided. You have destroyed downtown and now are moving to other areas through your bike lane plan. Stop it. Vehicles need to be able to move smoothly. This is vital.</li> </ul>
<ul style="list-style-type: none"> <li>• Better transit system is good. The neighbourhood hubs will still depend on the motor vehicle or transit as most people have a limited amount of time to walk or bike. More senior neighbourhoods or housing is required to accommodate to Baby Boomers.</li> </ul>
<ul style="list-style-type: none"> <li>• It recognizes that different people will have different reasons for choosing different modes of</li> </ul>

<p>transportation from time to time and considers the needs of all users and various modes. Our past and present reliance on private motor vehicles is not sustainable in the long term (due to limited supplies of both energy and parking space) and the sooner we can start moving toward a sustainable model, the less painful the transition will be.</p>
<ul style="list-style-type: none"> <li>• I would like to get in the habit myself of using transit and my bicycle more often.</li> </ul>
<ul style="list-style-type: none"> <li>• You make no mention of taxi service or the Action Bus. In fact, you make no mention of disabled people at all. This is an inexcusable oversight. No mention of bus stop safety/cleanliness. Some are horribly dangerous in winter due to the CITY NOT CLEARING ICE/SNOW (ie. Horn St. &amp; Taylor Drive this winter). Some bus stops get flooded in spring. The City is not doing itself any favors by overlooking these problems, as it means people like me will opt to either take a taxi or just not go anywhere.</li> </ul>
<ul style="list-style-type: none"> <li>• Strong cities have a diversity of transportation options that are reliable, accessible and sustainable. The Red Deer I want to live in has a public transit system that goes to all the communities and runs later into the night. Most of all it has a lot of bike lanes and pedestrian walkways that are spacious and accessible by wheelchair. The way transportation infrastructure is planned needs to reflect this future instead of having to retrofit everything.</li> </ul>
<ul style="list-style-type: none"> <li>• We need to have more easily accessible pedestrian, cycling and public transportation and not just cater to personal vehicles</li> </ul>
<ul style="list-style-type: none"> <li>• It is considering many aspects and has considered many views and opinions</li> </ul>
<ul style="list-style-type: none"> <li>• A step in the right direction.</li> </ul>
<ul style="list-style-type: none"> <li>• the video didn't tell me anything new. It showed lots of nice photos - primarily of downtown but I'm not clear what is going to change. I like the covered bus stop idea and more frequent transit service but there wasn't much else of substance there. I've tried to find the actual document but I just keep getting the video</li> </ul>
<ul style="list-style-type: none"> <li>• Active outdoor lifestyle. Not spreading out, staying local and building within city boundaries. Accomodating different modes early on in the rise of this City</li> </ul>
<ul style="list-style-type: none"> <li>• Healthy lifestyle</li> </ul>
<ul style="list-style-type: none"> <li>• It claims to address the issues where Red Deer lacks to encourage other forms of transportation. More frequent Transit stops, better lighting for walking paths and the change to our road ways to include bikes.</li> </ul>
<ul style="list-style-type: none"> <li>• I like the vision a lot. My concern is with the implementation of it. If you want this to work, for all of us, you'll need much better communication and public education, perhaps to move a bit more slowly, and to do it right the first time (the poor bike lane painting is a prime example of a rush job that ultimately drastically undermined a great project through poor implementation). I think increased Transit frequency is a must in this plan - every 15 min at peak times, and more express routes. This is a Red Deer I want to live in, but I want changes to come at a reasonable pace and not divide my wonderful city into two camps that hate each other.</li> </ul>
<ul style="list-style-type: none"> <li>• Improving the vibarncy and people on the street is important.</li> </ul>
<ul style="list-style-type: none"> <li>• I believe that our trail system is on par with the best there is.</li> </ul>
<ul style="list-style-type: none"> <li>• I like the idea of choice for transportation and feel it is necessary to create more sustainable options of transportation for the future.</li> </ul>
<ul style="list-style-type: none"> <li>• I think that all modes of transportation and preferences should be taken into consideration as well as the impact they have on each other</li> </ul>
<ul style="list-style-type: none"> <li>• As far as visions go, this one is excellent, and seemingly attainable. Too often, plans are too grandiose or too short-sighted. It is nice to see something that actually looks like it can work in</li> </ul>

Red Deer.
<ul style="list-style-type: none"> <li>Nice Video, not sure that it created a vision for me.</li> </ul>
<ul style="list-style-type: none"> <li>This draft seems to meet everyones needs</li> </ul>
<ul style="list-style-type: none"> <li>Really liked the idea of using plants to separate bike paths from street. I would more likely try biking. Safety.</li> </ul>
<ul style="list-style-type: none"> <li>Yes but not at the expense of efficiency. Trails and bike paths are good but not when they cause havoc on the roads. 40 th Avenue is a debacle thanks to the bike lane pilot. Don't do this to city thoroughfares again!</li> </ul>
<ul style="list-style-type: none"> <li>Attempting to mix vehicles with pedestrians ,cyclists skateboarders or any other mode of transportation is neither safe or effecient.</li> </ul>
<ul style="list-style-type: none"> <li>A strong connected public transit system is the backbone of any mega city, looking at the future such an integration concept can create an efficient/easier way of commuting.</li> </ul>
<ul style="list-style-type: none"> <li>Having options to enjoy my city and my relationship to the city I love.</li> </ul>
<ul style="list-style-type: none"> <li>I like the idea of more frequent transit routes as well as the larger walkways in busy areas. Going to school downtown has me walking often and it would be nice to feel safer not feeling like I'm right on the road.</li> </ul>
<ul style="list-style-type: none"> <li>We need to create a city for everyone - drivers, walkers, cyclists and riders. The driver on the road focus has led to sprawl and discriminates against those who are too young to drive, too old to drive or those who would prefer not to drive. It also hinders the quick and efficient movement of those who simply can't afford a car.</li> </ul>
<ul style="list-style-type: none"> <li>i love the idea of living in a city where you can walk/cycle to work or a nearby 'hub' for some items/shopping/coffee. I strongly value being active and am excited for Red Deer to continue developing the trail system and increasing walking/cycling safety and accessibility.</li> </ul>
<ul style="list-style-type: none"> <li>Adding beauty and safety to the walking, biking and transit routes shows caring and respect for our community and its citizens as a whole. I welcome more opportunities to live an active, outdoor lifestyle during all seasons of the year. And what a great way to stay fit.</li> </ul>
<ul style="list-style-type: none"> <li>To keep our trail system in all aspects of the study.</li> </ul>
<ul style="list-style-type: none"> <li>A city that is built just for cars is not a beautiful or interesting city. Cities that encourage alternate transportation are also the cities that have more social activities such as downtown fiestas, cyclovias, etc.</li> </ul>
<ul style="list-style-type: none"> <li>I would love to see Red Deer move toward being less auto-focused. It is by sustainable to continue building roads and neighbourhoods for cars an expect them to be paid for.</li> </ul>
<ul style="list-style-type: none"> <li>Having lived in both larger and smaller communities, I think that by improving the types of transportation available (and walkability), will aid in attracting and retaining an urban youth population</li> </ul>
<ul style="list-style-type: none"> <li>I like the idea of having solid and convenient alternatives to driving</li> </ul>
<ul style="list-style-type: none"> <li>I would like Red Deer to be more pedestrian and active transportation friendly.</li> </ul>
<ul style="list-style-type: none"> <li>The playbook mentions a more dense Red Deer, but all the new developments are single family homes and duplexes. The action does not match the stated ideal. Red Deer needs more high rise apartments. Red Deer also needs to fill in empty and under used lots before using up more farm land.</li> </ul>
<ul style="list-style-type: none"> <li>I like to see different options available to people. However, communication and education of the population needs to be done so it can be effective. Also, money to maintain and support these endeavors is crucial to a positive outcome.</li> </ul>
<ul style="list-style-type: none"> <li>downtown is where you want the sidewalks to be where people can walk around but that is</li> </ul>



<p>not needed everywhere. also STOP using so many lights. Red Deer is the worst city for driving around. It is just ridiculous on how council rushed to put in bike trails and did not use the brains God gave them. no thought about how it might effect traffic was put in thought. Also you did not mark the roads well for any driver during the winter which is half the time the city is in if not more.</p>
<ul style="list-style-type: none"> <li>• I like the pedestrians first mentality. Connecting trails is a good idea - the Pines escarpment could be better connected by a trail system that links to the Three Mile Bend Trails and to the other North side communities. Currently the 67 St. pedestrian walkway from Gaetz to the bridge isn't shovelled in the winter, but the South side of that same walkway is. I'm not sure why - I would think Gaetz and the malls at 67 St. would be a high pedestrian traffic corridor.</li> </ul>
<ul style="list-style-type: none"> <li>• Promotes a healthy, affordable &amp; diverse Red Deer.</li> </ul>
<ul style="list-style-type: none"> <li>• As a senior in Red Deer I like the fact that there are choices in getting around Red Deer. With the Red deer Action Bus and Red deer Transit, choices do not limit my activities in and around Red Deer. Having lived in Red Deer since 1998 I have seen a lot of changes in Red Deer Transit. with more frequent bus service I feel that more Red Deerians would access the transit system as well as other means of getting around Red Deer.</li> </ul>
<ul style="list-style-type: none"> <li>• For sure we need to plan differently from the past. It will be easy to do that in new area. The issue is retrofitting the old.</li> </ul>
<ul style="list-style-type: none"> <li>• The Mobility Playbook establishes that we cannot be content with "good enough" anymore. As a growing city, and in the heart of Canada's energy economy, Red Deer has, more than ever, the tools and resources to effect positive change. This change will allow Red Deer to be more than just a great city, but a world-class city. I would add though that this study/direction for Red Deer include the importance of designing interesting spaces at every level. Interesting sidewalks should include interesting lamp posts, and benches etc..</li> </ul>
<ul style="list-style-type: none"> <li>• I am a walker, and the emphasis on pedestrian traffic definitely gets my vote!</li> </ul>
<ul style="list-style-type: none"> <li>• Future not thought of once again, what about a light rail system underground from a downtown City Hall Park Stn. tying in the four corners of the city. Alberta Government Monies=Trail system was developed to move bikes/people not our current streets that were are not made wide enough to begin with. Future designs are important to have pathways paid for by developers. (i.e. WestLake - developer never made a path from 55 Ave to 60 Ave tying in the trail systyem for walking and biking now the City will be on the hook for its cost. Also why use Concrete instead of Asphalt on wide paths, the cost difference is probaby huge let alone the cost of machinery damage repairs never accounted for.</li> </ul>
<ul style="list-style-type: none"> <li>• Choice in transportation options - walking, transit, cycling</li> </ul>
<ul style="list-style-type: none"> <li>• ABSOLUTELY NONE of what I saw or read takes into account the reality of our harsh winters and the busy-ness of our lives that practically demand the use of a vehicle due to tight timelines.</li> </ul>
<ul style="list-style-type: none"> <li>• I like to have more options in the way I can get around.</li> </ul>
<ul style="list-style-type: none"> <li>• Emphasis on mobility choices such as cycling and transit.</li> </ul>
<ul style="list-style-type: none"> <li>• I am an avid walker, choosing to walk to and from work everyday. We have an amazing trail system and, for the most part, well connected sidewalks.</li> </ul>
<ul style="list-style-type: none"> <li>• This year I will be making the switch from a car commuter to a commuter cyclist, partly by choice and a desire and love of exercise and being outdoors, and partly because I believe that the city will and is moving in the right direction to support all modes of transportation. I know many people in my age group (20's) who are choosing not to drive, and to see the city working to accommodate their needs is fantastic! I loved every part of this playbook - wow!</li> </ul>



<ul style="list-style-type: none"> <li>• There will be grid lock if something does not change. people should be encouraged to leave the car at home. Saves them money, saves them time (if traffic is jammed up) reduces pollution.</li> </ul>
<ul style="list-style-type: none"> <li>• Agree with more frequent transit. You may have to consider smaller buses at some times because they may not be full.</li> </ul>
<ul style="list-style-type: none"> <li>• Looks lovely!</li> </ul>
<ul style="list-style-type: none"> <li>• Excited about the pedestrian and bike friendly plans, but who pays for it both financially and operationally. We are too small of a population to make it work now.</li> </ul>
<ul style="list-style-type: none"> <li>• I think there is tremendous room in our street spaces to encourage more biking, walking and transit use without negatively impacting car mobility. Can we measure how long "typical" car trips take without new bike/walking infrastructure. That can then be used as our base to say e.g. "we can add this separated bike lane" and the typical car trip is not negatively impacted.</li> </ul>
<ul style="list-style-type: none"> <li>• Because if you make the trails accessible and sidewalks more easier to walk on it would be more comfortable for everyone. Including people with mobile disabilities.</li> </ul>
<ul style="list-style-type: none"> <li>• Having multiple modes of transportation movements offered in a Place allows greater flexibility for the people within to move and interact with that Place. This would positively impact my family.</li> </ul>
<ul style="list-style-type: none"> <li>• I like how you've thought of the future. I agree that we need to give the pedestrians and the cyclists enough room to get around, but we also can't take away street space. Widening side walks should help with that.</li> </ul>
<ul style="list-style-type: none"> <li>• I love our green spaces and walking path availability.</li> </ul>
<ul style="list-style-type: none"> <li>• While i agreed with most concepts, i disagreed with the concept of making larger sidewalks, and building them out of brick, our sidewalks aren't overcrowded, they are simply lacking in some space, there are many areas of red deer with little to no sidewalks. Making larger sidewalks limits parking space, which is the last thing red deer needs!</li> </ul>
<ul style="list-style-type: none"> <li>• If my property taxes keep climbing it isn't a place I want to live in in the future.</li> </ul>
<ul style="list-style-type: none"> <li>• I can appreciate wider sidewalks in the downtown area, perhaps with benches allowing pedestrians the opportunity to sit outside.</li> </ul>
<ul style="list-style-type: none"> <li>• walking and cycling are becoming part of me healthier lifestyle ... I love that this playbook begins with the concept that every trip we begin and end as a pedestrian.</li> </ul>
<ul style="list-style-type: none"> <li>• I've only watched the vidio but it shows no financial or responcable input from cyclists.</li> </ul>
<ul style="list-style-type: none"> <li>• Look quite good but have you allowed for possible future rapid transit lines? If they were on the video, I didn't spot them. I support bike lanes. I think they will work well IF we are ALL prepared to try to make them do so by willingness to share the road and quit complaining while we get used to having them.</li> </ul>
<ul style="list-style-type: none"> <li>• We are NOT in Europe. When a couple city counsellors eventually figure this out will these impractical money wasting ideas stop??</li> </ul>
<ul style="list-style-type: none"> <li>• I believe that our trails system should be more efficient for pedestrian travel not necessarily just as a recreation resource. Our transit system needs updating as well.</li> </ul>
<ul style="list-style-type: none"> <li>• There is to much focus on things we know aren't working.THIS IS CANADA,We have winter here.It gets cold.People do not want to ride bikes when its -40.People do not want to wait for a bus when its -40.I am not against cyclists or bikelanes IF THEY ARE DONE PROPERLY.Putting human beings at risk by forcing them to ride bikes with mainstream traffic in winter is ridiculous.The people that presented this playbook are out of touch totally with reality. The money that was wasted on this survey could have been better spent doing proper snow removal or restoring the city streets back to the original configuration before the council tried</li> </ul>

to ram bikelanes down our throats.
<ul style="list-style-type: none"> <li>For future planning and projects, I am not averse to this approach. However, it will cost a significant amount of money to create this. I would like to know more about the project before endorsing this. I may like to see my tax dollars being directed toward other important initiatives.</li> </ul>
<ul style="list-style-type: none"> <li>This is exactly what the city needs. My hope is that this doesn't take too many years to bring to life. My kids are young and this is one of the reasons that we moved to Red Deer. We wanted a progressive forward thinking environment that changes with the times to meet the needs of the people.</li> </ul>
<ul style="list-style-type: none"> <li>Maybe develop a walkability concept in new neighborhoods. Similar to Clearview North. As far as bike lanes are concerned, trial is a failure. Very little bike traffic is observed using the lanes. Huge inconvenience and expense to the taxpayers of Red Deer.</li> </ul>
<ul style="list-style-type: none"> <li>I Love the trails in Red Deer. I strongly believe that we should put more time thought and money into the designing of our residential and commercial walks as well. Which is what it looks like you are also thinking. I would like to see a more healthy growing environment for the trees and other shrubs and plant species with also making commutes and leisurely walks more pleasurable. Downtown for instance; I enjoy the new "little Gaetz" idea! The sidewalks are wider, the extra lighting is great, the traffic calming bulbs with trees and plant material are planted quite well...this environment is inviting and calmer. Okay, I mean yes it does and even more trees and plant material. If these concepts could extend into some of the other areas (much more ideally) that would be Great!</li> </ul>
<ul style="list-style-type: none"> <li>The Ideas and concept are excellent in itself. However the video itself is awful.. We are known for our beautiful Parks, our Trail systems, and our Recreation Facilities and Amenities. The video is full of winter! Hello! the streets are lined with dirty snow. The Trails look hazardous. You have portrayed the city as congested with vehicles and people. I did not see any green in this video except what was digitally inputted. Where are the beautiful canopy trees lining our streets. Carnation Park. A segment with people walking their dog, jogging, biking, &amp; walking the trails. Saturday Morning @ the Farmers Market in front of the Red Deer Arena and Curling Rink. The Oval Track @ Collicutt. This video's verbal content was great and the right idea is there. The quality of the film needs creativity and esthetics. Sorry. It looks like Berlin.</li> </ul>
<ul style="list-style-type: none"> <li>Since the city was built to accommodate vehicles and not cycles trying to retrofit does not work.</li> </ul>
<ul style="list-style-type: none"> <li>Because it gives a choice and it continues to offer healthy lifestyle options</li> </ul>
<ul style="list-style-type: none"> <li>It brings life, vibrancy and hopefully healthier and more connected communities. But, given our 6 months of Winter, I'm wondering how well it will all be maintained, so that all pathways, roads, trails, etc. are utilized all year and not only seasonally.</li> </ul>
<ul style="list-style-type: none"> <li>Red Deer is not Copenhagen or Toronto .. Nor do I want it to be stop ruining the city with crazy ideas and wasted spending with no revenue and high costs it is a licence for more debt.</li> </ul>
<ul style="list-style-type: none"> <li>Despite what the city seems to think, Red Deer is a very spread out city and cars are necessary to get from A to B much of the time. Nobody is walking on a trail from Lonsdale to downtown etc.</li> </ul>
<ul style="list-style-type: none"> <li>Safe movement of people</li> </ul>
<ul style="list-style-type: none"> <li>Have you really considered our weather? You can make bus shelters comfortable in inclement weather, but what about walking to them in -40 and blowing snow. I can get in my warm vehicle and park in my garage. I won't freeze my ass off that way. And how many people are going to use the bike lanes in winter?</li> </ul>

<ul style="list-style-type: none"> <li>Red Deer is a fairly big city and therefore needs to accomodate cars. We endure long winters which further supports car usage. Few people choose to walk or bike when it's really cold outside. Also, I'm offended that the city hired consultants from Europe to help guide Red Deer with a plan for the future. Red Deer is not Europe and will never be. Just this past year, we have seen the results of counsel approving the bike lane pilot project. This has been the worst decision council has made during the 30 years I have lived in Red Deer.</li> </ul>
<ul style="list-style-type: none"> <li>Lots of options considered.</li> </ul>
<ul style="list-style-type: none"> <li>Yup - it does - reason is basically below. However, I think Red Deer is a great city, and love it..</li> </ul>
<ul style="list-style-type: none"> <li>They way it currently plays shows a city that allow consumers of transportation a choice. Work needs to be done with developers to adhere to our desire of better mobility and community. In particular, better placement of grouping local business to cater to daily needed reasources within the city located near sub-divisions. (Grocery, banking, libraries, small retail etc - not grouping 4 banks in the same proximity).</li> </ul>
<ul style="list-style-type: none"> <li>Answer same as below.</li> </ul>
<ul style="list-style-type: none"> <li>I agree the Playbook does create create a Vision for a Future Red Deer that would be inviting and a great place to call home. The Playbook does provide a significant amount of information compiled into a short three minute video. Great job to all involved, this endeavour is a major paradigm shift away from conventional transportation planning.</li> </ul>
<ul style="list-style-type: none"> <li>Photo shop did a good job of making the bicycle lanes look like a good thing but traveling on 40th is a nightmare and no matter what we do about mobility, vehicles will always be the first choice of the vast majority of people. That is who we should cater too. I don't use the Collicutt but can see the rational in having it. This study is a total wast of my tax dollars. I don't know who the thousands that you talked to are as have talked to hundreds and they are not in favor. Were these thousands even residents of the city?</li> </ul>
<ul style="list-style-type: none"> <li>It is important to collaborate and make sure we have an integrated approach when planning our growth. I hope the days of building roads with sidewalks that end abruptly are over and we have connected pedestrian and cycling options that support safe and active transportation options.</li> </ul>
<ul style="list-style-type: none"> <li>Gives choices rather than the single theme "Motor City"</li> </ul>
<ul style="list-style-type: none"> <li>I love and use the walking/bike trails all the time and have for over 20 years. I like the new bike trails and wish people would at lease give them a chance. It seems a huge waste to take them out so soon after they spent the money to put them in, when they haven't had a chance for people to get used to them. Some people just don't like change.</li> </ul>
<ul style="list-style-type: none"> <li>I agree although I think the main roadways throughout the city should not be decreased.</li> </ul>
<ul style="list-style-type: none"> <li>Yes, it describes a good vision for Red Deer mobility.</li> </ul>
<ul style="list-style-type: none"> <li>I have happily lived in Red Deer for over 25 years and marvel at our beautiful accessible parks, recreation facilities and special events which I use a lot. I know this takes forethought and appreciate future plans to let everyone partake and afford any of Red Deer's assets. We are so fortunate to have what we do and maintaining that level of accessibility is well worth it</li> </ul>
<ul style="list-style-type: none"> <li>if the ths cyclist would obey the traffic laws like vehicles do then there may be a very tiny chance of this to work</li> </ul>
<ul style="list-style-type: none"> <li>I think if you really want an input on how Red Deer's mobility should be a survey should be given to every household in the city, Send it with our utility bill and give us Red Deerians a fair chance voice our thoughts. putting things on your web site or asking 1000 people isn't fair for thoses who have no idea it's being done.</li> </ul>
<ul style="list-style-type: none"> <li>I would be very happy if Red Deer could become even more accessible for alternative methods</li> </ul>

<p>of transport. I love the trail system, I like to bike to where I need to be, and I would like to have transit be more efficient so I might consider taking it more often.</p>
<ul style="list-style-type: none"> <li>• Generally. I'm not sure it addresses the realities of transitioning the current infrastructure and the current mind-set. As well, wishing for a certain type of mobility may not take into account that, through the extremes of our changing seasons, our ability to deliver or our desire to partake will change.</li> </ul>
<ul style="list-style-type: none"> <li>• I agree with the high level concepts... though it's hard to tell what this will look like in practical terms.</li> </ul>
<ul style="list-style-type: none"> <li>• Good accessibility for walkers is important. The bikes are an issue at present. Painting a little strip occasionally along an existing road is NOT the way to go. It changes continuously and neither bikers or vehicles know where to drive. Bike paths need to be off the main roadways. The road on 55th street now is such a mess after painting, removing and repainting that is is not possible to know where the lanes actually are. It needs to be totally repaved and lined properly. Then there is 40th Ave!! No idea where to drive, it is a wonder there is not more accidents.</li> </ul>
<ul style="list-style-type: none"> <li>• I want a city where the movement has been thoroughly thought through, but taking into consideration all types of movement.</li> </ul>
<ul style="list-style-type: none"> <li>• Need to stop expanding using more and more lands</li> </ul>
<ul style="list-style-type: none"> <li>• I want to see people outside of their vehicles being more active and moving (yet safe).</li> </ul>
<ul style="list-style-type: none"> <li>• The city is growing and needs to accommodate all forms of transport. Especially considering cost of maintaining infrastructure for cars.</li> </ul>
<ul style="list-style-type: none"> <li>• Oh yes, it all sounds so good. And then reality hits. The reality is this: Red Deer weather in no way compares to either Victoria or Copenhagen (or any other of the coastal cities depicted). Therefore there are several weather related problems that are not mentioned. Since I walk to work regularly, I know about these problems personally. If I biked, the problems would be amplified. First, rain mixed with wind, and then extreme winter wind chill, are the two obstacles that cannot be overcome. You cannot walk in either. Wind driven rain drenches your clothes, wind chill is dangerous. Heat is also a problem. Unless you have extra clothes to change in to, a place to change, and most likely a shower, you will sweat, and likely smell, and be one hot mess at work. How many workplaces are equipped with showering and changing facilities, along with a locker to store clothes? How many people want to incur additional drycleaning bills? Do more laundry? Then, at least for women, there is the hair issue. Touques, hats, bicycle helmets ruin hair styles, along with wind and rain. Laugh if you will, but women spend a lot of time and money on their hair and want to look good. I could go on but have only so much time. Your utopian vision of walking to a local shop to pick up milk, chatting with neighbours along the way, and having school children walk to and from school is also fiction. The Moms I know are busy. They go on a big grocery run (which they need a car to haul the load - you can't do this kind of shopping and take it home on a bus, bicycle, or in hand). They rush from work to school to pick up the kids and rush them around to various activities (hockey, dance, music lessons, you name it), and rush some more to make supper or pick up supper from the grocery store or some take-out place. They need the car to haul not only the kids, but the hockey bags, the musical instruments, etc. Until you can convince families to withhold their children from extracurricular activities, you will not change their need for using a car. Lack of time is the single biggest factor that will prevent Red Deerians from adopting a lifestyle of walking, bicycling, and using transit until they lose their license. And kids walking to school? A lot of kids are bussed because they don't live anywhere close to the school. Of those that do, parents are concerned for their safety so they are often dropped</li> </ul>

<p>off by parents on their way to work. And picked up after school for the post school rush. What a world we live in. It all sounds so lovely in your playbook, but your playbook doesn't allow for the reality of our lifestyle.</p>
<ul style="list-style-type: none"> <li>• Yes I think if we can diversify modes of transportation we can all move more efficiently around our city.</li> </ul>
<ul style="list-style-type: none"> <li>• It is nice that Red Deer is looking for a balance between different transportation modes, and how they can work together. It did seem to me like the majority of the focus in the video was on the downtown area; it comes across that that is the focus instead of the whole city.</li> </ul>
<ul style="list-style-type: none"> <li>• I think it is very important that the City Plans wisely for the future, in order to grow sustainably. Right now it is challenging to move around red deer without a vehicle, the future needs to accommodate pedestrians. The cost of keeping roadways and vehicle infrastructure maintained is huge and needs to be managed wisely with the addition of pedestrian focused transportation etc.</li> </ul>
<ul style="list-style-type: none"> <li>• I'm sorry, but no matter how much you dream, you are not going to replace vehicles in this City - especially when we have 6 months of winter every year.</li> </ul>
<ul style="list-style-type: none"> <li>• yup alittle</li> </ul>
<ul style="list-style-type: none"> <li>• This video is nothing more than a sales pitch propaganda. It does not ask our opinion, it TELLS us our opinion!</li> </ul>
<ul style="list-style-type: none"> <li>• This video speaks in a number of vague generalities, so I cannot fully agree with what is intended. I believe there should be more non vehicle options. Those need to be both safe and efficient. Separate bike lanes achieve this for motorists, cyclists, and pedestrians. The bike lanes should be used by cyclists, rollerbladers, skateboarders, and those on mobility scooters. Public transit also needs to operate more reliably. Having more regular times as well as more logical bus stops. All of these options need to be more accessible to the disabled. As a disabled young adult without a vehicle, I use a cane and ride the buses. All too often the buses stop in a snow hill or a mud puddle. Bus stops are not connected to paths and are rarely cleaned of snow in winter. Our population is aging and the city is planned out and maintained by the young and healthy and it shows. As an example with limited mobility and extreme fatigue I see a different view. From downtown, if one were to take bus #10 and get off at the home depot (assuming the driver has pulled up to the curb and lowers the bus) they step off into grass (or a snow hill, or a mud puddle) walk 5 steps, cross a path, and proceed down a hill (iced or muddy) terminating in a tall curb (in the winter a large hill of parking lot snow is next) crossing the giant parking lot and the next one can go to Walmart (bcz hey seniors and disabled are on a budget) after shopping, now carrying bags, the closest stop that takes one downtown is back the way you came (across two lots, and up a small hill) heading right to cross at the lights half a block away, you get there, step off the path into the mud to press the walk button, then you have two options- go straight and step off the tall curb or go back to the path and over 5 steps to the wheelchair incline. You can then cross the road only to realize there is not enough time for a healthy person on a walk light let alone you and your dislocating hip and arthritic knee. Do you stop in the middle with only a 1.5 ft stretch of median (taller than mid calf) to protect you? Or do you keep going across the section of road you have nearly been run over on more times than you can count (most locals don't expect pedestrians after all there is no crosswalk and the rest are focused on the turn signal and forget there could be anyone in the road). You have finally crossed, and again you need to choose between a high step or extra steps. This side of the road has no pathway, in summer the grass doesn't grow, there are potholes and the bus bench is on a steep hill. In midseason it is mud, in winter there is usually a polished path of snow leading to the bench. Unfortunately</li> </ul>

it is still on a steep incline and you must really struggle not to fall over. Buses here are 1/2 hr apart, so you have 15 minutes to wait (assuming the bus is on time) out in the elements. When the bus arrives the driver overshoots and you have to rush another 8 feet on sideways incline. While waiting you decided to stop at bower mall. You choose at the food court stop and step off onto a sidewalk. You walk a block back towards home depot just to cross the road, and then cover half a block in the direction you came from to the mall. All of this has assumed you were not run over, startled or otherwise traumatized by cyclists, skateboarders or rollerbladers. Do get the hint?

- This video speaks in a number of vague generalities, so I cannot fully agree with what is intended. I believe there should be more non vehicle options. Those need to be both safe and efficient. Separate bike lanes achieve this for motorists, cyclists, and pedestrians. The bike lanes should be used by cyclists, rollerbladers, skateboarders, and those on mobility scooters. Public transit also needs to operate more reliably. Having more regular times as well as more logical bus stops. All of these options need to be more accessible to the disabled. As a disabled young adult without a vehicle, I use a cane and ride the buses. All too often the buses stop in a snow hill or a mud puddle. Bus stops are not connected to paths and are rarely cleaned of snow in winter. Our population is aging and the city is planned out and maintained by the young and healthy and it shows. As an example with limited mobility and extreme fatigue I see a different view. From downtown, if one were to take bus #10 and get off at the home depot (assuming the driver has pulled up to the curb and lowers the bus) they step off into grass (or a snow hill, or a mud puddle) walk 5 steps, cross a path, and proceed down a hill (iced or muddy) terminating in a tall curb (in the winter a large hill of parking lot snow is next) crossing the giant parking lot and the next one can go to Walmart (bcz hey seniors and disabled are on a budget) after shopping, now carrying bags, the closest stop that takes one downtown is back the way you came (across two lots, and up a small hill) heading right to cross at the lights half a block away, you get there, step off the path into the mud to press the walk button, then you have two options- go straight and step off the tall curb or go back to the path and over 5 steps to the wheelchair incline. You can then cross the road only to realize there is not enough time for a healthy person on a walk light let alone you and your dislocating hip and arthritic knee. Do you stop in the middle with only a 1.5 ft stretch of median (taller than mid calf) to protect you? Or do you keep going across the section of road you have nearly been run over on more times than you can count (most locals don't expect pedestrians after all there is no crosswalk and the rest are focused on the turn signal and forget there could be anyone in the road). You have finally crossed, and again you need to choose between a high step or extra steps. This side of the road has no pathway, in summer the grass doesn't grow, there are potholes and the bus bench is on a steep hill. In midseason it is mud, in winter there is usually a polished path of snow leading to the bench. Unfortunately it is still on a steep incline and you must really struggle not to fall over. Buses here are 1/2 hr apart, so you have 15 minutes to wait (assuming the bus is on time) out in the elements. When the bus arrives the driver overshoots and you have to rush another 8 feet on sideways incline. While waiting you decided to stop at bower mall. You choose at the food court stop and step off onto a sidewalk. You walk a block back towards home depot just to cross the road, and then cover half a block in the direction you came from to the mall. All of this has assumed you were not run over, startled or otherwise traumatized by cyclists, skateboarders or rollerbladers. Do get the hint?

- The basic premise of integrated transportation is good; however, the unrealistic ideas already being piloted in the City are unreasonable and based on City transportation systems in



climates where there is very little snow and ice throughout the year, such as Vancouver.
<ul style="list-style-type: none"> <li>It is important that the City provide an inviting environment for people to get out of their cars, or leave their cars at home.</li> </ul>
<ul style="list-style-type: none"> <li>More frequent transit system, which is the biggest issue, and wider sidewalks are key to downtown, and residential as well. We would take transit more often if there were direct routes, eg: up and down Gaetz and not turning off, as that's where most people need to go. If we could take the Ross St bus to the Gaetz bus, we would. See Vancouver's system. Also there should be sidewalks on both sides of the road. Eg: 30th Ave, 40th Ave, 32nd St, 19th St, etc. Side note not covered in the video; create path or sidewalk shortcuts through neighbourhoods. Walking and biking are great, but we're still in a hurry sometimes.</li> </ul>
<ul style="list-style-type: none"> <li>Asking after the fact is ridiculous. The roads are destroyed by having paint scraped off. The Ross street patio supplies a location for smokers, takes away valuable downtown parking. Making a bike lane out of a road is an ineffective use of infrastructure. A cycling path does not need the same road base as a street does. It's like using Canada Olympic Park for a crazy carpet. 40th avenue could win an award for the most dangerous city street in Canada. Drivers now hate bikers. Why didn't we start with education, collaboration and a positive go forward movement? This secret campaign has certainly backfired. I love the idea of less cars on the roads, but I've tried to use transit and it's terrible.</li> </ul>
<ul style="list-style-type: none"> <li>Yes, I think that it addresses various transportation means that I use. I love the trails, and walking paths.</li> </ul>
<ul style="list-style-type: none"> <li>It does not explain how to do this in existing areas or new subdivisions, it's just a general "feel good" video. It does not show or explain the repercussions of reducing vehicle lanes. Perhaps if you looked at the video when it is at the point of the 1:57 minute mark, you will see on the bottom left hand side of the picture, "Manhattan" style parking, because the city did not allow adequate frontage to the homes, creating a road parking problem.</li> </ul>
<ul style="list-style-type: none"> <li>I like the idea of grassed area between driving lane and bicycle lane</li> </ul>
<ul style="list-style-type: none"> <li>Integrating the bike lanes into the existing trail system would be smart, as would widening existing side walks or creating a new side walk as opposed to taking up a lane on already busy roads. This was dangerous, confusing and realistically made no sense. Therefore I am very happy to see that City Council is making an effort to get feedback before making and further changes.</li> </ul>
<ul style="list-style-type: none"> <li>You have most things right. Increase the frequency of transit buses. Make more direct routes so I don't have to go downtown and switch buses to get to/from work and I will gladly leave the car at home. Get the Bike Lanes off the streets. They need to be integrated into existing sidewalks and trails.</li> </ul>
<ul style="list-style-type: none"> <li>The concept is nice, but I don't find it very practical given our weather. Weekends may be busy just as the current bike lanes are but for the majority of the time no one is on them. I think it's more important to keep traffic flowing smoothly rather than creating more congestion, the existing trails on the road are an accident waiting to happen, just watch people making right hand turns on roads with "bike lanes"</li> </ul>
<ul style="list-style-type: none"> <li>I like the idea of having options for my transportation. I like connectedness to the trail system to get where I want to go, especially throughout the river valley and park system.</li> </ul>
<ul style="list-style-type: none"> <li>I like the concept of Neighbours and a hub. That was one of the things that I first noticed about RD when I arrived 30 years ago. Now, houses that look exactly the same are springing up everywhere and a Mac's store is the "hub". There does not seem to be sidewalks to a playground in most of these places. Just institutional looking houses. It is sad. No individuality</li> </ul>



<p>anymore. I would not like to bike on those roads. I love our bike paths/walking trails. The people who use them mainly, but not all, know to bike in signal file and keep to the right. Walkers and bicycles on the paths get along well. Bikes on the sidewalks downtown do not. Bikes on the main roads do not. Separate the bikes from the traffic - and let's be realistic and paint the picture of a WINTER - we all know what summer looks like - it is mainly winter here - don't try to "snow" us - we just are not that stupid!</p>
<ul style="list-style-type: none"> <li>I like the video that was done/attached, it offers many different ways of "moving" in the city. I walk, and use the trails in our city. It would be great if the trails were linked to the regular sidewalks so you could move between both easily. Perhaps this is already done, if it is I haven't discovered them yet!! I'm definitely in the minority but I didn't mind the "bike lanes". I think it is because I'm retired and I feel that it is my responsibility to stay off the roads when everyone is trying to get to work. I like how the City sorted out the lights by 39 St/40 Ave, it is congested there especially when you don't know what lane you should be in. I like how in the video you had the bike lanes with plantings/flower beds to protect them (the bike riders) from the regular flow of traffic. This is a good idea, but the streets would likely need to be wider. I think people should have a choice in how they move (walking/driving/cycling, etc), these options should be available to them. I sold my bike as I found the streets were not safe to ride on, I now make the decision to walk or take my car. I have made a conscious decision to NOT drive my car every day, it does take planning and some organization to do this.</li> </ul>
<ul style="list-style-type: none"> <li>Wider sidewalks, trail integrated into existing streets all mean one thing...reduced traffic lanes and flow. The bike lanes are a small scale of the outrage this city will express if more lanes are removed and traffic flow isn't #1</li> </ul>
<ul style="list-style-type: none"> <li>This video seems to put everything in Black and white. Can we not have a mix.</li> </ul>
<ul style="list-style-type: none"> <li>I think the bike lanes were a great idea, they were just rolled out badly and that affected the program.</li> </ul>
<ul style="list-style-type: none"> <li>Narrow plot housing takes up more room than apartments or condos per capita, but essentially makes ground-level apartments. Look up "nanny housing." It makes cheap, tacky looking neighborhoods full of undesirable homes, optimized to make as much money as possible for the developer who invariably builds a whole suburb at once. When you can reach out your window and touch the neighbor's wall, you're not really in a private home. When the sunlight reflecting off your window can melt your neighbor's siding, are you really detached, or is that just an illusion? The ideals sound good, but the bike lane project leaves me very hesitant to show support for many of the recommendations as they seem to want to force a certain lifestyle rather than accommodate it.</li> </ul>
<ul style="list-style-type: none"> <li>No</li> </ul>
<ul style="list-style-type: none"> <li>why does more money have to be spent foolishly!!!! why can't things remain the same.....cyclists unless motorized...stay off the roads where there are motorized vehicles....build a bike path -- along the sidewalk...up on the curb side...not on the road!!!! My vision of Red Deer is not based on bike lanes....but will be based on tax dollars if more and more money is spent stupidly!!!! Seriously...this is far from rocket science!!!!....We have been cycling around for a great number of years...but not on the roads where there is too much congested traffic already...nevermind adding bikes to it!!!!</li> </ul>
<ul style="list-style-type: none"> <li>This study is way too late, after spending an obscene amount of money on useless bike lanes, NOW you are asking if this is the right direction? Ridiculous</li> </ul>
<ul style="list-style-type: none"> <li>Yes absolutely. I liked the visual slide that showed bike lanes off of the streets (or bike paths instead). This would be something I would use with my family and children. On-street bike lanes I would be too scared to use.</li> </ul>

<ul style="list-style-type: none"> <li>• moving emphasis off of gas powered vehicles and onto human powered transportation is great.</li> </ul>
<ul style="list-style-type: none"> <li>• Haven't given it a lot of thought, some ideas were good but making the downtown sidewalks wider wasn't one of them. When the work was done on little Gaetz in front of the Scott block absolutely no consideration or thought was put in to convenience of parking or dropping off people with mobility issues that have to go for appointments in the Bunn building on the corner. Because the road is now narrow there is no place to stop and get a person with a walker safely to the sidewalk, generally if they need the aid of a walker they can't walk a block in the snow - snow is cleaned off of the sidewalks onto the road curb side and not removed by the city, it is left as one big icy, hilly, rutty and dangerous mess for seniors and people helping them all winter - I absolutely disagree with the whole concept and the people who designed it are Not thinking of the handicapped in that regard - for this reason I avoid downtown and that particular street unless my mother has an appointment.</li> </ul>
<ul style="list-style-type: none"> <li>• I only agree to some of it</li> </ul>
<ul style="list-style-type: none"> <li>• I am not interested in living in a community that is very dense. If I wanted this kind of lifestyle I would move to Victoria or Vancouver where the density is off set by other amenities such as the ocean front, Stanley Park, etc. I would agree we need to accommodate the four modes of transportation, but not the way it was done with the current bike lanes. To eliminate vehicle lanes for the sake of bike lanes is like going back to the horse and buggy days.</li> </ul>
<ul style="list-style-type: none"> <li>• It is a fantastic idea! Red Deer is a beautiful city and people love to take advantage of the outdoors but people don't because of the lack of user friendliness. People take the bus because they have to not because they want to but if you make the bus system easier and more appealing than people will want to ride. People use the trails because they are a fantastic way to get around the city, but sticking the bike lanes on the road is not a good idea but if you move them off the road and give the bikes a spot to safely ride without the hazards of people walking or driving then people will use them. I think the looks for the pedestrian walkways are wonderful idea. Everyone is a pedestrian and pedestrians need to be safe and happy. Beautiful job!!</li> </ul>
<ul style="list-style-type: none"> <li>• This playbook is a marketing spin by a failing council &amp; management team. It makes no sense, completely downplays the climate we live in and underestimates the requirement for vehicle traffic.</li> </ul>
<ul style="list-style-type: none"> <li>• I think it's a good thoery, i just hope the city can actuallymake it workina cost effective manner.</li> </ul>
<ul style="list-style-type: none"> <li>• Yes, stop shrinking our road space for bike paths.....make bike and walking paths part of the sidewalk system!</li> </ul>
<ul style="list-style-type: none"> <li>• We need to fix the bike lane fiasco and this gives a very general idea of how. Needs more concrete plans, and there are more things omitted than mentioned. Any progress from what we have now is good, but we need more than what is mentioned.</li> </ul>
<ul style="list-style-type: none"> <li>• Only includes vague concepts. I thought it would report on what Reddeerians specifically told you???</li> </ul>
<ul style="list-style-type: none"> <li>• It speaks not only about transportation but about neighbourhood development.</li> </ul>
<ul style="list-style-type: none"> <li>• It really did not state one way or the other what the plan (if any) is so I cannot say that it creates a vision for me. More like a collection of interesting platitudes that lack true direction, other than making walking easier and more enjoyable. I can get behind that.</li> </ul>
<ul style="list-style-type: none"> <li>• The focus on pedestrians, though not wrong, seems out of proportion. I fear that a minority of people may dictate the solutions brought to the table when really most people drive over</li> </ul>

longer distances. If we discourage driving, or impede it in an effort to encourage walking or bicycling, I believe congestion will result. Especially in the downtown core. Transit, though I rarely use it, could be more convenient. I think after the Bike Lanes Boondoggle, public trust regarding mobility decision made by City Council is at an all time low. I've seen crews out already working on filling pot holes, which the last few years have been Edmontonian in scale, and that is good.
<ul style="list-style-type: none"> <li>I like the idea of inter-connected neighbourhoods and public trails. I support public transport but wonder how much it will cost as we continue to expand our neighbourhoods.</li> </ul>
<ul style="list-style-type: none"> <li>I really like the idea of not having to use my car all the time. I love our trail system and like the idea of it's integration.</li> </ul>
<ul style="list-style-type: none"> <li>The whole plan has as its foundation an anti-car philosophy. But automobile is the first choice of the overwhelming majority of Red Deerians. Bike paths are nice but mostly recreational. This plan sacrifices the necessary (automobile) on the altar of nice (bikes and walking paths). There was not a single plan presented for improving the movement of automobile traffic. This is what people want, need, and use. They are telling you what they want by their actions (cars)...apart from any surveys such as this.</li> </ul>
<ul style="list-style-type: none"> <li>I want to do my part in relation to the carbon footprint and have increased the amount that I walk and cycle.</li> </ul>
<ul style="list-style-type: none"> <li>We have to keep moving towards something more sustainable than everyone driving a monster pick up to get to where they need to go</li> </ul>
<ul style="list-style-type: none"> <li>I believe the majority of people still tend to drive. Our shopping is based on the box store concept, not on the daily task of picking up groceries for immediate use. A lot of families are two income families and there is not time for daily shopping. Carrying \$200 worth of groceries and walking or biking is not reasonable. The Mobility Playbook is a nice thought, but not practical.</li> </ul>
<ul style="list-style-type: none"> <li>Partially I believe there has to be a shift due to gas prices, insurance costs, parking and space in our downtown as well as being environmentally responsible. We live in a beautiful city that can be enjoyed by slowing ourselves down and taking in the beauty</li> </ul>
<ul style="list-style-type: none"> <li>Moving toward a built environment and transportation network that makes it easier to ride my bicycle and walk is exactly what I would like to see.</li> </ul>
<ul style="list-style-type: none"> <li>I love the idea of living in a city that I can walk to a neighbourhood restaurant or pub, be connected to the large park system without having to walk or ride a bike on traffic focused roads, and take transit as a viable means of getting around the city. These are the types of amenities that I look for when I am travelling to another city as a tourist...wouldn't it be great to build on what we already have here in our beautiful city and live like we do when we are on vacation.</li> </ul>
<ul style="list-style-type: none"> <li>Interesting concepts but very preliminary</li> </ul>
<ul style="list-style-type: none"> <li>I think it's important to provide a diverse set of options for people to move themselves, otherwise we are encouraging residents to continue relying for the most part on personal vehicles. I believe that this initiative does lead to a better quality of life in the City.</li> </ul>
<ul style="list-style-type: none"> <li>Yes. The MP provides a more sustainable model than what we have today. I'm glad to see that administration is providing the vision and leadership that some councillors (i.e. Stephan) clearly lack.</li> </ul>
<ul style="list-style-type: none"> <li>The vision for Red Deer that is created is very much of one that already exists. If you would take a STEP BACK and look at what we already HAVE, you would see very little needs to be CHANGED. As a full time employed mother of 5 children, there is NO WAY I could bike, walk or</li> </ul>

<p>use the transit to go to work. Your vision of changing people's way of getting to and from work is unrealistic. Red Deer is a family based city and MOST PEOPLE have children that they need to get to and from day home in the mornings and after work. That being said, to get to and from school, my 17, 11 and 8 year old children ALL use the city transit during the winter months and bike in the spring and fall. During the summer months when my children aren't in school, we, as a family use the bike trails to explore all of what red deer offers (heritage ranch, bower ponds, the dog parks, the indoor and outdoor public swimming pools, discovery canyon, etc.) and currently have NO PROBLEM accessing them via the existing bike trails. There is NO NEED to change what already works. Instead of wasting all this time and money trying to create a "vision", why not put the money into what we already have. The bike trails need repair, add more maps, add other items that might encourage to use what ALREADY EXISTS in our city. I hope that you came to the realization that the BIKE LANES on our city streets were a complete fail, from start to finish. I look forward to seeing 39th street restored to the previous lane allocation. I have witnessed MANY near accidents because the intersection is so poorly marked.</p>	
<ul style="list-style-type: none"> <li>• This is Canada. We still get winter. We will probably never fully embrace bicycling as a realistic option for more than the really die-hard enthusiasts. As for taking away driving lanes and parking from the downtown core so that we can waste money on fancy sidewalks and tables, not in favour. The thing that really attracts people to the downtown is shopping, and there isn't any anymore. When I was a kid you came downtown to shop at the Bay, Eatons, Kreske's, etc. Now it is just overpriced boutiques that close at 5:00 pm.</li> </ul>	
<ul style="list-style-type: none"> <li>• The trail system in Red Deer is one of the best things that I love about it, would love to see them expanded and connected more.</li> </ul>	
<ul style="list-style-type: none"> <li>• The downtown sidewalks are so crowded with flower pots/outside eating areas, it's very hard to walk 2 abreast on most streets. Lucky if you can walk in a straight line without having to go around this or that. Looks nice but not if you have to walk with a disability. Sometimes you have to walk on a make shift wooden sidewalk because they extend their store front so much!</li> </ul>	
<ul style="list-style-type: none"> <li>• It provides balance for pedestrians, drivers and transit.</li> </ul>	
<ul style="list-style-type: none"> <li>• I am a firm believer in convenient and accurate transit, as well as trails become more useful and attached to walkways and paths.</li> </ul>	
<ul style="list-style-type: none"> <li>• Because the public wants more options for getting around, that is one reason my wife and I moved to Red Deer.</li> </ul>	
<ul style="list-style-type: none"> <li>• No, it's not safe to walk in Red Deer.</li> </ul>	
<ul style="list-style-type: none"> <li>• I currently see too much in the way of cars as the focus for streets. Too much isolation for individuals who aren't car-centric. Older folks, folks with disabilities, stay at home parents, etc. need environments where they are free to access services and interact with others and be a part of community (in fact, we all need this).</li> </ul>	
<ul style="list-style-type: none"> <li>• I believe the concept is excellent because we all want a healthy safe community to live in and for our children to live in and their children...etc.</li> </ul>	

**The draft mobility playbook proposes a shift in the way we do transportation planning to accommodate a balance between walking, driving, transit and cycling. Do you think the draft Mobility Playbook reflects a shift that works for Red Deer?**

<ul style="list-style-type: none"> <li>• It seems like it creates a shift.</li> </ul>
<ul style="list-style-type: none"> <li>• I think that it is important to realise how many people there are who would like to walk or ride transit who don't because the system just isn't all that effective currently. I think that the plans in the playbook offer a better alternative to the system in Red Deer. Really the way things are is not very well designed for anyone other than motorists.</li> </ul>
<ul style="list-style-type: none"> <li>• Currently the transit system is terrible, the paths are not safe at night, and the converted streets do tend to make it an obstacle for traffic</li> </ul>
<ul style="list-style-type: none"> <li>• Most consideration should be given to driving in our city because of the weather we encounter. I don't care how convenient it is to bike, walk, or wait for buses when it is -15 or colder outside, I will chose to drive. If driving lanes are cut down on busy streets and traffic is affected to create bike/pedestrian lanes that will rarely get used (especially in the winter) most citizens will be irritated to say the least. The trail system in Red Deer is great and I use it for walking my dog daily. The best part about most of the trails is that they are away from traffic noise/congestion. In my opinion roads and trail systems should be completely separated from each other as much as possible for the enjoyment of people using both systems. This is why the bike lanes on roads do not work. Traffic is too affected by very rarely used bike lanes.</li> </ul>
<ul style="list-style-type: none"> <li>• More frequent transit. Having ammenities close to housing would be good.</li> </ul>
<ul style="list-style-type: none"> <li>• My concern is with the new bike lanes - especially on 39 Street and 40 Avenue. These are both busy traffic corridors and removing driving lanes is a very bad idea. On 40 Ave. I feel like a drunk driver weaving left and right. Many drivers are not following the signage so I'm constantly watching cars either to left or right of me to make sure they know where they are supposed to be. So I don't know how that could be improved because I don't want any trees to be removed to accommodate a bike lane in these areas as well as restoring the traffic lanes.</li> </ul>
<ul style="list-style-type: none"> <li>• A few things for transit every 15 minutes on major routes. A system on the bus telling people what stop is next. Maybe a line that we can find out next stop times and we just type in a stop number. Having and make sure there is good lighting in all stops so people are visable to drivers at night.</li> </ul>
<ul style="list-style-type: none"> <li>• See above.</li> </ul>
<ul style="list-style-type: none"> <li>• The future planning can be improved. I wouldn't support major changes to existing streets, too costly. We need to make sure vehicles can move through city quickly and in the new planning make it pedestrian/cycle friendly. We can incorporate the existing trail system. The whole plan of new subdivisions make it so you have to travel to North Hill or South Hill for major shopping. Allowing/planning for shopping in newer areas to cut down on east/west going to Gaetz - ie Walmart/electronics shops.</li> </ul>
<ul style="list-style-type: none"> <li>• A need to connect communities with options (choices) for transportation and mobility.</li> </ul>
<ul style="list-style-type: none"> <li>• no comment.</li> </ul>
<ul style="list-style-type: none"> <li>• There is no way around it. It makes the city friendlier for everyone. Shows possibilities beyond today's status. It is a long term plan. The changes are big, both physically for infrastructure, and mental shift of people. Both take time. Small neighbourhood dog parks, off-leash help socializing in neighbourhoods. Key for increased use of bicycles is proper connection between the trails for safety. Currently too often bike lanes suddenly end, forcing</li> </ul>

to continue walking or using car lanes.
<ul style="list-style-type: none"> <li>This may be a mind shift for some people if they are not active. I know on the prairies a lot of people are used to just hop in their vehicle to go everywhere. Promotion of the health and environmental benefits is important. promoting choices and healthy alternatives is good (and the city does this).</li> </ul>
<ul style="list-style-type: none"> <li>You always like the left hand knowing what the right hand is doing.</li> </ul>
<ul style="list-style-type: none"> <li>Yes. Busy routes should run more often. Every 15 minutes when it is busy. But don't run the buses when it is busy.</li> </ul>
<ul style="list-style-type: none"> <li>Yes, it will be hard, as change is not easy for people. It takes work and money. In the long term it will become the norm. People are beginning to realized that they need to drive less and walk more (or cycle). Childrean are learning that they can do this to and from school. We need to encourage this as they become adults and provide safe routes all year round.</li> </ul>
<ul style="list-style-type: none"> <li>When it comes to transit , the only change that needs to be made is for a longer bus schedule so that people who work night shifts can get home. A transit system that operates till 1 am is ideal.</li> </ul>
<ul style="list-style-type: none"> <li>See above.</li> </ul>
<ul style="list-style-type: none"> <li>Yes - having worked on various focus groups for the city on the waskasoo parks, we highlighted the need to 'share the paths.' I wanted signage to highlight the need for walkers and skiers and bikers to be aware of their varying needs and speeds. That was about 10 years ago ow. Let's move forward with it - good to see. Thank you, we need to teach people civility.</li> </ul>
<ul style="list-style-type: none"> <li>Red Deer has a growing population of active families who are willing to walk and bike to their destinations. It is important that we can do this safely and easily. Also to have the choice to bike/walk back home or take the bus. We also have a growing population of people from other lands and cultures sho are used to and prefer to walk or use transit. Walking, biking and using transit also encourages friendly interaction among citizens.</li> </ul>
<ul style="list-style-type: none"> <li>I like what Red Deer has done in the past couple of years in implementing bike routes and clearing trails in the winter. I do think continuing looking for new ways, like increased transit times and encouraging walking and cycling routes, is something that Red Deer should do.</li> </ul>
<ul style="list-style-type: none"> <li>Please see comment above. Also, we could really cut down a lot of expenses on our public transit if we ran some smaller busses for the 1 or 2 people that you see riding them.</li> </ul>
<ul style="list-style-type: none"> <li>We can't afford to plan our roads and neighbourhoods primarily for cars. This is very expensive and I don't think that it could pay for itself. Just because 90% of trips are taken by car doesn't mean that the city should overinvest in just that mode.</li> </ul>
<ul style="list-style-type: none"> <li>I think the protected bike lanes are a step in the right direction but I do not feel they should take away a lane of vehicle traffic. If they can't be put in without removing vehicle mobility then the bike lanes need to go elsewhere and they certainly shouldn't interfere with traffic on the busiest streets in the city and especially in front of schools where busses have to stop and load.</li> </ul>
<ul style="list-style-type: none"> <li>It makes sense to look at what works elsewhere. Not everyone in Red Deer has had the opportunity or interest in researching other cities "best practices". It's not that their opinions should be discounted, but perhaps they should not have as much influence as city planners who have been educated in planning, and who have been actively researching what really works. I think there are some people afraid of changing habits who will actually benefit greatly from this new plan, as will their children. We need to be thinking about implications not only for this population but for those in the future. Thank you for the opportunity to be involved in this discourse!</li> </ul>



<ul style="list-style-type: none"> <li>I've entered neutral; some parts I agree with and others not - fundamentally I agree with the concept - I think we need to be careful which community we compare ourselves to - not Vancouver which doesn't have the same winter weather. The Bike Lanes fundamentally are a move in the right direction, but they don't work in the winter; which is 8 - 9 months of the year - as they are right now, they should be removed and the vehicle lanes returned. We've had a vehicle accident because the individual was in the bike lane not following the lane configuration. His error but was an unnecessary incident. We have fabulous park trails - can we not incorporate the bike lanes as an extension of the trails to get people where they want to go. The sidewalks if build wider can incorporate the bike / pedestrian traffic and have the vehicles on the roadways. I really like the down town concept with the larger sidewalks and the "walkability" concept. The Ross Patio was a great initiative that I'm hoping will return - nice friendly feel to the down town, makes you want to go downtown, feels safer with more people around.</li> </ul>
<ul style="list-style-type: none"> <li>.</li> </ul>
<ul style="list-style-type: none"> <li>To add to what I have said above, city council needs to be diligent on keeping the bike lane pilot project open and seeing it through to completion. The information from this project will definitely help Red Deer's future mobility. Integrating commuter bike lanes will take time and any one with a vision for the future can only see that cycling will be a part of that future.</li> </ul>
<ul style="list-style-type: none"> <li>We need to have maximum protection no matter what mode of transportation we choose. I do not cycle when the roads or trails are icy or snow - covered. Otherwise I will drive my hybrid vehicle or walk for the exercise. So yes I am for any planning that improves the safety aspect of our streets.</li> </ul>
<ul style="list-style-type: none"> <li>Too much left to be seen, but it looks like the plan is a good one, and headed in the right direction.</li> </ul>
<ul style="list-style-type: none"> <li>I think it can work but I do think drivers in Red Deer need to somehow be educated. There seems to be a lot of anger among drivers towards anyone using the roads that isn't in a car. (Many people's negative reaction to the bike lanes is case-in-point). In city's where there are more walking/cycling trails (such as Portland or Amsterdam), driver's have a respect for people on bikes and give them the right of way. As I said above, I've had people swear at me, throw things at me, cut me off, or crowd me off the road while I've been riding (even on bike lanes). Even when I've been pushing a stroller across an intersection with the walk signal in my favor, I've been cut off by cars making a turn. Many drivers are aggressive and don't have a respect for alternative forms of transportation. Personally, I feel that negative culture is the biggest obstacle to this plan (as much as I want to see it in place!)</li> </ul>
<ul style="list-style-type: none"> <li>The trail system is extremely important; I've been disappointed to see the trails and more green spaces not be included in new neighbourhoods like Lancaster and Anders. I'd really like to see some of the old forests around Clearview Ridge kept, and perhaps a trail that links Clearview Ridge to the Michener Centre trail.</li> </ul>
<ul style="list-style-type: none"> <li>the draft is little more than a feel good document. simply put Red Deer, like other growing cities, depends on vehicle traffic and this city needs to focus efforts on moving traffic first with bike and walking being at best a secondary concern.</li> </ul>
<ul style="list-style-type: none"> <li>It highlights alternatives that already exist in some form, rather than suggesting a dramatic shift. I can't "Strongly Agree" though, since the City is also simultaneously approving sprawling developments that clearly encourage driving (4 banks with drive-thrus in Clearview but no new pedestrian bridges??). This playbook reflects a shift that works for me, but the rest of Red Deer doesn't seem to have any incentive to get out of their cars.</li> </ul>
<ul style="list-style-type: none"> <li>This shift will have (has had) some push back but I believe is worth the effort, and can be</li> </ul>



gained with very little financial cost. For this to be effective each mode must be workable i.e., the person must get to where they are intending to go in a reasonable time. Part of that is a perceived or real adjustment of "reasonable." The other part is actually being able to get there in safety. For instance we have many miles of multi-use trails, but, by their route, few accommodate commuting. I believe this is the right approach. It will take time and social adjustment, but we'll be better off in the end. I'd like to see light rail transit beds being considered, particularly in new areas. In 50 years we'll be looking for them and it'll be hard then -- easy now. Thanks.
<ul style="list-style-type: none"> <li>• Yes, we do have to make a shift away from the vehicle. However, this will not happen overnight in our community. It will require a significant culture change that could take a couple of decades to really take hold.</li> </ul>
<ul style="list-style-type: none"> <li>• I like the idea of more busses and increased trails but again I don't like the idea of more bike lanes and the people I have talked with agree with my opinion</li> </ul>
<ul style="list-style-type: none"> <li>• residents need to be active, take responsibility for their healthfulness, help reduce our collective footprint and rely less on vehicles.</li> </ul>
<ul style="list-style-type: none"> <li>• I'm now retired, but things are too far apart to always walk to. I go downtown to church and church activities but rarely to other things. I grocery shop in my neighborhood and other shopping is done at mall in the south end. I walk around my subdivision daily and see lots of others out. I don't mind bikes sharing the sidewalk with me. Have not used the transit, as I have a car. I see people waiting at the stops. I try to carpool when I can. I think the distance and weather stop a lot of people from walking and biking. Having not used the transit system, I can't comment on how efficient it is.</li> </ul>
<ul style="list-style-type: none"> <li>• I really agree with the idea of decreasing the resources allocated to support driving individual cars and moving toward a more balanced approach.</li> </ul>
<ul style="list-style-type: none"> <li>• I think that it will work in the future, but there is a lot of resistance to change. Our city is very focussed on the automobile. I think that we need to follow the lead of other cities and encourage walking and biking.</li> </ul>
<ul style="list-style-type: none"> <li>• It sounds good, but the first step will be to get rid of the bike paths that have ruined the road system in our city. I would never ride on them or allow my children to ride on them...someone is going to get killed. PLEASE, this is not anything against bikers, we just need separate trails for them off the road, an extra sidewalk for example.</li> </ul>
<ul style="list-style-type: none"> <li>• I strongly believe in the revitalization of our city centre by having a pedestrian area for outdoor activities in the summer.</li> </ul>
<ul style="list-style-type: none"> <li>• In a city of more and more younger dynamic mobile people - people that need to drive for work and to work, people that depend on their vehicles more and more your vision is out of step with how Red Deer is really evolving. Your vision seems more suited to European and Asian type of cities that are more compact. Red Deer like most North American cities is very spread out and it's not practical or sensible to have to walk or bike or wait for a bus. We have more months of winter here in our climate which makes the mobility vision impractical.</li> </ul>
<ul style="list-style-type: none"> <li>• Yes the shift would be good for Red Deer. Not sure if public opinion and City Councils would stand behind it when it actually comes to the tangibles. But good start. A lot of cultural shift has to occur.</li> </ul>
<ul style="list-style-type: none"> <li>• It will work anywhere if it's done right. This means that you need to separate the bike lanes from traffic and integrate lights, rather than destroy our existing roads and annoy the entire city (40th avenue). Painting lines alone isn't going to do it. Again, look to Copenhagen and Amsterdam, and hire a professional. I'd rather pay lots to do it right once, then lots to do it wrong multiple times.</li> </ul>

<ul style="list-style-type: none"> <li>I think it begins/continues the conversation. More dialogue and action need to happen .I know there has been opposition to bike lanes as they were first put in place during a pilot period, and all voices need to be heard, but I would be very disappointed if the opposition to this first pilot marked the end of bike lanes....Shifts and adjustments can be made to better satisfy motorist and bikers...and so I hope that Council will continue to look creatively at options to make bicycle commuting a viable option in Red Deer. I applaud this step presented by the mobility playbook as long as the discussion and further action in the direction of sustainable commuting can continue.</li> </ul>
<ul style="list-style-type: none"> <li>If we do not build the right infrastructure, people will find that anything other than driving a car for every single errand is too frustrating. Not everyone can afford a car, or can afford to drive it to every single destination. People want a healthier lifestyle, to walk more on their daily errands, and they want to bike more. But the streets are too dangerous and the recreation paths don't go where we want to go. Our mass transit doesn't have enough "mass."</li> </ul>
<ul style="list-style-type: none"> <li>We are a city of less than 100,000. We need to look forward but if the job is done like last year and the bike lanes...don't do it. It was a cheap way to try and bring something in. Do it right the first time ...even if it takes a decade to construct. We need roads for vehicles 12 months of the year. Bikes well in all honesty I perhaps seen 4 all winters on the routes I travel. Man is a lazy beast and we will not be a majority in icy weather riding our bikes because of a plan like this.</li> </ul>
<ul style="list-style-type: none"> <li>As a cyclist, the focus on both lane separation and connectivity to the river path was appreciated. Red Deer's public transit system, by most accounts, is ineffective and inconvenient. It was good that the playbook addressed a root cause of this, which is a lack of density surrounding transit hubs.</li> </ul>
<ul style="list-style-type: none"> <li>Personal automobile transportation is already very quick and efficient throughout the city (especially in comparison to Calgary/Edmonton). While it may be difficult to convince many Red Deer residents to reduce their dependence on their vehicles, I believe it would be a positive shift.</li> </ul>
<ul style="list-style-type: none"> <li>Just another waste of money, This is what 40 grand buys a neat little video and a two question survey. The city should save some money to fix and repaint the roads after the bike lane screw up.</li> </ul>
<ul style="list-style-type: none"> <li>Red Deer is a wonderful place to live and is growing all the time because of that. However, in all reality we have winter for 6 to 8 months a year. You need to drive. Whether it be in a car or on public transportation. The Trail system in Red Deer is AMAZING. And the bike lanes are not. The population in Red Deer that drives as compared to that that bikes, and with our climate, please take the bike lanes out. For the most part people or only one or two brocks from the trail system that can take you anywhere in Red Deer. If you are choosing to go for a long bike ride, hit the trails or the hiway. We can all share the road if a bike does choose to ride on the road. As long as bikers follow the same road rules (example - stopping in line at a red light and not passing all the cars to the front of the line so we have to then take turns and nicely pass the bike again before the next red light).</li> </ul>
<ul style="list-style-type: none"> <li>Building roads a little wider in the future for cyclists is a great idea. Closing existing lanes on the main road so that cyclists can use it 2 or 3 months of the year does not make sense. Perhaps like Edmonton who have taxi lanes we could have cyclist lanes which are in affect from May - October and cars aren't allowed in those lanes during those months. Then in the winter they are again usable.</li> </ul>
<ul style="list-style-type: none"> <li>I love some of the ideas, I think lighting on our trail systems would be fantastic, Red Deer has the best bike trail system I've ever seen and I think the focus should be on keeping those trails</li> </ul>

<p>safe rather than implementing bike lanes on our roads - Red Deer is a growing city, and we need the traffic lanes we have. I personally love the bike trails and I would NEVER use the bike lanes that have been implemented so poorly. I am still outraged that city council spent close to \$1M of our money on such a useless "experiment", our weather only permits cycling 4-5 months of the year. Red Deer is my home town, however I did live in Calgary for 11 years of my adult life, trying to base these decisions on something Calgary has successfully done is idiotic - they don't get nearly as much snow as we do and they have nicer weather year-round. If the mobility playbook focusses on everything other than bike lanes on our roads then I would Strongly Agree with it.</p>
<ul style="list-style-type: none"> <li>• balance between what works now and planning for the future</li> </ul>
<ul style="list-style-type: none"> <li>• Putting the pedestrians and cyclist first, and applying the public policies needed to accomplish the goal is of tantamount importance.</li> </ul>
<ul style="list-style-type: none"> <li>• I don't want to die of a heart attack. *** Note - I realized what Bike lanes do for me... they don't allow me to ride (unless I am hardcore) all year round. BUT they do open up the shoulder season (march and likely October/Nov to cycling. So many people say bike lanes don't get used year round. True. But they can offer me EIGHT weeks more access to pedals. EIGHT. Also - My 5 year old daughter (at the time) rode her bike home from school last year with us - almost a 8km ride. This year we are planning to take a bike trailer to the day home to ferry kids. It can be done.</li> </ul>
<ul style="list-style-type: none"> <li>• Red Deer is a growing city and a changing place, and I definitely can envision specific subsets of the population that would benefit from each of the four modes of transportation listed - walking, driving, transit, and cycling. (I also recognize that many individuals use more than one mode of transportation). So yes, I think this is a shift that will work for Red Deer, and I think it is a shift that needs to happen for Red Deer. I think it is more a question of how we can shift the way the people of Red Deer think. There are always going to be people who resist change. How can this shift be implemented in a way that gives people time to adapt?</li> </ul>
<ul style="list-style-type: none"> <li>• I think that it's such a great idea. The idea of interconnecting all the trails into one big network is a fantastic idea! that way it would be ideal to cycle or jog/walk to almost anywhere in the city.</li> </ul>
<ul style="list-style-type: none"> <li>• We are too car-centric and have made it difficult to use other modes, no matter how nice our trail system is.</li> </ul>
<ul style="list-style-type: none"> <li>• I definitely support the shift.</li> </ul>
<ul style="list-style-type: none"> <li>• Red Deer is too small of a city for this type of urban planning. You should focus on the needs of the community instead of trying to make the city something it's not. You continue to approve single family residential development thereby moving people away from the downtown, business and other amenities. Meanwhile, the number of the cars on the road continues to increase as you take away lanes needed by commuters. It doesn't make sense that someone from the new Vanier would walk to the farmers market on Saturday morning. I know city planners think people will ultimately jump on board the commuter bike program but this just isn't realistic. Transit and walking don't fit in with people either. For the people of Red Deer, it's not about the journey, it's about the destination. We just want to get where we're going quickly and without hassle. Please consider this while planning for our future transit.</li> </ul>
<ul style="list-style-type: none"> <li>• What's the shift specifically?</li> </ul>
<ul style="list-style-type: none"> <li>• No as stated above we are not like Victoria or the city in the states or Denmark. We have ice and blizzards for 4-5 months of the year. People need safe transportation at that time at an</li> </ul>

affordable price. Increasing transit frequency would work but making it harder for cars does not make sense.
<ul style="list-style-type: none"> <li>if the past attempt at bike lanes is an example, it is dangerous. I would like to see bike paths nearer sidewalks and not near the roadways. This keeps the cyclist and motorist safe. Taking out parking downtown, has encouraged me to go downtown less, because walking is an issue for me parking is of prime importance. Maybe future areas could have wider sidewalks and not hinder the movement of traffic.</li> </ul>
<ul style="list-style-type: none"> <li>As long as they don't take away more traffic lanes to create bike lanes.</li> </ul>
<ul style="list-style-type: none"> <li>I believe in the planning in the "Go" plays chosen/stated, the Play #5 - Nurture a culture of change should be a "first priority", especially for the people who do not see the need for a change. Leaving it until the last of the 5 Plays is too late. We need to have the population realize there needs to be change. We need to establish the culture of change, then the other plays become viable.</li> </ul>
<ul style="list-style-type: none"> <li>More bike trails is good. Wider sidewalks is good as well.</li> </ul>
<ul style="list-style-type: none"> <li>Balance between walking, cycling, buses, and cars is good, but honestly I won't use the bike trails if they are part of the street. It doesn't feel safe to me to be so close to cars, the drivers of which may or may not know how to deal with cyclists. I'd rather not take any chances. I do use (and love) the walking/biking trails though, which are removed from traffic.</li> </ul>
<ul style="list-style-type: none"> <li>We need to accommodate all types of lifestyles.... Including elderly and wheelchairs..</li> </ul>
<ul style="list-style-type: none"> <li>I like more focus on pedestrians and bikes as we need to start going more sustainable as a city.</li> </ul>
<ul style="list-style-type: none"> <li>There will only be a real balance if the mobility planning is accompanied by sensible land use planning. When houses and homes are far from services, shops and pubs traveling becomes compulsory. How many communities are within 5 minutes of a local shopping hub, or even within 5 minutes walk of the home-owner's workplace? Reducing the need to travel would reduce the number of vehicles on the road making a lot of this planning easier.</li> </ul>
<ul style="list-style-type: none"> <li>There is too much emphasis on a balance between them when we don't have a strong need for one of them at this time. We need a drastic increase in walking bridges over main roads and proper lights at crossing. That should have been covered before taking the money and putting it into bike lanes that barely get used. We have amazing trails more effort should have been put there. No one should be on council running there own agenda and if you think the city doesn't see this for what it is. Your wrong.</li> </ul>
<ul style="list-style-type: none"> <li>I think it's a step in the right direction, I don't think most Red Deerians are open minded enough to think about options that don't include driving. They may use the trail system for leisure, but not as a way to get from place to place, and I think they will have a hard time thinking about using transit as not just for people who "can't afford" to drive.</li> </ul>
<ul style="list-style-type: none"> <li>Having a better connection between roads and path access would make it safer for pedestrians and cyclists and could contribute to making this a greener and more friendly city.</li> </ul>
<ul style="list-style-type: none"> <li>Again, considering the diverse mobility needs of our city's population it is extremely important to maintain a balance of options for all. Most of all, I implore you, please keep all sidewalks clear for Red Deer's less mobile citizens so that they are not housebound or dependent on others for their transportation.</li> </ul>
<ul style="list-style-type: none"> <li>The problem with transportation planning so far in Red Deer has been, in my opinion, that the emphasis has always been on "what's good for drivers?" We need to get a balance going--and if any of it upsets drivers, they need to build a wall and get over it. If this plan slows traffic, slows the commute, so be it. Simple answer, people: leave home earlier.</li> </ul>

<ul style="list-style-type: none"> <li>• There can be a bit of friction with people whom may not want to change their lifestyle that much. They may think that this plan will cost too much with no benefit to them.</li> </ul>
<ul style="list-style-type: none"> <li>• It seems to miss two important considerations. First, life expectancy is increasing each year. For people to live longer and to be in good health in their senior years means that the frequency and severity of injuries from all activities, including transportation, needs to decrease. The playbook shows many activities that are relatively unsafe and, in doing so, appears to promote facilitation of unwise choices. It also does not recognize the rate and severity of casualties that occur resulting from the different transportation choices; for example, studies show that bicycling on urban roadways results in net harm to people compared to driving in vehicles. So, to promote a population that is healthy in its senior years, keep bicycles off the roads. Additionally, walking is a dangerous activity for many persons in the elderly senior group. I do not recall recognition in the mobility playbook of ways to facilitate the transportation of older seniors.</li> </ul>
<ul style="list-style-type: none"> <li>• We need to shift our mentality. If we have nice, lit and wide sidewalks to walk for 10 minutes to the grocery store, or bike to work instead of always driving, then we can leave the car at home more often.</li> </ul>
<ul style="list-style-type: none"> <li>• See previous comments.</li> </ul>
<ul style="list-style-type: none"> <li>• see comment above</li> </ul>
<ul style="list-style-type: none"> <li>• It works if everybody can work within a mile of their residents but that is unlikely as most of our residential development is in one side of the City. Walking and biking is a fad that may not catch on as our population ages and facilities are spread out too far,</li> </ul>
<ul style="list-style-type: none"> <li>• I believe that there are members of our community who will complain about any change that doesn't directly satisfy their personal needs. Nonetheless, I believe the majority of the population will appreciate a focus on choice and the benefits that come with taking the focus away from private (often single-occupant) motor vehicle travel. Also, I think there has to be a shift; it's not a matter of choice. Like the world population generally, our city's population is aging and the reality is that without alternatives to driving one's self, many Red Deer residents will end up house-bound and isolated.</li> </ul>
<ul style="list-style-type: none"> <li>• I agree with the wider sidewalks, but I'm concerned that the new bike paths on the new roads are taking lanes away from traffic that can already be congested. I also don't feel like they are safe. In the video the paths were separated from the road, but the paths created last year are on the road and sometimes even criss-cross with the vehicle lanes. I think at intersections, bicyclists are safer getting off their bike and moving to the sidewalk.</li> </ul>
<ul style="list-style-type: none"> <li>• MORE lights on the trails? Please, NO. Red Deer has horrendous light pollution. Sometimes a person wants to take a walk at night and look at the stars - which are really hard to see more and more every year because of too much light pollution. I don't drive, so there is no way to go out into the country to stargaze.</li> </ul>
<ul style="list-style-type: none"> <li>• I think it definitely works for Red Deer as we need more options than just driving in our own motor vehicles everywhere. If the infrastructure is planned properly it is much cheaper than retrofitting roadways that were only designed for motor vehicle traffic. "If you build it they will come" applies in this instance: as we have more pedways, bike lanes, and increased public transit people WILL use it. They can't see the benefit until it is there.</li> </ul>
<ul style="list-style-type: none"> <li>• yes we need to a good balance of cars, pedestrian, cycling and transit</li> </ul>
<ul style="list-style-type: none"> <li>• I think this is the direction we need to go in as we become a larger city</li> </ul>
<ul style="list-style-type: none"> <li>• A step in the right direction.</li> </ul>
<ul style="list-style-type: none"> <li>• Putting pedestrians first has been part of city plans for ages but it hasn't happened. City</li> </ul>

leaders rarely model this behaviour and there has been little conversation about WHY we need to be putting pedestrians first. How is it going to actually happen this time?
<ul style="list-style-type: none"> <li>• Maybe not currently. But everyone will be very thankful when people start flocking and staying within this city because are planners have been forward thinking.</li> </ul>
<ul style="list-style-type: none"> <li>• more options</li> </ul>
<ul style="list-style-type: none"> <li>• Provided this can be done in a cost effective manner. Crazy high taxes is no way to get the job done. I am all for change that makes sense for growth, but I think it is a horrible waste of money and very poor planning that the parkade was built over the transit terminal. We should not be creating more expensive parking downtown, we should be making it a transit and pedestrian friendly enviroment.</li> </ul>
<ul style="list-style-type: none"> <li>• I think this will work for Red Deer IF it's done slowly and methodically and with care and attention paid to those who are not completely on board. Any big changes should be presented in a way that addresses and respects the opinions and concerns of those who don't agree. Proper listening and respect can sway those on the fence toward supporting and trying out the shifts being put forward. Shoving the changes through or brushing off the concerns of the vehicle-centric will harm the whole effort. I'm with you, as long as it's implemented with care. I want to take transit to work but the current routes and timing make it difficult. I want to live in a healthy, cohesive city where people aren't divided into two angry camps.</li> </ul>
<ul style="list-style-type: none"> <li>• It is important that we make it convenient for people to move around Red Deer without relying on cars all the time.</li> </ul>
<ul style="list-style-type: none"> <li>• as long as bike lanes do not restrict the flow of traffic</li> </ul>
<ul style="list-style-type: none"> <li>• I definitely support much of what is in the mobility playbook, but I wonder how many of the people who drive to work use their vehicle for work also. It would be an interesting comparison as it is indeed harder for these people to use alternative modes for commuting.</li> </ul>
<ul style="list-style-type: none"> <li>• I think that there is too much focus on vehicle transportation and not enough on pedestrian, biking and public transit. However, I believe that all modes of transportation need to be taken into consideration when determining the best way to address these areas.</li> </ul>
<ul style="list-style-type: none"> <li>• Shifting - even a little bit - will be a great move for Red Deer. Bicycling, walking and taking transit should be easy options. Too often, our current design (of roads and neighbourhoods) think of these modes after the fact and our inability to use them easily is reflected in that.</li> </ul>
<ul style="list-style-type: none"> <li>• I did not get shifted.</li> </ul>
<ul style="list-style-type: none"> <li>• This draft seems to meet everyones needs. Keeping in mind. There are more cars than bikes!! Scrap 40th ave bike lane!! But I do like the wide sidewalks.</li> </ul>
<ul style="list-style-type: none"> <li>• 15 min bus wait was more realistic compared to 30 min wait. More freedom to go places.</li> </ul>
<ul style="list-style-type: none"> <li>• Let's be honest-- Red Deer is cold and snowy. People drive because of this and because we are too small to have a large city transit meaning it takes forever to travel by transit. Create more trails and off road space for people to enjoy in good weather but acknowledge that we don't have a climate conducive to large scale pedestrian or bike traffic.</li> </ul>
<ul style="list-style-type: none"> <li>• Deleting the vehicle lanes on 40th ave at 39th st. and 55 st has only created a vehicle problem with traffic backing up there. Now the vehicles are cutting through the neighboring subdivisions ,eastview michner and morrisroe to avoid the traffic jams at those 2 intersections. The streets in these areas were built to safely handle local traffic only. Bike paths should only be considered as a recreation mode of transportation in Red Deer because our winters are so long. How many cyclists have you seen daily in the last 6 months. The lineup of vehicles idling at red lights on Ross street burn up more gas and create more polution than the bike trails would ever save. The bike trails should be for recreation and the cost should come from the</li> </ul>



recreation budget, be separate and not interfere with vehicle traffic. It is the responsibility of our elected officials to spend our tax dollars wisely, not for any special interest group. bike paths, not commuter. the amount of traffic or the speed at which commuters travel. handle large amounts of traffic consistently.
<ul style="list-style-type: none"> <li>Integrating the mechanical and physical movement brings a balance that is much required for many of the commuters. It brings in harmony of healthy movement integrating the daily commute and workout, and also contributing to build a greener planet.</li> </ul>
<ul style="list-style-type: none"> <li>How we get around our city should be flexible - time of year, purpose of trip. This new balance being presented allows me to exercise that flexibility. Right now I have little choices or little examples of what is possible.</li> </ul>
<ul style="list-style-type: none"> <li>I think Red Deer has a pretty good system and these improvements will really help. However I believe the road maintenance and snow removal are huge concerns!! We need to come up with much better solutions as to snow removal rather than just creating huge, inconvenient and unattractive mounds of snow and ice on the road. It makes driving and walking difficult and dangerous.</li> </ul>
<ul style="list-style-type: none"> <li>We must plan to make cycling safe and walking more efficient. We currently plan to save drivers less than a minute while making pedestrians take an extra 5 minutes (eg Taylor / Ross St interchange). Good luck on transit though....could be very expensive and will take a number of years and many good experiences to change people's behaviour.</li> </ul>
<ul style="list-style-type: none"> <li>I think most people want to have a great city to live in with lots of easy options for transport and recreation without having to drive to get there. I think this plan aims for that which is good.</li> </ul>
<ul style="list-style-type: none"> <li>Although I would like to "strongly agree" with this question, it will likely be very difficult to make the shift away from automobile-centric thinking in Red Deer. Some of the reasons I have heard for resistance to try alternative (non-car) transportation are: "I'm busy and it takes too long", "it's not safe", "it's too far to walk/bike", and "I'm not a bus person". To counteract the standard excuses, alternative transportation would ideally be convenient, safe, fun and "cool" (maybe local celebrities could get involved by participating in and promoting the walk/bus/cycle options?).</li> </ul>
<ul style="list-style-type: none"> <li>There needs to be separation / barrier between the bike lanes and the roadway.</li> </ul>
<ul style="list-style-type: none"> <li>Red Deer is a young city and we know it is going to grow. That is why it is important to get it right at this time, and the Mobility Playbook reflects the right philosophy.</li> </ul>
<ul style="list-style-type: none"> <li>Designing primarily for cars poses a threat to pedestrian and cycling safety, as well as making public transit a less than favourable option. We should not punish those who choose not to drive, or can not drive, by making walking, cycling and transit inconvenient options. The mobility Playbook reflects a direction that will benefit everyone.</li> </ul>
<ul style="list-style-type: none"> <li>Red Deer seriously lacks a balance as it is now, so this will address the imbalance.</li> </ul>
<ul style="list-style-type: none"> <li>I agree with the balance, however not confident others will agree</li> </ul>
<ul style="list-style-type: none"> <li>Creating better sidewalk, trails and connection features is a great start. Transit shelters are a must and better trail connection to the bus stops, giving the bus rider some pride in taking the bus instead of being left in the middle of a stranded snow bank.</li> </ul>
<ul style="list-style-type: none"> <li>The playbook does not give much detail. The bike lanes put in during 2012 were a failure. We need innovative ideas on how to increase transit ridership. How about some reduced senior passes that are valid only during off peak hours. Cost could be about \$30 per month. Also make transfers good for two or three hours so a person can go to a mall and back home on one transit fare if they do not spend too much time there. Offer temporary discounts on</li> </ul>



transit passes to encourage people who drive to work to switch to transit.
<ul style="list-style-type: none"> <li>I would agree. It is going to take some time to get people's mind sets changed. Therefore whatever does get implemented will have to be done thoughtfully or you will get a negative response like for the bike lanes on the roadways. Then you will have to work twice as hard to convince people.</li> </ul>
<ul style="list-style-type: none"> <li>I think you have to concentrate more on the movement of the traffic of cars through and around the city. You have a traffic light stop southbound traffic where 200 feet there is another crosswalk for people. NO THOUGHT. How much are we paying to put up these lights and cost of electricity? this is in the corner of 67th Street and 30 Ave.</li> </ul>
<ul style="list-style-type: none"> <li>Everyone strongly values pedestrian walkways and the trails systems. The group that keeps getting their panties in a knot over the bike lanes are a bunch of red necks that like to complain about anything that might be better for the environment. It would be good to see the City not held hostage by these crazies and stick to their guns on making our community more liveable. More roads and more cars does not make for a better community. If you make it nicer and easier to walk and ride, then people are more likely to take and use more environmentally friendly methods of commuting.</li> </ul>
<ul style="list-style-type: none"> <li>Red Deer is small and young enough for that shift to happen.</li> </ul>
<ul style="list-style-type: none"> <li>AS above, the different means of getting around Red Deer, provide a good selection of choices for Red Deerians and visitors.</li> </ul>
<ul style="list-style-type: none"> <li>See comment above. Public education is critical to this change and thus the need to move slowly in retrofitting. The bike lanes just installed are an example of that. They need "tweaking" in order to get acceptance of them and some that were done are simply unsafe. These need to be taken out immediately before there is an accident and this whole process will be set back tremendously . A great start has begun and I commend the City . Bike trails need to be a part of all planning in new developments but please go very careful in imposing them where they have not been. Downtown improvements with sidewalks and sitting areas ,etc. have been tremendous.</li> </ul>
<ul style="list-style-type: none"> <li>I think the Playbook hits home on the point that we can't sustain the type of development that we are currently pursuing. By looking down the road in Calgary, we see what urban sprawl becomes if it goes unchecked. This not only impacts the city's financial ability to provide services to taxpayers, but also takes away from the environment we live in. Red Deer has the chance to get ahead of sprawl, and create an interesting and vibrant city. This playbook is a great first step on a long journey. I would caution though that this change must be all-encompassing. We simply cannot create change in downtown, but allow our developing neighborhoods on the city's edge to continue developing as they have been. This playbook should also reach out to land use policy, and ensure that we encourage higher-density multi-use spaces on the edges of Red Deer. We must hold the entire city to a higher standard.</li> </ul>
<ul style="list-style-type: none"> <li>I have seen a similar shift work well in another city.</li> </ul>
<ul style="list-style-type: none"> <li>Talk to the people that drive the streets or Red Deer daily that are born and raised here not people transplanted. This is Alberta and we have 4 seasons to deal with. Do not hide the facts from the people, let them decide in a timely manner. You have to spend a little to get things to work out properly. Hopefully the online Census program will work so that future issues can be put out to the Homeowners in the same process.</li> </ul>
<ul style="list-style-type: none"> <li>Cycling will only work on a widespread, useful level when bike lanes are dedicated to bike traffic, and are part of the road network, but separate from vehicle traffic.</li> </ul>
<ul style="list-style-type: none"> <li>No. Plain and simple.</li> </ul>

<ul style="list-style-type: none"> <li>• yes</li> </ul>
<ul style="list-style-type: none"> <li>• Anything is possible with vision and positive thinking.</li> </ul>
<ul style="list-style-type: none"> <li>• Tough question. Do I think the draft Mobility Playbook reflects a shift that works for me? Absolutely. Do I think it reflects a shift that work for Red Deer? Not quite yet - we are still relatively entrenched in a car mentality. The City has to demonstrate leadership that provides opportunities for more Red Deerians to make better sustainable mobility choices.</li> </ul>
<ul style="list-style-type: none"> <li>• If you build it and educate, they will come. We must work together in all sectors to allow everyday people to get from point a to point b easily and safely.</li> </ul>
<ul style="list-style-type: none"> <li>• We HAVE to change. People have to change, be more open minded less RED NECK. Or there will not be a future for our kids. I will fly past Councillor Stephan on my bike, while he is getting frustrated sitting in traffic. I challenge him to a trip through town in rush hour. I will win and I will be following the rules of the road.</li> </ul>
<ul style="list-style-type: none"> <li>• Agree that more emphasis should be placed on bike, pedestrian and transit travel.</li> </ul>
<ul style="list-style-type: none"> <li>• We are already over our head in debt....how will we possibly pull this off financially? Our population is growing, how will you accommodate everyone in the limited space that we already have?</li> </ul>
<ul style="list-style-type: none"> <li>• Majority rules.....99% of the public travel in vehicles, and therefore you need to take care of that first. You can't cut two lanes off an existing 4-lane road and make thousands of cars share half the space just to allow five bikes a day, for four months a year use the other half of the road. In future roads, for sure be more pedestrian friendly, but not at the expense of vehicle traffic. Also, transit will not move forward until service is expanded to 20 or 15 minute intervals in peak times. The total hours of service is also lacking, particularly at night. I can't take the bus to a concert or Rebels game because if it goes a bit late there is no bus home.</li> </ul>
<ul style="list-style-type: none"> <li>• I think we need to concentrate more on making biking work in the downtown. Abandon (for now) the 40th Ave bike lane to concentrate on adding downtown infrastructure for biking. That is the only broken connection between our fantastic trail system and downtown. The first adopters of cycling will want to go downtown, whether it's for work or to attractions such as Ross St patio, the new splashpark or for coffee/restaurants.</li> </ul>
<ul style="list-style-type: none"> <li>• Transit is the biggest issue, you still can not go anywhere and if you have a transfer and miss the bus that is another \$2.35 which is coming out of our pockets. So by making the transfers longer it would help us out, especially on the school runs before and after school when the buses are really crowded.</li> </ul>
<ul style="list-style-type: none"> <li>• Red Deer is a community that has primarily been built on industry including Oil and Gas. Many of these industries require vehicles for day to day business, which also make it convenient for people to use them away from work. With time people will adapt to other transportation choices, if they are offered. I look forward of the future of Red Deer.</li> </ul>
<ul style="list-style-type: none"> <li>• It's a good start. I love what you've done with downtown, making it an area to walk around and not just drive every where. Transit will have to become more exact with times, and during the kids bus ride to and from school, more buses will regularly have to be sent out.</li> </ul>
<ul style="list-style-type: none"> <li>• I grew up in rural Sk.and am not keen on riding my bike on city streets but would do so on the paths.</li> </ul>
<ul style="list-style-type: none"> <li>• same as above</li> </ul>
<ul style="list-style-type: none"> <li>• cars should have priority. It is the best way to travel. bicycles should have to fend for themselves or get lost.</li> </ul>
<ul style="list-style-type: none"> <li>• A cyclist myself, I don't agree with removing existing roadways to make bike lanes. We're</li> </ul>

<p>almost 100,000 people but not yet large enough for the population to accept the loss of vehicular traffic ways. What may work for the Edmontons and the Calgarys, doesn't necessarily work for Red Deer. Integrate into new neighborhood plans, the construction of wider two-lane roads thus allowing space for bike lanes.</p>
<ul style="list-style-type: none"> <li>I believe that our society as a whole is trying to live a greener and more a healthy life style ... we tried the community bikes a few years ago ... it did not last long ... they have a program in Montreal that works quite well ... I would like to see something like that here as well. Focusing on making the movement work well for all modes of transportation in the a great goal to strive for. Our first try at bike lanes was not well thought out .... it was done in such a way as to compete with cars and rob homeowners of parking on their front streets We can do better I am sure ... choosing 55 Street as a share situation was a bad choice .. its too busy ... need to try to find secondary streets to put the bike lanes on ... not mains/busy streets ... we need bike lanes , just need to be very careful about where they are placed.</li> </ul>
<ul style="list-style-type: none"> <li>There is no balance of reponcability by users. Drivers are taxed to the limit while cyciists pay nothing compared to the amount of road tax drivers of all motorized vehicles do.</li> </ul>
<ul style="list-style-type: none"> <li>Would like to see more emphasis on public transit, including parking areas (possibly with small parkades) on or near the City perimeters with frequent small bus service to downtown and perhaps other important centres such as the Centrium and Collicott at their busy times.. Pay to park and include 'free' bus. Also consider small collector buses in residential areas to main routes.</li> </ul>
<ul style="list-style-type: none"> <li>The shift in transportation use must come from the citizens not from a money wasting plan. We want to drive out own automobiles, on roads, with multi lanes without potholes...just ask! This is our culture!</li> </ul>
<ul style="list-style-type: none"> <li>I believe that future economics is going to cause more people to need alternatives to owning and using cars on a regular day to day basis. Although we live in a wealthy resource based economic region of Canada, we should plan to have good options for all levels of wealth in our community. This addresses that. If we build it well it will be used.</li> </ul>
<ul style="list-style-type: none"> <li>I dont know how much money this playbook cost the taxpayers of Red Deer but what ever it was is too much.You cant force your utopia idea of transport onto a population that relies on the current methods to get from point a to b.The current experment with bikelanes being a case in point.There was no planning , no thought, and no vision put into this program before it was instigated.As a result it has turned out to be a total failure.Even though Red Deer city council seems to be bound and determined to ram bikelanes down our throats they are making no provisions in plans for new subdivisions or traffic planning to include bike lanes.As a result at some time in the future if the bikelanes are adapted they will be making major changes to streets throughtout Red Deer that should have been included in their current planning.A case in point being the current traffic interchange on Taylor Drive just before it crosses the river.WHERE ARE THE BIKELANES???a 14 million dollar screw up waiting to happen. I see no reason why consultants from other countries were hired for this survey.They also say they consulted with 1000s of Red Deerians.REALLY????I KNOW OF NO ONE THAT WAS CONSULTED.What knoweldage or experince do this consulants have with Alberta climate, culture, lifestyle, or work habits.They are trying to apply a European idea to a Alberta city and it isnt working.They can go back where they came from and conduct there surveys in there own countries.Our city council should have had better brains than to hire a company that isnt qualified to work here or give Red Deerians a report that is false and misleading.</li> </ul>
<ul style="list-style-type: none"> <li>The original infrastructure of the city already accommodates these elements well. I do not feel we need to add more bike lanes alongside motor vehicle lanes. The interconnected pathways</li> </ul>

and existing side walks provide a method of bike and pedestrian transport that we already seem to struggle keeping accessible during winter months. I wouldn't mind seeing additional transit though. I have attempted transit and in order to get to and from work, I would have to be on a bus for 1 hr 45 minutes as compared to 30 minutes in a car. I would rather see other initiatives addressed such as road and side walk clearing in winter.
<ul style="list-style-type: none"> <li>• I much prefer the idea of the bike lanes when seperated from traffic.</li> </ul>
<ul style="list-style-type: none"> <li>• The Copenhagen concept will not work for Red Deer. The climate in central alberta is significantly different than Copenhagen or even Victoria BC. The work force that makes up the majority of taxpayers need to have mobility which an automobile provides. The majority of citizens believe the concept is not the direction that is needed for the City.</li> </ul>
<ul style="list-style-type: none"> <li>• I like the Idea of separate bike lanes,preferably further away from vehicle traffic; maybe seperate two "lanes" for foot traffic and bike traffic on a slightly wider "sidewalk" or trail.Yes it looks like you are trying to create a nice balance of traffic types and accomadate all types of movement</li> </ul>
<ul style="list-style-type: none"> <li>• No</li> </ul>
<ul style="list-style-type: none"> <li>• We spend eight months in cold conditions the majority do NOT wish to walk no matter how you try to spin it,as for the bike routes (40ave max 16 bikes in one day)this merely proves the stupidity of a badly thought out plan. So stop wasting my tax dollars.</li> </ul>
<ul style="list-style-type: none"> <li>• yes- Red Deer folks are active and it would be nice to keep it that way for our children growing up!</li> </ul>
<ul style="list-style-type: none"> <li>• So needed. I'll strongly agree, when I see it implemented and working the way you've envisioned.</li> </ul>
<ul style="list-style-type: none"> <li>• Costs versus revenue are not in line. Bus system has limited passengers at high costs already Big buses carrying 5 people is not enviromentally friendly. Weather is a problem.. Bike lanes a joke and waste. Not toronto or copenhagen stop the idea if river walks like san antonio or whatever other ideas and get back to reddeer ..</li> </ul>
<ul style="list-style-type: none"> <li>• As the failed bike lane project has proven, there's very little desire for increasing bike access. Walking has never been an issue and doesn't need to be addressed. Red Deer is already a city designed for cars, you can't decide it's now a city for walking.</li> </ul>
<ul style="list-style-type: none"> <li>• I don't feel the video was clear enough to answer this</li> </ul>
<ul style="list-style-type: none"> <li>• From our home to downtown Red Deer, it is approximately a 45 minute walk. However, we have to walk down Ross Street, with it's narrow sidewalks, crazy drivers, noise and air pollution from the vehicles. It is a pretty scary walk, walking so close to the road. Especially past 40th Avenue going westbound.</li> </ul>
<ul style="list-style-type: none"> <li>• Too much emphasis has been placed on supporting the needs of pedestrians. We have city street lights placed out in different corners of the city that still give priority to pedestrians. I've seen many times where people will get out of their cars and run over to the street light and select the appropriate "pedestrian walk button" so that the light will change in their favour. Also, we need to set up street lights so that closely spaced lights are synchronized.</li> </ul>
<ul style="list-style-type: none"> <li>• Helps to better define the direction intended and make it "intentional" rather than haphazard as it has been in the past.</li> </ul>
<ul style="list-style-type: none"> <li>• I use to live in Red Deer, but now am in Rocky. However I am in Red Deer very often, and Red Deer is the City I would move back to. Yes, I think we do need to start thinking in this direction. I think the economy is going to eventually involve using less fuel, gas omissions etc. Plus, I think that people are going to start realizing the benefits of exercise. I could go on and on with this, but am sure you get the picture. However, I also think that the bicycle paths in</li> </ul>

<p>town are not yet up to specks. They are awfully narrow, and I can envision a truck with wide mirrors wiping someone out quite easily, or a vehicle driving over the line into the next lane, and therefore forcing the driver next to the bicycle lane to move into the bicycle lane. Plus, I have seen several vehicles parked in the bicycle lanes. Isn't there a way to put a few less bicycle lanes in, but make them wider at those places? I am thinking of in front of Central School as an example here. If someone gets hit on a bicycle as opposed to in a car - it is a much different scenario, and a fine just won't cut it...*my thoughts. :)</p>	<ul style="list-style-type: none"> <li>I would love to see our bike lanes separated from traffic lanes with a functional divider that works as added protection to the bicyclist as well as separated from the side walks. Business downtown need to ensure their sidewalk retail product displays and signage are not impeding wheelchair usage - which is currently not happening. Would also like to see selected parking stalls on Ross Street and little Gaetz dedicated to seniors only or those with mobility challenges that might not need a handicap authorization placard, but would appreciate the opportunity to park closer to their intended destination to accommodate their physical limitations. Everyone else should gladly park further away and take "pride in your stride".</li> </ul>
<ul style="list-style-type: none"> <li>Parking downtown just gets worse every year. It doesn't matter how wide the sidewalks are if no one is shopping downtown. Between Pauls patio and the "park" area in front of the old CIBC bank, it's too frustrating to drive through and try to park downtown. Last summer I went downtown maybe two times. It was ridiculous. I love flowers and trees and patios - absolutely. I have them in my yard. However, I don't put them on my driveway because I like to park in my driveway. We are a society of drivers and vehicles. We pay our taxes to pay for our roads and we'd like to use them. There are sidewalks for pedestrians and always have been. I ride my bike on the sidewalks. It is too dangerous for bikes to be on the road and I think it's ridiculous to promote that.</li> </ul>	<ul style="list-style-type: none"> <li>Having previously worked with the Traffic Section of the Engineering Department, I have always been struck by the width of our streets and of course the area required to build Arterial Roadway Intersections. I was able to connect that very issue with the themes presented in the Playbook and why the time to change to a more balanced approach to Transportation Planning is now.</li> </ul>
<ul style="list-style-type: none"> <li>Until they drastically improve transit it will be under utilized. I have used it numerous times but between figuring out the route and time and less than friendly drivers I will use as seldom as possible. People that live in Red Deer don't necessarily work in Red Deer or the neighborhood they live in so your vision is truly not realistic. People drive their kids a block to school when they could walk. Kids don't ride their bikes like they once did and no amount of thinking otherwise will make it so. Expand the bike paths so the people that drive can unwind on them, but to think that cycling is ever going to be a preferred method of getting around is not realistic. Quit wasting time and more importantly tax payer dollars on this folie.</li> </ul>	<ul style="list-style-type: none"> <li>A balance between vision and current practicality is required. slow progress is still progress.. I look forward to the day when all different types of transportation are equally valued, but appreciate it will take time.</li> </ul>
<ul style="list-style-type: none"> <li>Fianlly the pedestrian is in the plan. We have spent millions of dollars trying to accommodate the cars and trucks, but have neglected other modes, which if used would decrease the pressure high traffic volumes place on costly infrastructure.</li> </ul>	<ul style="list-style-type: none"> <li>I lived on a bus route for 13 years (Reichley street) and hated how often a totally empty bus went by!! Thought it was a huge waste of tax payer dollars for the busses to run empty! They were busy before and after school but that was it! Anywhere you go in the city an empty bus will pass you! I don't know what the solution is for this but empty busses running continuously</li> </ul>

just to keep someones job is a waste!
<ul style="list-style-type: none"> <li>I really like the what has been done in the past few years with making, especially the downtown core, more pedestrian/cyclist friendly and think it's a great idea to make that shift as the city continues to grow. I think that the City's trail system is a huge positive and like that is can be accessed very easily throughout the city and I think it's important to maintain that link as the City grows.</li> </ul>
<ul style="list-style-type: none"> <li>Yes, as long as development supports ammenities being closer by in neighborhoods, and the bike lane safety is improved - ie. separate from road lanes.</li> </ul>
<ul style="list-style-type: none"> <li>I only have one concern that the video cleared up: 1. the bike/walking paths should not be linked to vehicle traffic, but separated from vehicle traffic and the artist conception of that was brilliant. I love accessing downtown, but parking is expensive and frustrating if a ticket results from poor timing. Rather than only regimenting the downtown parking with meters and parking machinery, could there be a monthly/annual pass process, like transit has, that would allow a first come, first serve/park access? Personally, I would pay an affordable monthly fee, even if I only used it half the time to make parking fair and available to all. This is just a thought I have had for awhile.</li> </ul>
<ul style="list-style-type: none"> <li>when they painted all the line on the roads maybe you shoud have driven them when the traffic is busy there was no planning shouls leave well enough alone</li> </ul>
<ul style="list-style-type: none"> <li>Again..A lot of people who live in this city have no common sense, they can not understand the bike lanes now and drive in them. They don't pay attention to the posted signs. So changing things doesn't matter. why waste tax dollars?? What happened to common courtesy, I have lived in Red Deer all my life 40+ yrs and we use to share the sidewalk bikes and pedestrians and no one got hurt, now that's wrong?? I'm very confused by the way the city counsel thinks.</li> </ul>
<ul style="list-style-type: none"> <li>I appreciate that the city has consulted many citizens in forming plans for the future! I think that so long as you keep the public aware of plans, and allow their input it will go well!</li> </ul>
<ul style="list-style-type: none"> <li>See the answer to #2. As a philosophy, I have no spcific concerns. I see the initial actions of the City, with respect to implementation, to be lacking the resolve and the basic communcation skills. Implementation actions to date may well be running counter to the larger plan.</li> </ul>
<ul style="list-style-type: none"> <li>I strongly agree with the idea that we should not continue to develop solely around single occupancy vehicles.</li> </ul>
<ul style="list-style-type: none"> <li>The idea is right, just depends what gets done with it. We will see what paint appears this year.</li> </ul>
<ul style="list-style-type: none"> <li>While I agree with the bike lanes I think they were very poorly thought through and rushed. More citizen input should have been requested and more thought put into the location and structure of the lanes. We have bike paths that should have been integrated into the plan, we also have streets that were not built to be narrowed for this accommodation and that move alone has caused much of the problem. Yes we do need better ways of getting around, but the car is here to stay and we need to ensure it is accommodated.</li> </ul>
<ul style="list-style-type: none"> <li>The only thing you must do is avoid disasters like 40th Ave. The lanes should go back to 2 lanes- a through and a left turn/through. Traffic lines up in the right lane with no one in the left turn lane then traffic is making dangerous moves into the right. There should have been one sidewalk on 40th made wide to accomodate bikes and pedestrians. Right now it is dangerous for bikes and vehicles, No one knows where they need to be driving. Otherwise great plans.</li> </ul>
<ul style="list-style-type: none"> <li>If we look at all means of transportation in balance then we will be focussed on all types of</li> </ul>



movement.
<ul style="list-style-type: none"> <li>If there is balance for accomodating alternate forms of transport people have options. Options are great because if it's nice outside most people would like to walk or cycle. One problem could be if it snows and all the commuting pedestrians and cyclists decide to drive to work instead. Will there be enough road way to accomodate all the extra cars at that time?</li> </ul>
<ul style="list-style-type: none"> <li>For many of the reasons stated above. More importantly, probably we need to change the way we develop our city. Until people work close to the neighbourhood they live in, the issues we face today will persist. But adding industrial, commercial, and other service industries into our residential areas is not a move I would favour. Most people don't even want schools there anymore. One last thing. Your playbook shows increased population density overall, but particularly along transit routes. That's fine, but busy roads and walkways equal noise. Do this, but require increased sound barriers for the homes from developers as constant noise is incredibly damaging to people over time. Better construction (such as ICF walls) and better sound barriers separating multiple family dwellings will produce happier people.</li> </ul>
<ul style="list-style-type: none"> <li>Yes and if people open up to walking, public transportation and cycling we will increase interaction with people in our community. Creating an even more inviting community.</li> </ul>
<ul style="list-style-type: none"> <li>Not everyone drives a car, and it is nice to have transit, bike lanes and trails to offer positive incentives to leave the car at home.</li> </ul>
<ul style="list-style-type: none"> <li>I think that Red Deer will accept a shift as a whole as long as a balance is found between pedestrian centered methods of transportation and vehicles. Previous attempts at this seem to have discounted the "driver" which was not received well within our vehicle centered City. However, I do believe that once a pedestrian friendly shift is planned and executed well it will be accepted and loved as much as our already existing trail system, which at one time was controversial itself.</li> </ul>
<ul style="list-style-type: none"> <li>I don't believe in Pedestrian First - I think it should all be equal. I live in an older neighborhood in Red Deer - how can you re-engineer that to suit this vision? I'd much rather see more money go into snow removal in this City so that I can get around more safely in the winter, than see more bike lanes.</li> </ul>
<ul style="list-style-type: none"> <li>we need longer tranist hours of service. since most people who used tranist are on fix incomes and are shift workers.</li> </ul>
<ul style="list-style-type: none"> <li>As a city grows geographically, rapid forms of transit are necessary, not slower forms like bicycles and walkways.</li> </ul>
<ul style="list-style-type: none"> <li>The bike lanes will create a safe and efficient route for cyclists. As pictured there would be more than just a paint line seperating and protecting them from motorists. The bike lanes should be used for cyclists, skateboarders, rollerbladers and those on mobility scooters. This will leave the sidewalks to pedestrians and joggers while preserving the road for motorists.</li> </ul>
<ul style="list-style-type: none"> <li>The bike lanes will create a safe and efficient route for cyclists. As pictured there would be more than just a paint line seperating and protecting them from motorists. The bike lanes should be used for cyclists, skateboarders, rollerbladers and those on mobility scooters. This will leave the sidewalks to pedestrians and joggers while preserving the road for motorists.</li> </ul>
<ul style="list-style-type: none"> <li>The people that are interested in walking and cycling are already using the fantastic trail system that exists in the City. The trail system is one of the things I heard about the most when I moved to the City. Integrating bike lanes onto major roadways to the detriment of traffic flow and safety in a City that is growing in leaps and bounds has been an expensive fail on the part of Council.</li> </ul>



<ul style="list-style-type: none"> <li>• We need to change habits. Education needs to be part of changing people's attitudes, behaviour and motivation to be more active.</li> </ul>
<ul style="list-style-type: none"> <li>• We liked the idea of the bike lanes being separated by a small median. That way it doesn't affect traffic, and there would be no confusion in winter.</li> </ul>
<ul style="list-style-type: none"> <li>• You can't make a shift without a proper plan, proper education to the people, proper licensing and insurance for ALL road vehicles. You also must asses the costs of keeping these transportation areas maintained and snow free.</li> </ul>
<ul style="list-style-type: none"> <li>• Yes, making transit more accessible and trails more usable fits well within existing Red Deer Infrastructure. I would like to see additional land use planning/bylaws that would increase density in the downtown core (and other areas?) and allow for alternative housing types that would make self powered commuting more viable.</li> </ul>
<ul style="list-style-type: none"> <li>• Bike paths (and for the most part), pedestrians, are not winter friendly. People still need their cars to go from "A" to "B".</li> </ul>
<ul style="list-style-type: none"> <li>• Love the idea of wider pedestrian sidewalks downtown and a look that promotes walking not driving.</li> </ul>
<ul style="list-style-type: none"> <li>• It will be hard to answer this without more details.</li> </ul>
<ul style="list-style-type: none"> <li>• Fix the potholes!</li> </ul>
<ul style="list-style-type: none"> <li>• In the future and in new subdivisions possibly make the roads or sidewalks wide enough to accommodate pedestrian traffic &amp; bikes, but not to the point where the cost of a lot to build makes it unaffordable for people to live in the subdivisions.</li> </ul>
<ul style="list-style-type: none"> <li>• I particularly like the move to urbanize the core of the City. This has been one of my own motives for years and has been very much part of my business.</li> </ul>
<ul style="list-style-type: none"> <li>• I think that it reappresents a shift. It shows that you are FINALLY listening to the Citizens of RD. We spent 10 years debating flouride and still have not come to a conclusion and POOF! overnight we get on-street bike paths - and on 55th? No wonder we are all upset! So, do I think that your playbook will work for RD? I have no confidence left. Let's wait until we vote a new council in and then decide.</li> </ul>
<ul style="list-style-type: none"> <li>• I think we need to consider all modes of transportation, as noted in the playbook. I do not currently take the transit as I am young enough to still be driving. When I do start taking the transit I would like that people (users) are protected from the "elements". I appreciate that the routes have been expanded into the county (ie: Cineplex/COSTCO, etc), this helps, as I go to these places. If buses were more frequent it may increase ridership. With all the negative feelings about the bike lanes they may not be safe! I would hate to think this, but I have heard some very negative comments. I generally walk around in my own area (Eastview Estates) in the summer time. I do not tend to walk long distances in the winter, mostly due to cold weather and avoiding snow windrows. I like wider sidewalks if at all possible, enjoy the "plantings" that are on streets/main roadways. It helps that you can walk in nature without having to go to the trails. The planning of "greens spaces" in the city is a great idea. If I've made spelling mistakes I'm sorry.</li> </ul>
<ul style="list-style-type: none"> <li>• Very few families will change transportation needs. From car seats to speed and convenience of an auto. We don't have enough time in a day already we need to move quick to meet out family needs in a day! This kid here, that one there, home from work, cook, run, etc. no bus or bike is keeping up with our lifestyles in 2013</li> </ul>
<ul style="list-style-type: none"> <li>• If it is done right. The city of Red Deer have been doing things without the proper planning. When this doesn't work then will just throw money at the problem. This is in part why taxes go up year after year.</li> </ul>

- We as a community should be looking at ways to promote cycling, walking and taking the bus. Without having these ideas in mind when planning for the future we will miss out on great opportunities during building phases.
- The idea of accessibility by any means is laudable and positive. Putting pedestrians and cyclists first, by your own metrics, does a disservice to the 90% who mostly drive. This is why the bike lane project is so widely considered disastrous. The city should not be forced to be something it is not, or it will end up catering to the extreme minority of citizens at the cost of all others. Many people will vote against the current city council members because of the bike lane fiasco, and their successors would do well to take note of that. As an avid cyclist, I would never use the on-street bike lanes because they are far too unsafe, and confusing to motorists. The trail system is fantastic, and already meets my needs for 80-90% of most journeys, especially now that it is plowed in the winter. Downtown, while bikes are prohibited on sidewalks, the wide walks offer good room to pass pedestrians at safe speeds, despite the many obstacles (posts, trees, signs). This should be considered in future development, and perhaps even have very narrow bike lanes - on the sidewalks - away from storefronts to help cyclists and pedestrians alike avoid collisions. I disagree that cyclists and pedestrians cannot coexist - riders must simply equip a bell or horn, and ride at an appropriate speed for the conditions - 30kph may be fine for a trail, 5kph is more appropriate for a sidewalk with stores or opaque hedges/walls concealing adjoining walkways. If I could suggest changes to make my bike travel easier, I'd just suggest ensuring that new neighborhoods have trail access that is as contiguous as possible, and that the extremities of the city have at least some kind of sidewalk access, as many times on the North end, I have found myself cutting through narrow parking lots and riding over/through rock beds to get to the next parking lot rather than risking it on access roads or Gaetz Ave proper. Any time you have to take away driving lanes to accommodate other traffic, you are doing it wrong - if Red Deer is to grow, we need to enhance its driveability to reach farther and farther from the downtown core, and choking off main thoroughfares like Ross Street, or turning 40th Ave into a confusing game of "where's the lane?" only handicaps the city more as it continues to grow. Areas with trails, and even areas with sidewalks do not need bike lanes, and bike lanes are just hazards to everyone without physical separation from motor vehicles. Also, wherever lanes are redefined, it is ABSOLUTELY ESSENTIAL that it is clear which lane markings are current and which are deprecated. Ask anyone about 40th Ave for clarification on this. I do agree with making transit stops more central and more sheltered. I don't know if 15 minute service is the solution, as much as TIMELY service. When I took the bus regularly around 2003-2006, the main problem was that some days the bus would be on time, some days I'd watch it blow past the stop 10 min early while I walked to the stop, and other times, I'd make it to the stop early and wait 15-20 min for it to show up. This is especially frustrating when the cost of a pass necessitates its regular twice-daily weekday use in order to justify its cost; I lost days of value every month to randomly-appearing busses. If they ran on time, and came to all the stops they purportedly served, it would be much better. Also, rather than regular 15 min service, dynamic use of overload busses would greatly improve things. There are many times in the afternoon where I would be the only passenger on a bus, or maybe 1 of 3 on a half hour journey. There were also many times in the morning when I would get onto the bus and have no choice but to stand beside the driver because everyone was jammed shoulder to shoulder like a Tokyo subway down the whole length of the bus. We don't always need more busses, but certain times and routes very predictably need more.
- This is a farming and oil based town. Big trucks are a fact of life. You can not rely on transit

they don't run all the time.
<ul style="list-style-type: none"> <li>• stupidity really does not need an answer!!!! how much of our tax paying dollars are paying these stupid people on council to come up with these ideas!!! worry about fixing the streets and roads and keeping them clean and clutter free and pothole free.....if they paid someone to count and announce that there is over 13,000 potholes in the city streets to be repaired!!!.....doesn't this tell you they can spend money like it's going out of style!!!! But they are oh so proud!!!!!! I on the other hand would be completely embarrassed and they should be!!!!!!</li> </ul>
<ul style="list-style-type: none"> <li>• This study is way too late, after spending an obscene amount of money on useless bike lanes, NOW you are asking if this is the right direction? Ridiculous</li> </ul>
<ul style="list-style-type: none"> <li>• I like that bike lanes are not the focus and that other modes of transportation are also emphasized. Job well done!</li> </ul>
<ul style="list-style-type: none"> <li>• the vast majority of Red Deer residents that I have talked to want nothing for bicycles. they do not want them on streets, on their own lanes, on sidewalks, on walking paths.</li> </ul>
<ul style="list-style-type: none"> <li>• Again I am very neutral in these ideas. I can see a need but I am strongly against taking away existing traffic lanes on major routes to make bike lanes - this idea is not a good one, there will always be a lot of vehicular traffic with the addition of cyclists, I don't believe cyclists should get priorities on our roadways in the aspect of taking lanes away from vehicles!</li> </ul>
<ul style="list-style-type: none"> <li>• Nice Draft I only agree to some of it. The street bike lanes need to go. No enough money for this right now. Try again 5 years from now. We need to fix our roads first and faster. The asphalt paving being used is not lasting. North Taylor Dr. was just paved, and look at it this year. Its a mess again.</li> </ul>
<ul style="list-style-type: none"> <li>• There was no mention of keeping the trail system clear of snow all winter. Is that what will happen with the walking and bicycle trails/lanes. An example is this past winter, which started in October and as of the later part of March is still here. How does a senior drive their scooter when the trails are covered with snow and the sidewalks are covered with ice.</li> </ul>
<ul style="list-style-type: none"> <li>• People are getting to be more and more active and if you make it appealing to all people then they will use it and love it!</li> </ul>
<ul style="list-style-type: none"> <li>• Please stop wasting our precious resources on this marketing non-sense. We aren't Paul Harris's personal bank account for his pet projects. Let's just get to the election so we can vote these fools out and move on with a mobility plan that makes an ounce of logical sense.</li> </ul>
<ul style="list-style-type: none"> <li>• I agree with everything except the bike lanes. Bicyclists should be able to share the sidewalks and trails with pedestrians.</li> </ul>
<ul style="list-style-type: none"> <li>• Yes, asking Red Deer citizens how they feel and what they want is a huge step in the right direction before just doing and trying out new ideas without input!</li> </ul>
<ul style="list-style-type: none"> <li>• As previously mentioned, any progress is better than none.</li> </ul>
<ul style="list-style-type: none"> <li>• Same as above</li> </ul>
<ul style="list-style-type: none"> <li>• i think it is critical that we move away from an autocentric style of development, and of living. The Playbook appears to reflect a greater emphasis on pedestrian, cycle and transit, which is great. I would have like to hear the video emphasize more our responsibility as a community to reduce our carbon emissions.</li> </ul>
<ul style="list-style-type: none"> <li>• Well it does talk about making walking a higher priority which I generally agree with. Too many area designs are more like the solution to an engineering problem on how to move traffic with too little thought given to those who would be walking.</li> </ul>
<ul style="list-style-type: none"> <li>• No, Red Deer is a city or suburbs, with a large amount of the population using cars to commute to work. Cycling, where it does not impede traffic or is on trails, is good, 5 months of</li> </ul>

the year. Walking and transit is usually the domain of those who cannot afford cars or live close to work. Would a 'balance' be trying to move people from drivers to other forms of commuters in an effort to conform Red Deer to some mistaken idea of a cosmopolitan, environmental responsible and health conscious city? I'm worried that may be the case, I also worry when proposals like the new intersection for Taylor are taken seriously.
<ul style="list-style-type: none"> <li>I think the bike lanes are a great example of something that does not work in its current format. The majority of people are never going to use bikes to get to work, get their groceries, etc. While bike lanes are great and should improve biker safety, they should not take away from the existing road space that was allocated for motorized vehicles. Replacing vehicle traffic lanes with bike lanes may result in some additional people using them to get to work etc, the majority of people will always want to use their vehicles. Also, as the city continues to expand its boundaries, people will increasingly rely on vehicles to do their shopping, visit doctors and dentists, ferry children around, etc. I feel we are using the bike lanes as a way to reinforce the notion of using bikes instead of vehicles - i do not think this will work.</li> </ul>
<ul style="list-style-type: none"> <li>I walk to work during the summer and feel the vision in the playbook is supportive of my efforts.</li> </ul>
<ul style="list-style-type: none"> <li>See #2</li> </ul>
<ul style="list-style-type: none"> <li>i believe it does. There is definitely a shift happening in Red Deer in regards to environmental issues and active living and it is nice to see that the City is addressing this now. Not everyone may be on board at this time but i believe it is the way of the future and kudos to you for address this earlier rather than later.</li> </ul>
<ul style="list-style-type: none"> <li>There will be lots of residents who will not want this change because it is a change from what they are used to. This is the way we need to go!</li> </ul>
<ul style="list-style-type: none"> <li>We do live in Canada and we have a very short season of "good" weather. The bike lanes we currently have haven't been used by any significant number of people for at least 6 months. The majority of people I tend to see walking are walking dogs or jogging with no real destination- they are walking for the sake of walking. Outdoor patios are similar to the bike lanes- great in the summer, but what about winter? It makes driving difficult as space is still taken away from the street, but not being used.</li> </ul>
<ul style="list-style-type: none"> <li>I don't agree with putting bike lanes on major arteries by taking away driving lanes. There are boulevards that can contain both sidewalks and bike lanes that lead into the trails as well as the downtown. We have a great trail system that can be utilized better in the winter by snow clearing. We need to accommodate for these things not eliminate roads to do it.</li> </ul>
<ul style="list-style-type: none"> <li>Moving away from making the car the most desirable transportation is a great decision for the City of Red Deer, and will help to save infrastructure costs and make Red Deer a more desirable city to live in.</li> </ul>
<ul style="list-style-type: none"> <li>I appreciate the challenges that council has gone through with the bike lanes and that becoming a negative focus regarding this plan. That said, as traffic congestion increases as a result of urban growth, the frustration and pains to implement a system of alternative transportation will only become more difficult. By implementing this strategy now, you may not be doing something favourable but you are doing something necessary to prepare for the future.</li> </ul>
<ul style="list-style-type: none"> <li>Current transit routes that mandate a trip downtown to get where I need to be going are time consuming and not very convenient. A route that circles Taylor, 67th Street, 30th Avenue and the Delburne Road would be much more usable for myself. Connector buses from the current routes could provide a great feeder system to such a circle route. People who are not heading downtown would not have to spend time there.</li> </ul>

<ul style="list-style-type: none"> <li>Although I think the Playbook is a little vague regarding how the balance will take shape or what that shift will entail, at this point it is fair. I think that a shift towards a more balanced approach is something that could work for Red Deer, as long as the current users of the existing network aren't forgotten about.</li> </ul>
<ul style="list-style-type: none"> <li>I think the MP is proposing a realistic, workable shift given our challenges; not the least of which is climate.</li> </ul>
<ul style="list-style-type: none"> <li>There can NEVER truly be a PERFECT balance between walking, biking, driving and transit use. To try to obtain a balance between these 4 things will in turn produce failure. More people require VEHICLES to transport their young children/babies to day home. That will not change REGARDLESS of how many bike lanes, busses, sidewalks or driving lanes exist. If you change our existing roads, you will only succeed in making driving in Red Deer more difficult and less user friendly. To expect a mother to take the transit or bike to work each morning/evening is unrealistic. WHAT WE HAVE ALREADY WORKS. STOP SPENDING TIME AND MONEY TRYING TO CHANGE IT. Improve the state of our existing streets and trails. Don't change them.</li> </ul>
<ul style="list-style-type: none"> <li>Transit will probably never be the ride of choice for working adults in Red Deer like it is in Calgary, etc. The buses aren't safe. My kid comes home almost daily with stories of people smoking drugs on the buses, people fighting on the buses, people lighting people's hair on fire, etc. The bike lanes are a joke!!! They need to be removed from the major thoroughfares. The City doesn't even maintain them in the winter, and they are a driving hazard. I have instructed my kid not to use them, as they aren't safe. There are no decent restaurants in the downtown core, so no one wants to come downtown in the evenings, or spend any time there. There isn't even a Tim Horton's or other suitable lunch place.</li> </ul>
<ul style="list-style-type: none"> <li>Bike lanes/walking trails which are not part of the existing roads, would be great for everyone.</li> </ul>
<ul style="list-style-type: none"> <li>As you said, Red Deer is a growing community. If you are planning new roads then make the plan at the grass routes level to incorporate a bike path. NOT change a two lane road into a 1 lane and have a bike path---that is crazy! This is Alberta, Canada-we have snow. Why have a designated bike path that might get 2-4 bikes on it during the bad months.</li> </ul>
<ul style="list-style-type: none"> <li>Expansion of walkways, paths and widening sidewalks will enable and attract pedestrians and increase safety.</li> </ul>
<ul style="list-style-type: none"> <li>Though, I think there will be a lot of resistance toward a stronger transit since the current transit system is very poor.</li> </ul>
<ul style="list-style-type: none"> <li>Yes, one thing I would like to see is more bike paths on the North Hill area. (Normandeau)</li> </ul>
<ul style="list-style-type: none"> <li>Walk on 2A in Red Deer (Gaetz), and your ears will ring for days. It's way too loud here due to cars etc..</li> </ul>
<ul style="list-style-type: none"> <li>See my comments above.</li> </ul>
<ul style="list-style-type: none"> <li>I would agree "mostly"; however, I would like to see the bike lanes put in (along or under the tree line - don't take out the trees make the bike lane with them) without taking a lane out of the road. I find it very dangerous - especially now in the winter when you cannot tell where the lanes begin and/or end, etc. Especially on 40th Avenue and 39 Street.</li> </ul>

## **APPENDIX C**

### **SUMMARY OF FEEDBACK – SPEAKER SERIES**

#### **WALKABILITY ROADSHOW – SEPTEMBER 21 – 23, 2011**

##### **Community Meeting**

The public meeting attracted over 120 participants and started with a welcome from Mayor Morris Flewwelling, a presentation of Canadian walking initiatives from Jacky Kennedy of Green Communities' Canada Walks and a presentation from Bronwen Thornton from Walk21.

Bronwen then facilitated the interactive workshop where participants had the opportunity to share their ideas for making Red Deer more walkable.

Participants indicated that they enjoy walking in Red Deer because of the vast trail system and walkways, the wild life they encounter, the social aspects of meeting people along the way, the sense of freedom that walking provides and enjoying the fresh air. They noted that the downtown area is still small enough to walk to all destinations.

**The great ideas to improve walking in Red Deer that held the highest priority to the participants at the Community meeting were:**

- to have pedestrian only streets in the downtown core and
- to improve the snow clearing frequency and intensity of the walkways and trails in the winter.

**Mid level priority items were:**

- to increase time permitted to pedestrians at cross walks
- expansion of the trails system to ensure connectivity between trails and walkways to bus stops
- to ensure that new neighbourhoods are being developed with walkability in mind and
- to ensure that walking is a commuter option.

**Items identified by participants as important but held lower priority were:**

- creating maps that identify trails
- creating walking paths in industrial areas and
- providing mid-block crossings for pedestrians.

#### **ROSS STREET EXPERIMENT – OCTOBER 18, 2011**

Participants in the Ross Street Experiment completed surveys which contained the following question: "What are your top 3 priorities for improving the way you move around Red Deer?" From the survey results, we identified themes that are described below.

##### **Walkability (63 comments)**

Walkability generated the highest number of comments. Three major themes arose:

- Safety for pedestrians and cyclists
- More pathways and sidewalks
- Better planning focused on pedestrian crossings

**Bikeability** (53 comments)

Bikeability generated the second highest number of comments. The major theme revolved around the need for more bike paths and bike lanes.

**Cars and Small Trucks** (51 comments)

- Better synchronization of traffic signals
- More parking (and free parking)

**Transit** (47 comments)

Comments on transit focused on three themes:

- Better routing and coverage
- Longer and more frequent service
- Better accessibility to bus stops

**Planning** (37 comments)

Four themes arose on planning.

- Support for Ross Street experiment
- Need for more beautification and green space
- Desire for more mixed developments
- Support for more cultural activities

**LIGHTS! CAMERA! TRANSIT! – FEBRUARY 14 -16, 2012**

One of the engagement strategies employed for this portion of the Integrated Movement Study was developing two surveys: The first survey focused on transit users in Red Deer, and the second on residents who do not use transit. For the transit users, a survey was developed and placed on 50 buses in Red Deer for one day. The transit survey had a great response, with almost 1200 completed surveys.

What We Learned - Transit Users

	<b>Very Important</b>	<b>Important</b>	<b>Neutral</b>	<b>Not Important</b>
Improve coverage of city	49.0%	30.8%	18.3%	1.9%
Make routes more direct to provide faster service	48.0%	32.8%	16.0%	3.3%
Run more frequently	48.6%	28.3%	18.8%	4.3%
Run earlier in the morning and later at night	54.3%	21.8%	17.8%	6.1%
Improve access to bus stops for disabled persons	46.4%	30.6%	20.1%	2.9%
Use smaller buses to provide local community routes that would connect to major routes	28.3%	25.5%	32.4%	13.7%
Other (please specify):				
Total number of responses: 1,105				



**How can transit better serve Red Deer & what do you see as the most important priority for transit to focus on in the future?**

Six dominant themes emerged as most important to transit users.

- 1) Longer service, and weekend service = 28%
- 2) Direct Routes = 20%
- 3) Frequency of trips = 18%
- 4) Transit Scheduling = 8%
- 5) Safety = 5%
- 6) Customer service, consideration for seniors and disabled citizens, and fare = 4% each.

**The following is a list of general comments received, which constitutes 17% of the responses:**

- Have separate buses for school students as they are too loud, use foul language, take possession of the front seats which are allotted for seniors, mothers with strollers and people with disabilities. These seats need to be available these users at all times.
- Consideration for all passengers.
- Smaller buses during off peak hours or on low ridership routes.
- Longer transfers.
- More stops. This will make it easier in the winter for people with limitations to access the bus stops with minimal travel.
- More and improved bus shelters including better accessibility through sidewalk connections (snow removal).
- Regional transit service.
- Environmentally sustainable.
- Less stops.
- Route Planner.
- New buses.
- LRT.
- Seat belts for people sitting in wheel chairs.
- More garbage receptacles.
- Bigger buses; too cramped.
- Last trip of the day should be a complete route.
- Cleanliness of buses.
- Comfortable rides.
- Better and larger transit maps.
- Clean Sorenson Station more often during snow melting periods.
- New technology such as real time tracking apps, text messages if bus is running late, Google maps, etc.
- Doing a great job. Some drivers are the best.
- Increase ridership. Advertise and promote transit better.
- Coordinate with the College in terms of when classes get off and when the buses should arrive.
- More service to the north end of town.
- Adjust service according to community activities.
- Wifi and TV's.
- More locations where you can buy tickets and passes.

- Don't cut routes.
- Proper advance notification if stop will be closed.
- Improve wait times for action bus service.

### 3. What is your fare category?

Senior = 4.3% Adult = 61% Student = 34.7%

### 4. Do you feel safe on Red Deer Transit?

Yes = 97.5% No = 2.5%

### What We Learned - Non-Transit Users

	Agree	Disagree	Don't Know
It's easy to get information about Red Deer Transit bus routes and schedules.	68.0%	8.3%	23.7%
I don't take Red Deer Transit because it takes too long.	24.9%	50.0%	25.1%
I can get to and from work using Red Deer transit.	45.2%	23.1%	31.7%
I would be comfortable waiting at a bus stop or terminal and riding with other Red Deer Transit riders.	79.5%	8.1%	12.4%
I would use Red Deer Transit more often if gas prices went up to \$2.00/Litre.	41.3%	37.5%	21.2%
Red Deer Transit is a necessary public service.	98.1%	0.3%	1.6%
I require a personal vehicle during the day for work.	50.4%	40.2%	9.4%
Bus stops are located close to my house and destination.	82.1%	13.0%	4.9%
I don't like planning around bus schedules.	51.2%	30.3%	18.5%
Total number of responses: 376			

### How often do you ride Red Deer Transit?

Almost every day = 15.4%\*

Fairly often, 5 to 10 times a month = 5.8%

Rarely, less than five times a month = 20.7%

Never = 58.1%

### How do you usually travel to you most frequent destination (work, school, etc.)

Drive – single occupant vehicle = 71.4%

Carpool = 3.9%

Walk or Ride a Bike = 10.2%

Transit = 14.4%

**If you travel by car to your most frequent destination, do you have to pay for parking?**

Yes = 28.2% - If yes, how much

No = 53.6%

Not Applicable = 18.2%

**How familiar are you with Red Deer Transit's routes, schedules, and stops near your home?**

Very familiar = 21.7%

Somewhat familiar = 40.3%

Not at all familiar = 38.0%

**If you commute into Red Deer from a surrounding community, would you use a regional transit service?**

Yes, Daily = 10.1%

Yes, half of my monthly commuting trips. = 10.9%

No = 12.6%

Not Applicable = 66.4%

*\*While the survey was intended to capture residents who do not use public transit, we did not exclude those surveys at the three locations whereupon a transit user was surveyed.*

**BUILDING BLOCKS/COMPLETE STREETS – MAY 1 – 2, 2012**

On May 2nd, key stakeholders were invited to participate in a facilitated activity that Gary Toth has done in cities around the world, including San Antonio, Texas and Belfast, Ireland. The activity is intended to bring together stakeholders who represent the different priority uses of roadways. The stakeholders who were able to attend our session included:

- Central Alberta Rural Manufacturing Association
- Central Alberta Self Advocates
- Citizen—pedestrian advocate
- Red Deer Association for Bicycle Commuting
- City of Red Deer—Environmental Services, Waste Management
- Waste Management Canada
- Red Deer Regional Airport
- Stantec Consulting
- McElhanney Consulting
- ISL Engineering and Land Services
- Associated Engineering

These representatives were led through Gary's activity, which had them develop as many street types as possible. The groups prioritized certain streets for Red Deer, and indicate their priority use, design vehicle, speed, and other features that would be on the street. The following is the outline of the activity (all words in italics come directly from Gary's exercise outline):

### **Objective**

*This exercise gave the opportunity to learn the framework for developing a street typology for use by Red Deer in sizing and planning streets. A typology is a classification of different street types by the role the street plays in the community system as well as its local land use context. The objectives of this exercise are to*

- *Apply principles of street design and planning from the previous presentation on Streets as Places,*
- *Develop a mindset about thinking of streets as places not just vessels for moving cars,*
- *Begin to understand how to frame your perspective on how streets should function to support broad community goals*

### **Background**

*All across Canada, communities are becoming concerned about the consequences of tuning streets solely for cars. This has led to consistent overly wide streets and high speeds. Most cities possess far more street capacity than needed even during peak hour. In most communities, this has led to residential streets that parents are reluctant to allow their children to cross; commercial streets with failing shops; difficulty for senior citizens to find neighborhoods where they can age in place; dramatic decreases in walking; concerns about increasing obesity; and parents feeling the need to drive their children everywhere.*

*Your charge is to develop anywhere from five to twelve street types that together, help frame future street investment to support broad community goals. This exercise is not anti car, but instead about creating a balance. Some streets that can handle more cars at higher speeds will still be needed to move from neighborhood to neighborhood and from one part of town to another.*

### **The Exercise**

- *Break into groups of 5 to 8.*
- *Take ten minutes to brainstorm ten to twelve street types. Please record all ideas and dispute none during this period; during this brainstorming, there are no bad suggestions. List them on a flip chart.*
- *Take five minutes to evaluate and narrow down the street types for Red Deer. Think about:*
  - *Why these types?*
  - *What makes each of these a type? (how are they different from each other?)*
- *Develop a matrix matching street types with the following desired operational features (30 minutes)*
- *Begin to suggest Red Deer streets as examples to fit into your new streets types (10 minutes)*
- *Prepare report out (10 minutes)*

The groups were given the time to develop the different street types they thought would work in Red Deer, then complete the table according to street type and primary use of the street. The following are the tables created by the five groups that participated.

Street type	Primary use of the street*^	Adjacent Land Use (Context)*	Mode Priority**	Desired speed^	Design Vehicle for intersections	Tolerance of Congestion^^	On Street parking?	Other features (enhanced crosswalks; medians, bulbouts)?
X1								
X2								
X3								
X4								
X5								
X6								

#### NOTES

\*^ What is the street itself primarily used for: getting from one place to another, getting to somewhere on the street, recreation, shopping on the street, etc.

\* e.g. residential, commercial, school, office ... This could be called the context,

^ this can be a number or a concept, e.g. "walking speed" or "slow enough that pedestrians are less likely to die in crashes.

\*\* Think about who should be / needs to be the primary user(s) of the street: pedestrians, bike, bus, cars, truck – list them in order.

^^ e.g. Always free flowing; accept congestion during peak hours; don't take steps to eliminate congestion at any level.

The following tables represent a diversity of stakeholders working together to articulate how different roads can be designed for a different priority usage, thus ensuring that there are prioritized roads for all mode users.

## Group One

<b>Street Type</b>	<b>Primary use of the street*<sup>^</sup></b>	<b>Mode Priority **</b>	<b>Desired speed<sup>^</sup></b>	<b>Tolerance of Congestion<sup>^^</sup></b>	<b>Design Vehicle</b>	<b>Other features (enhanced crosswalks; medians, bulbouts)?</b>
<b>Recreation Street</b>	Recreation (ie street hockey), block party	Pedestrian, cycling	30 km/hr or less	N/A (low)	Auto	traffic calming, signage
<b>Neighbourhood Roads</b>	Movement within residential areas	Shared: pedestrians, cyclists, auto	30 km/hr	Low	Auto	traffic calming, signage, trails
<b>Shared Commuter</b>	Commuting to/from work, shopping, etc.	shared: auto, bus, pedestrians, cyclists	50 km/hr	Low	Bus, truck	Separation between active mode lanes and vehicles
<b>Destination/Main Street</b>	Access to 'destination', street level retail, etc.	Pedestrians	20 km/hr or less	Low	Auto	"Destination," green space, traffic calming, angle parking
<b>Commercial Boulevard</b>	Vehicle movement & access to commercial	Shared: auto, bus, pedestrian, cyclist	60 km/hr	Medium	Bus, truck	Transit lanes, medians, plantings, decorative lighting
<b>Industrial/Oilfield Way</b>	Goods movement; commute to/from lanes	Auto (still accommodates transit and pedestrian and cyclist)	60 km/hr	Medium	Bus, truck	Turning accommodation for large vehicles, high/wide load

## Group Two

<b>Street Type</b>	<b>Primary use of the street*<sup>^</sup></b>	<b>Mode Priority **</b>	<b>Desired speed<sup>^</sup></b>	<b>Tolerance of Congestion<sup>^^</sup></b>	<b>Design Vehicle</b>	<b>Other features (enhanced crosswalks; medians, bulbouts)?</b>
<b>Urban Boulevard</b>	High density commercial; lots of accesses	1. Vehicles 2. Transit	Uniform speed - 50 km/hr	LOS E (congestion is OK - tolerable)		Centre raised medians/ landscaping in middle and on both sides; visually appealing
<b>Speedway</b>	Few accesses (major exits only)	1. Vehicles 2. Transit	80-100 km/hr	LOS C (low congestion)		Visual appeal is less important; directional signs for City features; entrances into the City; raised median
<b>Freight Road</b>	Wide lanes for heavy trucks	Designated Lanes  Heavy vehicles  Cars  Bus, transit	60-80 km/hr	LOS D (acceptable congestion)	18-Wheeler	Transit stops; separated walkways (limit interaction of traffic and people); informational/wayfinding signage)
<b>Work Road</b>	Getting to work	Mixed use - cars, transit, bicyclists, pedestrians	50 km/hr	LOS D (congestion during peak hour is OK)	Bus	Lane reversal; enhanced crosswalks; surface treatments for bicycle lanes; no bulbouts



<b>Community Avenue</b>	Getting to community areas	Mixed use - equal priorities	30km/hr - 50km/hr	Tolerable (at key areas)	Transit/emergency vehicle	Bulbouts; narrower lanes; larger entrances to back alleys (for RV's, WM), segregation between cars, bikes, pedestrians
<b>Home Road</b>	The street in front of your house	Family-based vehicles	30 km/hr	Congestion is not likely	People	Very visually appealing; people friendly; shared road use - no need for designated lanes

## Group Three

<b>Street Type</b>	<b>Primary use of the street*<sup>^</sup></b>	<b>Mode Priority **</b>	<b>Desired speed<sup>^</sup></b>	<b>Tolerance of Congestion<sup>^^</sup></b>	<b>Design Vehicle</b>	<b>Other features (enhanced crosswalks; medians, bulbouts)?</b>
<b>Promenade</b>	Socializing	Pedestrians	Slow	High	People	Benches
<b>Skinny Street</b>	Neighbourhood	Inclusive	Slow	Moderate	People, bikes, cars	Traffic circle, sidewalks, cul-de-sac
<b>Destination/Tourism</b>	Destination	Inclusive	Slow	High	People, bikes, cars, bus	Sidewalks, bulbouts, boulevards, crosswalks, cafes
<b>Bike/Walking Trails</b>	Active transportation	Active transportation	Slow	High	people, non-motorized	Benches, water fountains, landscaping, washrooms
<b>Big Vehicle Movement</b>	Cargo Movement	Semis/trucks	Fast	Low	Oversized loads	Rounded corners, wider radius, multiple lanes, high-quality road
<b>Transit Commuter</b>	Commuting - moving people	Transit, auto, motor bikes	Medium	low	LRT, buses, autos	Bike pathway, bus lane, pedestrian overpass
<b>High Speed Roadway</b>	Moving people and goods	Autos, motor bikes	Fast	Low	Inclusive	

## Group Four

<b>Street Type</b>	<b>Primary use of the street*<sup>^</sup></b>	<b>Mode Priority **</b>	<b>Desired speed<sup>^</sup></b>	<b>Tolerance of Congestion<sup>^^</sup></b>	<b>Design Vehicle</b>	<b>Other features (enhanced crosswalks; medians, bulbouts)?</b>
<b>Arterial</b>	Fast way of getting from point A to B	Cars, bus, bicycle	50 km/hr	Moderate	Personal vehicle	bus pull-out area
<b>Residential</b>	People	Walking, bicycling, personal vehicle, utility service, emergency service	30 km/hr	High	Personal vehicle	Utility services in back alleyways, parking in the alleyways (rear of house), bulbouts
<b>School Route</b>	Children	Walking, bicycling	30 km/hr	High	Bus	bus turns, garbage & recycling turns

## Group Five

<b>Street Type</b>	<b>Primary use of the street*<sup>^</sup></b>	<b>Mode Priority**</b>	<b>Desired speed<sup>^</sup></b>	<b>Tolerance of Congestion<sup>^^</sup></b>	<b>Design Vehicle</b>	<b>Other features (enhanced crosswalks; medians, bulbouts)?</b>
<b>Community Commercial</b>	Support local community	Walking and bicycle	40 km/hr or less	Moderate to high throughout the day	Cube van courier	Busy is good! Jaywalk is standard; mixed use
<b>Transit Corridor</b>	Mass transit with walkability	BRT/LRT	50 - 60 km/hr	Very low for transit, higher for other vehicles	Bus/rail	Cars could be accommodated
<b>Industrial w/ Pedestrian Connections</b>	Industrial vehicles with human touch	Large trucks/machines with accommodations for people	50 km/hr	Low	Multi-axel truck	Provide access to other systems (transit + trails); internal connectivity; bicycle lanes
<b>Promenade</b>	Two feet or two wheels	Public gathering & commerce	30 km/hr or less	High	Bicycle	Deliveries at rear; jaywalk is standard
<b>Residential Transit/Bike Feeder</b>	Access - resident to City "Transition"	Cars, transit, bikes - shared equally	40 km/hr	Moderate	Transit Bus	Human should have right-of-way



ENVIRONMENTAL ADVISORY COMMITTEE

**DATE:** April 17, 2013  
**TO:** Director of Development Services  
**FROM:** Environmental Advisory Committee  
**RE:** Draft Mobility Playbook – March 2013

---

At the Wednesday, April 17, 2013 meeting of the Environmental Advisory Committee, the Committee discussed the March 2013 Draft Mobility Playbook. Following the discussion, the motion as set out below was introduced and passed:

**“Resolved** that the Environmental Advisory Committee, having considered the draft report from Development Services Re: the Mobility Playbook dated March 2013, supports the Mobility Playbook as a planning tool for the City of Red Deer as it is in keeping with the objectives of the Environmental Master Plan.”

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Andrea Pagee'.

Andrea Pagee  
Chair, Environmental Advisory Committee

c: Jeremy Bouw, Divisional Strategist  
Nancy Hackett, Environmental Initiatives Supervisor



Original report presented at the Monday,  
March 18, 2013 Council Meeting.

March 7, 2013

## Integrated Movement Study – Draft Mobility Playbook

Development Services

### Report Summary & Recommendation:

---

The development of the Mobility Playbook involved a unique and comprehensive public input process by bringing industry experts to the community and testing their ideas for applicability in Red Deer. One of the key questions considered throughout the study has been: "Will this work in Red Deer?" The ideas must respect what is important to Red Deerians now, and preserve and enhance it for the future.

The next step is to take the draft Mobility Playbook out to where the public is, and confirm if the vision of the future Red Deer is a good fit with the community.

The summary results of the public consultation will be compiled and presented to Council, along with the final draft of the Mobility Playbook.

### Recommendation:

It is recommended that Council accept this document as a draft and table for final consideration on May 27, 2013.

### City Manager Comments:

---

This is an important step in the process and a consultation plan has been developed with a report coming back for Council's consideration in May, 2013.

Craig Curtis  
City Manager

### Proposed Resolution

---

Resolved that Council of The City of Red Deer, having considered the report from the Development Services Department, dated March 7, 2013, re: Integrated Movement Study - Draft Mobility Playbook, hereby agrees to table this item for final consideration at the Monday, May 27, 2013 Council Meeting.



## Report Details

### Background:

---

Council identified the need for planning principles that support a variety of transportation options in The City's 2009-2011 Strategic plan. A strategy charter was developed outlining desired outcomes, driving factors, phases, and a general scope required to meet the objective of "ensuring that planning and development for growth supports our distinctive character and quality of life."

On September 28, 2009 a roads planning workshop was held with Council and administration as an initial step towards understanding the challenges, opportunities, and different points of view to define a clear, informed vision for movement within our community.

Several things lead to this work becoming important to pursue:

- Numerous stakeholder groups expressed a desire to improve the way we move around the city;
- Increasing requests to better accommodate many ways of moving such as walking, biking, transit and automobile;
- An increase in active transportation options as an effort to promote healthy lifestyles;
- Continual increasing capital and operating costs related to the current roadway infrastructure;
- Environmental considerations; and,
- The desire to facilitate choice for our residents.

The Movement Charter, adopted by Council in 2011, developed strategies to help achieve this theme/goal, one of which was the Integrated Movement Study. This led to the development of the Mobility Playbook, which is to provide an "umbrella" of direction to future related master plans.

Council's 2012-2014 Strategic Direction provided confirmation of this direction through the following theme:

*"Our deliberate decision to create competitive alternatives to single occupant vehicle travel in transportation network encourages healthy active lifestyles, environmental stewardship, supports safety for people of all ages, increases use of our public and green spaces, and integrates our sidewalks, trails, bike lanes, transit service, rail, and roads with our built environment."*

The City of Red Deer hired 8-80 Cities & Gehl Architects to produce the Mobility Playbook as a planning tool to help The City create a more balanced, sustainable and integrated



transportation system for all Red Deerians. The Mobility Playbook identifies strategies and actions to provide more mobility choices and to inform transportation planning decisions. In particular, this document will inform the upcoming revisions to the Transportation, Trails and Transit Master Plans.

### **Discussion:**

---

The City undertook an involved consultation process throughout the initial phase of the IMS, in an effort to engage the public.

#### **WALKABILITY ROADSHOW – SEPTEMBER 21-23, 2011**

The City partnered with Alberta Health Services (AHS) and Walk21 for the Walkability Roadshow. On day one, Walk21 held a workshop with City Council, staff and community stakeholders about the tremendous value of planning for walkability, and Mayor Morris Flewwelling signed the International Charter for Walkability. A full-day walkability audit took place with members of Council and the IMS project team.

In the evening of the second day, approximately 125 citizens came to the top floor of Executive Place to hear highlights from the walking tour from that day – and provide their insights into what would make Red Deer a more walkable community. These insights were gathered, and would later inform a pilot project in the downtown.

#### **ROSS STREET EXPERIMENT – OCTOBER 18, 2011**

Building on the success of the Walkability Roadshow, and based on overwhelming support for creating vibrant, walkable places in different parts of the city, the Ross Street Experiment was conceptualized to be the venue for the next speaker series event, with the topic of placemaking.

In the morning, 17 parking spaces on the north side of Ross Street, between 49<sup>th</sup> Ave and 50<sup>th</sup> Ave, as well as the driving lane running straight west of Veterans' Park, were blocked off and designated as a public space for pedestrians. Picnic tables, live music and hundreds of people filled the space throughout the day. In the evening, approximately 85 people gathered, despite the cool weather, to hear Gil Penalosa, from 8-80 Cities, talk about placemaking and creating vibrant, meaningful spaces for people to gather and interact.

#### **LIGHTS, CAMERA, TRANSIT! – FEBRUARY 16, 2012**

An on-board transit survey produced 1100 responses, and our face-to-face surveys with Red Deerians produced close to 385 completed surveys. Approximately 80 people came to provide their thoughts on transit and hear Michael Roschlau, of the Canadian Urban Transit Association, speak at the Lights, Camera, Transit! event.





## BUILDING BLOCKS – MAY 1 & 2, 2012

Gary Toth, of Projects for Public Spaces, and former Director of Transportation for the New Jersey Department of Transportation was the next international speaker to come to Red Deer and talk about complete streets and context sensitive solutions. On May 1<sup>st</sup>, Safety City was used to develop an activity that allowed participants to apply the principles they heard from Gary and apply those principles in a practical manner. Participants used props— scaled down bikes, people, trees, cars, trucks — to design the blocks of Safety City for different users.

In groups, people were quick to assemble and design a road that would accommodate the priority road usage they were given. The conversations were dynamic and forward-thinking. The roadway designs also reflected creative problem-solving and unique roadway designs. City staff did this activity in the morning, and approximately 25 citizens did the activity in the evening.

On May 2<sup>nd</sup>, key stakeholders were invited to participate in a facilitated activity - Community Based Street Typology. The activity brought together stakeholders representing the different priority uses of roadways.

Additionally, Council workshops were held with 8-80 Cities, Gehl Architects and City administration.

Council has been involved with the IMS in the following ways:

September 28, 2009 – Healthy Roads Workshop

January – December, 2010 – Strategy Charter and Terms of Reference developed

December 13, 2010 – Open Council meeting - approval of draft Strategy Charter (DC 5.1),  
Terms of Reference

January 10, 2011 – Council input into Terms of Reference

February 22, 2011 – Open Council meeting – approval of final Strategy Charter, Terms of  
Reference

December 5, 2011 – GPC approves the Movement Charter

April 19, 2012 – Council presentation – Cities for People

September 10, 2012 – Council workshop – Project Summary, Key Findings, Situation  
Assessment

November 27, 2012 – Council Workshop – Playbook concepts, planning for the future



Workshops, focus groups and discussions were held with the consultants, administration and citizens related to the Integrated Movement Study.

April 17 + 18, 2012 – Capacity Building Workshop: Quality Criteria; with City staff, Alberta Transportation, Alberta Health Services

September 11, 2012 – Focus groups with New Canadians and City Staff

September 12, 2012 – Setting Actions and Targets workshop with IMS Project Team

November 27, 2012 – Focus groups with Seniors, Middle School students, Business Community

A project summary has been produced that details the process, background, and rationale behind the Integrated Movement Study, the engagement process, the work completed by the consultants, and the key findings realized through the engagement process.

#### MOBILITY PLAYBOOK CONSULTATION

Continuing with the overall public engagement process of the Integrated Movement Study, administration will take the draft Mobility Playbook out to the community in several ways to talk about the planning values in the Playbook. The intent of this process is two-fold:

- 1) Inform – we will inform citizens about:
  - a. The Mobility Playbook,
  - b. The Integrated Movement Study,
  - c. The Project Summary
  - d. The Mobility Profile
  - e. Where to get more information,
  - f. Where and when the public consultations will occur,
  - g. The different ways to submit feedback.
- 2) Consult – we will provide opportunities for citizens to provide feedback:
  - a. Online
  - b. At our open house
  - c. At community meetings
  - d. At our 'traveling road show'
  - e. At Let's Talk

Below is a more comprehensive consultation plan:



## MOBILITY PLAYBOOK – PUBLIC CONSULTATION

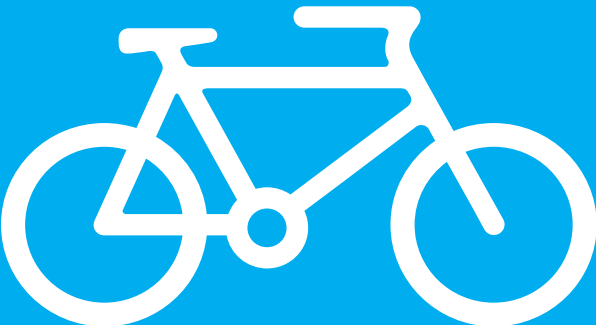
What	Audience	Goal
Mobility Playbook video	<ul style="list-style-type: none"> <li>▪ Speakers' series participants</li> <li>▪ Motorists</li> <li>▪ Schools</li> <li>▪ Community groups</li> <li>▪ Transit riders</li> <li>▪ Media</li> <li>▪ Residents</li> </ul>	<p>Red Deerians learn more about the mobility playbook and the Integrated Movement Study.</p> <p>Red Deerians provide feedback on the draft mobility playbook, and the five big plays.</p>
Open house and video screening	<ul style="list-style-type: none"> <li>▪ Speakers' series participants</li> <li>▪ Motorists</li> <li>▪ Schools</li> <li>▪ Community groups</li> <li>▪ Transit riders</li> <li>▪ Residents</li> </ul>	Red Deerians provide feedback on the draft mobility playbook, and the five big plays.
Travelling road show	<ul style="list-style-type: none"> <li>▪ Motorists</li> <li>▪ Community groups</li> <li>▪ Transit riders</li> <li>▪ Residents</li> </ul>	Residents are aware of the draft mobility playbook, and provide feedback on the document.
Conventional promotion	<ul style="list-style-type: none"> <li>▪ Residents</li> <li>▪ Speakers' series participants</li> <li>▪ Media</li> <li>▪ Community groups</li> </ul>	Residents are aware of the draft mobility playbook, and provide feedback on the document.
Business promotion	<ul style="list-style-type: none"> <li>▪ Residents (not aware of the IMS)</li> </ul>	Create awareness of the mobility playbook video, and the opportunity to provide feedback.
Community meetings	<ul style="list-style-type: none"> <li>▪ Community groups (e.g. Rotary)</li> </ul>	Promote the mobility playbook, and encourage participants to provide feedback.
Feedback form	<ul style="list-style-type: none"> <li>▪ Speakers' series participants</li> <li>▪ Motorists</li> <li>▪ Schools</li> <li>▪ Community groups</li> <li>▪ Transit riders</li> <li>▪ Residents</li> </ul>	Residents provide feedback on the draft mobility playbook, and the five big plays.
Let's Talk	<ul style="list-style-type: none"> <li>▪ Speakers' series participants</li> <li>▪ Motorists</li> <li>▪ Schools</li> <li>▪ Community groups</li> <li>▪ Transit riders</li> <li>▪ Residents</li> </ul>	Promote the mobility playbook, and encourage participants to provide feedback.

DRAFT

READY/SET/GO!

# MOBILITY PLAYBOOK

RED DEER





HEATHER (& FAMILY)  
ENVIRONMENTAL SPECIALIST,

*"We moved to our neighbourhood because of the trails. We use them for running, biking and for walking with the family."*

*"The best way for me to describe Red Deer is - It is easy. It is easy to get around, easy to meet people, easy to go out running, easy to have good food or a drink. It has everything a big city has but it is easier here."*

*"Red Deer is a good city for myself because I'm raising a family. It's not too big where you can still travel and not have to sit in traffic. I'll probably stay in Red Deer the rest of my life."*

*"Red Deer is a medium city with a small town feel. I think Red Deer is successful for small business because it has a strong sense of community and the lifestyle benefits help attract people here."*

*"Red Deer is an active city with all of our bike trails and our biking lanes along our main roads and all of the walking trails. It's very interesting [to live here] because you can be in the forest yet you can still be in the city."*

*"One of the great things about living in this city is the Red Deer Transit System that helps me get around. It is a great service for everyone and especially for people in wheelchairs."*

CALEIGH,  
MIDDLE SCHOOL STUDENT



ROB,  
FIELD SUPERVISOR,  
OIL & GAS INDUSTRY



WES,  
RED DEERIAN SINCE 1984



SHANNON,  
PUBLIC SERVICE EMPLOYEE

KEEGAN,  
LOCAL BUSINESS OWNER,  
MANUFACTURING  
INDUSTRY





### What is the Mobility Playbook?

The Red Deer Mobility Playbook is a user-friendly tool for action and positive change in Red Deer. This document is the result of a partnership project between 8-80 Cities, Gehl Architects and The City of Red Deer to identify the strategies and actions needed to provide Red Deerians with more mobility choices, and as such a better quality of life.

The document is inspired by a traditional sports playbook and has three chapters:

**ready** - why Red Deer is ready for integrated mobility;  
**set** - existing opportunities and challenges; and  
**go!** - the key plays that in unison will help The City create a more balanced, sustainable and integrated transportation system for all Red Deerians.

---

#### CONSULTANT TEAM:

**GEHL ARCHITECTS**  
 URBAN QUALITY CONSULTANTS




---

#### Gehl Architects

Copenhagen, Denmark  
[www.gehlarchitects.dk](http://www.gehlarchitects.dk)

---

#### 8-80 Cities

Toronto, Canada  
[www.8-80cities.org](http://www.8-80cities.org)

---

with **Kontoret arkitekter**

[www.kontoretarkitekter.se](http://www.kontoretarkitekter.se)

### How did we get here?

The Mobility Playbook is one of many outcomes of the Integrated Movement Study (IMS) which has used a multi-faceted approach to engage Red Deerians. The City of Red Deer coordinated “speaker series” events and workshops with the community on the topics of walkability, placemaking, transit, and complete streets from September 2011 to May 2012. The City rolled out a comprehensive transit survey, collected extensive feedback on the Commuter Bike Pilot Project, and the Ross St. Experiment. In addition to city-led initiatives, 8-80 Cities conducted focus groups and workshops with community members, including elected officials, city staff, older adults, business leaders, newcomers, children, and parents, to help inform the creation of the Mobility Playbook.

The IMS team has spoken with close to 2000 people and collected even more ideas. Thank you to all that participated. To find out more about the IMS engagement process visit:

**[www.reddeer.ca/whatmovesyou](http://www.reddeer.ca/whatmovesyou).**





READY



A black and white photograph showing a man walking towards the camera on the left side of a paved path. He is wearing a dark jacket and light-colored pants. On the right side of the path, two cyclists are riding away from the camera. They are wearing helmets and casual cycling gear. The background features trees and a residential street with parked cars.

# /SET/GO!

READY/SET/GO!

# A QUALITY CITY, A GROWING CITY

Red Deer is a fantastic city celebrated for its great quality of life, strong economy, and beautiful landscape. The 2012 Ipsos Reid survey of the community found that 98% of residents report quality of life here as good or very good. Being at the heart of the Alberta growth corridor, a city of learning and a social hub for its surroundings, it has a lot to offer. This success is leading to huge growth in Red Deer. It is set to double in size in 20 years. This presents new challenges and

opportunities for the city. Where people live, how they move around in the city and quality of life are intrinsically linked, so it is necessary to adopt an integrated approach. It is key to build on Red Deer’s assets like short commuting distances and access to nature, while addressing problems such as a lack of independent mobility for nondrivers. It is crucial to act now while the city is growing. Red Deer is ready.

## THE TOP THINGS RED DEERIANS HAVE TOLD US THEY VALUE MOST IN THEIR CITY \*

\*2008 & 2012 IPSOS REID RESULTS



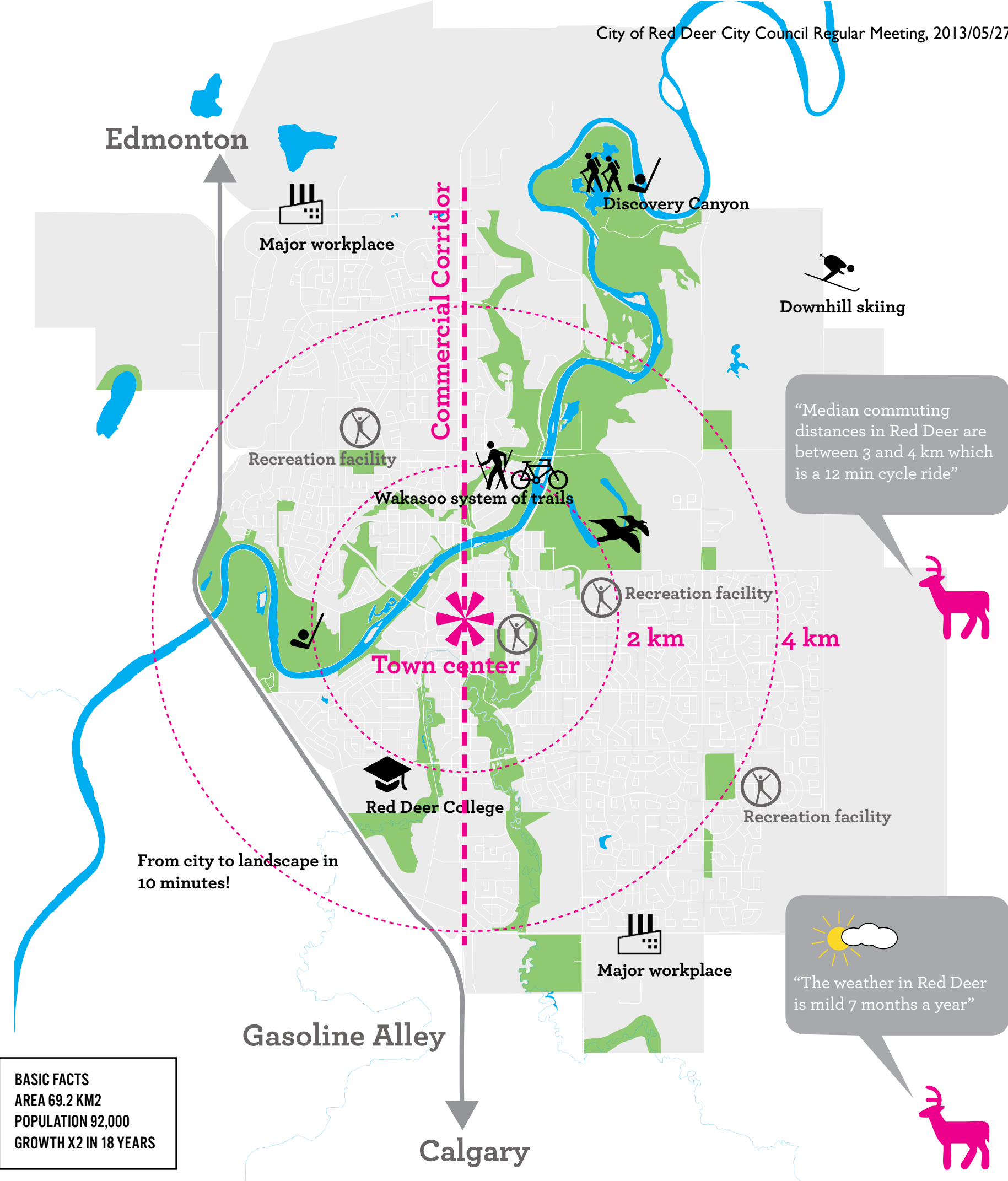
**01. The overall quality of life**  
This was ranked as the most important aspect of living in Red Deer. This encompasses many things: time with family, nature and financial security.



**02. Active living and recreation**  
Ranked as the second most important aspect of Red Deer life, the trails and the natural landscape are on Red Deer’s doorstep.



**03. Economy**  
As the third most important aspect of city life in Red Deer, the employment and affordability of the city is at the centre of what makes it great.





# TWICE AS MANY

RED DEER'S POPULATION WILL DOUBLE,  
WHICH IS A MAJOR OPPORTUNITY



# Y IN 18 YEARS.



READY/SET/GO!

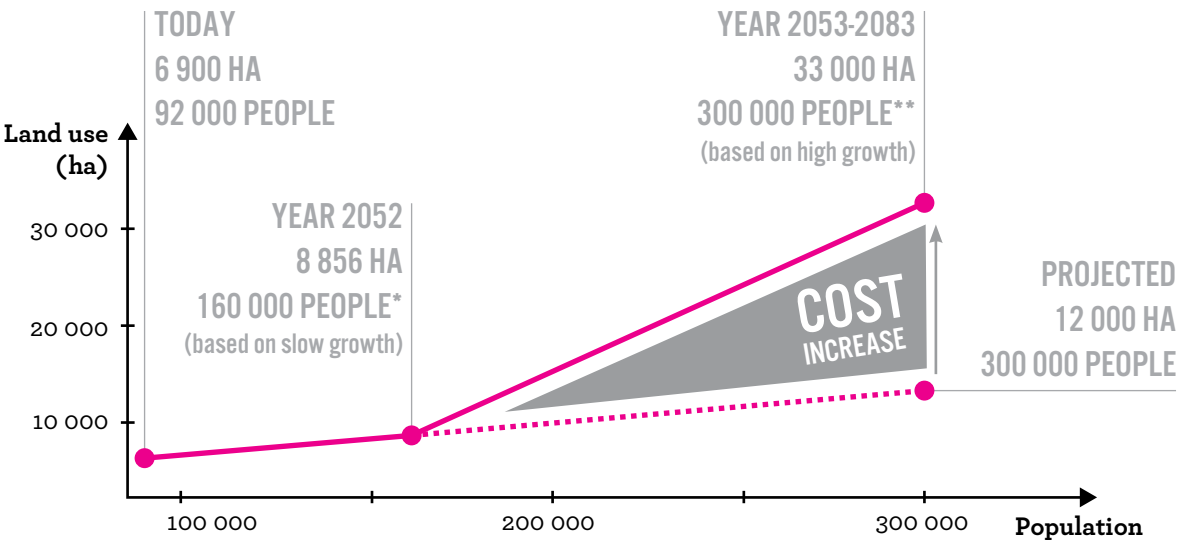
RISKS OF BUSINESS AS USUAL...

If Red Deer grows outwards then providing high quality roads, trails and transit for the whole area will become increasingly costly and difficult. The key to growth that supports mixed mobility is infill: creating mixed and lively street based urban development and intelligent growth along well served transit corridors. Linking land use and mobility is essential to the quality of life the city

can offer. Sprawl generates longer commutes, and poorly served neighbourhoods with fewer local amenities and hubs. The social connections that make a place feel ‘local’ are also discouraged when sprawling residential neighbourhoods are further and further away from the heart of the city.

TO ECONOMY

**Impact**  
Life in Red Deer would gradually become more and more expensive as housing, energy bills and (by the greatest proportion) transportation costs grew as a percentage of household income. The percentage of household income spent on fuel has risen 10 fold in 10 years. This trend is set to continue, leaving less income available for socializing and leisure.



We see here two projections for growth in Red Deer, one from a growth study completed by The City, and one from a consultant doing a commercial opportunities study. While the rate of growth is debated what is certain is that Red Deer is growing, and The City must prepare with plans of how to manage that growth. If The City continues to grow outwards the cost of providing quality services, including transportation, increases rapidly.

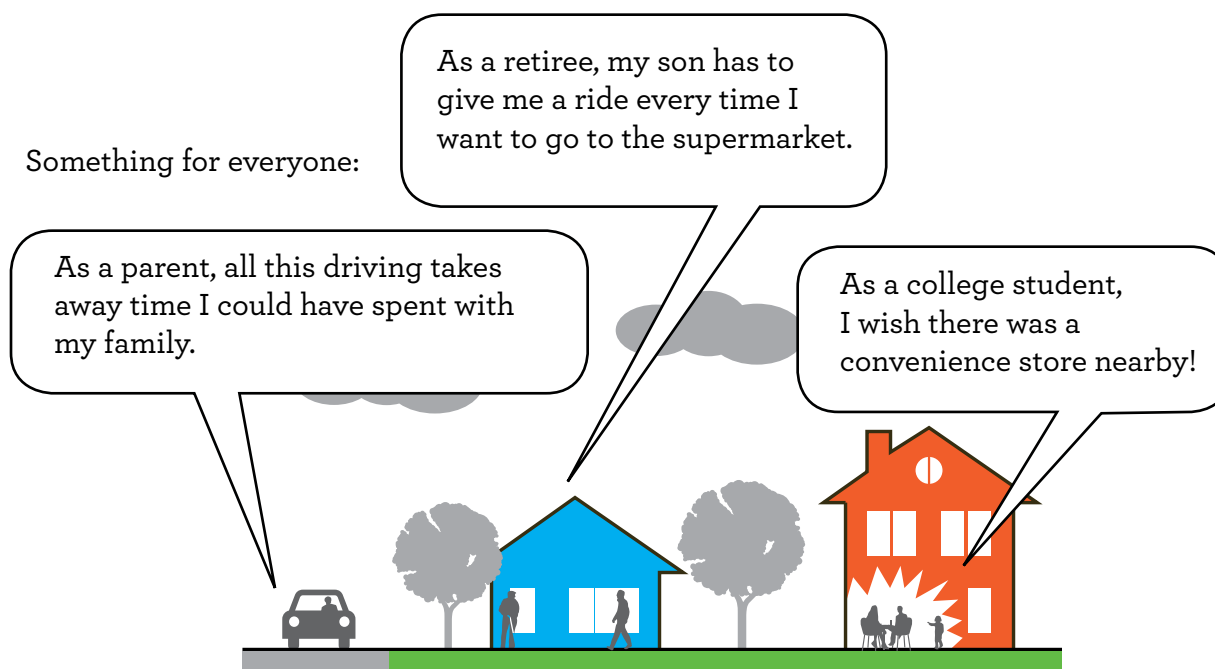
\* CITY OF RED DEER GROWTH STUDY - 2004  
\*\* COMMERCIAL OPPORTUNITIES STUDY 2010: CORIOLIS CONSULTING CORP.

## TO QUALITY OF LIFE

### Impact

The potential impact on quality of life is huge as Red Deer could potentially shift from being a compact, local city to a sprawling city of twice the population spread over two times the area. Commuting times would rise steeply taking time away in the day from recreation and time spent with family. Distance to amenities would most likely grow too as at increasingly low densities the City and other levels of government would struggle to provide as many nearby services to citizens such as schools and doctors. Integration of the new residents into the close knit Red Deer community would be challenging as there would be less concentrated public life in streets and outdoor spaces, resulting in social isolation. Non-drivers would become dependant on drivers, with a loss of independence.

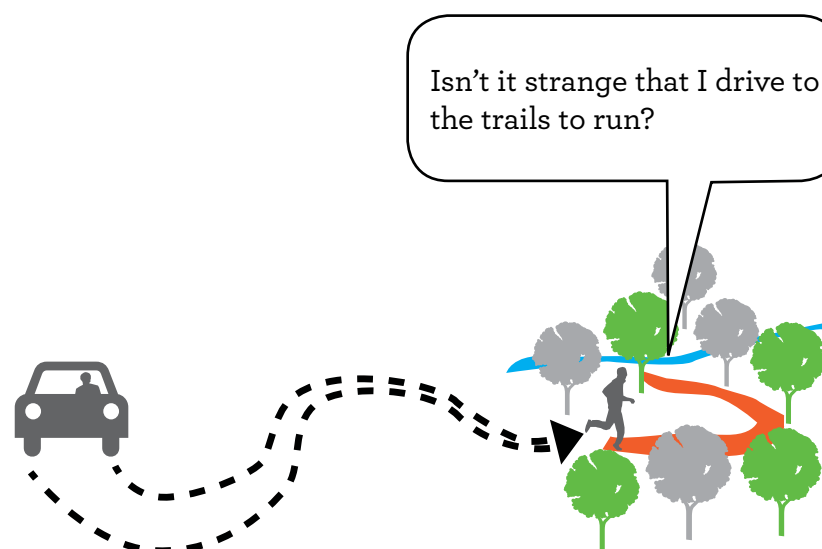
Something for everyone:



## TO ACTIVE LIVING AND RECREATION

### Impact

Time spent commuting and driving children to different parts of the city for school and activities would eat into recreation time. 60% of Albertans are already over-weight, and with fewer opportunities for easy access to outdoor recreation and active transportation, this would increase. With a larger area to provide infrastructure to, The City would struggle to afford, implement and maintain high quality infrastructure and public spaces residents are accustomed to.





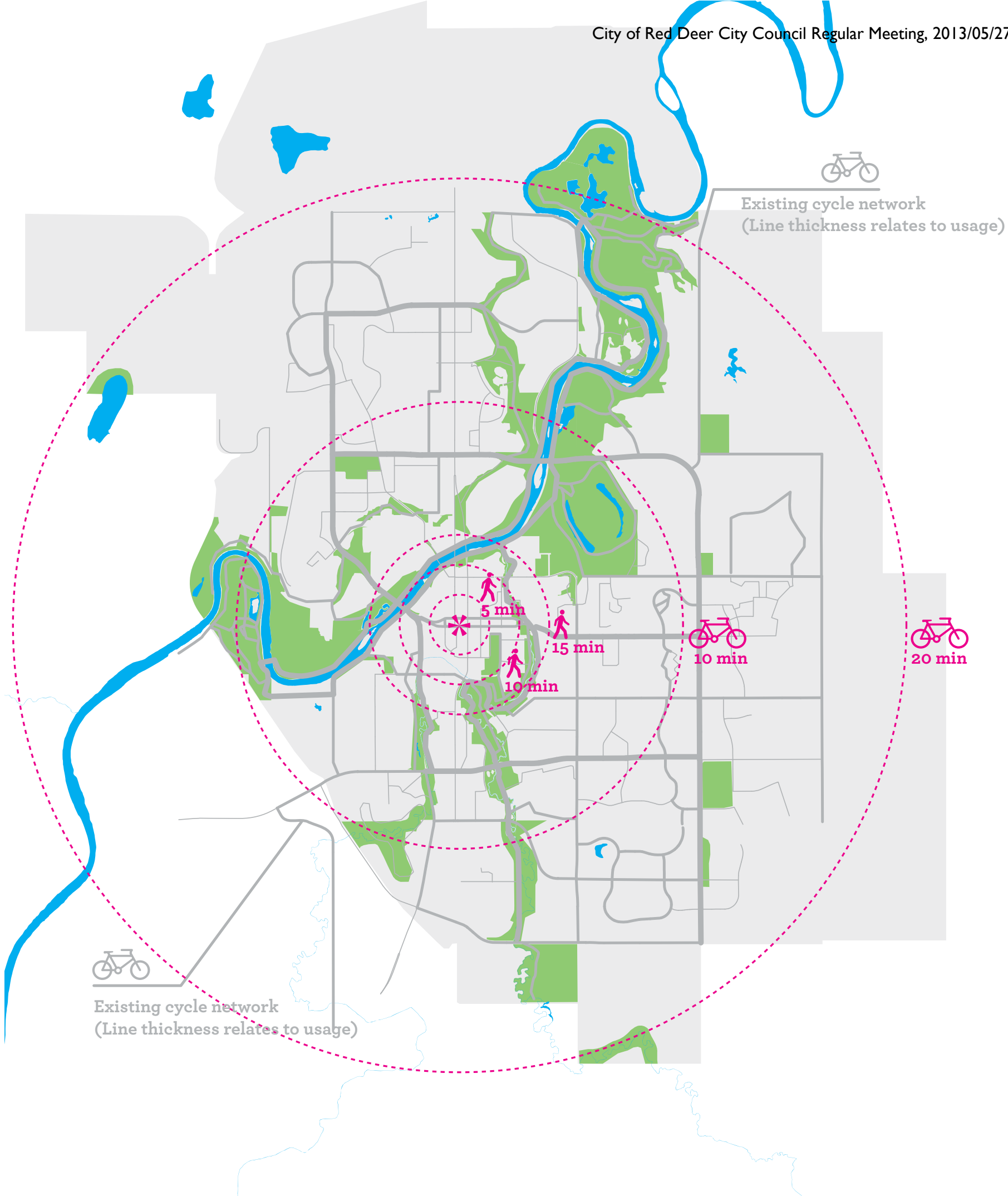
READY/SET/GO!

# RED DEER IS READY FOR CHANGE

There have been exciting changes recently with new downtown development, extensions to the trails network and exciting temporary pedestrian and community centred projects like the Ross Street Patio. These efforts, the voices we have listened to in the city and external factors all indicate that Red Deer is ready for wider changes, for bolder moves and even more exciting

possibilities for future improvements to mobility. With median commuting distances between 3 and 4km, 7 months of relatively mild weather per year and quality of life at the heart of community values, Red Deer is a clear contender for leading the way for mid-sized cities in providing healthy and sustainable mobility.







# READY

THE TIME TO ACT IS NOW



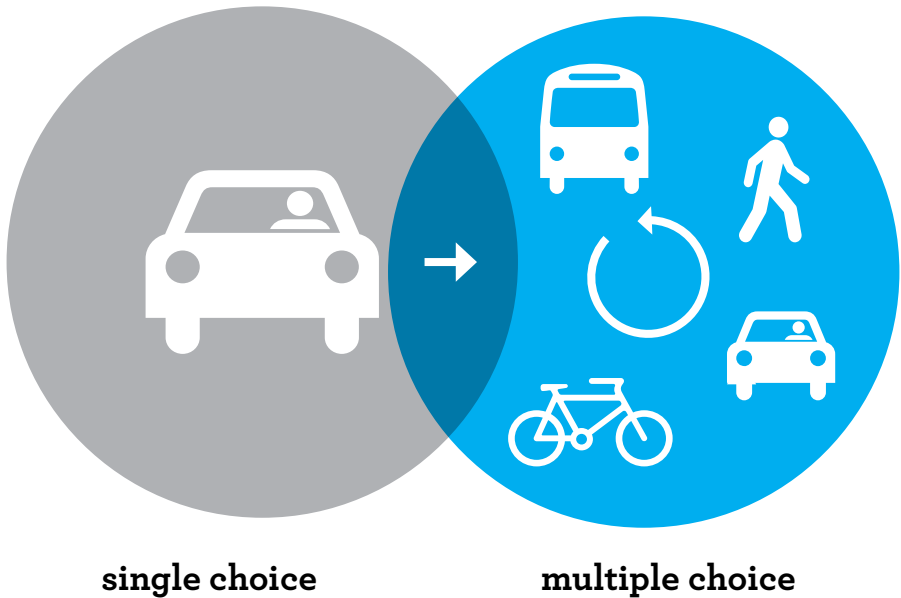
SET/GO!

READY/SET/GO!

# RED DEER IS TALKING THE TALK...NOW WE MUST WALK THE WALK.

Moving from single to multiple choices. Turning cost into profit for everyone. Creating choice in how we move around gives individuals the freedom to choose the mode they feel best suits each journey. With choice we can find the most efficient, most enjoyable and most logical way to make each journey based on cost, time and personal preference. The ability to choose the mode fit for purpose is what is lacking in Red Deer. There are very few options and this creates wasteful, inefficient and not necessarily enjoyable journey

choices. If we have choice then we can base our decision on a combination of factors, such as time of year, recreation or saving cash. Not everyone drives a car. Children, the elderly and disabled have the right to independent mobility too, but a system that is based predominantly on the car excludes these people, and limits opportunity for transport as part of a healthy lifestyle.





Some things to consider ...



pedestrians

Walking is part of every journey we make regardless of mode. Even when driving we walk from where we park to our final destination. In Red Deer, even this can be difficult because the roadways are built primarily for cars.



cyclists

Cycling could be the fastest and most convenient way to travel, with many secondary benefits to health and wellbeing. However to create this efficiency and feeling of comfort requires infrastructure and maintenance.



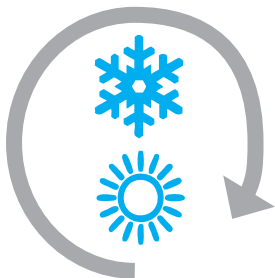
transit riders

Using transit can be a cost effective and sociable way to travel comfortably, especially in winter. Public transit creates independence for those who don't drive, generates public life in a city and decreases car congestion and traffic.



drivers

Driving is excellent for longer inter-city trips where other modes aren't viable, when there are a group of people travelling or the weather really doesn't permit being outside for long.



seasonal

Climate is a factor in determining how we choose to make a trip - however it does not determine definitively the way we should make that journey.



recreation

Integrating recreation with mobility through the trails, extending the networks to serve both recreation, housing and city areas.



how to grow

The length of time we are willing to spend travelling across the city using a number of modes should be a determining factor in how we let our cities grow. The cost of infrastructure is directly proportional to sprawl - the higher the density the cheaper to implement and improve infrastructure, and the more viable non-private car travel becomes.



amenity

Five-minute proximity to amenity is crucial in creating a sense of community, and giving the opportunity to create complete neighbourhoods with mixed mobility. Downtown Red Deer has a high ratio of amenities, but most neighbourhoods are very low.

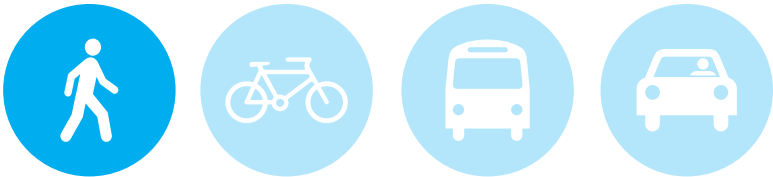


sharing

Whether it is sharing a ride or a car with your whole community, new ways networked on and offline has facilitated new ways to come together as a community.

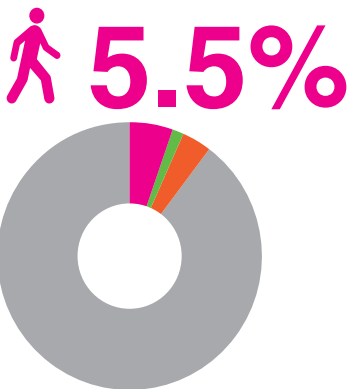
READY/SET/GO!

PEDESTRIANS



The City can do a lot to create more opportunities to walk. The highest priority should be providing basic provision for pedestrians. The recreation network is extensive and a major lifestyle advantage for Red Deer’s citizens but doesn’t link up with the places where people live. There is limited walking provision in residential areas. This is inadequate to invite much more than necessary pedestrian journeys. Also, low suburban density discourages walking often offering few attractions or amenities

to actually walk to. Downtown leads the way with new significant measures to encourage walking being implemented. These should be extended out to the rest of Red Deer to create a full pedestrian network. A mobility strategy must address the entire network considering the different stages of a journey. Every journey begins and ends with walking.



Situation today – only 5.5% of all trips are made by walking

TODAY

- Many arterial roads have two way traffic ,but only one side of walkway. The pedestrian is low priority.
- There is an extensive recreation network in Red Deer today.

CHALLENGES

- The under-developed network and lack of local amenity do not create an inviting public realm for people.
- Perceptions are it is unsafe to walk.
- Intersections aren’t pedestrian oriented.

POTENTIAL

- Turning cost into profit. Short car journeys are wasteful and damaging to health and well being. Getting people out in the fresh air has many co-benefits.
- Upgrading as roads are built to highest possible standard for pedestrians.
- Develop walking on both sides of arterial roads. Identify desire lines and construct facilities accordingly.

“Red Deer is not that big so if you have to go downtown you can just walk all the way.”

NEWCOMER FOCUS GROUP PARTICIPANT



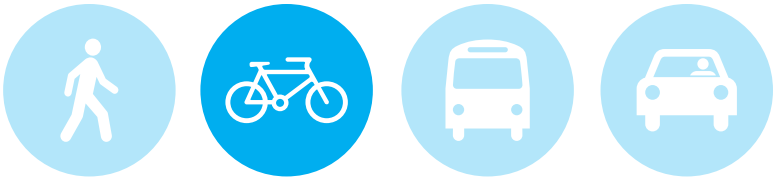


READY/SET/GO!

CYCLISTS

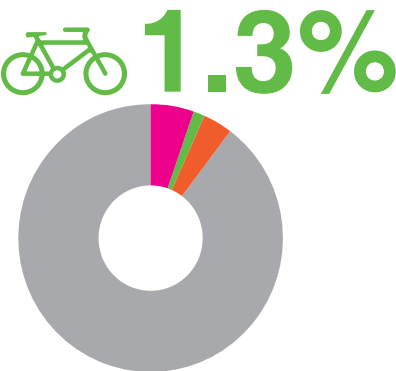
The recreation network is extensive and a major lifestyle advantage for Red Deer’s citizens. It could be the foundation for a new commuter network spanning the entire city. Commuter cyclists require direct routes that feel safe and are free from obstructions which requires a design speed of 15km/h. Currently, trails are either recreation routes (indirect but beautiful) or sidewalks (direct but obstructed and shared with pedestrians). A third option needs to be delivered. There is a conflict with walking on trails. Walking speed is around

5km/h and includes baby strollers, children, the elderly and other vulnerable users. Cycling can be up to 20km/h and has a high accident risk if undertaken on an urban sidewalk. The modes need to be separated if it is to become a realistic alternative to the car. Cycling has massive potential in compact Red Deer. It is independent, can be sexy, and allows for door-to-door travel. All of Red Deer is within a 20min cycle ride of downtown. Many cities worldwide would be envious of that fact. Leverage it.



TODAY

- People rave about the trails network. It is one of the things people love about Red Deer.
- The average Red Deer commute is an 11.5 min cycle.



Situation today – only 1.3% of all trips are made cycling

CHALLENGES

- Perceptions of cycling to do with climate, safety and an under-developed infrastructure network.
- In 2012 some on-street cycle lanes were removed due to opposition.

POTENTIAL

- Red Deer is a small compact city with enviable qualities to achieving mixed healthy mobility and lively city life.
- 66% of commutes are under 5 km. Many trips could be made by walking and cycling. Recreation while getting to work and school.
- Bicycle priority at intersections. Cycling should be acknowledged in the road system. A new hierarchy of trail design is needed as the current design standards do not acknowledge that there are multiple users and that cycling is 20km/h and walking 5km/h.

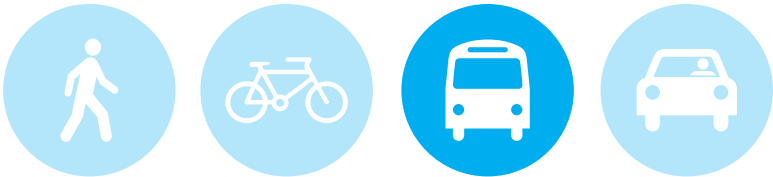
“The trail system is wow- it’s unbelievable here.”

FOCUS GROUP PARTICIPANT



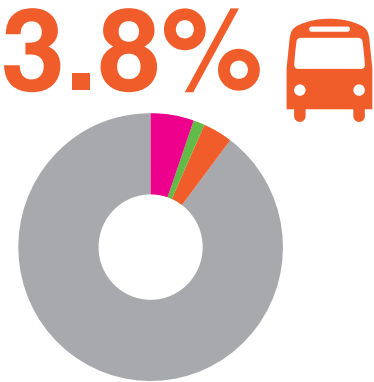
READY/SET/GO!

TRANSIT RIDERS



Currently there is extensive coverage at the expense of directness: Red Deer’s bus routes take circuitous routes that lengthen journey times. A more direct service would generate a more competitive alternative to the car. With a 30min headway the whole system is only sufficient to serve a ridership that is 90% captive. Captive transport riders are people who have no other alternative than to take

transit - this is mostly students and the elderly. To attract new, non-captive users, 30 minutes between services is too long. A more frequent, direct service would create a more attractive bus network. Rapid transit corridors would be an excellent way to create an easily understood and attractive network.



Situation today – 3.8% of current trips are made by bus

TODAY

- Transit is mostly used by those who have to use it in Red Deer: the young, the elderly and the disabled. It is indirect and infrequent.
- “More. Run more, run earlier, run later.” More was the most commonly used word by all respondents of the transit survey.

CHALLENGES

- Every journey begins and ends with walking so you need a good quality walking environment to support transit and high quality places to wait.
- Accounting for climate. Some of the coldest countries in the world have high ridership of transit systems.

POTENTIAL

- The transit network is infrequent and indirect. Red Deer’s grid offers an excellent logic that should link neighbourhoods and places of employment could be better targeted.
- Transit stops need to be designed with the weather in mind.

“If you could make the service faster and more frequent, I think that more people would use transit as a daily mode of transportation.”

TRANSIT SURVEY RESPONDENT

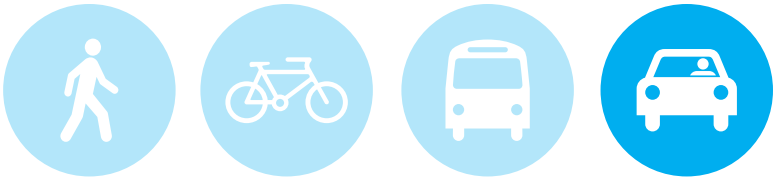


READY/SET/GO!

DRIVERS

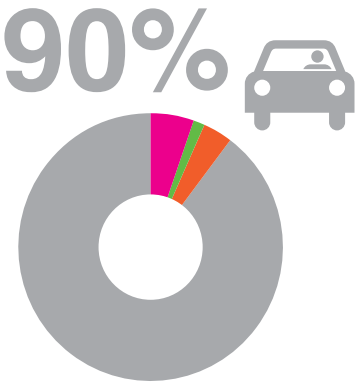
Red Deer puts cars and motorists first on all streets with the exception of a few places in downtown. Building a city predominantly for cars discourages walking and cycling. Despite policy stating otherwise all forecasts predict Red Deer will continue developing as a car centric city. Bold policy and action is needed to challenge this trend. Red Deer should look to cities such as Odense to understand the level of action required for change. Significant incentives will need to take place in

order to promote alternative forms of mobility. This includes removing direct and indirect subsidies to drive, improving conditions for other modes, and public education and awareness programs. Creating a road hierarchy in Red Deer acknowledging some roads need to accommodate large vehicles and faster speeds, while others don't, will help create a city more suited to people walking and cycling.



TODAY

- Despite policy stating otherwise all forecasts predict Red Deer will continue developing as a car centric city.
- The number of vehicles per household is directly correlated with mortgage default in North America.



Situation today – 90% of all trips are made by car

CHALLENGES

- The ease of car use in Red Deer is a challenge to getting the financial and personal benefits of choosing appropriate mode for each journey, essentially becoming a smart - rather than default - driver.
- Some roads need to accommodate large vehicles and faster speeds, while other roads do not need to meet the same standards.

POTENTIAL

- Red Deer is a small compact city with enviable qualities to achieving balanced mobility - there is so much potential.
- Create a road hierarchy. Design beyond the peak hour. Not all roadways need to accommodate the peak load and volume when those peak hours only account for two hours of the day.

“I think we can be encouraged to car pool. Especially if people work in the same workplace.”

FOCUS GROUP PARTICIPANT



READY/SET/GO!

# MOBILITY QUALITY CRITERIA



Together with citizens and city staff, a new quality criteria for pedestrians, cyclists, and transit riders in Red Deer. A mobility strategy is not simply about designing transportation systems and networks - it is ultimately about influencing people’s decisions. While planning is often done from a birds eye view - looking from above at complex systems and maps - it is important to also plan at eye-level. Through our focus groups and workshops with Red Deerians, the citizens helped to define the criteria that would make it more attractive for them to choose to walk, cycle, and/or take transit. Simply put, you said the choices must be safe, accessible, and enjoyable.

SAFE

- **Design for the most vulnerable user**  
The entire street section including intersections and crossings are designed for all ages and abilities.
- **Safety from crime/violence**  
Streets are well lit, provide easy sight lines and views, and are conducive to passive surveillance or “eyes on the street.”
- **Well Maintained**  
The surface of sidewalks and walking trails are well maintained, are cleared of snow and ice in the winter, and free of obstacles.

ACCESSIBLE

- **Access to information**  
Pedestrian oriented signage and wayfinding is easily available and intuitive, user-friendly maps on walking routes are available online and in certain key locations, and people in Red Deer are aware of their rights and responsibilities as a pedestrian.
- **Complete & interconnected network**  
Walking routes are integrated and connected including sidewalks, trails, and pathways in order to link key origins and destinations.
- **Mix of amenities and services**  
There is a mix of amenities and services within walking distance of residential and commercial districts.

ENJOYABLE

- **Design for the pedestrian experience**  
Streets have an inviting public realm and are aesthetically pleasing with attractive streetscaping.
- **Programs and activities**  
Streets are recognized as places for people to meet and gather with lively overlapping uses and activities.

FOR



• **Design for diversity of ages and skill levels**

Cycling infrastructure is designed to invite a diversity of riders including children and seniors. Lower speeds on residential & commercial streets and separating cyclists from traffic on roads 40km/h or more.

• **Safety from crime/violence**

There is secure bike parking provided at key destinations, streets are well lit, provide easy sight lines and views, and are conducive to passive surveillance.

• **Well Maintained**

The surface of cycle paths and trails are well maintained, are cleared of snow and ice in the winter, and free of obstacles.

• **Access to information**

There is special signage and wayfinding for cyclists, user-friendly maps on cycling routes are available online and in key locations, and people in Red Deer are aware of their rights and the responsibilities as a cyclist.

• **Complete & interconnected network**

On street cycle paths are integrated and connected with off street trails, in order to link key origins and destinations.

• **Mix of amenities and services**

There is a mix of amenities and services within cycling distance of residential and commercial districts.

• **Design for the cyclist experience**

Streets have support elements such as quality parking for cyclists and an inviting public realm, with attractive streetscaping.

• **Programs and activities**

Streets are recognized as places for people to meet and gather with lively overlapping uses and activities and, in some cases, special bike-friendly events.

FOR



• **Safety getting to the bus for all ages/abilities**

There are safe prioritized pedestrian connections to transit stations and stops that are accessible to people of all ages and abilities.

• **Safety on the bus**

The environment on the bus provides for passive surveillance by passengers and the driver and the bus are well equipped with necessary safety elements in the case of traffic accidents.

• **Access to information**

There is special signage and wayfinding for transit riders, user-friendly maps and schedule information on transit routes are available online and at transit stations and stops, and in some cases, real-time information on routes and schedules is available.

• **Affordable**

Riding the bus in Red Deer is a competitive and affordable option for people who cannot or choose not to drive.

• **Integrated system & optimal service**

Bus routes link key origins and destination in Red Deer, and service is appropriate to adjacent densities and land uses.

• **Positive experience getting to the bus**

Pedestrian connections to stations and stops are given priority, transit stations and stops offer quality shelters with comfortable seating and an inviting public realm.

• **Positive experience on the bus**

There is good customer service with helpful and friendly drivers and transit staff; the buses are clean and well maintained.

READY/SET/GO!

# HOW HIGH DO WE SET THE BAR?

Red Deer could be a best practice model for other small cities in the world.

Canada



Victoria, Canada

Is a small compact city on a peninsula with protected forest to the north. There are high levels of commuting into the city for work as well as a large retired community. The active transportation network serves these groups well. In 2003 a greenways network in the city was established which creates good safe routes through the city and into the surrounding natural beauty. Tourism around recreational cycling serves the city well as business growth in this area has been high.

North America



Davis, US

Davis has successfully leveraged its student population into cycling eventually developing a network spanning 95% of arterial streets, with 50 miles in total. It is a dense, low rise, compact city that directly tied its land use strategy to its transportation strategy. It has become known as the US cycling capital around which a recreation industry has boomed and they have a thriving downtown with local businesses and cycling events throughout the year.

Global

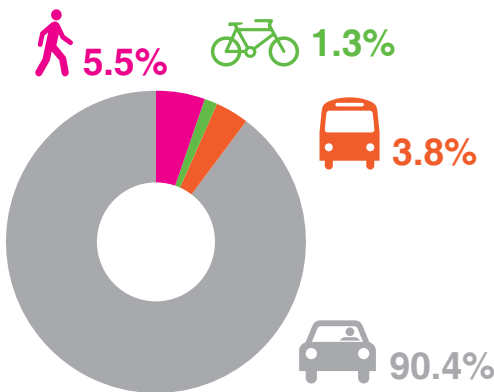


Odense, Denmark

Is a city of double the population of Red Deer. It has relatively low density but has been built with cycling and active mobility front and centre of the city’s agenda. 80% of Odense’s children walk or cycle to school and there are 3m of cycle paths for every resident in the city. Between 1997 and 2001 they managed to increase cycling by 20%.

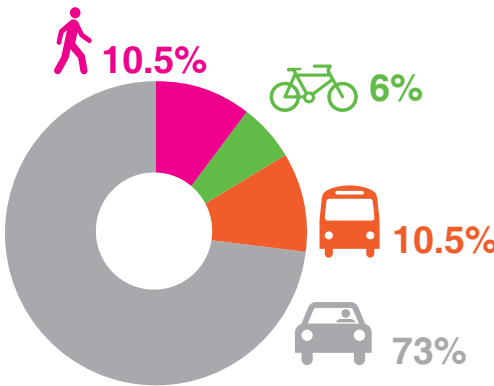


RED DEER  
AREA 69.2 KM2  
POPULATION 92 000  
DENSITY 1329 PEOPLE PER SQKM



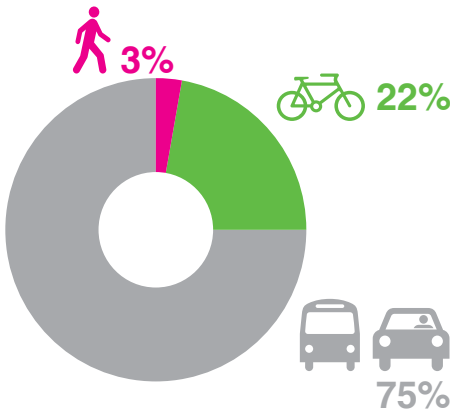
**How to....**  
The city created many plans outside of the silos of transportation, health etc. Active living greenways and green homes plans have helped them develop targeted projects and integrate different issues.

VICTORIA  
AREA 19.4 KM2  
POPULATION 80 000  
DENSITY 4109 PEOPLE PER SQKM



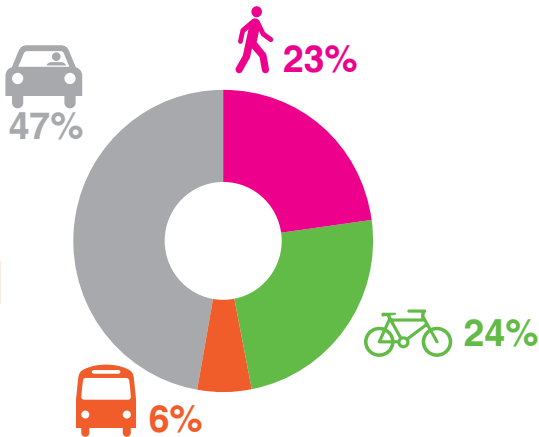
**How to....**  
Davis began by creating bicycle lanes separated by parked cars. As the city grew, all codes required bicycle infrastructure. The Davis greenway network was then developed as a multiuse trail network which accompanied a building boom.

DAVIS  
AREA 25.6 KM2  
POPULATION 65 740  
DENSITY 2560 PEOPLE PER SQKM



**How to....**  
The Odense bicycle strategy is updated every year and with any new road changes new improvements are implemented. The city also sets ambitious short-term targets and measures success.

ODENSE  
AREA 161 KM2  
POPULATION 191 610  
DENSITY 1190 PEOPLE PER SQKM







# READY/

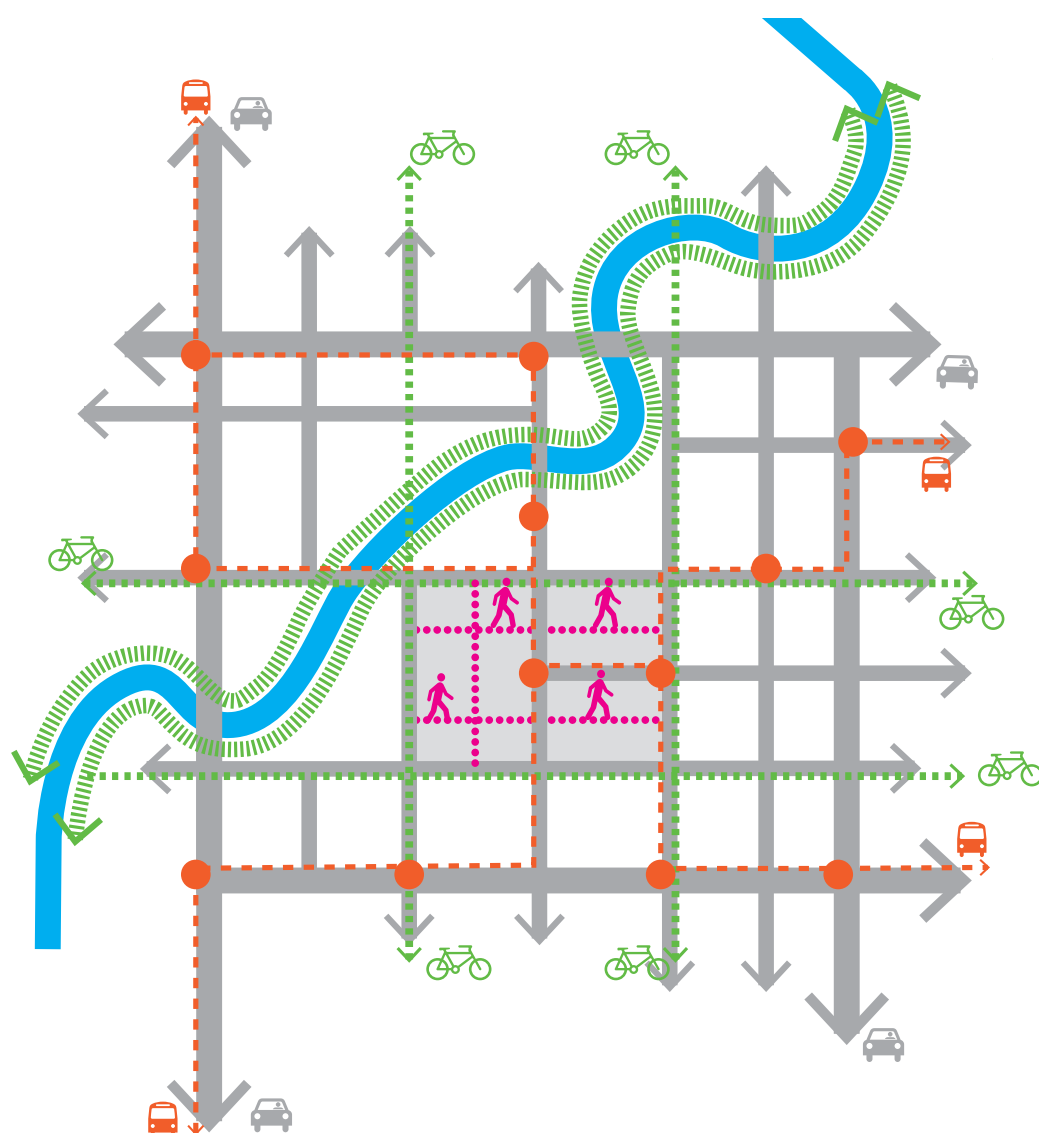


# /SET/GO!

READY/SET/GO!

# 5 PLAYS

The five plays are the top priorities for making the most impact in the city of Red Deer's mobility behaviours. They cross silos of city departments and require joint thinking and action from politicians, city staff and citizens alike.



## Different Streets, Different Priorities

Not all streets need to cater to all modes. A balanced mobility network uses a context-sensitive approach to infrastructure provision, while also ensuring networks are maintained. That said, the current modal split in Red Deer will only be changed with significant increases in priority for pedestrians, cyclists and transit users.

**PLAY 1** PUT PEDESTRIANS FIRST

**PLAY 2** TIE LAND-USE AND MOBILITY TOGETHER

**PLAY 3** MAKE TRANSIT PART OF THE JOURNEY

**PLAY 4** CONNECT THE TRAILS

**PLAY 5** NURTURE A CULTURE OF CHANGE



READY/SET/GO!



“Walking and cycling lets  
you meet more people.”

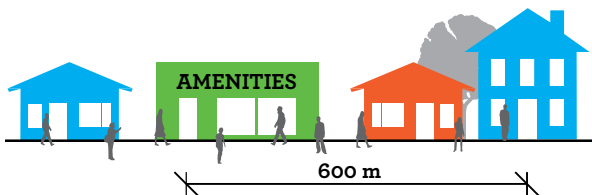
MIDDLE SCHOOL FOCUS GROUP PARTICIPANT



# PUT PEDESTRIANS FIRST /PLAY 1

As Red Deer grows in population it will be crucial to provide local neighbourhood streets and destinations that have a mix of uses and invite people to walk. Downtown Red Deer has a walkscore of 78, higher than many comparable North American downtowns. Walkscore, a rating system for pedestrian amenity, rates the proximity

of amenities for everyday life. In contrast, other Red Deer neighbourhoods when measured this way scored much lower at 35. Current commercial development recommendations suggest strip malls on the edge of town could act as neighbourhood centres. These would be car hubs not people hubs; what is needed is street-based local people-priority



## Human scale streets

Streets should be for people, not just cars. Our physical dimensions as humans, and the speed at which we move - 5km/hour - requires a street environment that is in keeping with these parameters. Visual stimuli, comfortable noise levels, benches to rest on and trees to shade us are all important.

## Create walkable hubs

Local neighbourhood hubs are crucial to sustaining a good quality of local life. It has been shown that amenities within 600m increase the likelihood of walking significantly. Hubs should offer continuous and direct routes to and around them for pedestrians.

## Build quality footpaths and maintain them

Inviting walking requires an offer of a pleasant and high quality walking environment. The width of the sidewalk, the material, how it behaves in different conditions and its life-cycle are all very important to consider. How well the sidewalk can be maintained and the frequency of this maintenance is also crucial to this.

## IN TEN YEARS...

Every Red Deerian can visit a local shop to buy milk on foot chatting to neighbours along the way and passing children cycling and walking to and from school.

“Clear the side walks every day! It sometimes takes weeks before major roads are cleared (in winter).”

FOCUS GROUP PARTICIPANT





READY/SET/GO!





# TIE LAND-USE AND MOBILITY TOGETHER /PLAY 2

Red Deer acknowledges in its Municipal Development Plan that growing intelligently can support mixed mobility by offering convenient connected places to live and work without the loss of landscape or easy access to it. Corridor densification would be an optimal way to absorb the incoming population while retaining the preexisting quality of life. A Commercial

Opportunities Study of the city identified that Red Deer needed more ambitious apartment targets, that they should be concentrated in selected locations that support other commercial and quality of life objectives. The City can support this by making it easier to acquire land downtown, along corridors and in new neighbourhood hubs.



## Enforce and incentivise minimum density targets

Red Deer has a minimum density standard of 14.8 units per hectare. This is too low to support a successful approach to integrated mobility. The City should consider increasing its minimum density in line with proven best practice in the range of 25-35 units per hectare. Assumed lot sizes should be reviewed and the percentage of multi family dwelling units increased.

## Establish new housing standards

Currently policy discourages narrow plot housing, with a maximum of 33% of total development area to be in this style. Provide incentives for density and have reduced off street parking requirements where housing is within 500m of transit corridors creating better value for developers. Higher density does not necessitate tall buildings. Low-rise density can be delivered when considering different types of housing geometries.

## Require Transit Oriented Development

Growth that can utilize existing infrastructure supports the provision of municipal services in a cost effective manner. Enforce proximity requirements to transit for new development, and link density targets to distance from transit making transit oriented development the most profitable.

## IN TEN YEARS...

All new residents are absorbed within the existing city boundary with increased density creating great walkability to the new shops and amenities and schools in the city. So many now live within 500m of transit it has increased bus frequency to 10mins.

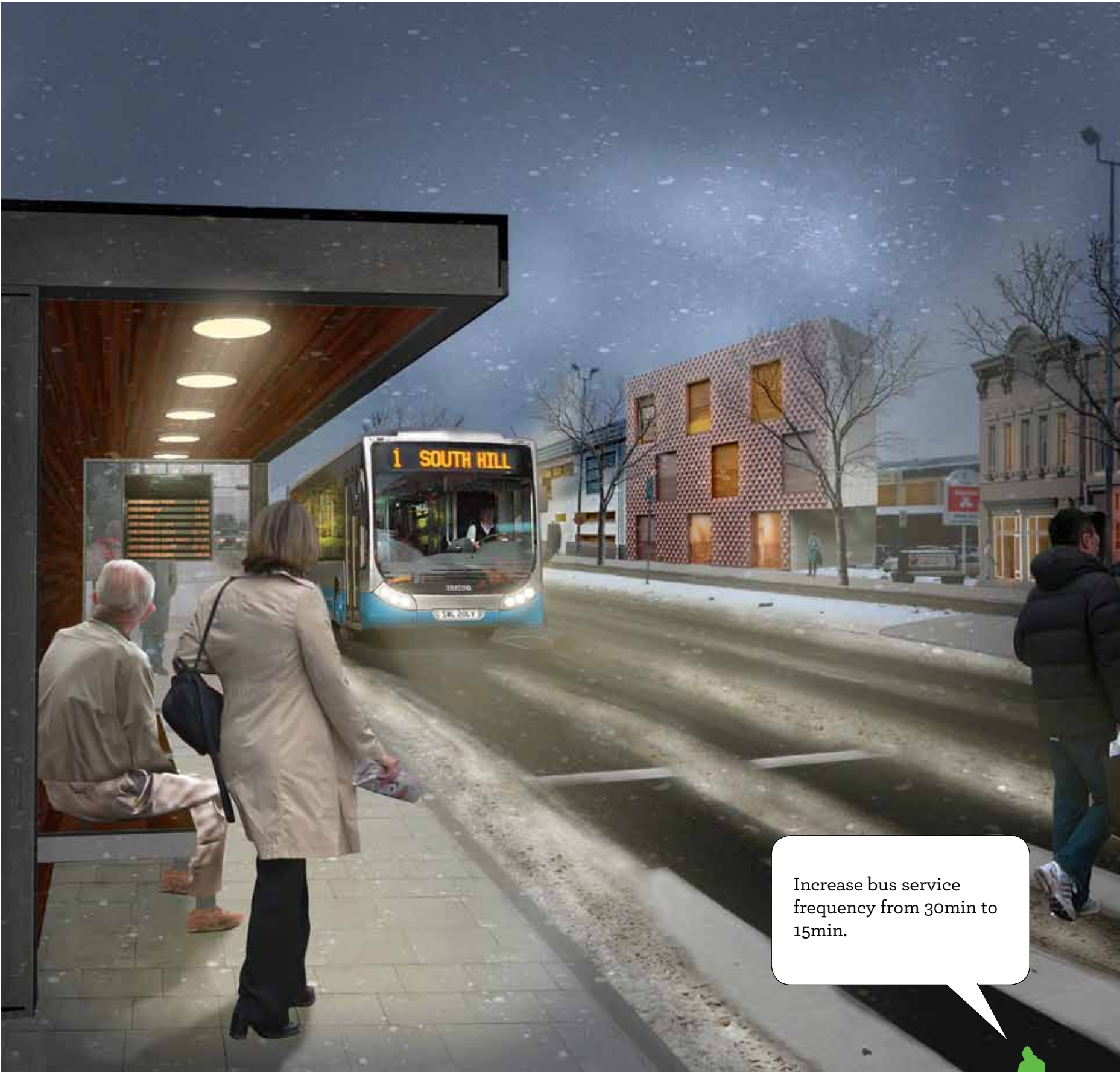
“Adopt planning principles that encourage multi-use.”

FOCUS GROUP PARTICIPANT



SOURCES; NEIGHBOURHOOD PLANNING GUIDELINES AND STANDARDS 2008, COMMERCIAL MARKET OPPORTUNITIES STUDY, CORIOLIS CONSULTING CORP 2010

READY/SET/GO!



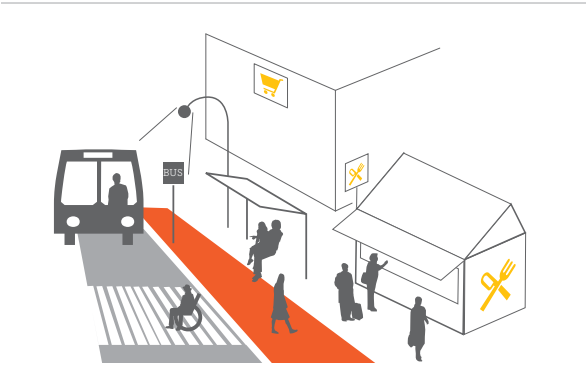
Increase bus service frequency from 30min to 15min.



# MAKE TRANSIT PART OF THE JOURNEY /PLAY 3

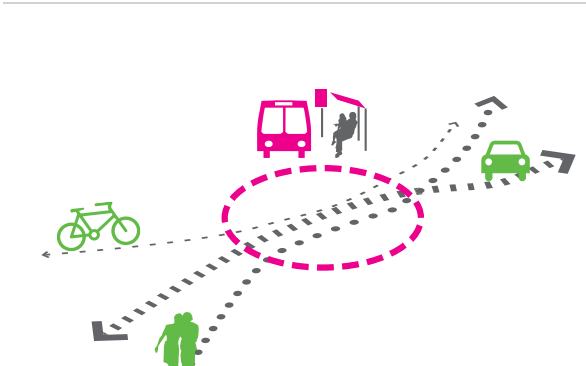
Transit should offer convenient, direct routes frequently. Following the logic of the grid would allow this with maximum 500m walks to transit stops. A frequent (15min) interval and a rationalized direct service needs to be supported by a strong

micro network of pedestrian infrastructure and comfortable transit stops. Effective information on transit times, on the street, online and on smart phones would help in addition to informational campaigns directed at nondrivers.



**Place stops where other things are happening**

Transit should link with hubs, centres of education and work. The network needs to be integrated to provide pleasant, seamless and logical journeys. Waiting for transit can also be time for shopping or social time if it is well placed so riders interact with other places and people.



**Ensure access for pedestrians, motorists, cyclists**

Transit should act as a support to other modes, a cyclist should be able to put their bike on for a ride home or a motorist should rely on it if having a drink in town. Everyone should know the transit service routes and be occasional riders.



**Improve the waiting experience**

Service information, protection from the elements and proximity are all important features of transit stops. Real time updates to smart phones can help make transit convenient and accessible; this should be integrated with climate protected stops.

**IN TEN YEARS...**

Transit will benefit the majority of Red Deerians, with frequency approaching 15min intervals at busy times and a high proportion living close by, it will become a much more viable and convenient travel choice.

“It should be mandatory to connect sidewalks to transit stops.”

FOCUS GROUP PARTICIPANT

A small illustration of a person pushing a stroller, located at the bottom of the quote box.



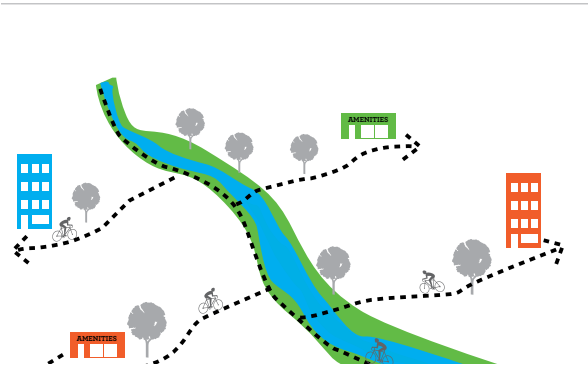
READY/SET/GO!



# CONNECT THE TRAILS /PLAY 4

The Red Deer river valley has an outstanding well loved trails network. People own bikes and use the trails. What is needed is an expansion of the trails into a network of greenways, on-street lanes and separated bikeways along arterial roads that would transform the network from a recreational one to

a full city network, helping people get to where they want to go. Well designed integrated cycle lanes and trails should be comfortable, convenient, connected and continuous.



### Tie urban network into recreation

The existing trail network can only reach its full potential if connected to an on-street network helping people be active and reach home and destinations. For cycling to be integrated into transportation options, direct, convenient routes must be available to employment and hubs. People cycle for pleasure, and they need to be encouraged to integrate this into their journey to work or school.



### Plan with the entire street section in mind

The proportion of space given to each mode should be addressed case by case on each road according to where it falls in the hierarchy of streets and its predominant use patterns. Cars, cyclists and pedestrians all move at different speeds and require different space; cycling and walking should be separated where appropriate.



### Create a Red Deer model for cycling

Every city is different and has different approaches to making cycling fun and part of the city's identity. Red Deer should explore specific road markings, cycle furniture and events. Cycling is cultural and linked to self identity; in Copenhagen many people have a kid's box at the front of the bike for their family, in London every hipster has a fixed gear bike, what will Red Deer's cycle culture be?

## IN TEN YEARS...

Red Deer will be proud of its unique cycle culture, recreational and commuting which generates a fantastic public life for most of the year. It will be integrated into and support all the other outdoor pursuits the city loves.

"I would love to bike because it would keep me healthy and save me more money, but it needs to be safe!"

NEWCOMER FOCUS GROUP PARTICIPANT

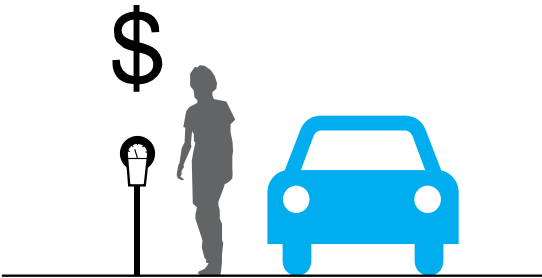
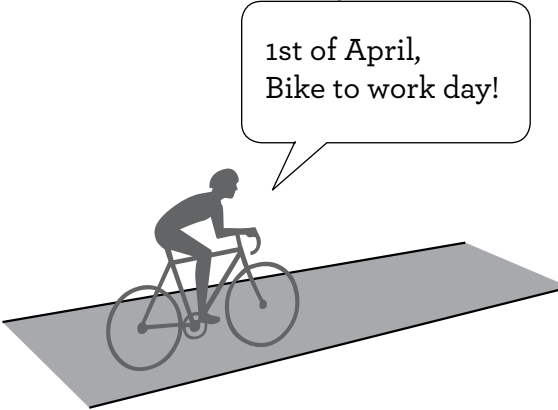


READY/SET/GO!

NURTURE A CULTURE OF CHANGE /PLAY 5

Change is always possible, but default settings are very strong. It can be difficult to break habits, which is why creating good habits for the large numbers of new people arriving to Red Deer will be crucial. Newcomers to Red Deer offer an opportunity to start a wave of active transportation

enthusiasts. Information, invitations and marketing of the active-lifestyle in Red Deer can promote the city’s quality of life in city branding and invite positive behaviour. Change can be difficult but acknowledging that it will happen, and actively seeking to shape that change is the most positive way forward.



**Lead by example**  
The City of Red Deer is one of the largest employers in Red Deer. If it were to have programs, competitions, incentives and momentum for multi- modal employees it could create a significant shift for the city. There are many examples of employer programs to draw on and you have a captive audience, use it!

**Show that change is possible & desirable**  
Change can be fearful and uncomfortable if people feel their city or values are being challenged. Presenting the arguments for change in clear understandable ways attune with local people is crucial. Implementation of change must be accompanied by smart community and political work.

**Remove direct and indirect driving subsidies**  
Parking is free almost all over Red Deer while transit is relatively expensive. Make sure costs from the city reflect the long term quality of life and commercial objectives. Short term profits must be over-looked for long term gains.

**IN TEN YEARS...**  
Red Deerian’s were very proud of the city’s reputation as Canada’s leading small city for high quality of living, innovation and industry. A mixed society with mixed sectors of industry, knowledge and service economies the city is known for its forward thinking approach.

“Let the city be an example: The city as an organization incorporating alternative modes into how we do business.”

FOCUS GROUP PARTICIPANT





# TOOLS FOR CHANGE

Through speaking with community members three themes about how, and with who, the City of Red Deer can act emerged. These actions complement the five plays and strengthen the notion that we need a collaborative, multi-sectored approach to mobility with programs to support infrastructure and policy changes.

#1

## ENHANCE COMMUNICATION & TRANSPARENCY

People in Red Deer want to easily find information about their transportation choices and the City’s progress on mobility initiatives.



**TO DO:**

- Launch an interactive web page that is the go to place for mobility in Red Deer.
- Establish a simple set of metrics on pedestrians and cyclists and collect baseline information that will be used to inform decision making.
- Develop and implement a wayfinding strategy.

#2

## BUILD & MAINTAIN PARTNERSHIPS

In order to create a significant shift in travel behaviour in Red Deer, The City cannot act alone. Balanced mobility has to spill into various departments, sectors and organizations.



**TO DO:**

- Partner with Red Deer schools and school boards to support and expand programs that promote more walking, cycling and bussing to schools (e.g walking school bus, bike to school days).
- Work with school boards on siting locations for new schools that align with priorities to decrease dependency on driving to/from school.
- Partner with Alberta Health Services on a campaign to promote the health benefits of active transportation.

#3

## MOBILIZE PEOPLE WITH PROGRAMS

It’s about so much more than providing infrastructure, people need to be inspired to act.



**TO DO:**

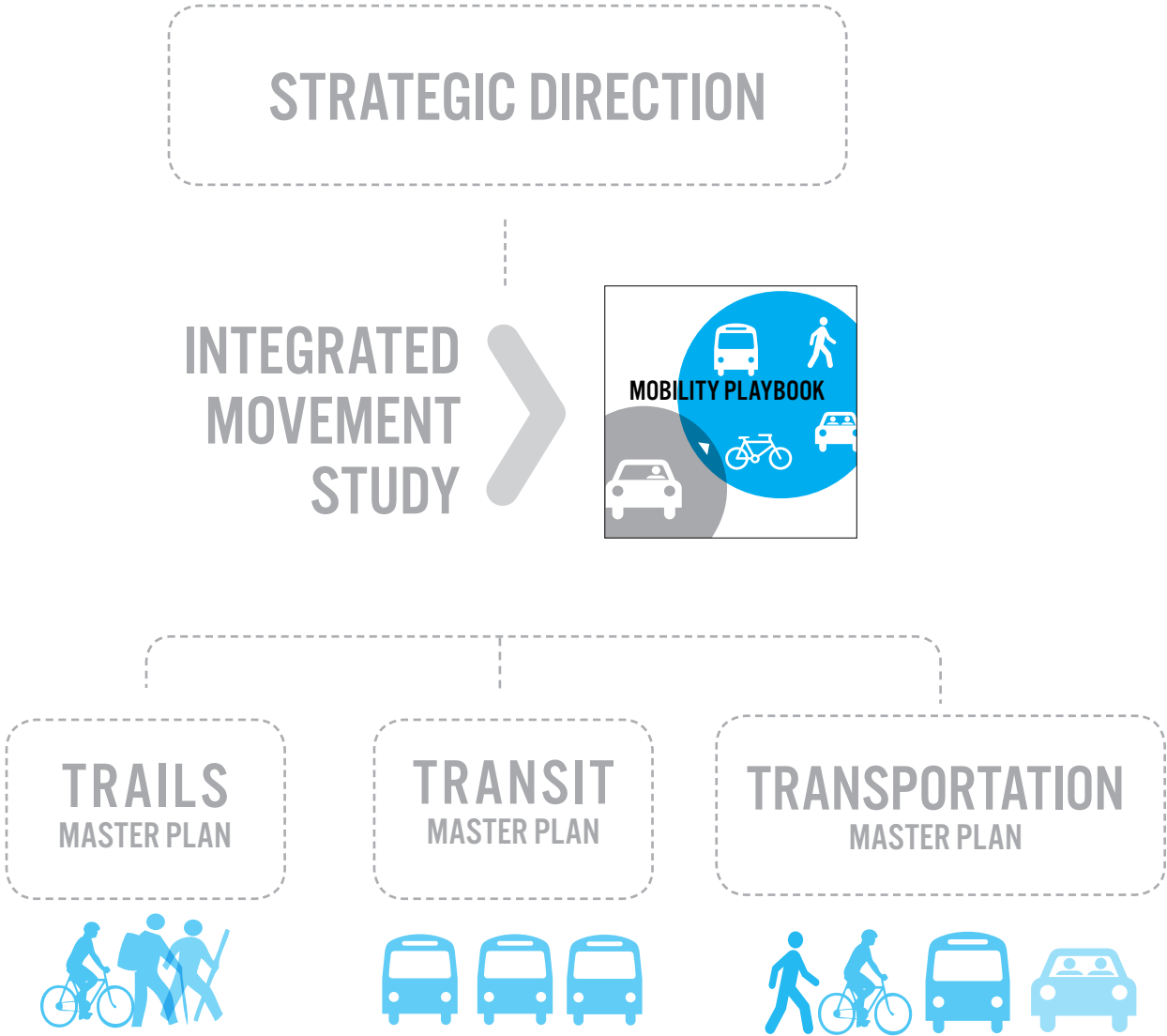
- Involve youth and other stakeholders in the design and implementation of events and programs that encourage walking, cycling and transit ridership.
- Continue to support and program the Ross St Patio and identify other pilot projects that prioritize streets as places.
- Deliver training programs on bicycle safety in cooperation with community partners.



READY/SET/GO!

NEXT STEPS

Council’s Strategic Direction informed the development and undertaking of the Integrated Movement Study and this Mobility Playbook. This document will inform subsequent planning documents that, while more technical and detailed in scope, will reflect the priorities and values identified in the Playbook.



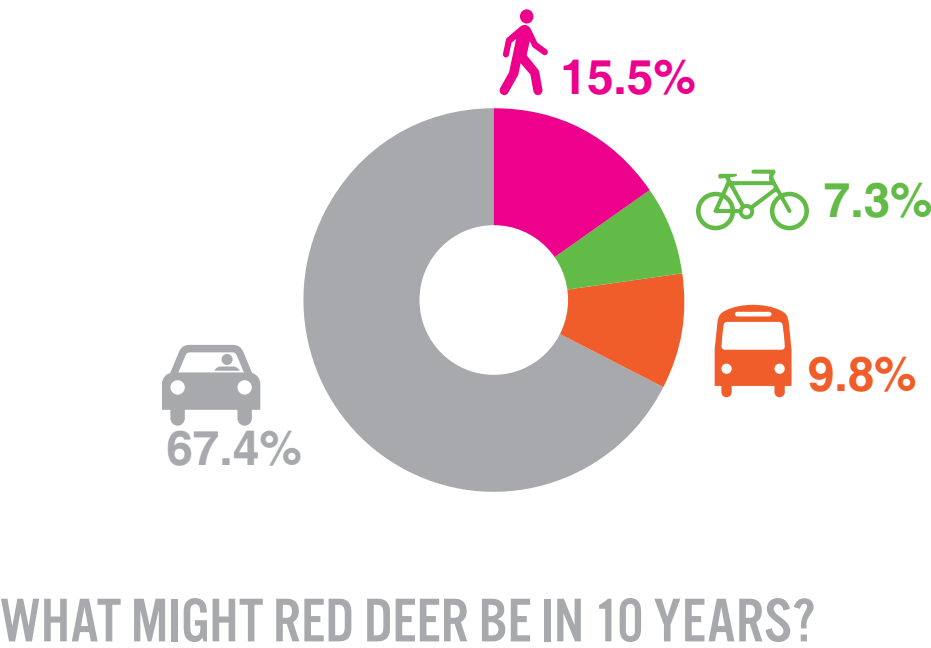
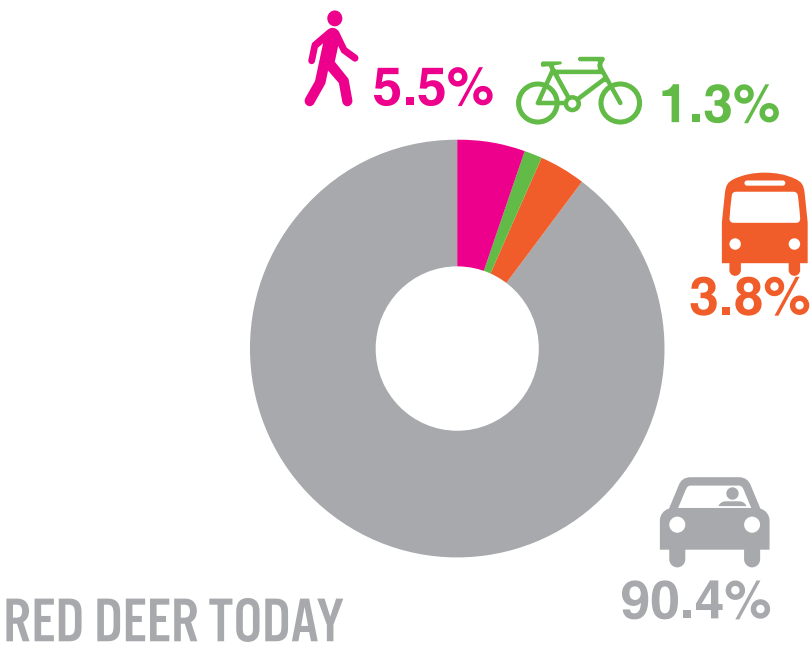
PRIMARY METRIC

Modal Split - seasonal and frequent

The number one metric for measuring success in achieving more balanced and integrated mobility in Red Deer will be modal split. To be most effective The City should aim to set short, medium and longer term targets for modal split. Progress should be measured every year and measurements should be taken in both winter and summer to account for seasonal variation. Annual measurements will help to identify success and to identify where more needs to be done.

Future Red Deer: a city with multiple choices

By implementing the strategies identified in the five plays Red Deer can achieve its goal of creating a city that is safer, more sustainable, and offers more mobility choices to its citizens. Cities with the most success in creating balanced and integrated mobility set ambitious goals first, then follow through on actions with ongoing monitoring. Based on best practice of what has been achieved by other cities in Canada, North America and around the world. an achievable and balanced modal split for Red Deer in 10 years would have similar proportions to the one here, with suitable modes being chosen for each journey.



# READY/SET/GO!

## TOOLS FOR CHANGE

Red Deer – a safer, healthier more convenient and affordable city. This is the potential outcome of a balanced modal split. This measure doesn't capture all the value added by mixed mobility. We suggest some that reflect what Red Deerians most care about in their city, over-all quality of life, active living and recreation and economy.

Regular measuring supports project evaluation, the targeting of resources effectively and an excellent evidence base from which decision makers and politicians can create policy. Measuring the correct indicators is crucial in supporting the city and culture you want, shifting from thinking about systems to people.

## OTHER CONSIDERATIONS

### **Measuring road safety and perceptions of safety**

- Aim to reduce actual accident numbers and the fear of road traffic accidents for pedestrians.

### **Choices survey**

- Asking why people make the transportation choices they do to help direct improvements

COMPLEMENTARY METRICS



**Overall quality of life:  
Liveability Index**

Quality of life can be measured in many different ways. The City has done a great job at measuring this with seven annual municipal quality of life surveys conducted by Ipsos Reid. The City should address the metrics used in these surveys and consider devising a pioneering liveability index for small cities using some of the qualities identified by Red Deerian’s as crucial to their quality of life. Living close to school, knowing neighbours and opportunities for active outdoor living are aspects of city life that some indices have begun to address. Look at global best practice to find ones that best suit the priorities of Red Deerians.



**Active living and recreation:  
Health and Obesity**

Keeping a finger on the pulse of Red Deerian’s health is another metric that should be used to measure how well The City is serving its citizens need to stay active. Alberta’s adults are 66% overweight or obese as are 21% of children and young people. The City of Red Deer should seek to gather data on its own rates and measure change over time. Supporting walk to school initiatives with quantified results can be a powerful tool in wider change.



**Economy:  
Growth and Affordability**

Red Deer is currently at the heart of Canada’s leading economic growth area. It is important that The City measure how much of this growth is being captured and felt in the improvement of the quality of the everyday lives of Red Deerians. This should be measured by looking at employment levels as well as household incomes in relation to the cost of housing, running a car and general housekeeping. An ambition to maintain or decrease the costs of living in line with inflation would allow Red Deerians to enjoy the fruits of growth and save for a prosperous future. Building affordability into new areas of the city is crucial to building in this resilience and is directly linked to house price and car dependency.

COST OF OBESITY IN ALBERTA, 2005 AVAILABLE [HTTP://WWW.ALBERTAHEALTHSERVICES.CA](http://www.albertahealthservices.ca)

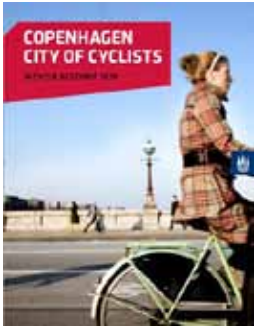
READY/SET/GO!

MOBILITY ACCOUNT(ABILITY)

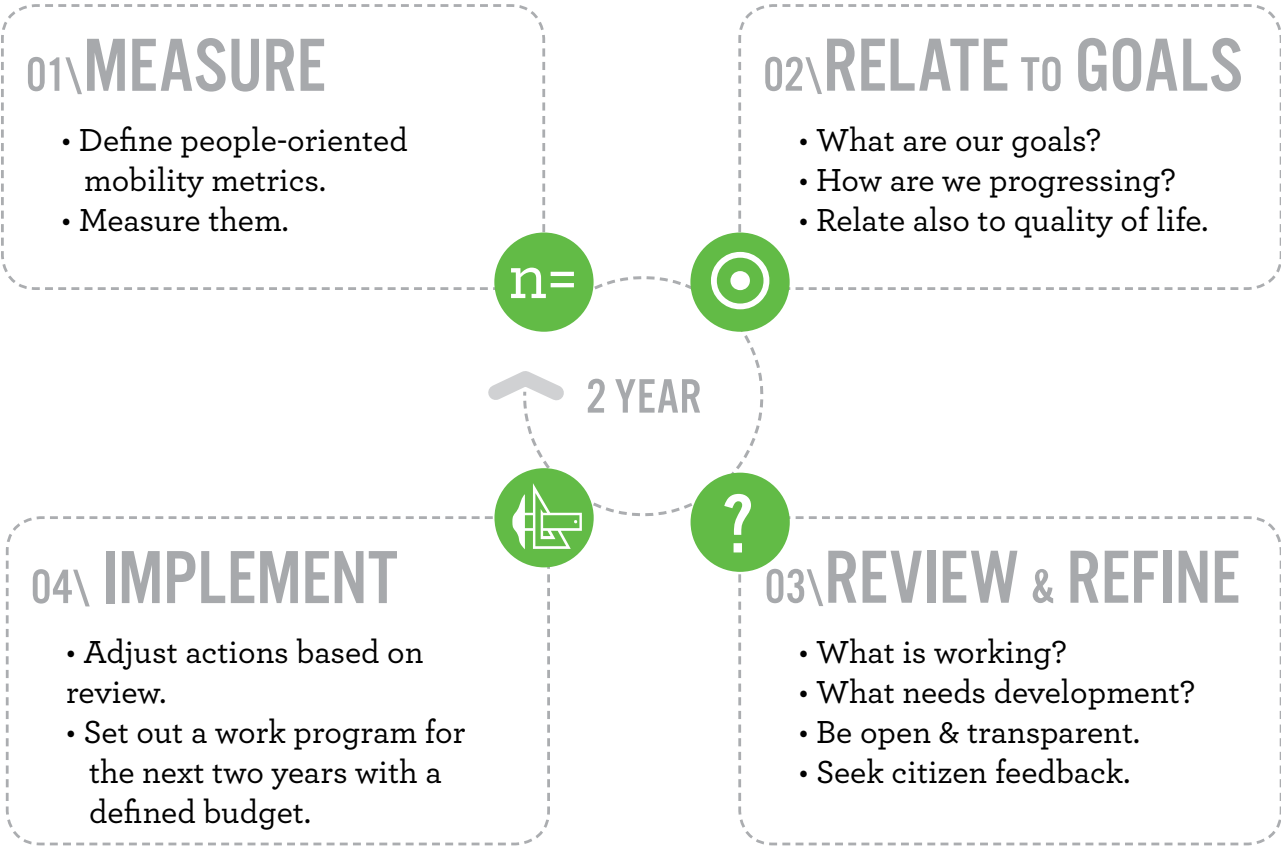
There is no magic bullet for creating mobility choice. Implementation is sensitive to unique social, political and cultural forces.

To keep Red Deer focused on its mobility goals, The City should establish a feedback loop as shown here, with a two year cycle.

To record and guide progress we recommend the establishment of a Biannual Red Deer Mobility Account, similar to the one Copenhagen keeps for cycling (shown here). This would be the key piece of documentation that tracks Red Deer’s progress towards greater mobility choice, and a historical record of how it was achieved.



Copenhagen Bicycle Account  
[www.cycling-embassy.dk](http://www.cycling-embassy.dk)





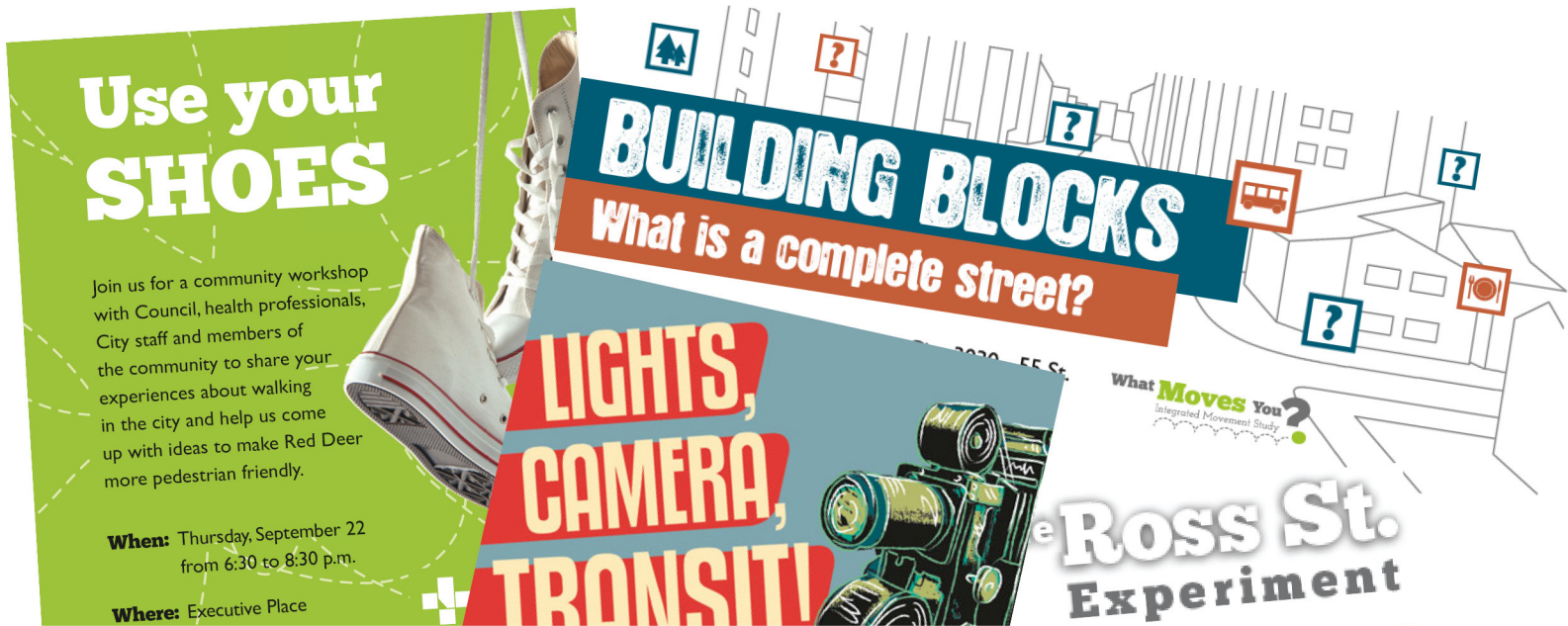




**GEHL** ARCHITECTS  
URBAN QUALITY CONSULTANTS



# Integrated Movement Study Project Summary



The City of Red Deer  
November 2013



TABLE OF CONTENTS

PREFACE	~	I
BACKGROUND	~	2
RATIONALE	~	4
WHO	~	6
PROCESS	~	9
WALKABILITY ROADSHOW	~	10
ROSS STREET EXPERIMENT	~	12
LIGHTS, CAMERA, TRANSIT!	~	14
BUILDING BLOCKS	~	15
SITUATION ASSESSMENT	~	17
MOBILITY PLAYBOOK	~	20
KEY FINDINGS	~	24
IMPLEMENTATION	~	29
CONCLUSION	~	31



## PREFACE

The City of Red Deer has asked a lot of questions, and learned a lot from Red Deerians about moving through our city. We know movement is essential – and we know how we plan to move in our city has to reflect the community and its values.

What moves you? It is a simple question, but reflects the way our roads, sidewalks, trails, transit system and neighbourhoods all interact to highlight what has been done well, where we can improve, and how we should plan our city as we continue to grow.

This document summarizes what The City heard from Red Deerians as we asked what moves you? From The Walkability Roadshow, Ross Street Experiment, Lights, Camera, Transit! and Building Blocks we heard from thousands of Red Deerians about moving through the city, and how we could plan for the future. We have come up with some ideas that we think reflect the needs and desires of the community, and can help us build a transportation network that is truly integrated, and considers all users.

We're not done though. The mobility playbook presents a vision for the community, and we want to hear if it's the right vision for Red Deer. Planning a transportation network around motorists, pedestrians, transit riders, and cyclists, means testing ideas to make sure they're right for Red Deer. So please, read through this document, and stay tuned because The City will be coming back to the community to test the vision put forward in the mobility playbook early in 2013.



## BACKGROUND

The need for planning principles that support a variety of transportation options was adopted as a specific Area of Emphasis in The city's 2009-2011 Strategic plan. As a result, a strategy charter was developed outlining desired outcomes, driving factors, phases, and a general scope required for the strategy to meet the objective of "ensuring that planning and development for growth supports our distinctive character and quality of life."

On September 28, 2009 a road planning workshop was held with Council and key members of administration. The workshop was a good initial step towards understanding the challenges, opportunities, and different points of view to define a clear, informed vision for movement within our community.

Our approach in establishing our strategy and defining this project considered several issues that lead to this work becoming important to pursue:

- Numerous stakeholder groups have expressed a desire to improve the way we move around the city;
- Increasing requests to better accommodate many ways of moving such as walking, biking, transit and automobile;
- An increase in active transportation options as an effort to promote healthy lifestyles;
- Environmental considerations; and,
- The desire to facilitate choice for our residents.



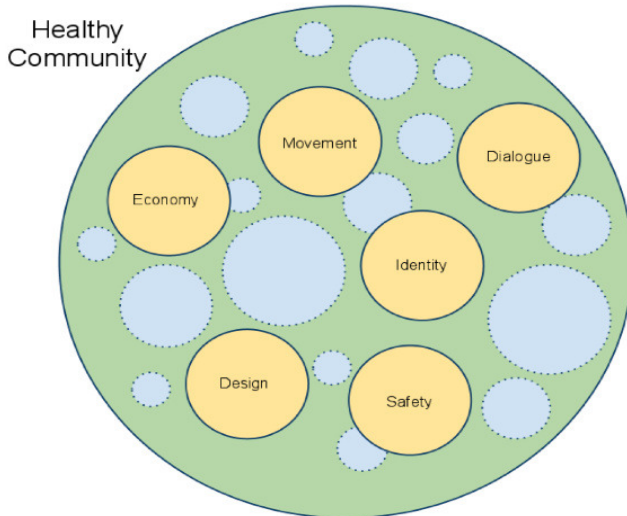


## BACKGROUND

As Red Deer grows, and our vision and direction matures, a broader view and an integrated approach will become a requirement not only for City employees, but also for the consultants and others who wish to work with us. This direction was confirmed in the 2012—2014 Strategic Plan for Council, when it adopted the Movement Charter. The goal of the Integrated Movement Study is:

*“Our deliberate decision to create competitive alternatives to single occupant vehicle travel in transportation network encourages healthy active lifestyles, environmental stewardship, supports safety for people of all ages, increases use of our public and green spaces, and integrates our sidewalks, trails, bike lanes, transit service, rail, and roads with our built environment.”*

The six themes of the strategic direction support a healthy, vibrant, and sustainable community.



This diagram illustrates the themes of our strategic direction (yellow), current initiatives and projects of various sizes (blue), and all of our ongoing activities (green). Many activities and projects will continue and others may need to be adapted as our strategic direction is implemented.

From the 2012—2014 Strategic Direction

**Goal: Be Authentic – Distinctive character (DC)**

**Objective – DC 4:** Ensure green spaces and park systems are core to our distinctive character.

**Strategies:**

- DC 4.1: Complete and implement the River Valley and Tributaries Park Concept Plan.
- DC 4.2: Continue to implement the Trails Master Plan.
- DC 4.3: Implement Walkways Park Special Gathering Places Plan.
- DC 4.4: Develop a comprehensive strategy to acquire green space and parks systems throughout the city, making our decision-making matrix.
- DC 4.5: Encourage year round use of the parks system.

**Objective – DC 5:** Ensure planning and development for growth supports our distinctive character and quality of life.

**Strategies:**

- DC 5.1: Adopt planning principles that support a variety of transportation options.
- DC 5.2: Implement planning initiatives outlined in the inter-municipal development plan (IDP) and joint planning initiative (JP).
- DC 5.3: Continue planning and development for growth in the city consistent with the municipal development plan (MDP).
- DC 5.4: Explore regional opportunities for service delivery and projects and an understanding of The City's role.
- DC 5.5: Review the purpose and objectives of the land bank.
- DC 5.6: Continue to implement approved master plans such as water and waste water master plans, the Emergency Services Master Plan, and the Transportation Master Plan.

**Objective – DC 6:** Maintain a caring and supportive community which identifies and addresses social needs in a role appropriate for The City of Red Deer.

**Strategies:**

- DC 6.1: Promote principles of accessibility in facility and program development.
- DC 6.2: Discuss and define The City's social mandate.

From the 2009—2011 Strategic Direction



The purpose of Integrated Movement Study (IMS) is to confirm and test the vision established by Council for The City's transportation and movement needs, and to further the interpretation of that vision into key, long-lasting principles that will guide decisions related to movement. Whether it is pedestrians, motorists, cyclists, or transit riders, the needs of users must be integrated so The City can plan our infrastructure needs to meet the demands as our city continues to grow.

Acting on input from Council, our community, and on growing national and international interest, The City of Red Deer embarked on an in depth, multi-phase project to test our community's vision and inform the planning and development of a truly integrated, multi-modal transportation network. The study considers appropriate ways to improve transportation planning, as well as related zoning and development practices, to facilitate movement that is safe, efficient, environmentally sound, and financially sustainable.

The IMS is about movement of all types – travel by vehicle, foot, bicycle, transit and other modes. Because of this, we need to consult with the community to plan the safety, comfort and convenience of our transportation network. We must consider the needs of people with disabilities, children, families, and the elderly and balance them with the needs of other private, commercial and industrial users. Overall, this study will help us make it easier for people to get around our city, and help us understand the principle of “nearby” as we make decisions about zoning and transportation development.



## RATIONALE

We are learning as we consult with the community, and our intent is to bring new skills to our organization by taking a holistic approach that looks at not only modes of transportation, but also the built environment, and community amenities.

This project was structured with a focus on intra-organizational involvement because transportation cannot be looked at in isolation. By creating engagement and education opportunities both within The City and externally with the community, we hope to create new knowledge and skills that can be the key to future planning. The staff investment in this research will create new expertise that can be drawn on in making innovative and progressive recommendations to City Council.

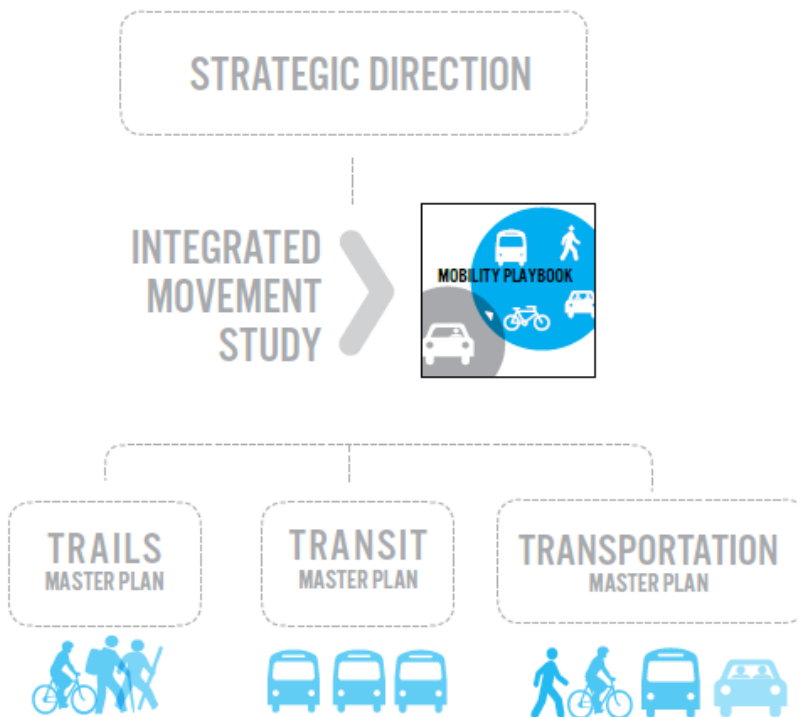


Image from the Mobility Playbook, Gehl Architects & 8-80 Cities

*Council's Strategic Direction informed the development and undertaking of the Integrated Movement Study.*

*The Integrated Movement Study will inform subsequent planning documents that, while more technical and detailed in scope, will reflect the values and benchmarking set out in the Integrated Movement Study.*





WHO

The Integrated Movement Study used an inter-departmental approach from the start. Guiding the overall work of the Integrated Movement Study was its steering committee, consisting of:

Craig Curtis - City Manager  
 Paul Goranson - Director of Development Services (Project Champion)  
 Greg Scott - Director of Community Services  
 Frank Colosimo - Engineering Services Manager  
 Tara Lodewyk - Planning Services Manager  
 Kevin Joll - Transit Manager  
 Shelley Gagnon - Recreation, Parks & Culture Manager

The work of the Integrated Movement Study was carried out by a project team, consisting of the following:

Jim Jorgensen - Former Project Manager, Divisional Strategist for Development Services  
 Syed Ali - Engineering Services  
 Jeremy Bouw - Development Services, Project Manager  
 Quincy Brown - Planning Services  
 Michael Cox - Communications & Strategic Planning  
 David Girardin - Recreation, Parks & Culture  
 Gerry Gummo - Transit Services  
 Trevor Poth - Recreation, Parks & Culture  
 Michael Williston - Engineering Services

The City of Red Deer entered into a collaborative partnership with 8-80 Cities and Gehl Architects to provide support and expertise in best practices that could be applicable to Red Deer.

.....  
**GEHL ARCHITECTS**  
 URBAN QUALITY CONSULTANTS





WHO

8-80 Cities is a not-for-profit organization based out of Toronto, Ontario. 8-80 Cities recognizes that “citizens hold the greatest expertise when it comes to building the communities where they live, work and play.” They are dedicated to contributing to the transformation of cities into places where people can walk, bike, access public transit and visit vibrant parks and public spaces. With 8-80 Cities, we are thrilled to be able to work with Gil Penalosa, Amanda O’Rourke, and Kirstine Tommerup. For more information, visit [www.8-80cities.org](http://www.8-80cities.org).

8-80 Cities has partnered with the esteemed Gehl Architects, based out of Copenhagen, Denmark. Gehl Architects is a consulting firm offering expertise in the fields of architecture, urban design, and city planning. Their work is based on the human dimension – the built environment’s effect on social interaction between people in urban design. We have been the beneficiaries of working closely with Jeff Risom and Claire Mookerjee at Gehl Architects. For more information, visit [www.gehlarchitects.com](http://www.gehlarchitects.com).



Jeff Risom, Gehl Architects



Gil Penalosa, 8-80 Cities



Amanda O’Rourke, 8-80 Cities

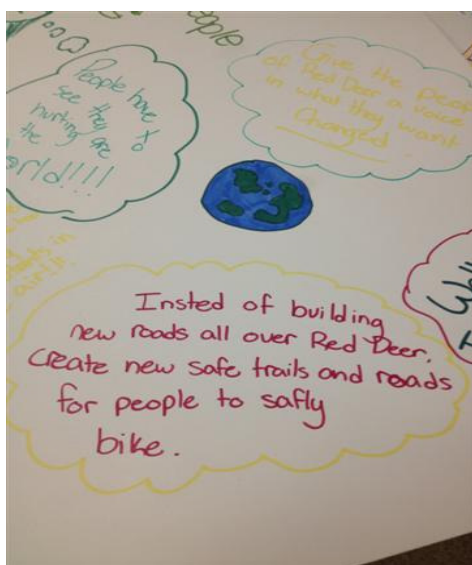
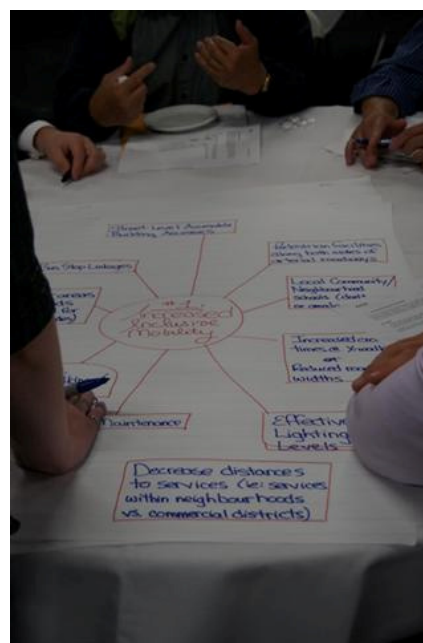




WHO

Throughout the study, the City was able to work closely with several key stakeholders during a variety of workshops, facilitated sessions, and strategic planning sessions. They included the following:

Thousands of Red Deer residents  
 Alberta Health Services  
 Alberta Transportation  
 Central Alberta Manufacturing Association  
 Central Alberta Self Advocates  
 Red Deer Association for Bicycle Commuting  
 Waste Management Canada  
 Red Deer Regional Airport  
 Stantec Consulting  
 McElhanney Consulting  
 ISL Engineering and Land Services  
 Associated Engineering  
 Al-Terra Engineering  
 Red Deer Chamber of Commerce  
 Seniors  
 International Newcomers to Red Deer (CARE)  
 Public/Catholic School Administration  
 Parent Councils





The City views its work with the consultants and the stakeholders as a way to partner with, define, and understand where are we today, where we want to go, and how we can get there. The project's methodology was separated into three aspects: engagement and education, situation assessment, and the mobility playbook.

### **Engagement and Education**

An integral part of the project is engaging and educating our organization and the community about the different modes of transportation, and how to better use our streets as public spaces. The City approached the engagement and education aspect of this project by hosting unique theme based speaker series events. The objective of the speaker series events was to educate and engage Red Deerians, and gather information such as the attractors and barriers of the different modes of transportation. The speakers series was an opportunity to hear from the community, and was not promoting one form of transportation over another.

Four events were held between September, 2011 and May, 2012. The following is a breakdown of each event – what the topic was, who the speaker was, who was involved, and what we heard.



The City of Red Deer partnered with Alberta Health Services (AHS) and Walk21 to carry out the Walkability Roadshow. From the report produced by AHS:

“The Alberta Walkability Roadshow was undertaken to support change that improves walkability and encourages citizens to choose to walk. Walking has long been the most inclusive and popular form of physical activity. Not only is walking associated with improved health but the more opportunities you have for quality walking experiences the more likely you are to choose to walk.

The Walkability Roadshow brings together a team of local and international experts to build a model framework of local strategies, plans, and actions to help create walkable communities. The Roadshow aims to complement the great work already being done in the community and provide resources to help move it forward.”

Over the course of three days, several activities took place. On day one, Walk21 held a workshop with City Council, staff and community stakeholders. At this workshop, participants heard about the tremendous value of planning for walkability, and Mayor Morris Flewwelling signed the International Charter for Walkability. A full-day walkability audit took place with members of Council and the IMS project team. With this audit, the walkability experts – Walk21 – took folks on several different walking tours throughout Red Deer. It was an eye-opening experience for those involved, and revealed several areas to be addressed with regard to walkability in Red Deer.





## WALKABILITY ROADSHOW - SEPTEMBER 21 - 23, 2011

In the evening of the second day, approximately 125 citizens came to the top floor of Executive Place to hear a presentation from Walk21 – highlighting their walking tour from that day – and provide their insights into what would make Red Deer a more walkable community. These insights were gathered, and would later inform a pilot project in the downtown.



*Red Deer residents listen to a presentation from Walk21*



*Walk21 talks to residents about the walkability audit that took place earlier in the day. The consultants, the IMS project team, and some City Councillors did several walking tours throughout Red Deer to see what was working well, and where there were real barriers to walkability.*

**Key Finding:** Consider having pedestrian only streets in the downtown core and improve the snow clearing frequency and intensity of the walkways and trails in the winter.





Building on the success of the Walkability Roadshow, and based on overwhelming support for creating vibrant, walkable places in different parts of our City, the Ross Street Experiment was conceptualized to be the venue for the next speaker series event, with the topic of placemaking.

In the morning, the 17 parking spaces on the north side of Ross Street, between 49<sup>th</sup> Ave and 50<sup>th</sup> Ave, as well as the driving lane running straight west of Veterans' Park, were blocked off and designated as a public space for pedestrians. Picnic tables, live music and hundreds of people filled the space throughout the day. In the evening, approximately 85 people gathered, despite the cool weather, to hear our guest speaker, Gil Penalosa, from 8-80 Cities, talk about place-making and creating vibrant, meaningful spaces for people to gather and interact.



*During the day residents made use of picnic tables scattered throughout the patio; benches and trees provided a barrier between the public space and Ross Street traffic.*



*In the evening, residents bundled up and came out to hear Gil Penalosa talk about the value of placemaking*



**ROSS STREET EXPERIMENT - OCTOBER 18, 2011**

Throughout the day, surveys were collected from people who spent time at the Ross Street Experiment, asking the following question: What are your top 3 priorities for improving the way you move around Red Deer? The results were broken down as follows:

### **Walkability** (63 comments)

Walkability generated the highest number of comments. Three major themes arose:

1. Safety for pedestrians and cyclists
2. More pathways and sidewalks
3. Better planning focused on pedestrian crossings

### **Bikeability** (53 comments)

Bikeability generated the second highest number of comments. The major theme revolved around the need for more bike paths and bike lanes.

### **Cars and Passenger Trucks** (51 comments)

The major theme with regard to cars and trucks revolved around the need for more parking (and free parking).

### **Transit** (47 comments)

Comments on transit focused on three themes:

1. Better routing and coverage
2. Longer and more frequent service
3. Better accessibility to bus stops

### **Planning** (37 comments)

Four themes arose on planning:

1. Support for the Ross Street Experiment
2. Need for more beautification and green space
3. Desire for more mixed developments
4. Support for more cultural activities

**Key Finding:** Some roads in Red Deer can be used to create vibrant public spaces

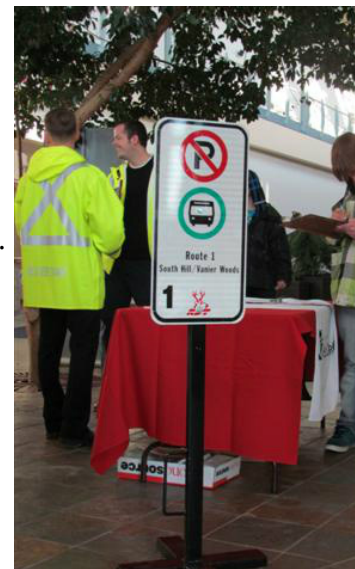




## LIGHTS, CAMERA, TRANSIT! - FEBRUARY 14 - 16, 2012

Public transit is a key component to integrated mobility. Planning for public transit is an opportunity to influence how neighbourhoods and cities are built. Considering public transit through planning gives cities the chance to build more walkable neighbourhoods, encourage active transportation, and strengthen community cores. Transit-oriented development contributes to the creation of great places and quality public spaces, while assuring environmental sustainability and financial responsibility.

Public transit in Red Deer provides “bus transportation services along Red Deer’s main corridors and streets.” As Red Deer’s economy, population, and geographic size grow, the need for public transit increases. As the city’s demographics change, how we think about public transit will also change. The IMS wanted to engage with Red Deerians about transit, and understand more about our current transit system. We wanted to know why people do or do not use transit, and what the barriers are to choosing public transit in Red Deer.



*A traveling bus stop at the Collicutt Centre*

We set out to connect with as many people as we could, and were pleased with the overwhelming response. An on-board transit survey produced 1100 responses, and our face-to-face surveys with Red Deerians produced close to 385 completed surveys. At our public speaking event, approximately 80 people came to provide their thoughts on transit and hear Michael Roschlau, of the Canadian Urban Transit Association, speak.

**Key Finding:** There is a need for increased frequency of buses, and more direct routes to major destination areas.



The City of Red Deer was pleased to invite Gary Toth, of Projects for Public Spaces, to come to Red Deer and talk about complete streets and context sensitive solutions.

From the website [www.pps.org](http://www.pps.org):

Projects for Public Spaces is a non-profit planning, design, and educational organization dedicated to helping people create and sustain public spaces that build stronger communities. Their pioneering placemaking approach helps citizens transform their public spaces into vital places that highlight local access, spur rejuvenation, and serve common needs.

Since the beginning of the Integrated Movement Study, it has been important to share the message that this study is not a war on cars. Vehicle movement is an important aspect in all communities, and that necessity led to our event focusing on complete streets.

Complete streets are streets designed and operated to enable safe, attractive and comfortable access and travel for all users. Often, people think that complete streets are part of a prescriptive design guideline that accommodates all users on all roadways. It was important to connect with City staff, external stakeholders, and citizens, to dispel this myth that is often associated with complete streets. Completing a street is about understanding what a particular roadway can accomplish, and identifying what its primary usage should be. Not all roads are going to have bicycle lanes, bus lanes, pedestrian corridors and commercial transport access; additionally, not all roads should be designed for the largest design vehicle to have priority access.



### BUILDING BLOCKS - MAY 1 - 2, 2012

On May 1<sup>st</sup>, we utilized Safety City and developed an activity that would take what participants heard from Gary and apply those principles in a practical manner. Participants had an exceptional amount of props to use — scaled down bikes, people, trees, cars, trucks, — to design the streets of Safety City for different users.

In groups, people were quick to assemble and design a road that would accommodate the priority road usage they were given. The conversations were dynamic and forward-thinking. The roadway designs also reflected creative problem-solving and unique roadway designs. We did this activity in the morning with City staff, and in the evening with approximately 25 citizens.

On May 2<sup>nd</sup>, key stakeholders were invited to participate in a facilitated activity - Community Based Street Typology - that Gary Toth has done in cities around the world, including San Antonio, Texas and Belfast, Ireland. The activity intended to bring together stakeholders who represent the different priority uses of roadways. The stakeholders who were able to attend our session included:

Central Alberta Rural Manufacturing Association  
 Central Alberta Self Advocates  
 Citizen—pedestrian advocate  
 Red Deer Association for Bicycle Commuting  
 City of Red Deer—Environmental Services, Waste Management  
 Waste Management Canada  
 Red Deer Regional Airport  
 Stantec Consulting  
 McElhanney Consulting  
 ISL Engineering and Land Services  
 Associated Engineering



**Key Finding:** Not all roads in Red Deer need to accommodate the same priority usage; different roads can be designed to accommodate different priority modes of transportation.





To set and achieve the vision and principles of the Integrated Movement Study, The City needs to understand and articulate our current situation. This process will identify the successes and gaps in our current policies, procedures and practices with respect to best practices. The consultants have completed a high level review of the following City documents and identified the successes and gaps in relation to best practices:

- a. Municipal Development Plan
- b. Inter Municipal Development Plan (2011)
- c. Trails Master Plan (2005)
- d. Transit / Special Transportation Study (2004)
- e. Transportation Plan Update (2003/04)
- f. Bicycle Master Plan (2003)
- g. Neighbourhood Planning Guidelines and Standards
- h. Engineering Design Guidelines (2010)
- i. Growth Study (2004)
- j. Progress and Potential – Red Deer's Greater Downtown Action Plan 2008 Update
- k. Commercial Opportunities Study (2010)
- l. Environment Master Plan (2011)
- m. Community Culture Vision (2007)

As a result of the situation assessment, our consultants were able to establish a mobility profile for Red Deer, comparisons to other municipalities of a similar size to Red Deer, the impact costs of planning for alternative modes of transportation, and the benefits of designing for alternatives to single-occupant vehicle usage.





## SITUATION ASSESSMENT

The report identifies key areas that need to be examined through our transportation planning. The following identifies some of the highlights of the situation assessment.

### WALKING

- Extensive recreation network - the network is extensive and a major lifestyle advantage for Red Deer's citizens.
- Limited walking provisions in residential areas - the 'extended curb' that is designed to serve somewhat as a sidewalk in Red Deer is inadequate to invite pedestrian use.
- Downtown leads the way - the most significant measures to encourage walking are being implemented downtown.
- Low suburban density discourages walking - land use patterns in general will have the largest impact on mobility patterns in the future. This must be addressed in any mobility strategy.

### CYCLING

- Extensive recreation network - the network is extensive and a major lifestyle advantage for Red Deer's citizens. It can be a foundation for the creation of a commuter network.
- Limited commuter provision - commuter cyclists require direct routes that feel safe and are free from obstructions. This means a design speed of 15 km/hr. Currently, trails are either recreation routes (indirect, but beautiful) or sidewalks (direct, but obstructed and shared with pedestrians). A commuter provision needs to be delivered.
- Conflict with walking on trails - walking speed is around 5 km/hr and includes baby strollers, children, the elderly and other vulnerable users. Cycling can be up to 20 km/hr and has a high accident risk if undertaken on an urban sidewalk. The modes need to be separated.
- Realistic alternative to the car - cycling has a massive potential in flat, small Red Deer.
- All of Red Deer is within a 20 minute bicycle ride of downtown - this is a fact many cities worldwide would be envious of.



## SITUATION ASSESSMENT

### TRANSIT

- Extensive coverage at the expense of directness - Red Deer's bus routes take circuitous routes that lengthen the journey. A more direct service would create a more competitive alternative to the car.
- 30 minute headway is only sufficient to generate 90% captive transport riders who have no other alternative to transit.

### DRIVING

- Driving is the overwhelmingly dominant form of transport in Red Deer - significant cultural change will need to take place in order to promote alternative forms of mobility. This includes removing direct and indirect subsidies to drive, improving conditions for other modes and public education and awareness programs.
- Red Deer puts cars first on all streets, including extensively in the downtown - building a city only for cars discourages walking, cycling and transit and all of the benefits these forms of mobility offer. Cars are major emitters of carbon dioxide, contribute to a sedentary lifestyle, are comparatively expensive to own and run compared to other transport modes; and are particularly sensitive to oil prices.
- Despite policy stating otherwise, all forecasts predict Red Deer will continue developing as a car-centric city - bold policy and action will be required in order to reverse this trend that is underscored by a deep North American affiliation with the car, and decades of urban development around it.

*All notes on this and the preceding page come directly from the Mobility Profile developed by Gehl Architects. Please refer to the full document for more information.*



This final document will not only outline the vision for transportation, but will also articulate the principles that inform our future transportation and land use planning tools. It also be a tool to assist City Council and administration in making decisions in a coordinated, well understood manner. The City has asked the consultant to follow through with the following:

1. Develop a comprehensive framework that will inform and improve our transportation and land use planning to accomplish the vision and principles. The framework should be divided into short, medium and long term. The intent is the Consultant work with The City in developing the framework. This section will define “How do we get there?”
2. Develop an evaluation tool to establish our level of success in achieving the visions and principals set in the Integrated Movement Study.
3. Produce a modal hierarchy to support principles.
4. Develop a system that assists Council, administration and the community to make coordinated decisions when planning and reviewing for transportation and land use.
5. Assist how this document would fit into the hierarchy of The City’s planning documents.

The intent of the mobility playbook is to be a practical document that will inform subsequent planning documents for The City, which include:

#### **Red Deer Trails Master Plan:**

In addition to evaluating our existing pathways and recommending improvements to them, the plan provides long term direction for future trail development. The plan also includes up-to-date detailed standards to ensure that trails are constructed in a way that allow them to be enjoyed by all types of users.

The plan focuses on identifying all trails and determining where missing links should be filled to create a cohesive network. It also focuses on improving the various trail type standards and identifying trails to be upgraded.



**Transportation Master Plan:**

As a key component of managing and planning for its continued growth, the City of Red Deer has historically updated its transportation plan every six to eight years.

This document articulates specific recommendations for improvement of some of The City's major roadways. The Integrated Movement Study recognizes the need for commercial transport and vehicle prioritization in its planning

**Transit Transportation Study:**

The goal of this study is to identify the most effective and efficient way of delivering public transportation services, and develop a framework for expanding public transportation services in the future as the city grows.





## KEY FINDINGS

Throughout the initial phase of the Integrated Movement Study, The City learned several key things throughout its workshops, citizen input, surveys and what our guest speakers revealed to us during their time in Red Deer.

### KEY FINDING – OUR TRANSPORTATION PLANNING MUST BE BALANCED AND SUSTAINABLE

#### WHERE DID WE LEARN THIS?

The Walk21 Group and the Walkability Roadshow  
Gary Toth, PPS—Context Sensitive Solutions, Community-Based Street Typology  
8-80 Cities & Gehl Architects

#### WHAT DOES IT MEAN?

- Plan for modes of transportation alternative to single occupancy vehicles.
- Different roadways can be designed for different prioritized uses.
- Designate road priority by road type.
- Not all roads need to accommodate the largest design vehicle.
- Road uses can change as neighbourhoods change.
- The City has historically designed primarily for motor vehicles, which naturally limits walkability.
- Encouraging active transportation is good for public health.
- Investing in alternative modes of transportation is economically and environmentally sustainable.
- Balance different modalities.
- The City should work to remove barriers to alternative modes of transportation.







## KEY FINDINGS

### KEY FINDING – OUR STREETS ARE PUBLIC SPACES

#### WHERE DID WE LEARN THIS?

Ross Street Experiment  
Gil Penalosa, 8-80 Cities

#### WHAT DOES IT MEAN?

- Look for opportunities to use streets as public spaces—like the Ross Street Patio, Little Gaetz Farmer's Market, neighbourhood street parties or festivals.
- These spaces can be permanent or temporary.
- Activities can be formal or informal.
- Have a balance between parking needs and public space.



*The Downtown Farmers' Market was a new addition to Little Gaetz on Wednesday afternoons.*





## KEY FINDINGS

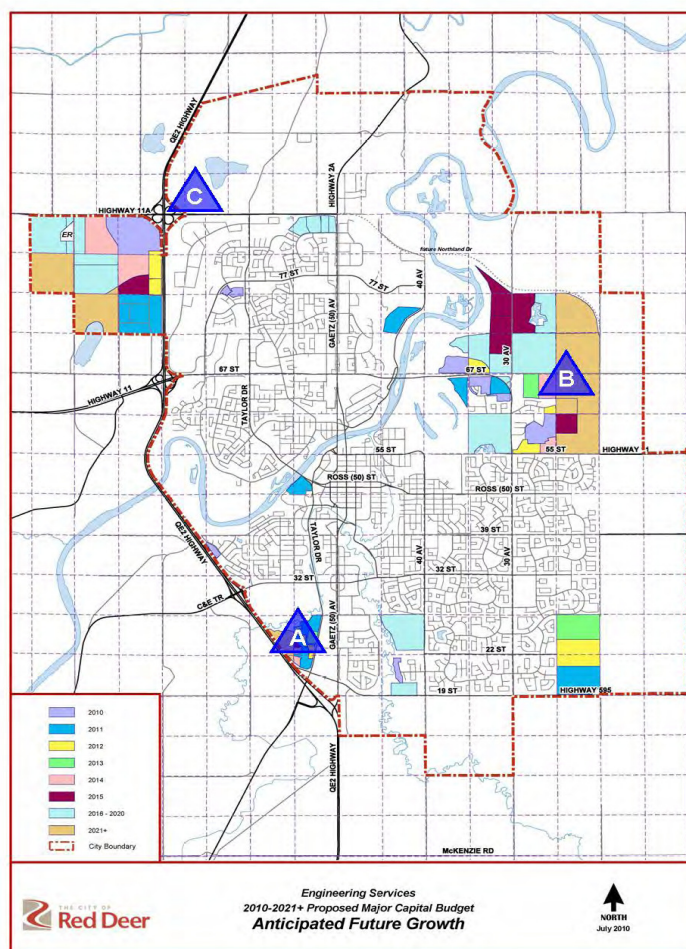
### KEY FINDING - OUR LAND USE PLANNING SHOULD CONNECT TO OUR TRANSPORTATION PLANNING

#### WHERE DID WE LEARN THIS?

Gehl Architects  
Gary Toth, PPS

#### WHAT DOES IT MEAN?

- Our current location and pattern of density does not support public transit to be efficient and sustainable.
- Our current location and pattern of density does not encourage walking as a viable mode of transportation.
- Our current commercial growth pattern may prohibit the success of integrated movement.
- Cluster density to encourage different activities and support different modes of transportation.
- Proximity to commercial, recreation and employment centres should be set to promote alternative modes of transportation.





### KEY FINDING - OUR STREETS CAN ACCOMMODATE MULTIPLE USERS

#### WHERE DID WE LEARN THIS?

Each speaker who came to Red Deer, including those not with the IMS

#### WHAT DOES IT MEAN?

- Our streets have been identified as very wide.
- Our design standards need to be reviewed to determine what road widths are appropriate.
- Many of our roads provide more capacity than what is generally needed.
- We have the ability to retrofit some roads to accommodate alternative transportation priorities.



*A Walk 21 Consultant crosses a wide boulevard in Red Deer.*



*A retrofitted street in downtown Red Deer accommodates larger vehicles, parking, and bicycling infrastructure.*





## KEY FINDINGS

### KEY FINDING - TRANSIT IS A VALUED MODE OF TRANSPORTATION IN RED DEER

#### WHERE DID WE LEARN THIS?

Lights, Camera, Transit! Event with Michael Roschlau, CUTA  
1400 completed surveys

#### WHAT DOES IT MEAN?

- Public transit in Red Deer needs to be prioritized by The City in order for it to become a more viable option for residents.
- Citizens who completed the survey said they wanted: direct/express routes, frequent service, longer service hours, and regular hours during weekends.
- Make transit a competitive option to the single occupant automobile to attract a wider ridership.
- Take steps now to identify potential transit corridors for higher speed transit options (i.e. bus rapid transit on Gaetz Avenue).





## KEY FINDINGS

### KEY FINDING - PLAN FROM A USER PERSPECTIVE INSTEAD OF A SYSTEMS PERSPECTIVE

#### WHERE DID WE LEARN THIS?

Walkability Roadshow  
Gehl Architects

#### WHAT DOES IT MEAN?

- Typically, planning is done from a 30,000 foot level - people see the world at an average of six feet; we need to plan from this level.
- Walk appeal and the pedestrian experience affects perception of distance.
- Organizational shift in mindset for The City and development community to experience the project or development from the user's perspective rather than just reviewing plans.
- Developers will need to demonstrate what the plan looks like from a user perspective.
- City will need to develop evaluation criteria from the user perspective.







## KEY FINDINGS

### KEY FINDING - CHANGES TO MOBILITY, DENSITY AND MODAL SPLIT TAKE TIME, AND CAN CREATE CONFLICT IN THE COMMUNITY

#### WHERE DID WE LEARN THIS?

Throughout the Integrated Movement Study

#### WHAT DOES IT MEAN?

- Red Deer is a growing community and the policies and procedures used by The City need to balance all modes of transportation.
- The support for initiatives and changes in the community are needed to evaluate programs.
- Change takes time, requires patience, and discipline.
- Invest in education and engagement at the onset of an initiative, and continue throughout the project.



*Left: Ross Street downtown before the patio.*

*Above: Red Deer residents enjoy the Ross Street patio.*



The Integrated Movement Study has been working through its initial phase of engagement and education, and situation assessment. The last speaker series event took place in May, and since then, several steps have been taken to carry this project through to the final document. The following outlines the different activities undertaken before the final mobility playbook is presented to City Council for consideration as a planning tool.

**Council Workshop** – September 10, 2012 with the IMS steering committee, project team and our consultants – 8-80 Cities. The intent of this workshop was to confirm with Council the direction of the Integrated Movement Study, as well as present the key findings. These key findings are referenced earlier in this report.

**Council Workshop** – November 27, 2012 with the IMS steering committee, project team and our consultants – 8-80 Cities. This workshop is an opportunity to review the overall process that has been undertaken for the Integrated Movement Study, and what the process will be for the final stages of the study. The final stages of the study are outlined below:

### **Focus Groups**

One of the goals of the IMS is to listen and better understand the current challenges and opportunities from people of all walks of life—children and youth, seniors, new Canadians, business people, parents, and many more. To achieve this goal, The City and its consultants will engage the members of a few different groups to find out what is important to them about how they move throughout Red Deer. These focus groups will be facilitated by 8-80 Cities.



**Draft Mobility Playbook to Council – March, 2013**

The mobility playbook will be presented to Council at the Open Council meeting on March 18, 2013. Our consultants, including Gehl Architects, will be available at the meeting to answer any of Council's questions, as well as to provide an overview of the Integrated Movement Study and the mobility playbook.

**Public Consultation – March—April, 2013**

After Council has reviewed the mobility playbook, our intent is to bring it out to the community in several varied and unique ways. This document will inform subsequent planning documents, and we recognize the importance of taking it out to as many people as we can to confirm the principles and values developed through the Integrated Movement Study. Our approach will be multi-faceted and geared toward connecting with people in a way that is meaningful for them. The feedback will be compiled and attached to the final report and mobility playbook that will be going to council in May, 2013.

**Final Playbook to Council – May, 2013**

After the document has been taken out to the community, the final document will be brought to Council, with the recommendation of being adopted as a planning document by The City. Our intent is to bring the final document to the May 27th Open Council meeting.



## CONCLUSION

The Integrated Movement Study has been a large undertaking and a great opportunity to connect with many people in Red Deer about a very important topic: what moves you? The resulting document will challenge the way The City has done transportation planning, but also reflect the values, principles, and practical needs of Red Deerians, particular to facilitating transportation choices.

There are many opinions about transportation planning; throughout this process, we have heard many different ideas, thoughts, and desires with regard to what is important to Red Deerians. The intent of this project is not to adopt one point of view about transportation planning and apply it to all decisions made about roads, public transit, sidewalks, and so on. The intent is to develop meaningful values and benchmarks that can be used to inform decisions made about how Red Deerians move throughout the city.

The steering committee and project team would like to thank everyone who has been involved with this project, and everyone who will be involved in shaping the way we move through Red Deer. This conversation is important, and it has been very valuable having it with you.

For more information, please visit: [www.reddeer.ca/whatmovesyou](http://www.reddeer.ca/whatmovesyou)



May 08, 2013

## Municipal Election Signs

Inspections and Licensing

### Report Summary & Recommendations:

---

Inspections & Licensing Administration makes a recommendation that Council approve the three new locations for election signs and approve a change to location 9B to accommodate new development in the area.

Inspections & Licensing department recommends the addition of new election sign locations at:

1. Taylor Drive north and south bound from 77 Street to Highway 11A,
2. West and east bound on 32 Street from 57 Avenue to QE2,
3. North bound on Gaetz Avenue to Highway 11A.

Inspections & Licensing department further recommends a change to the existing election sign location 9B from south/west bound on 67 Street and 30 Avenue to north/east bound.

### City Manager Comments:

---

I support this recommendation of Administration and the direction Council provided during discussion at the Governance & Policy Committee meeting. The other locations identified for addition to the list of designated election sign locations seem appropriate.

Craig Curtis  
City Manager

### Proposed Resolutions:

---

Resolved that Council of The City of Red Deer having considered the report from the Inspections & Licensing department dated May 8, 2013 re: Municipal Election Signs hereby recommends the addition of new election sign locations at:

1. Taylor Drive north and south bound from 77 Street to Highway 11A,
2. West and east bound on 32 Street from 57 Avenue to QE2,
3. North bound on Gaetz Avenue to Highway 11A.

Resolved that Council of The City of Red Deer having considered the report from the Inspections & Licensing department dated May 8, 2013 re: Municipal Election Signs hereby agrees to change the existing election sign location 9B from south/west bound on 67 Street and 30 Avenue to north/east bound.



## Report Details

### Background:

---

Following the 2001 election, Council approved the placement of election signs on select, designated public lands, which has been the practice to date. Criteria for the locations were determined as following

- Main arterials
- Aesthetics
- Safety
- No conflict with underground lines and utilities.

Enforcement of the placement of election signs has been conducted by Legislative Services Department, who tried to resolve sign issues which related to requests for removal of signage or signage conflict between candidates.

There has been an election sign placement booklet made available to all candidates at each election which gives information on criteria and the location of where the election signs can be placed within the City. There were 34 locations identified for the 2010 election.

### Discussion:

---

A survey was conducted by the Legislative Services Department in 2010, following the municipal election to obtain feedback on the election sign regulations. Council reviewed the report and feedback and on January 24, 2011 City Council passed a resolution for the review of election signage.

The resolution was as follows:

**“Resolved** that Council of The City of Red Deer having considered the report from the Legislative Services Manager / Returning Officer, dated December 28, 2010, re: 2010 General Election Overview, hereby agrees as follows:

1. That Administration is directed to review existing election sign locations and bring back recommendations for criteria for election sign locations and location reductions.
2. That all issues of election sign compliance be referred to bylaw enforcement.”

Further direction and clarity was required by administration in order to complete the review of election signs. Inspections & Licensing took a report to the Governance and Policy Committee on January 28, 2013. The resolutions following this meeting were:

**“Resolved** that the Governance & Policy Committee, having considered the report from the Inspections & Licensing Manager, dated January 18, 2013 regarding Election Signs, hereby agrees that the direction with



*respect to the election sign locations will be unchanged and that administration proceed with identifying further designated locations within growth areas.”*

*“Resolved that the Governance & Policy Committee, having considered the report from the Inspections & Licensing Manager, dated January 18, 2013 regarding Election Signs, hereby supports the recommendation of Administration to proceed with changes to the enforcement of election signs as follows:*

- *Call owner to indicate non-compliance;*
- *Request compliance within 24 hours;*
- *Issue fines as necessary;*
- *Bring forward an amendment to the Land Use Bylaw to modify penalties to election sign provisions to be the same as those applied to real estate signs; and*

*Governance & Policy Committee further agrees that where possible, only “soft” enforcement of election signs be applied as the campaign period is for a brief period where election signs are a tool used to support democratic process.”*

## **Analysis:**

The Inspections & Licensing Department has completed a thorough review of existing and potential new locations for election signs. Site inspections were completed at each location by Inspections & Licensing. As well, several City Departments were contacted in regards to the proposed locations and their comments were taken into consideration when recommending the final site locations.

Administration took into account the following criteria for the new proposed locations:

- Main arterials to provide for maximum exposure to the public
- Aesthetics – designated locations large enough to accommodate signs without becoming cluttered or causing excessive visual blight
- Safety – do not interfere with traffic safety, block the view of traffic control devices, obstruct site lines, distract drivers, or impede vehicular or pedestrian traffic.
- Ensure there is no conflict with underground lines and utilities.

It is recommended that the following three sites be added:

1. Taylor Drive north and south bound from 77 Street to Highway 11A
2. West and east bound on 32 Street from 57 Avenue to QE2
3. North bound on Gaetz Avenue to Highway 11A.

Change the existing election sign location 9B from south/west bound on 67 Street and 30 avenue to north/east bound.



With the addition of the three proposed locations there would be 37 locations where municipal election signs can now be placed. If council approves the recommended changes a new election sign placement booklet will be made available to all candidates for the upcoming 2013 fall election.

### **Enforcement**

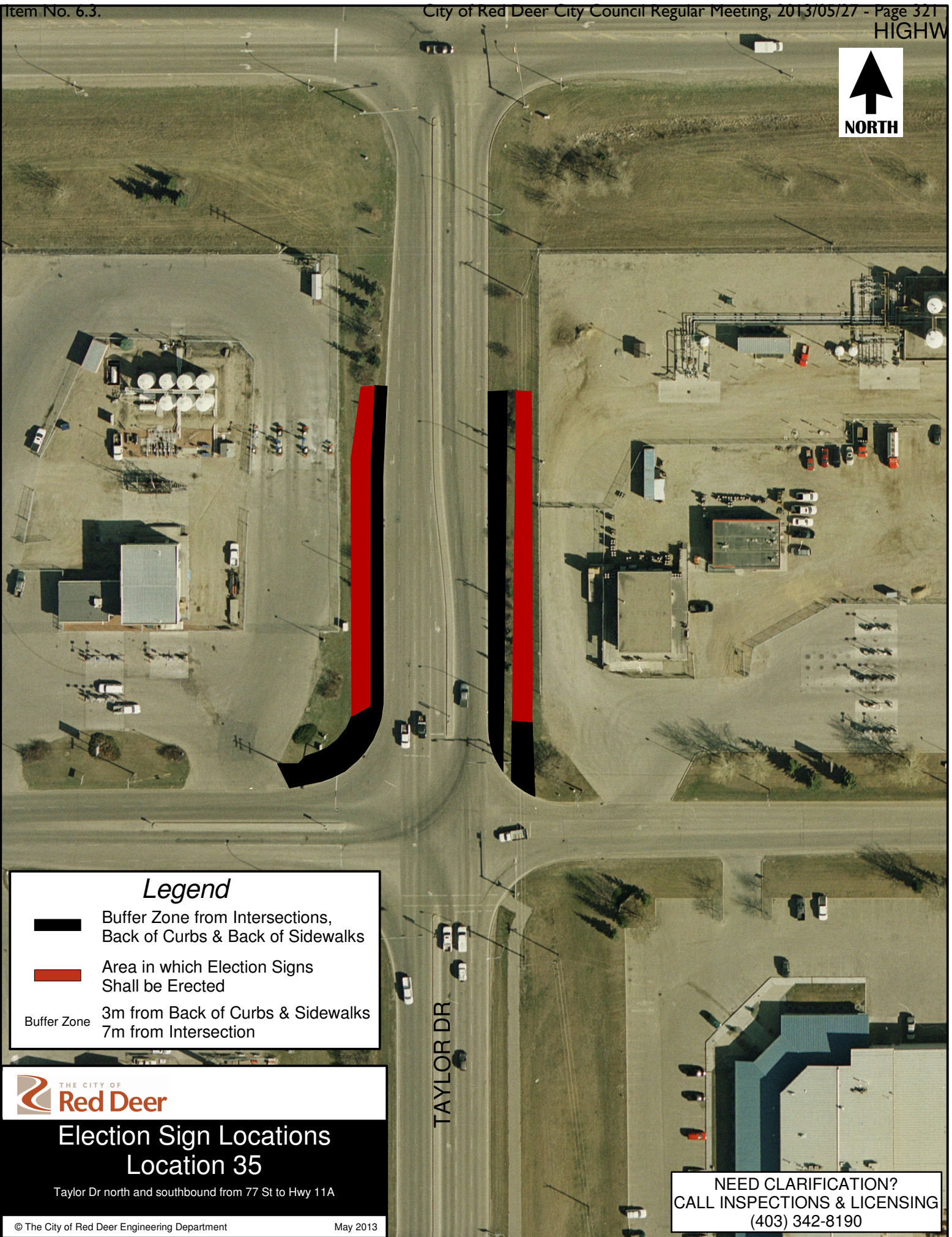
For past elections, enforcement as it relates to election signage has been conducted by the Legislative Services Department. Traditionally, administration tried to resolve election sign issues before taking a stronger enforcement approach, including removal or ticketing. Ample opportunity, typically 48 hours, was provided to candidates to rectify a sign that was not compliant. Candidates were contacted directly via telephone, the sign location identified, the nature of the violation described, and a request for removal or relocation made. These calls were logged and the date at which the candidate corrected the situation was noted. There have been very few instances in which Public Works has been asked to remove a sign, and no violation tickets have ever been issued.

Inspections & Licensing Department will be taking over the enforcement of non-compliance of election signs. Similar processes will be followed as previous elections, which are outlined in the resolution passed by GPC. Administration will work with candidates to resolve any problems that may occur during the time their signs can be posted.

### **Land Use Bylaw Amendment**

At this time the Planning Department is working on a Land Use Bylaw amendment that will be coming to Council in June or July which will deal with a number of small housekeeping items. Within this proposed Land Use Bylaw amendment a minor change will be proposed to the specified penalties within Schedule C" which will add penalties for displaying an election sign in contravention of the Bylaw. Similar to other signs such as "open house" and "real estate" signs the penalties will be \$100.00 first offence, \$250.00 second offence and \$500.00, third offence.





### Legend



Buffer Zone from Intersections,  
Back of Curbs & Back of Sidewalks



Area in which Election Signs  
Shall be Erected

Buffer Zone

3m from Back of Curbs & Sidewalks  
7m from Intersection



## Election Sign Locations Location 35

Taylor Dr north and southbound from 77 St to Hwy 11A

NEED CLARIFICATION?  
CALL INSPECTIONS & LICENSING  
(403) 342-8190





### Legend



Buffer Zone from Intersections,  
Back of Curbs & Back of Sidewalks



Area in which Election Signs  
Shall be Erected

Buffer Zone

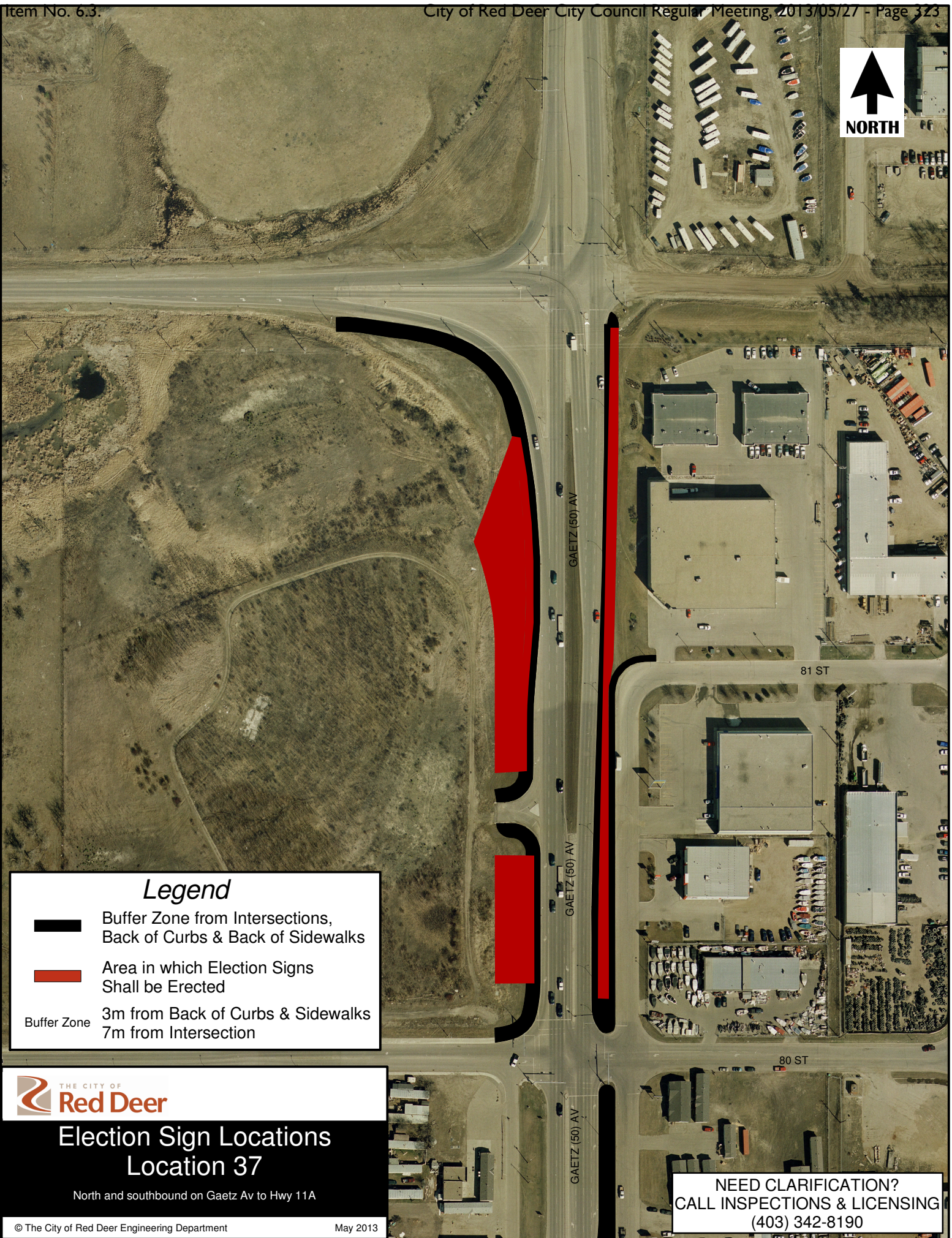
3m from Back of Curbs & Sidewalks  
7m from Intersection



## Election Sign Locations Location 36

West and eastbound on 32 St from Taylor Dr to QE2





### Legend



Buffer Zone from Intersections,  
Back of Curbs & Back of Sidewalks



Area in which Election Signs  
Shall be Erected

Buffer Zone

3m from Back of Curbs & Sidewalks  
7m from Intersection

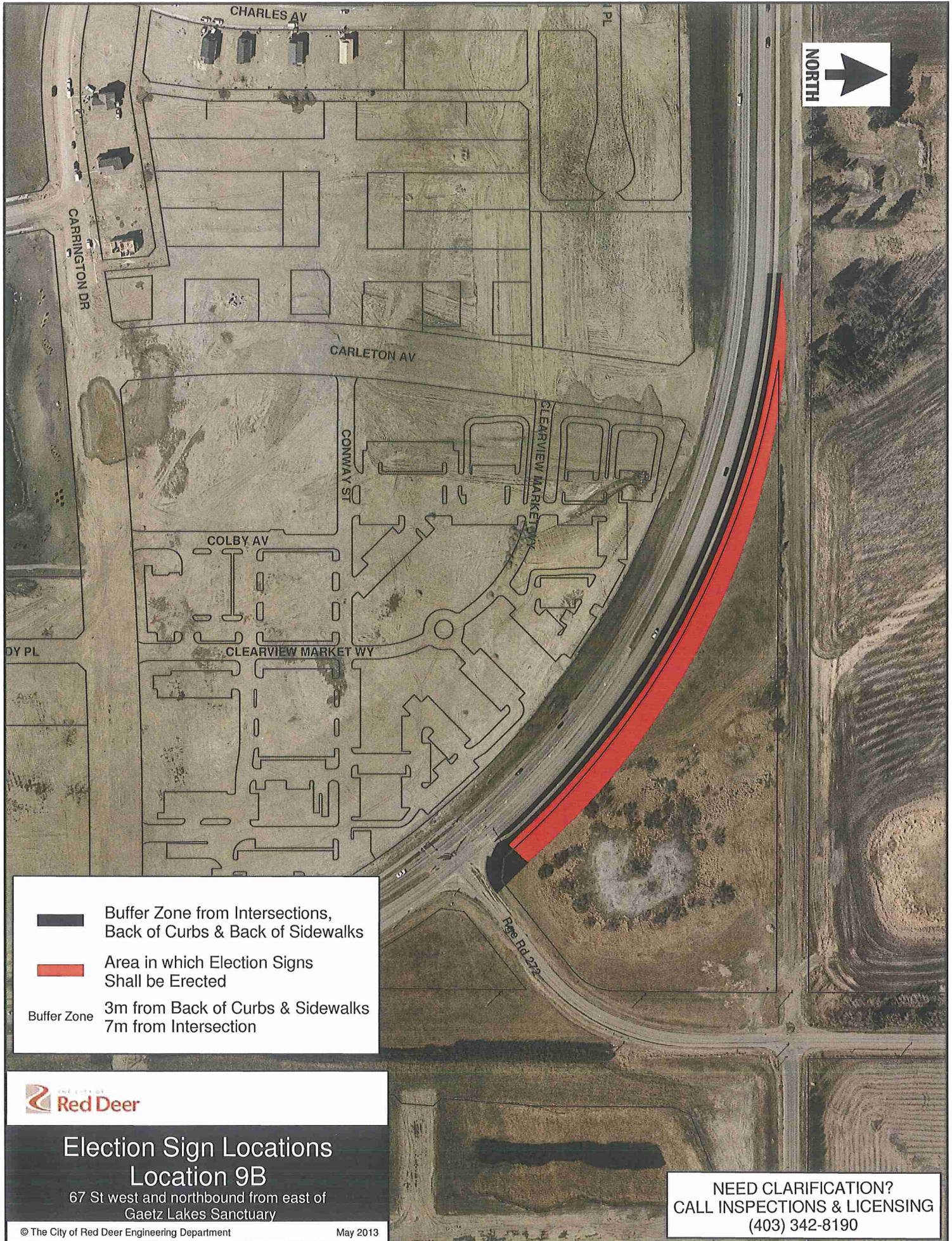


## Election Sign Locations Location 37

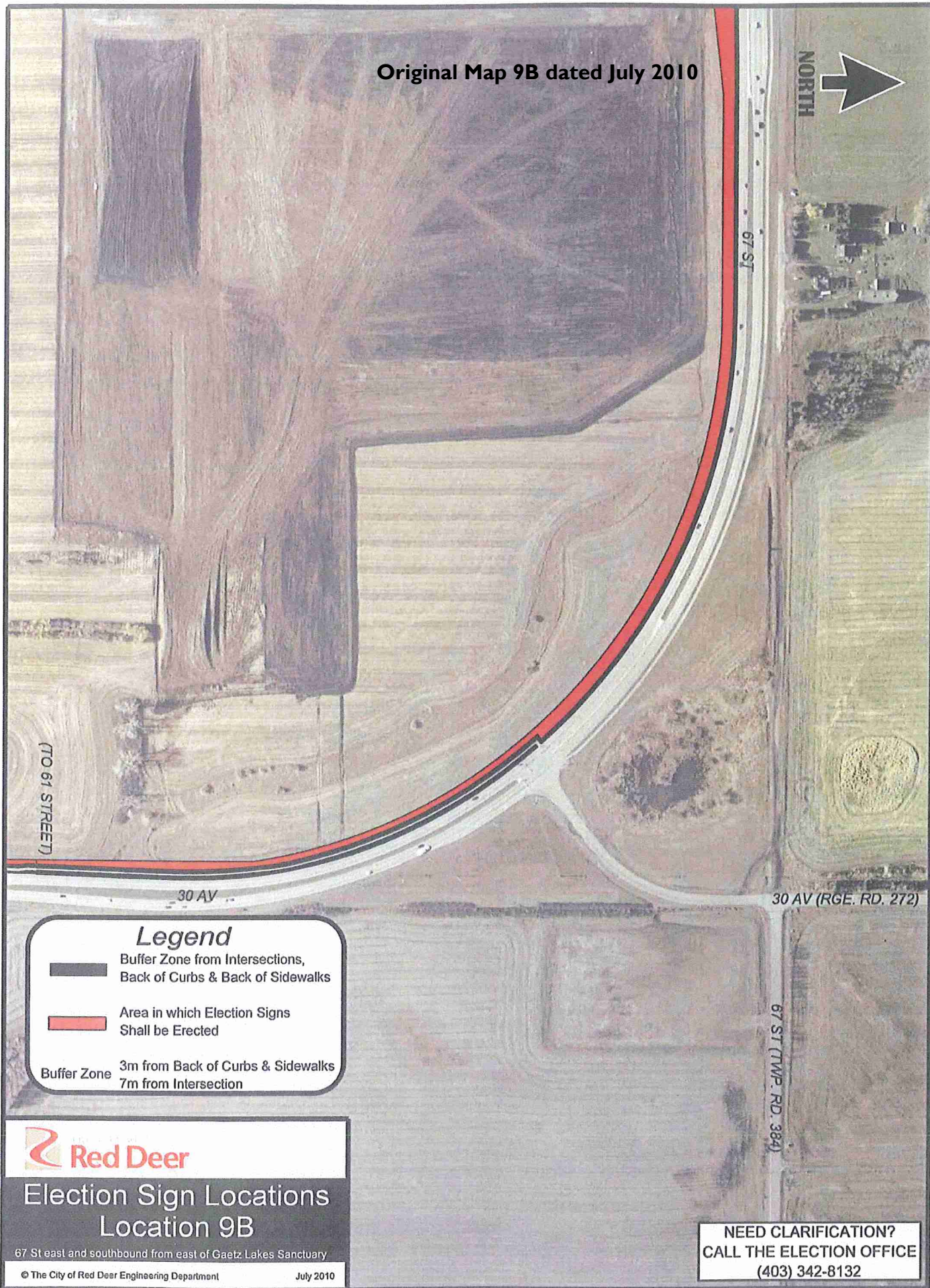
North and southbound on Gaetz Av to Hwy 11A

NEED CLARIFICATION?  
CALL INSPECTIONS & LICENSING  
(403) 342-8190











May 13, 2013

## Discretionary Use for Outdoor Sale and Display of Goods in Clearview Market

Inspections and Licensing

### Report Summary & Recommendation:

---

It is recommended that City Council approve the discretionary use for outdoor sale and display of goods in connection with a 134.9m<sup>2</sup> accessory structure within a 645.93m<sup>2</sup> fenced and screened enclosure for a seasonal garden centre, to be located at 3 Clearview Market Way (Lot 4, Block 9, Plan 112-3961), zoned DC(27).

Approval is subject to:

1. The Owner will be required to obtain an Occupancy Permit for the seasonal garden centre and related sales and storage each year from the Inspections & Licensing Department.
2. The Owner will be required to remove the garden centre structure and fence enclosure from September 1<sup>st</sup> until March 31<sup>st</sup> each year.

### City Manager Comments:

---

I support the recommendation of Administration

Craig Curtis  
City Manager

### Proposed Resolution

---

Resolved that Council of The City of Red Deer having considered the report from Inspections & Licensing dated May 13, 2013 re: Discretionary Use for Outdoor Sale and Display of Goods in Clearview Market, hereby approves the discretionary use for outdoor sale and display of goods at the Independent Grocers store located in the Clearview Market Square. Approval is subject to:

- 1) The Owner will be required to obtain an Occupancy Permit for the seasonal garden centre and related sales storage each year from the Inspections & Licensing department, and
- 2) The Owner will be required to remove the garden centre structure and fence enclosure from September 1<sup>st</sup> until March 31<sup>st</sup> each year.





## Report Details

### **Background:**

---

The Clearview Market site is zoned Direct Control (DC27). The general purpose of this Direct Control (DC27) district is “to allow for and encourage a variety of commercial, limited office, residential, civic, cultural and recreational uses that primarily serve the local neighbourhoods. These uses shall be distributed throughout a comprehensively designed development area that emphasizes sustainability and compact pedestrian friendly urban development.”

The DC27 district allows for a number of permitted uses, such as commercial service facilities, retail sales and restaurants. There are a number of developments under construction and completed within the site.

On January 17, 2012, the Development Officer approved the Development Permit for a 2583.7m<sup>2</sup> grocery store, on behalf of Independent Grocer, which opened in December, 2012.

### **Discussion:**

---

A development permit application for an accessory building for a seasonal garden centre and the outdoor sale & display of goods has been received by the Inspections & Licensing Department from Loblaw Properties West Inc. (Independent Grocer).

City Council is the approving authority for all applications for discretionary uses in the Clearview Market. The accessory building for the garden centre and the related outdoor display and sales of good are deemed discretionary uses.

The garden centre will be located in the west parking area of the store and operate annually from April until August. The garden centre will cover 26 parking stalls, during this period. The parking layout was approved by City Council in the overall concept plan for Clearview Market on September 20, 2010. The parking requirement for the grocery store would be 142 stalls and the garden centre would be 36 stalls for a total of 178 stalls. The liquor store and gas bar would require another 30 stalls for a total of 208 stalls. There are 272 stalls in this area; 246 with the removal of the 26 stalls for the garden centre location.

The garden centre is 645.93m<sup>2</sup> and will be enclosed with screened metal fencing. The temporary accessory structure is 134.9m<sup>2</sup> and will be located within the enclosed area.

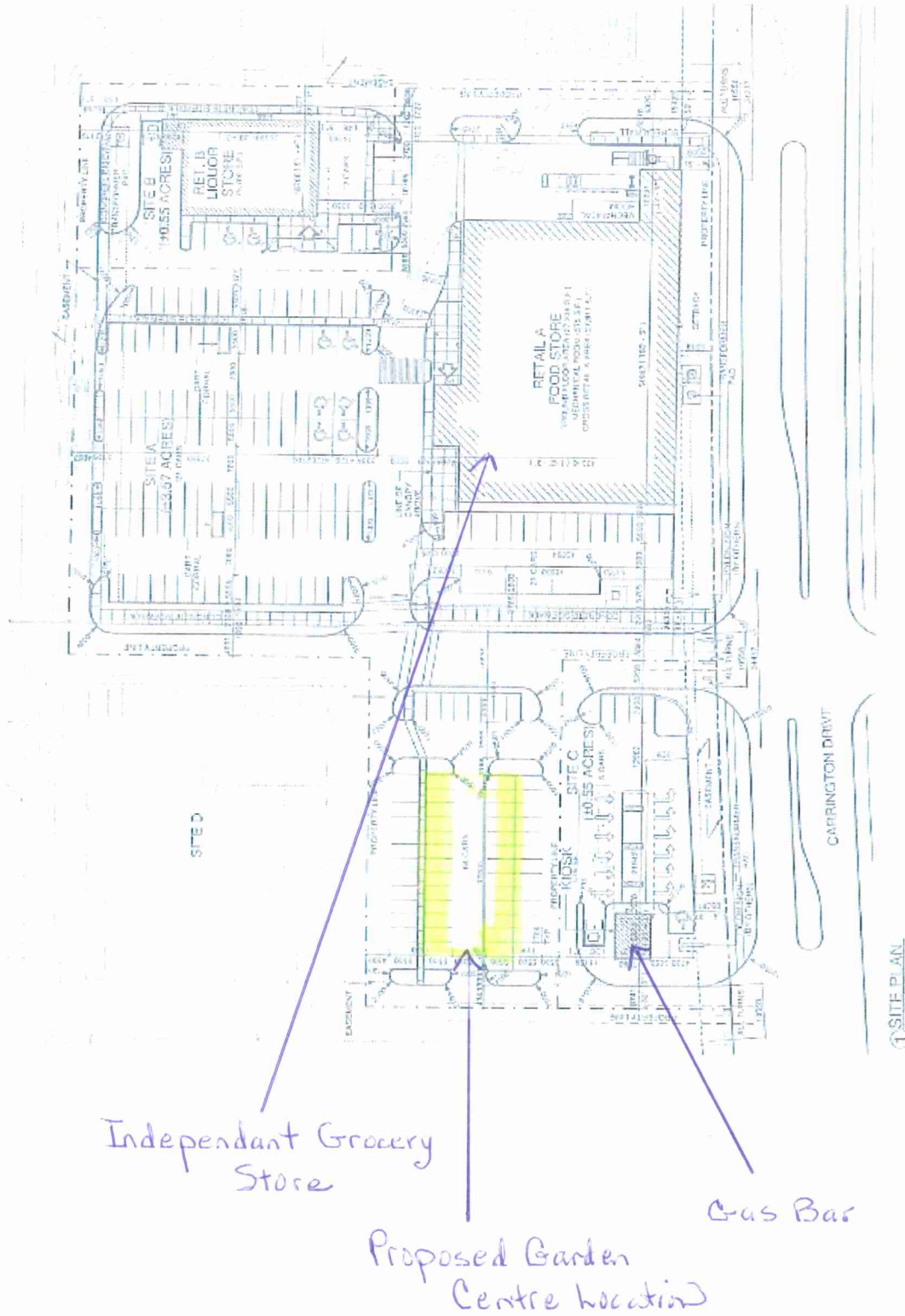


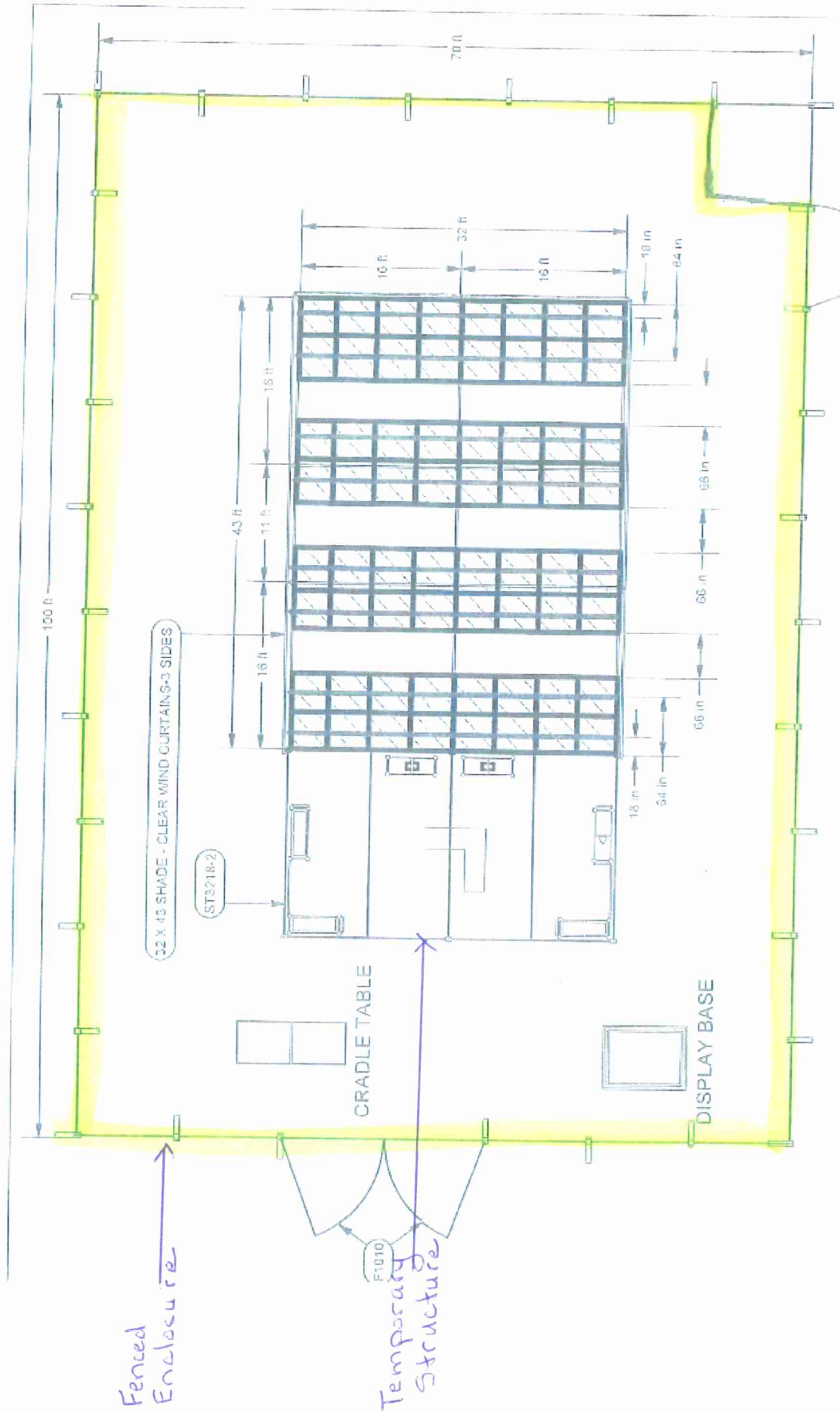
Within the Land Use Bylaw, Section 5.7(10), the regulations for outdoor display or sale of goods in commercial districts, indicate that screening shall not exceed 2.5 metres in height or exceed 25% of the gross floor area of the retail store and outside storage of goods are to be kept in an orderly manner. Administration has worked with the developer on these standards and they do meet the requirements of the Land Use Bylaw for parking and location of the garden centre

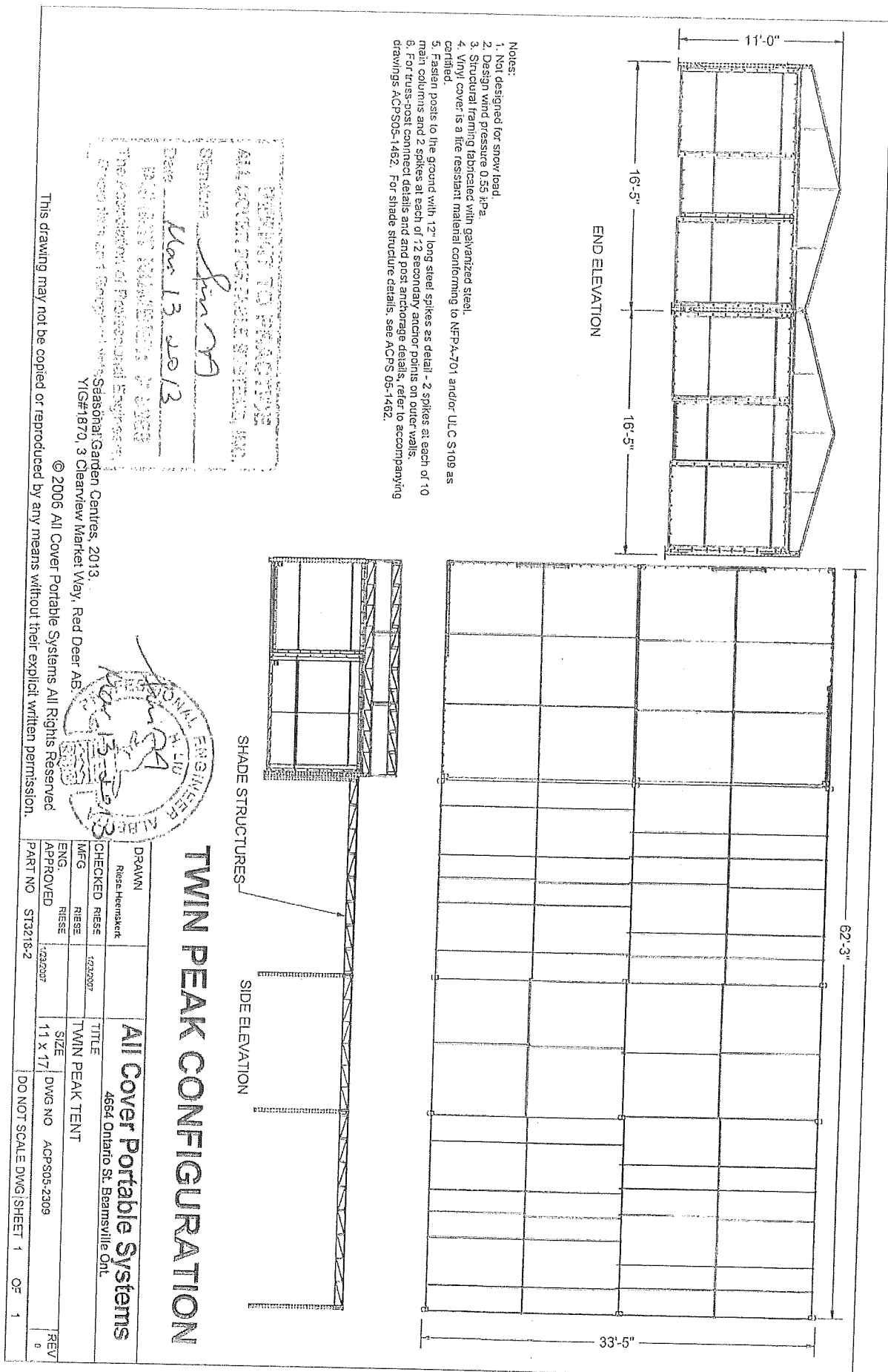
**Analysis:**

---

The use of an garden centre and outdoor sale & display of goods is consistent with the use of a grocery store and the proposed uses do not deviate from the intent of the Clearview Market Concept Plan.





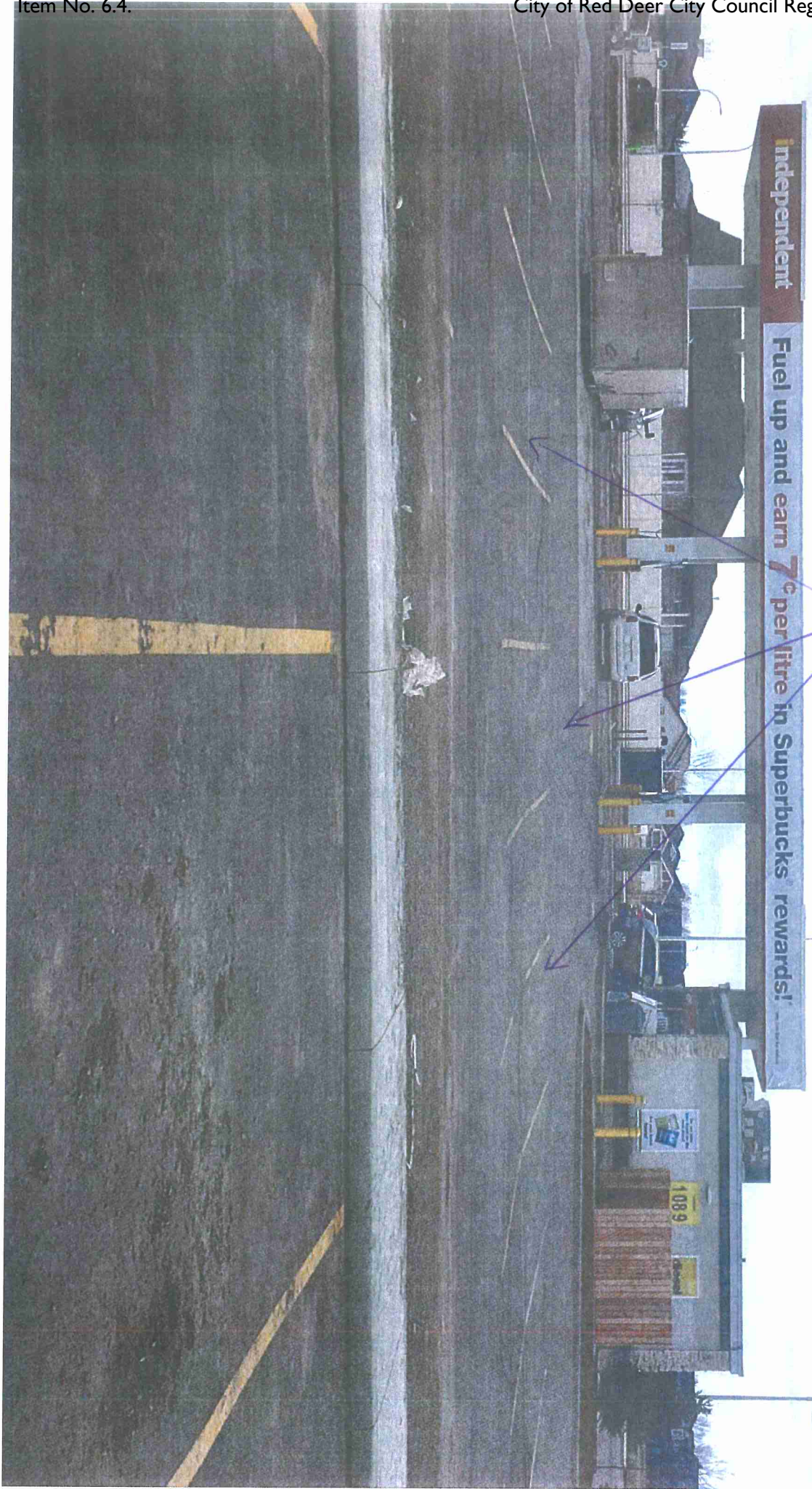




Example of Screened Fencing  
on another location







Location of Proposed Garden Centre







**Red Deer** 3 Clearview Market Way

The City of Red Deer does not guarantee the accuracy of the information.  
Data to be used as information only.  
Copyright © 2012 The City of Red Deer

**Redgis**  
May 9, 2013  
Scale 1:1930



May 14, 2013

## Change in Start Time for the Monday, June 10, 2013 Council Meeting

Legislative Services

### **Report Summary & Recommendation:**

---

Administration is requesting that Red Deer City Council change the start time of the Monday, June 10, 2013 Council Meeting to 12:00 p.m. from 2:00 p.m. to accommodate the number of items scheduled to that agenda.

### **City Manager Comments:**

---

I support the recommendations of Administration that Council change the start time of the Monday, June 10, 2013 Council meeting to 12:00 p.m.

Craig Curtis  
City Manager

### **Resolution:**

---

Resolved that Council of The City of Red Deer, having considered the report from the Legislative Services department, dated May 14, 2013, re: Change in Start Time for the Monday, June 10, 2013 Council Meeting, hereby agrees to change the start time of the Monday, June 10, 2013 Council Meeting from 2:00 p.m. to 12:00 p.m.





April 29, 2013

## AUMA Resolutions

LEGISLATIVE SERVICES

### Report Summary & Recommendation:

---

Each year, municipalities are invited to contribute resolutions that strive to address a topic of concern to municipalities throughout the Province for consideration by the AUMA membership. Resolutions that are adopted inform and direct AUMA's activities.

Council has requested the development of resolution requesting the AUMA encourage the province to increase the reporting threshold for non-injury collision.

### City Manager Comments:

---

I support the recommendation of Administration.

Craig Curtis  
City Manager

### Proposed Resolutions:

---

Resolved that Council of The City of Red Deer having considered the report from Legislative Services dated April 29, 2013 re: AUMA Resolutions hereby agrees to forward to the Alberta Urban Municipalities Association (AUMA) the following resolution:

#### **Increasing the Reporting Threshold for Non-Injury Collision**

**Whereas** in 2011 the Alberta Transportation changed the reporting threshold for non-injury collisions from \$1,000 to \$2,000; and

**Whereas** this was the first change in 20 years; and

**Whereas** this new threshold was intended to better reflect the current cost of vehicle repairs but is still not reflective of the current costs as escalated over a 20 year period; and

**Whereas** policing responses to non-injury collisions comprise a significant portion of policing resources that could be better utilized in improving public safety;

**Now therefore be it resolved that** the Alberta Urban Municipalities Association urge the Province of Alberta to further increase the reporting threshold for non-injury collisions from \$2,000 to \$5,000.



Resolved that Council of The City of Red Deer having considered the report from Legislative Services dated April 29, 2013 re: AUMA Resolutions hereby agrees to forward to the Alberta Urban Municipalities Association (AUMA) the following resolution:

### **Provincial Recycling Programs**

**Whereas** ensuring resource sustainability is a concern of all Albertans; and

**Whereas** the Province of Alberta has taken a leadership role in the creation of provincial wide recycling programs including electronics, tires and beverage containers; and

**Whereas** the Province's leadership has enabled a greener environment and secured recycling facilities for the betterment of all Albertans and the Province as a whole; and

**Whereas** Alberta villages, towns and cities collaborate with other orders of government and stakeholders to ensure the sustainability of future resources; and

**Whereas** many commodities are not recycled or are recycled at significant costs to municipalities due to the volatility of commodity markets; and

**Whereas**, it is in everyone's interest that the maximum amount of recyclable materials are recycled;

**Therefore be it resolved that** the Alberta Urban Municipalities Association urge the Province of Alberta to:

1. Expand and refine the existing Extended Producer Responsibility programs to include more items (e.g. electronics) and not download costs to municipalities (e.g. paint).
2. Develop additional Extended Producer Responsibility programs for items such as construction and demolition waste, leaf and yard waste and packaging waste.
3. Create a means to stabilize and develop predictable markets for recyclable materials including plastics, glass, paper, cardboard and other materials.

Resolved that Council of The City of Red Deer having considered the report from Legislative Services dated April 29, 2013 re: AUMA Resolutions hereby agrees to forward to the Alberta Urban Municipalities Association (AUMA) the following resolution:

### **Reducing Greenhouse Gas Emissions from Power Generation**

**Whereas** the population of Alberta is expected to continue to grow, as are the number of businesses and other electricity consumers; and





**Whereas** electricity use is a significant contributor to the emission of green house gases (GHG); and

**Whereas** Alberta's primary source of electrical generation is coal power; which emits high GHGs compared to other sources such as hydro, natural gas, wind or solar, and thus causes Alberta to register a much higher emissions factor than other provinces, and

**Whereas** The Government of Alberta is presently reviewing its "2008 Climate Change Strategy" with regard to ongoing efforts and focus on reducing Green House Gas emissions, and

**Whereas** there are high health and environmental costs to the pollution generated by coal fired electricity production which are often borne by individuals and local municipalities,

**Whereas** other provincial governments including Ontario and Nova Scotia have significantly reduced their dependence on coal-fired generation of electricity by various means, demonstrating the transition is possible, and

**Whereas** many municipalities have been investing time and resources into local sustainability initiatives to reduce green house gas emissions, but have little control over the regulation and province wide electric system;

**Therefore be it resolved that** Alberta Urban Municipalities Association urge the Province of Alberta to move away from our province's dependency on coal power by investing in renewable energy and natural gas fired electricity generation and by assisting in developing alternative energy sources through financial incentives, education, promotion and collaboration with municipalities.

## Report Details

### Background:

The Alberta Urban Municipalities Association (AUMA) was founded in 1905 and represents Alberta's 284 urban municipalities including cities, towns, villages, summer villages, and specialized municipalities, as well as Associate and Affiliate members. The AUMA represents and advocates the interests of all members to both the provincial and federal governments as well as other provincial and federal organizations.

Each year, municipalities are invited to contribute resolutions that strive to address a topic of concern to municipalities throughout the Province for consideration by the AUMA membership. Resolutions that are adopted inform and direct AUMA's activities.

### Discussion:

Attached are appendices reflecting 3 topics which Council and the Corporate Leadership Team have identified for consideration of resolution development. The topics are:



- Appendix 1: Increasing the Reporting Threshold for Non-Injury Collision
- Appendix 2: Provincial Recycling Programs
- Appendix 3: Reducing Greenhouse Gas Emissions from Power Generation

Each of these topics have been reviewed in context of prior resolution adopted by the AUMA and a recommendation is provided for each topic outlining whether a resolution should be considered for adoption by Council, whether the topic has already been addressed in a resolution of the AUMA, or whether there are other considerations that would result in the deferral for future consideration of the topic being addressed.

## **Appendix I**

### **Increasing the Reporting Threshold for Non-Injury Collision**

**Whereas** in 2011 the Alberta Transportation changed the reporting threshold for non-injury collisions from \$1,000 to \$2,000; and

**Whereas** this was the first change in 20 years; and

**Whereas** this new threshold was intended to better reflect the current cost of vehicle repairs but is still not reflective of the current costs as escalated over a 20 year period; and

**Whereas** policing responses to non-injury collisions comprise a significant portion of policing resources that could be better utilized in improving public safety;

**Now therefore be it resolved that** the Alberta Urban Municipalities Association urge the Province of Alberta to further increase the reporting threshold for non-injury collisions from \$2,000 to \$5,000.

#### **Background:**

#### **Increasing the Reporting Threshold for Non-Injury Collision**

In 2011 the Province amended the Collision reporting thresholds for the first time in over 20 years by increasing the reporting for a non-injury collision to \$2,000 from \$1,000. This was done in conjunction with the Canadian Council of Motor Transport Administrators.

This level of response is a significant drain on policing resources as time is invested in processing these reports for insurance purposes. In many cases, the damage to a newer vehicle can be quite minimal and yet meet this threshold.

While the initial intent of the 2011 increase was to reflect the current cost of vehicle repairs, it is our belief that this threshold is still not reflective of the current cost of vehicle repairs and are recommending a resolution be forwarded to the AUMA to lobby the provincial government to increase non-injury reporting thresholds.



## Appendix 2

### Provincial Recycling Programs

**Whereas** ensuring resource sustainability is a concern of all Albertans; and

**Whereas** the Province of Alberta has taken a leadership role in the creation of provincial wide recycling programs including electronics, tires and beverage containers; and

**Whereas** the Province's leadership has enabled a greener environment and secured recycling facilities for the betterment of all Albertans and the Province as a whole; and

**Whereas** Alberta villages, towns and cities collaborate with other orders of government and stakeholders to ensure the sustainability of future resources; and

**Whereas** many commodities are not recycled or are recycled at significant costs to municipalities due to the volatility of commodity markets; and

**Whereas**, it is in everyone's interest that the maximum amount of recyclable materials are recycled;

**Therefore be it resolved that** the Alberta Urban Municipalities Association urge the Province of Alberta to:

4. Expand and refine the existing Extended Producer Responsibility programs to include more items (e.g. electronics) and not download costs to municipalities (e.g. paint).
5. Develop additional Extended Producer Responsibility programs for items such as construction and demolition waste, leaf and yard waste and packaging waste.
6. Create a means to stabilize and develop predictable markets for recyclable materials including plastics, glass, paper, cardboard and other materials.

#### Background:

#### Provincial Recycling Programs

- The Province of Alberta has shown leadership over the past 30 years implementing a number of successful province-wide waste management and recycling programs including; the beverage container collection program (1972), the pesticide container collection program (1980), hazardous waste legislation (1985), the tire recycling program (1994), the used oil materials recycling program (1997), an electronics recycling program (2004).
- Alberta currently has the highest per capita waste disposal rate of any province in Canada. The Province had set a goal to reduce the provincial per capita waste disposal rate to 500 kg per person per year by 2010. This goal has not been achieved, and in fact the per capita disposal rate was 1,122 kg per person in 2008.



- Increased stability in recycling markets would greatly assist municipalities in diverting waste from landfills and funding their recycling programs. For example, in late 2008 and early 2009 the industry experienced a crash in recycling commodity markets. Municipalities saw greatly reduced revenue for certain recycling commodities (e.g. cardboard), were forced to pay recyclers to accept certain commodities (e.g. mixed paper and plastics) or send some commodities to landfill where no market could be found. The volatility of recycling markets can have significant impacts on the recycling programs operated by municipalities.
- Expansion of the existing provincial recycling programs would also assist with waste diversion. For example, many Cities currently recycle, at their own cost, additional electronic items (e.g. stereo systems, DVD players and microwaves) that are not part of the provincial electronic waste recycling program because residents expect these types of items to be included in the program.
- The crash of international recycling markets has had a significant impact on local municipalities and is a good example how relying on one major recycling market (i.e. China) does not create robust recycling programs. More recycling markets and markets that are located closer to the source of the recyclables would strengthen Alberta's recycling programs. Additionally, reducing the distance that recyclables must be transported prior to being recycled would increase the sustainability of recycling programs and reduce the emissions related to transportation.

#### References

Alberta Environment, 2010. Too Good to Waste, retrieved from <http://environment.alberta.ca/02638.html>

Bearing Point. February 28, 2006. Bench Marketing Evaluation of DAO Stewardship Programs in Alberta. Report Commissioned by Alberta Environment.

Duffy, Daniel. Of Markets and Future. MSW Management Elements 2010. vol. 19 No. 3

Alberta Used Oil Management Association's website, accessed at <http://www.usedoilrecycling.com/en/ab/dropofflocations?q=T4N+5J2>

Statistics Canada (2008). Disposal and diversion of waste by province and territory (Waste disposal per capita). Retrieved from: <http://www40.statcan.gc.ca/l01/cst01/envir32b-eng.htm>



### **Appendix 3**

#### **Reducing Greenhouse Gas Emissions from Power Generation**

**Whereas** the population of Alberta is expected to continue to grow, as are the number of businesses and other electricity consumers; and

**Whereas** electricity use is a significant contributor to the emission of green house gases (GHG); and

**Whereas** Alberta's primary source of electrical generation is coal power; which emits high GHGs compared to other sources such as hydro, natural gas, wind or solar, and thus causes Alberta to register a much higher emissions factor than other provinces, and

**Whereas** The Government of Alberta is presently reviewing its "2008 Climate Change Strategy" with regard to ongoing efforts and focus on reducing Green House Gas emissions, and

**Whereas** there are high health and environmental costs to the pollution generated by coal fired electricity production which are often borne by individuals and local municipalities,

**Whereas** other provincial governments including Ontario and Nova Scotia have significantly reduced their dependence on coal-fired generation of electricity by various means, demonstrating the transition is possible, and

**Whereas** many municipalities have been investing time and resources into local sustainability initiatives to reduce green house gas emissions, but have little control over the regulation and province wide electric system;

**Therefore be it resolved that** Alberta Urban Municipalities Association urge the Province of Alberta to move away from our province's dependency on coal power by investing in renewable energy and natural gas fired electricity generation and by assisting in developing alternative energy sources through financial incentives, education, promotion and collaboration with municipalities.

#### **Background:**

#### **Reducing Greenhouse Gas Emissions from Power Generation**

- Information provided by The Government of Alberta, Alberta Environment and Sustainable Resource Development (AESRD) indicates that Alberta is the largest provincial emitter of greenhouse gases in Canada, due not just to our role as a global energy supplier but also because of our reliance on coal-fired electricity generation. <sup>i</sup>
- We need to take action to reduce our environmental footprint. The issue is that humans have substantially increased GHGs by burning fossil fuels, including coal.





Scientists now agree that human activity is most likely responsible for most recent temperature increases. <sup>ii</sup>

- The AESRD website reports that consultation with Albertans on the province's 2008 Climate Change Strategy showed that Albertans said they want to take action against climate change. They also said they want to show that the province is doing its part to reduce greenhouse gas emissions entering our atmosphere.
- The Government of Alberta has encouraged Albertans to become more energy efficient, but given that consumer rebate programs were ended in 2012, additional efforts would be appropriate to continue reductions in our ghg production. Facilitating not just conservation, but more focusing on environmentally responsible sources of energy should be considered.
- Experts indicate that the Provincial electricity grid could be transitioned to wind or natural gas powered plants at a cost competitive with that of new coal plants. <sup>iii</sup>
- Renewable energy makes up only 10% of the energy used in the world.<sup>iv</sup> If Alberta wishes to be a world leader in energy there is certainly opportunity for leadership in improving investment in renewable energy and stricter regulation of coal fired generation.
- Burning coal is not as efficient as wind or natural gas plants, as only about 40% of the energy in coals is turned into electricity, the remainder goes into the atmosphere or is released into water bodies<sup>v</sup>,
- The Province of Alberta burns more coal alone than the rest of the country combined. In 2012, 64% of electricity was generated by burning coal. Coal causes more pollution than any other source of electricity. Coal produces a higher level of ghg emissions than any other fossil fuel. <sup>vi</sup> There are both environmental and health impacts on Albertans.
- With coal as the primary electricity generating source, one kWh of electricity in Alberta generates 710 grams of CO<sub>2</sub>. By comparison, British Columbia only generates 30 grams of CO<sub>2</sub> per kWh. <sup>vii</sup>
- Presently, Alberta has 6 coal plants with 18 individual units. The total capacity is over 6,200 MW. These plants accounted for a third of the sulphur dioxide emitted in Alberta in 2011, 10% of the nitrogen oxide, 44% of the mercury from man-made sources, and 6% of fine particulate matter. Many other pollutants are also released. The 43 megatonnes of ghg emissions from coal powered electricity plants are only slightly less than all of the ghg emissions from the oilsands in 2011 (46 megatonnes). The top seven ghg emitters in 2010 in Alberta were all coal fired plants. Five of these plants rank in the top ten ghg emitters in Canada.<sup>viii</sup>
- Two thirds of the electricity traded in Alberta is from coal fired generation. <sup>ix</sup>
- Canada's average ghg emissions from electricity generation in 2010 were 190 t/GWh. Alberta's emissions were more than four times higher due to coal fired generation, at 840 t/GWh.<sup>x</sup>
- Other provinces including Nova Scotia have reduced reliance on coal-fired electricity generation through government action.



---

### References

- <sup>i</sup> Government of Alberta (May 2013). Alberta and Climate Change. Retrieved from: <http://environment.alberta.ca/0918.html>
- <sup>ii</sup> Government of Alberta (May 2013). What is Climate Change? Retrieved from: <http://environment.alberta.ca/0906.html>
- <sup>iii</sup> Pembina Institute, Edmonton's Energy Transition, June 20, 2012 City of Edmonton
- <sup>iv</sup> Pembina Institute, Edmonton's Energy Transition, June 20, 2012 City of Edmonton
- <sup>v</sup> Pembina Institute, Edmonton's Energy Transition, June 20, 2012 City of Edmonton,
- <sup>vi</sup> Anderson, Kristi et al, A Costly Diagnosis: Subsidizing coal power with Albertans' health. March 2013.
- <sup>vii</sup> Municipal Climate Change Action Centre, Alternative Energy webinar, April 9 2013.
- <sup>viii</sup> Anderson, Kristi et al, A Costly Diagnosis: Subsidizing coal power with Albertans' health. March 2013.
- <sup>ix</sup> Anderson, Kristi et al, A Costly Diagnosis: Subsidizing coal power with Albertans' health. March 2013.
- <sup>x</sup> Anderson, Kristi et al, A Costly Diagnosis: Subsidizing coal power with Albertans' health. March 2013.



May 27, 2013

## IBEW Bargaining Update

Legislative Services

### **Report Summary & Recommendation:**

---

That Council endorses the recommendations of the Human Resources Department as submitted to the In Camera meeting of Council on May 27, 2013

### **City Manager Comments:**

---

I support the recommendation of Administration.

Craig Curtis  
City Manager

### **Proposed Resolutions**

---

Resolved that Council of The City of Red Deer, having considered the report from the Human Resources department dated May 27, 2013 re: Mediator's Recommended Terms of Settlement, hereby ratifies the Memorandum of Agreement between The City of Red Deer and IBEW as presented to the In Camera Meeting of Council on May 27, 2013.



## Report Details

### **Background:**

---

Council has been provided In-Camera with information relating to a human resources matter.

### **Discussion:**

---

The recommendations contained in the report will remain confidential under the provisions of the Freedom of Information & Protection of Privacy Act which provides that:

- 25(1) The head of a public body may refuse to disclose information to an applicant if the disclosure could reasonably be expected to harm the economic interest of a public body, including the following information:
- (c) information the disclosure of which could reasonably be expected to:
    - (i) result in financial loss to,
    - (ii) prejudice the competitive position of, or
    - (iii) interfere with contractual or other negotiations of, a public body.



May 8, 2013

## **Minor Amendment to the Lancaster Vanier Neighbourhood Area Structure Plan**

### **Bylaw Amendment 3217/A-2013**

#### **Consideration of First Reading**

Planning Department

#### **Report Summary & Recommendation:**

---

Bylaw 3217/A-2013 proposes to make three minor changes to the Laredo neighbourhood via the Lancaster/Vanier East neighbourhood area structure plan (NASP) as follows:

1. Addition of potential two storey walkout lots in four different areas
2. Relocation of a lane entrance/exit and removal of the centre median
3. Removal of a centre median of a local road.

As the proposed NASP amendment is a minor change and no city departments or external stakeholders opposed the change, the Planning Department recommends Council support Bylaw 3217/A-2013.

#### **City Manager Comments:**

---

I support the recommendation of Administration that Council consider first reading of Lancaster Vanier Neighbourhood Area Structure Plan Bylaw Amendment 3217/A-2013. A Public Hearing would then be held on Monday, July 8, 2013 at 6:00 p.m. during Council's regular meeting.

Craig Curtis  
City Manager

#### **Proposed Resolution**

---

The Council consider first reading of Lancaster Vanier Neighbourhood Area Structure Plan Bylaw Amendment 3217/A-2013.





## Report Details

### Background:

---

The Lancaster/Vanier East NASP was adopted by Council in June 2011 and sets out the future development of two quarter sections of land for a variety of residential and open space uses. The south quarter, Vanier East is not impacted by any of the proposed changes. The north quarter, Laredo, where the changes are proposed has not sold any lots yet.

### Discussion:

---

The changes described below are shown on Figure 1 attached:

1. Addition of potential two storey walkout lots in four different areas
  - Three of the areas shown in Figure 1 are well within the bounds of the Laredo neighbourhood. The fourth area is across from existing homes on Lancaster Drive. The physical appearance of the new homes along Lancaster Drive will not change as the walkout portions (if constructed) would face south into the interior of the unconstructed Laredo neighbourhood. Letters were sent to adjacent landowners and no replies were received.
2. Relocation of a lane entrance/exit and removal of the centre median
  - A cul-de-sac is proposed to have a lane entrance/exit relocated to exit on to the adjacent collector road. Also, the centre median is proposed to be removed. This will allow the addition of another RIA lot and a slight narrowing of the road. No lots have been sold in this area.
3. Removal of a centre median of a local road
  - The local road is proposed to have the centre median removed therefore reducing the road right-of-way slightly.

### Analysis:

---

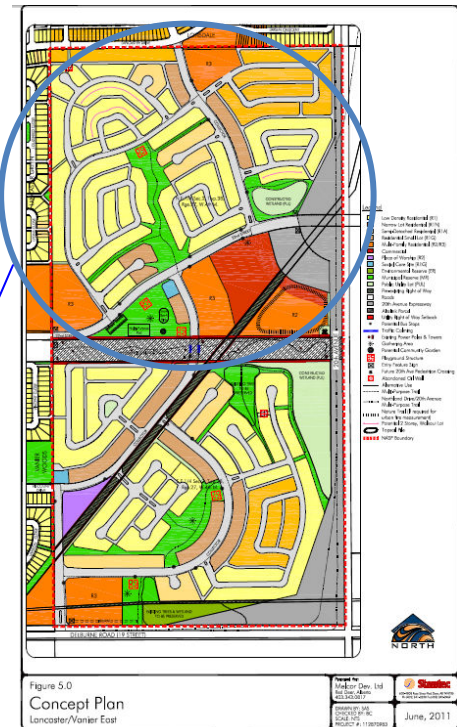
The addition of walkouts in Part 1 of the NASP amendment is considered minor because they will not change the physical appearance of the neighbourhood for anyone who currently resides adjacent the Laredo neighbourhood. No comments were received from landowners in the existing Lancaster neighbourhood.

Amendments to the NASP are not required for removal of centre medians in the roadways as described in part 2 & 3. These are part of the detailed design that occurs once a NASP is approved. Administration was coming to Council to amend other portions of the NASP therefore this provided an opportunity to also incorporate these changes on the land use concept.

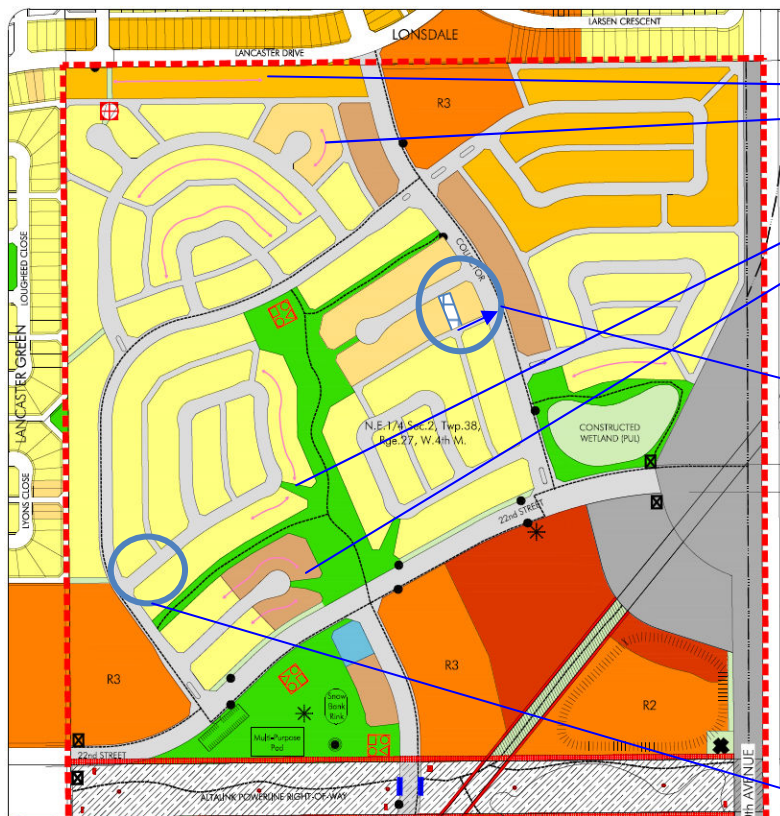
The relocation of a lane in part 2 is considered a minor amendment and allows the addition of a RIA lot. Administration had no concerns with the amendments.



**Figure I – Subject Area** showing proposed changes.



Proposed Changes to NASP Figure 5 (and replicated in figures 6, 7, 8)



1. These areas show where 1-2 storey walkout lots are proposed to be added

2. The hatched area shows the current lane entrance and median as shown in the current NASP. It is proposed to now have the lane exit east onto the collector road as shown by the small arrow. The centre median is removed. This will allow the addition of an R1A lot and slightly reduce the road right-of-way. The current configuration is shown at left

3. This entrance no longer needs a centre median therefore the road right-of-way can be narrowed slightly. The current configuration is shown at left.

**BYLAW NO. 3217/A-2013**

Being a Bylaw to amend Bylaw No. 3217/98, the bylaw containing The City of Red Deer Neighbourhood Area Structure Plans.

COUNCIL OF THE CITY OF RED DEER, ALBERTA, ENACTS AS FOLLOWS:

Bylaw no. 3217/98 is hereby amended as follows:

- 1. The existing Figures 5.0, 6.0, 7.0, & 8.0 of the Lancaster Vanier East Neighbourhood Area Structure Plan are DELETED.
- 2. The Lancaster Vanier East Neighbourhood Area Structure Plan is amended by the ADDITION of the attached Figures 5.0, 6.0, 7.0, & 8.0

READ A FIRST TIME IN OPEN COUNCIL this                      day of                      2013.

READ A SECOND TIME IN OPEN COUNCIL this                      day of                      2013.

READ A THIRD TIME IN OPEN COUNCIL this                      day of                      2013.

AND SIGNED BY THE MAYOR AND CITY CLERK this                      day of                      2013.

\_\_\_\_\_  
MAYOR

\_\_\_\_\_  
CITY CLERK

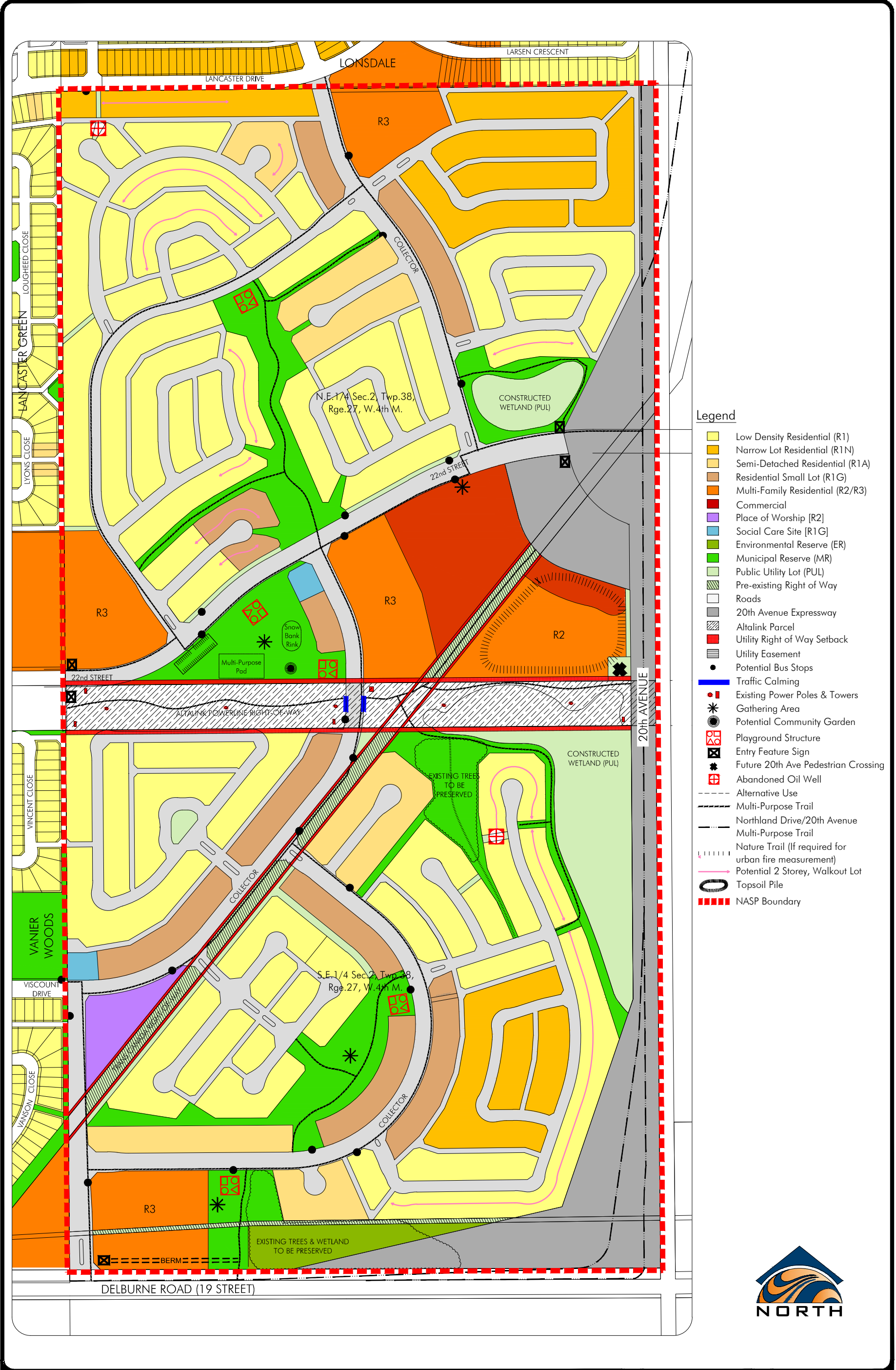


Figure 5.0  
Concept Plan  
Lancaster/Vanier East

Prepared for:  
Melcor Dev. Ltd  
Red Deer, Alberta  
403.343.0817

**Stantec**  
600-4808 Ross Street Red Deer, AB T4N1X5  
Ph:(403) 341-3320 Fx:(403) 342-0969

DRAWN BY: SAS  
CHECKED BY: BC  
SCALE: NTS  
PROJECT #: 112870983

April 2013



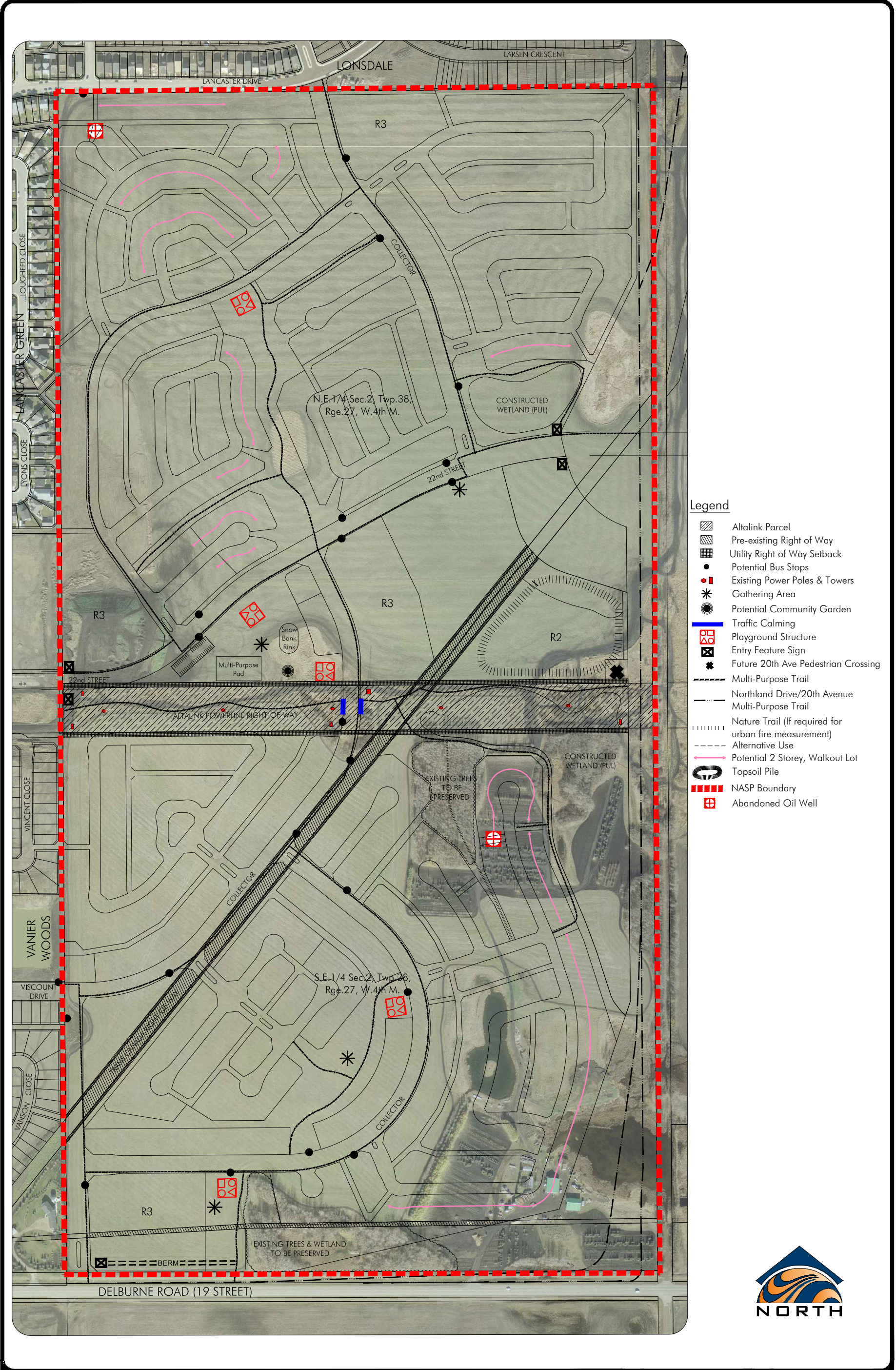


Figure 6.0  
Concept with Aerial Photo  
Lancaster/Vanier East

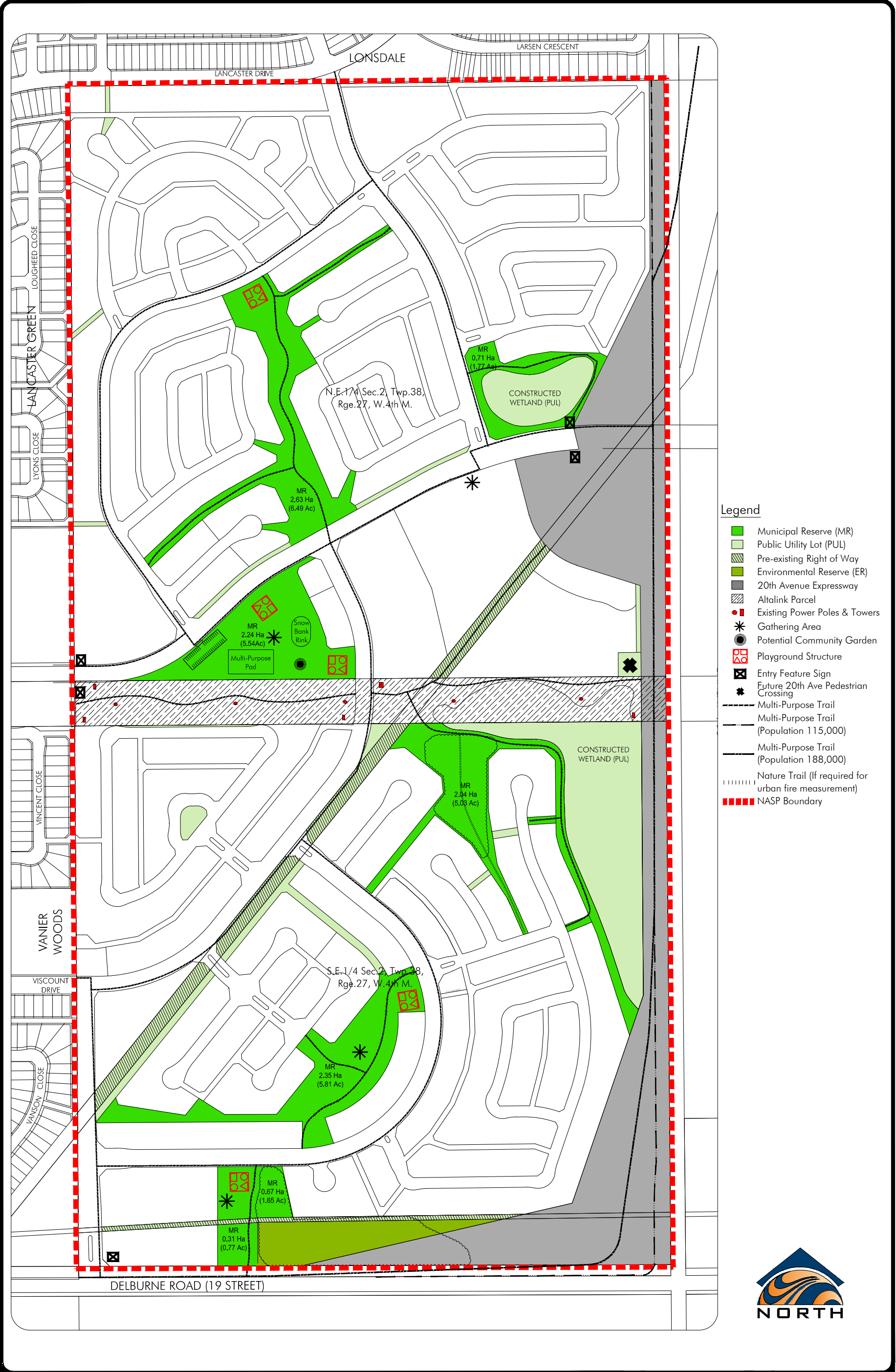
Prepared for:  
Melcor Dev. Ltd  
Red Deer, Alberta  
403.343.0817

600-4808 Ross Street Red Deer, AB T4N1X5  
Ph:(403) 341-3320 Fx:(403) 342-0969

DRAWN BY: SAS  
CHECKED BY: BC  
SCALE: NTS  
PROJECT #: 112870983

April 2013





- Legend
- Municipal Reserve (MR)
  - Public Utility Lot (PUL)
  - Pre-existing Right of Way
  - Environmental Reserve (ER)
  - 20th Avenue Expressway
  - Altalink Parcel
  - Existing Power Poles & Towers
  - Gathering Area
  - Potential Community Garden
  - Playground Structure
  - Entry Feature Sign
  - Future 20th Ave Pedestrian Crossing
  - Multi-Purpose Trail (Population 115,000)
  - Multi-Purpose Trail (Population 188,000)
  - Nature Trail (If required for urban fire measurement)
  - NASP Boundary



Figure 7.0  
Open Space / Trails  
Lancaster/Vanier East

Prepared for:  
Melcor Dev. Ltd  
Red Deer, Alberta  
403.343.0817

600-4808 Ross Street Red Deer, AB T4N1X5  
Ph:(403) 341-3320 Fx:(403) 342-0969

DRAWN BY: SAS  
CHECKED BY: BC  
SCALE: NTS  
PROJECT #: 112870983

April 2013

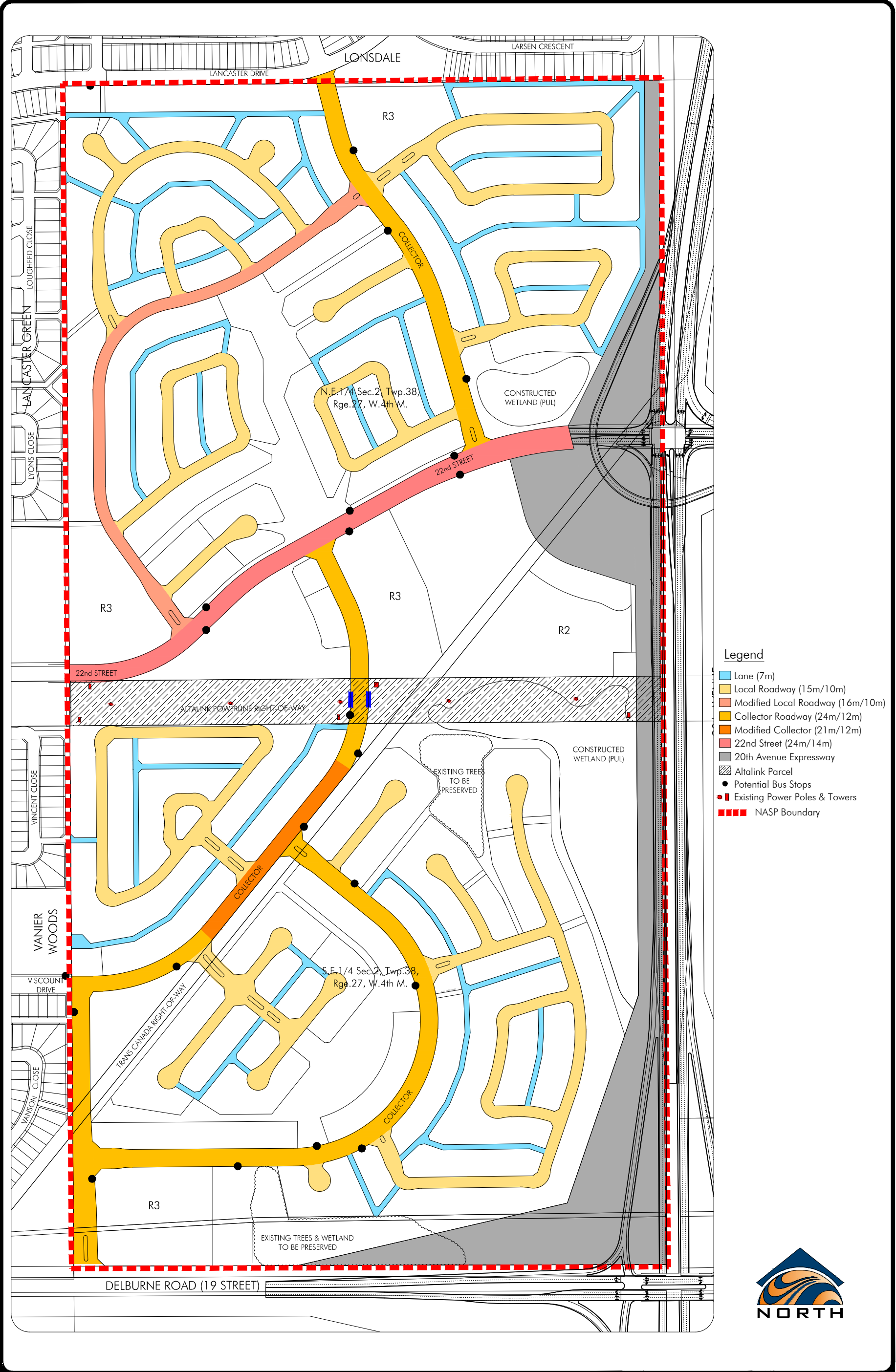


Figure 8.0  
Transportation Network  
Lancaster/Vanier East

Prepared for:  
Melcor Dev. Ltd  
Red Deer, Alberta  
403.343.0817

600-4808 Ross Street Red Deer, AB T4N1X5  
Ph:(403) 341-3320 Fx:(403) 342-0969

DRAWN BY: SAS  
CHECKED BY: BC  
SCALE: NTS  
PROJECT #: 112870983

April 2013



## **Value For Money Audit (VFM)**

Electric Light and Power Department (EL&P)

*Final Report*

June 11, 2012



# Table of Contents

Executive Summary .....	1
Methodology.....	5
Department Profile – EL&P.....	7
1 Strategic Design and Alignment.....	9
1.1 Strategic and Business Planning.....	9
1.2 Sustainability Planning.....	12
1.3 Enterprise Risk Management .....	14
1.4 Revenue and Rate Approach.....	15
1.5 Budgeting and Capital Planning.....	18
2 Management and Execution .....	24
2.1 Service Lines and Programs .....	24
2.2 Organization Structure and Staffing .....	27
2.3 Employee Management.....	37
2.4 Working Environment.....	45
2.5 Operations and Maintenance Planning and Execution .....	48
2.6 Financial Management and Rate Model .....	52
2.7 Infrastructure and Asset Management .....	63
2.8 Operating Risk and Business Continuity.....	67
3 Customer, Citizen and Stakeholder Engagement.....	69
3.1 Citizen Engagement.....	69
3.2 Customer Relationship Management.....	70
3.3 Partnerships and Stakeholder Relations .....	72
3.4 Regional and Other Integrated Planning.....	72
4 Monitoring, Measurement and Results .....	73
4.1 Performance Monitoring and Reporting.....	73



4.2 Regulatory Compliance and Reporting..... 78

4.3 Financial Reporting..... 79

Summary of Recommendations ..... 81

Appendices..... 92

Appendix A - Evaluation Framework – Overview

Appendix B - Evaluation Framework – Best Practice Assessment Guide

Appendix C - Measures and Metrics

Appendix D - Evaluation Framework – Criteria (Diagnostic Questions)

Appendix E - List of Documents Reviewed

Appendix F - Interview Participants

Appendix G - Interview Guide – City of Red Deer

Appendix H - Interview Guide – External Stakeholders

Appendix I - Summary of Interview Feedback, Documents Reviewed and Analysis Undertaken

Appendix J - Benchmarking Participants

Appendix K - Benchmarking Questionnaire

Appendix L - Benchmarking Results Summary

Appendix M - Best Practice Guide for Developing Measures and Metrics





## Executive Summary

In September 2011, the City of Red Deer (the City) contracted Grant Thornton to undertake a Value for Money (VFM) audit of its Electric Light and Power (EL&P) utility. The goal of this review was to identify opportunities for performance improvement to help the organization not only achieve its desired goals and objectives, but also position it for long-term sustainability.

A customized evaluative framework was developed that was designed to be applicable not only to EL&P, but to other City departments, utilities and functions as well. The evaluative framework focused on four main strategic areas: strategic design and alignment; management and execution; citizens, customer and stakeholder engagement; and monitoring, measurement and results.

Overall the findings of this review indicates EL&P to be a well functioning utility delivering a high level of service with qualified, experienced and dedicated staff utilizing sound management practices. EL&P compares very well in terms of distribution tariff rates charged and operational reliability statistics to similar utilities.

The current number and types of staff in EL&P allow the utility to effectively carry out its mandate. However, certain identified areas could benefit from further assessment to determine if there are resource constraints.

EL&P has been a financial benefit to the City for many years through the payment of the Municipal Consent and Access Fee (MCAF), dividends and special dividends but has reached a point where more investment is required to address capital needs, specifically around deferred maintenance issues. Utility fiscal policies around such issues as reserves and debt financing must be defined. The City and EL&P have recognized the need to develop a revised rate model based on agreed upon and comprehensive fiscal policies and is addressing this through a rate model review.

Much of EL&P's increasing costs (and rates) are being driven by expenditures that are beyond the control of EL&P, particularly the rapidly increasing price of transmission. EL&P has been effective in managing costs which are within its control.

Within the context of the above overall findings, a review of this nature also provides the opportunity for recommendations to further enhance the performance of EL&P. Numerous recommendations have been put



forward throughout this report which address issues identified during this review, a summary of which are provided below:

### **Summary of Recommendations**

#### **Strategic Design and Alignment**

- In alignment with the City's efforts, EL&P should work with City Administration to improve its annual Service Plan by including linkages to operating and capital budgets and performance measures.
- EL&P should track and benchmark electric-utility-specific metrics independently and outside the scope of the Service Plan.
- The City should develop a best practice Enterprise Risk Management (ERM) framework and support departments in its application.
- EL&P should continue to play an active role in the Rate Model Review and ultimately implement the resulting fiscal policies and rate model.
- Clear rate setting philosophies should be identified by Council which reconcile the often conflicting objectives of utility revenue stability and conservation pricing.
- Future fiscal policy needs to address how to appropriately fund forecasted capital funding requirements through the appropriate use of utility debt and reserves.
- EL&P should explore ways to more directly link its own business planning to the City's Environmental Master Plan.
- The budgeting process should emphasize consideration of previous years' actual revenues and expenditures rather than focusing on budgeted numbers.
- EL&P should continue to track and report on the percentage of electricity arising from renewable energy sources that flows through its system.
- Based on projected growth, contingencies for additional staff resources should be built into subsequent operating budgets.

#### **Management and Execution**

- Acceptance of a revised Utility Fiscal Policy will provide the utility with the needed direction for effective financial management and rate setting.
- The City should continue to allow EL&P to build reserves without capping the amount held in reserves or requiring that the utility pay a special dividend to the City.
- EL&P should develop an operations and maintenance planning approach that is linked to an asset management system.
- EL&P should identify and document a best practice approach to project management, which puts in place protocols and templates to be followed for every project.
- Continue with current initiatives to apply the asset management plan and address identified asset management concerns.
- The City and Council should consider EL&P's request to hire a Safety Coordinator and a lead for the Market Support section.
- All supervisors of employees should be carrying out (at a minimum) annual face-to-face employee evaluations using the City's process and templates.



- The utility and HR should continue to review municipal and industry compensation benchmarks to ensure it remains competitive on this front.
- EL&P should develop a "disaster plan" to ensure business continuity in the event that one or several key resources leaves on short notice or becomes suddenly unavailable.
- Continue with City-wide efforts to emphasize the safe and efficient completion of work.
- The utility accountant position should assume a larger role in the budgeting and financial management activities carried out in the utility.
- The City should establish internal Service Level Agreements (SLAs) between the Corporate Services functions and the departments to which they provide services, including EL&P. In the absence of formal SLA's, metrics such as target service delivery times and quality (where measurable) should be established, monitored and tracked over time to ensure services are being delivered in an effective and efficient manner.
- EL&P should further review workflow and overtime worked to determine trends in workloads and to identify current and future pressure points, and should take immediate steps to assess the workloads of the two General Foremen and address any capacity issues as necessary.
- EL&P should immediately begin work to implement a succession plan to address upcoming retirements within the utility workforce.
- EL&P should introduce new asset tracking metrics to gain a better understanding of asset condition and priority maintenance activities.
- Corporate Services, in conjunction with EL&P and within the broader ERM approach currently being developed by the City, should develop business continuity plans for a wider range of scenarios and identify mitigation strategies that can be implemented in the short term to support these plans.
- Responsibility for general office management and supervision of general administration staff would be more appropriately assigned to the utility Manager.
- In conjunction with corporate procurement, EL&P should review its tendering and contract management practices to ensure that a consistent process is being followed and contracts are structured to maximize contractor performance.
- EL&P, in conjunction with HR, should ensure that all job descriptions are updated and that as many positions as possible are transitioned to using the design ladder approach.
- EL&P should identify training goals and standards and management should commit to ensuring that adequate time is made available for employees to participate in this training.
- EL&P should review all activities and functions to determine if there are other emergency scenarios for which key risks can be identified and mitigation activities can be implemented.

**Citizen, Customer and Stakeholder Engagement**

- EL&P should work with Communications to develop a citizen engagement strategy to inform potentially affected citizens about the new substations and lines.
- As part of a citizen engagement strategy, EL&P should communicate not only when outages occur and how long they are expected to last, but should also provide information about the number and length of outages (trends and comparisons to others) which are quite favourable.



- EL&P should undertake a comprehensive cost-benefit analysis of the developer services activities that considers all direct and indirect costs associated with the activity, including opportunity costs such as staff effort directed at external projects rather than internal maintenance needs.
- EL&P should make an effort to meet with large customers to identify any strategies to minimize or mitigate disruptions.
- EL&P should consider working with Communications to develop a stakeholder engagement assessment and plan, which should be linked with the citizen engagement strategy.
- EL&P should consider developing a regional expansion strategy, aligned with projected City growth, that identifies communication and stakeholder engagement strategies to facilitate this growth.

**Monitoring, Measurement and Results**

- EL&P and City management should strive to educate Council about the utility and how it operates under the utility rate model.
- The City should develop a performance management framework that can be applied to all departments, utilities and functions in the City, with both general and specific measures as well as a roll-up to department level dashboards and a City-wide dashboard.
- The issues identified in the Representation Letter should be linked to strategies in the annual Service Plan, ERM and operational risk planning.



# Methodology

This Value for Money audit was designed to incorporate six main phases of activity:

1. Project planning and start-up;
2. Development of an evaluative framework;
3. Data gathering;
4. Performance benchmarking;
5. Analysis and development of recommendations; and
6. Reporting and presentations.

## ***Project Planning and Start-Up***

A kick-off meeting was held with the project Steering Committee in October, 2011, following which a comprehensive project work plan was developed detailing the activities to be carried out during each component of the data gathering, benchmarking, analysis and reporting phases.

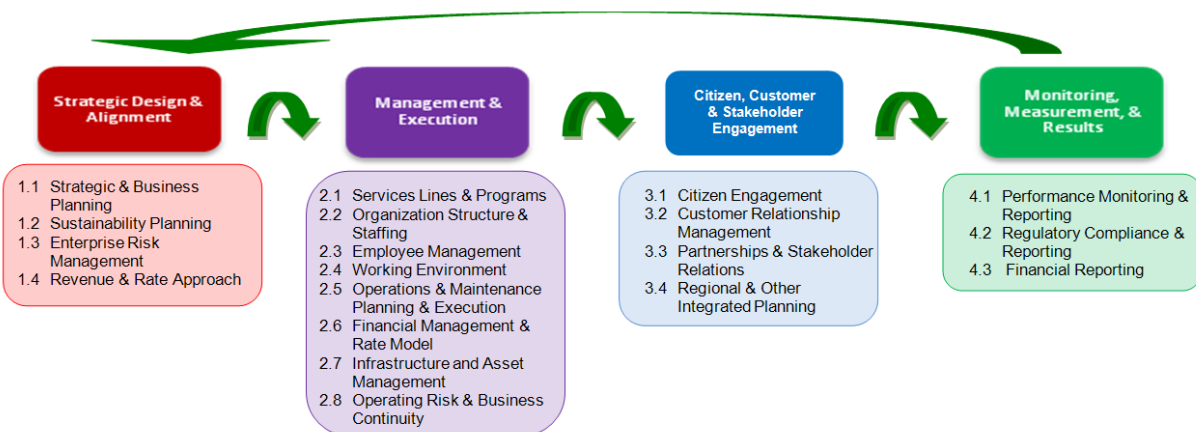
## ***Evaluative Framework***

As part of project planning a customized evaluative framework was developed that was designed to be applicable not only to EL&P, but to other City departments, utilities and functions as well (see **Appendix A** for an overview of the evaluative framework). The result was a structure that focuses on four main strategic areas:

1. Strategic design and alignment;
2. Management and execution;
3. Citizen, customer and stakeholder engagement; and
4. Monitoring, measurement and results.

Beneath each of these strategic areas are three to eight functional areas that guide the analysis and allow for specific focus on critical areas. While it is recognized that not all areas will apply to all City departments or utilities (e.g. regulatory compliance and reporting), the application of a consistent model will allow for better comparison and alignment between the various functions and a better understanding of the Value for Money provided by each. Refer to **Appendix B** for further detail on best practice assessment procedures regarding management practice, documentation and metrics, **Appendix C** for measures and metrics, and **Appendix D** for criteria or diagnostic questions for each area.





### ***Data Gathering***

Following the design and approval of the evaluative framework, data gathering was comprised of two primary components. The first was an extensive document review (see **Appendix E** for a listing of the documents reviewed) that included a variety of documents provided by City and EL&P staff and external stakeholders as well as information obtained from the City's web site. Secondly, 23 interviews were conducted with City and EL&P staff (17) and key external stakeholders (6). **Appendix F** contains a list of interview participants and **Appendices G and H** present the internal and external interview guides, respectively. These interviews were conducted in person or over the phone as logistics permitted, and were held during December 2011 and January 2012. A summary of the feedback obtained during the interviews as well as the documents reviewed and analysis undertaken can be found in **Appendix I**.

### ***Performance Benchmarking***

Concurrent with the data gathering phase, a benchmarking initiative was undertaken with seven comparable municipal electric utilities. This included four utilities in Alberta (Edmonton, Calgary, Lethbridge and Medicine Hat), one in British Columbia (Kelowna), and two in Ontario (Waterloo and Oakville). Potential organizations were contacted and asked to support the initiative by filling out a questionnaire and/or participating in a short telephone interview (see **Appendix J** for a list of benchmark organizations and contacts and **Appendix K** for the benchmarking questionnaire). Information obtained during the benchmarking process has been summarized and is provided in **Appendix L**.

### ***Analysis and Development of Recommendations***

Results from the data gathering and performance benchmarking phases were integrated into the evaluative framework and used to develop recommendations for each functional area. A preliminary draft summary of findings and recommendations was presented to the project Steering Committee in March 2012.

### ***Reporting and Presentations***

Feedback from the Steering Committee on the preliminary draft summary of findings and recommendations was gathered and integrated into the draft report where appropriate.



## Department Profile – EL&P

Housed under the Development Services division, the Electric Light and Power (EL&P) department is a wires service provider, a regulated transmission provider, a provider of the Regulated Rate Option (RRO), negotiates power contracts for City departments, and is responsible for planning, building, operating and maintaining Red Deer's electric transmission and distribution facilities to reliably deliver power to every customer in the City's service area. The department does not generate electricity. The utility handles residential, commercial, and industrial service applications and provides a range of customer services, including:

- new service constructions and connections,
- meter installation,
- testing and maintenance,
- load settlement,
- electricity usage analysis,
- power quality monitoring and analysis,
- underground cable locating,
- street light and traffic light installation and maintenance, and
- trimming trees.

EL&P engages in two main types of business supporting the distribution of electricity in its service area: the first is management of its system of distribution wires as a Distribution Facility Operator (DFO) and (to a much lesser degree) the management of its transmission infrastructure as a Transmission Facility Operator (TFO). These businesses are entirely self-funded and receive no financial support from the City's tax base. The distribution tariff rates are set by EL&P and approved by Council. Transmission tariffs are managed by the Alberta Electric System Operator (AESO), which collects access fees from TFOs for system access. The TFO then submits a Transmission Tariff filing to AESO to recover transmission costs. EL&P also pays a franchise fee - the Municipal Consent and Access Fee (MCAF) - to the City.

Delivery and billing for the Regulated Rate Option (RRO) service is currently contracted out to Enmax Energy, and a number of power retailers have been permitted to offer retail electricity services in the Red Deer area for those customers that prefer to enter into a contract. The majority of data management functions required for meter management, load settlement and related activities and regulation are contracted out to Enmax Power and Dataco as these functions require a great deal of costly software and expertise.



EL&P engages other contract suppliers for goods or various services related to electricity infrastructure, but in general carries out much of its work in-house, including system maintenance, system design, administration of the rate model, development of the transmission tariff filing, and construction work required to support development in the Red Deer service area. Further, all of the high voltage work in the area is carried out by EL&P staff. EL&P's only direct customers are developers, for whom it provides services including new meter installation, existing meter upgrades, or energizing sites.

In addition to its transmission and distribution responsibilities, EL&P is also responsible for installing and maintaining the street and traffic light system in Red Deer. EL&P has ownership of all street and traffic light assets, the initial installation of which is paid for by the developer. Unlike the transmission and distribution aspect of EL&P, the energy and operating costs of the street and traffic light system are funded by taxes.



# 1 Strategic Design and Alignment

## 1.1 Strategic and Business Planning

### City of Red Deer

Overall strategic direction for the City is set by Council through the priorities and goals identified in the Strategic Plan. This plan is prepared every three years following the municipal elections, with the most recent document approved in the summer of 2011, but the City and its departments engage in strategic planning activities on an ongoing basis. The City is in the process of transforming the way strategic planning is undertaken as it moves to a vision driven planning framework, which is a recognized strategic planning methodology.

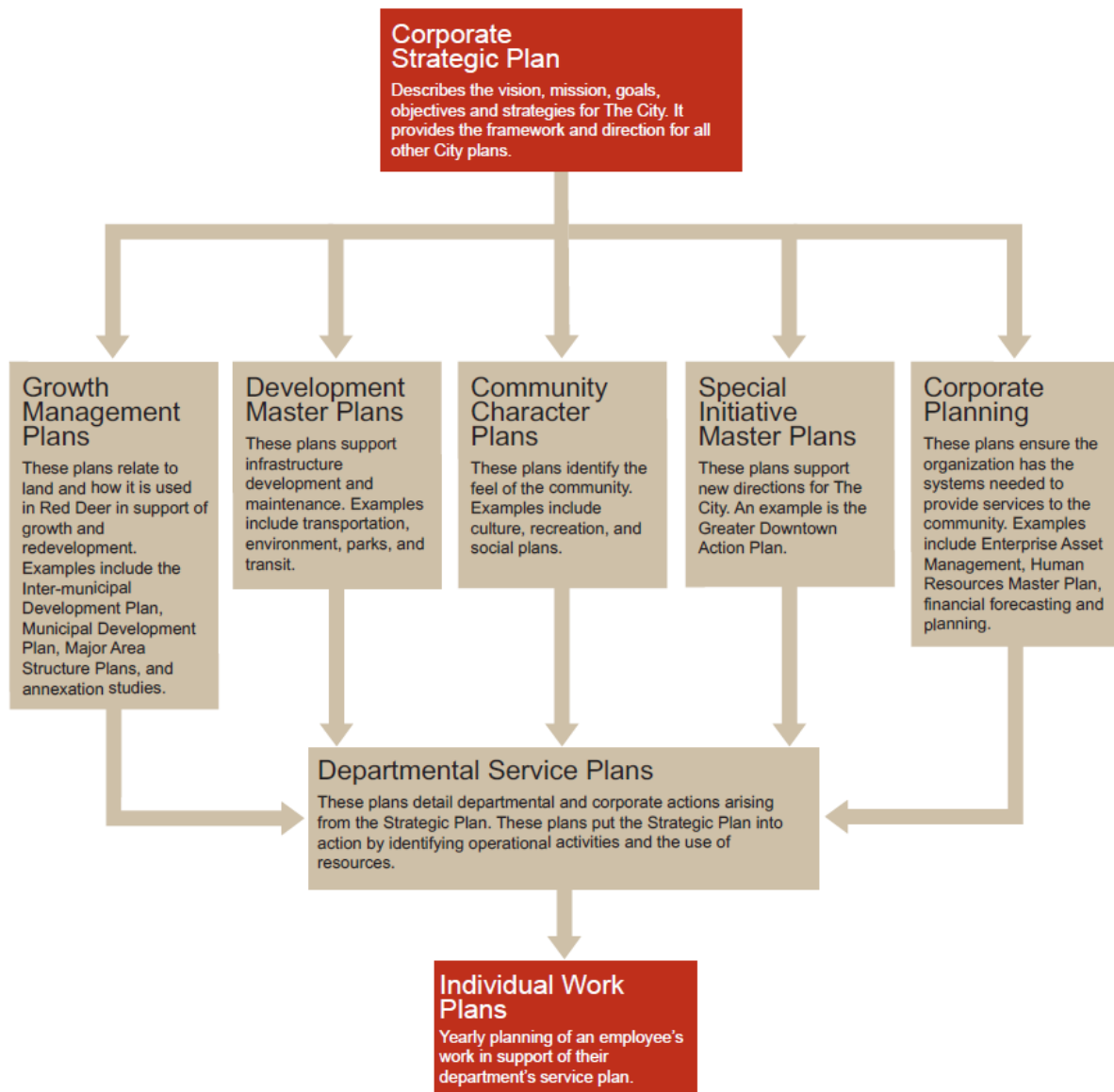
Driven by a three-pronged vision of innovative thinking, inspired results and vibrant community, and a mission of working together to provide leadership and sustainable municipal services for the community, the Strategic Plan outlines six themes for strategic direction: economy, design, movement, identity, safety, and dialogue. These themes are intended to support the City's Administration in implementing strategies that support a healthy, vibrant and sustainable community, and aim to unleash innovation, foster creativity and invite participation. Sustainability is described in this document as being comprised of four general elements: environmental, cultural, economic, and social sustainability. The Strategic Plan is intended to direct long term vision and goals and as such does not detail specific implementation plans for achieving these.

Initiating the implementation plans for this strategic direction is the responsibility of City Administration, and is described at a high level in the City's Internal Effectiveness Charter. This document shows plans and initiatives for improving performance management, strategic planning, business planning and budgeting, and financial management and sustainability for the City. These high-level descriptions identify lead departments, timelines, desired outcomes, and organizational support and financial resources available to facilitate the achievement of these outcomes, and act as a solid framework for guiding more specific work which is described in further detail in individual department Service Plans.

The following diagram illustrates the strategic planning linkages between the plans prepared by the City and its various departments and functions:



Figure 1: City of Red Deer Strategic Planning Linkages



## EL&P

EL&P carries out its strategic planning through its Service Plan, which supports the identification of and timely response to important issues and trends in the utility's strategic environment and provides direction and priorities to management and staff. This plan has most of the elements of a good business plan, including line action planning and identification of issues, but there are no direct linkages to the operating or capital budget and while this plan describes the utility's desired outcomes, specific performance measures are neither identified nor tracked. Recognizing this, the City (which establishes the guidelines for department service plans) has set a goal for all service plans to include performance measures within two years. EL&P's Service Plan is well aligned with the corporate strategic / business planning process.





The Service Plan identifies the key aspects of the utility's mandate and short history of budgeted FTE positions and projected FTE growth. It provides a concise summary of the previous year's activities as well as actions planned for the next three years. The Service Plan does not directly link to the previous year's Service Plan to demonstrate whether all previous strategies and initiatives were completed, but instead highlights select achievements. High level plans are prepared describing the action, role of EL&P (leading, supporting or implementing), timeline, supporting departments or external partners, and expected outcomes. Specific financial resources are not attached to actions. The Service Plan also identifies linkages to the City's strategic plan, which in the case of EL&P refers specifically to the effectiveness charter and the utility's participation in this VFM audit and the expectation that this audit will inform the performance management strategy. The plan then describes any funding adjustment recommendations, which in the 2012-2014 plan includes a request for additional funding to support the addition of a Safety Coordinator position (this position has subsequently been reassigned to the HR department rather than EL&P). Lastly, the Service Plan outlines future considerations including additional positions required to support ongoing operations and customer service, plans to manage revenue and expense volatility, plans to manage third party services and service providers, pilot projects, and plans to manage new and advancements in technologies. An appendix showing a high level summary of the utility's organizational structure is also included at the end of this document.

The Service Plan represents the only corporate strategic planning carried out by EL&P. However, the Utility's Transmission Master Plan, which is in the final stages of development but has yet to be reviewed and approved by Council, details information required for transmission planning and appears to provide a strong foundation for the way forward. Communication regarding transmission planning was identified as an area where some issues arose in the past, but is seen to have improved and is currently carried out in an effective manner. EL&P is involved in the preparation of various residential and industrial Area Plans.

EL&P has also demonstrated willingness and capability to engage in strategic alignment and coordination with other City departments and utilities as well as external stakeholders such as developers. Further, the utility's strategic priorities and approaches are discussed with regulatory authorities on an annual basis when rates are proposed and approved.

#### **Link between the City and EL&P**

While there is a direct relationship between EL&P's Service Plan and the City's internal effectiveness charter, the utility's Service Plan is not directly linked with the City's strategic direction as set by Council. In aligning with these high level strategic directions and priorities, EL&P's clearest link is through its mandate to provide reliable and environmentally-responsible electric services to all customers while ensuring safety to utility workers and the public.

It is understood by EL&P that City Council and Administration want to see the utility place more strategic attention on promoting energy conservation through both the rate model and utility operations. From the utility's perspective, the primary focus is seen to be operational. However, it is important that EL&P stay engaged in the City's larger strategic planning process as it evolves and continue to explore ways to link specific activities in its Service Plan to the broader direction provided.



There are differing opinions regarding EL&P's position as it relates to the Council's (and the City's) priority of conservation and the potential impact such a focus could have on EL&P's ability to operate as a sustainable, self-funding utility. As the utility is reliant upon the income generated by fees to maintain and expand its infrastructure, it is critical that EL&P maintain rates that support these activities. Shifting the rate model to be more heavily weighted toward variable fees has some potential to influence customer demand by encouraging conservation, but this would reduce guaranteed income through fixed fees while also potentially lowering income from variable fees (if customers take advantage of the conservation incentive as anticipated). This would negatively impact revenue to support current initiatives as well as constrain future capital spending.

This could potentially have a negative impact on the utility's ability to access additional debt financing if needed. However, over the long term it is possible that conservation could reduce capital costs if lower usage results in reduced strain on the infrastructure, which could effectively increase the useful life of the assets. Further, decreased demand could reduce the need for EL&P to expand capacity and therefore reduce the need to take on additional capital debt. Ultimately, it is important for all parties to understand that conservation must be a priority when operating in the municipal context as customers and citizens simply expect that the City will conduct its operations in a socially responsible and environmentally sustainable fashion.

### **Recommendations**

- 1.1.1** In alignment with the City's efforts, EL&P should strive to improve its annual Service Plan by including linkages to operating and capital budgets and performance measures, which will measure progress toward the achievement of goals. However, as performance measures are driven by City Administration and are designed to be applicable to all departments, utilities and functions equally, EL&P must ensure that any performance measures presented in its Service Plan are in line with the City's direction. Further EL&P is not permitted to change the content or presentation of its Service Plan to include any additional information at this time.
- 1.1.2** With this noted, it may be of benefit to EL&P to track and benchmark electric-utility-specific metrics independently and outside the scope of the Service Plan. The establishment of a database of metrics that are informative regarding the utility's operation as a utility, rather than as a City department, will likely provide important insight into the effectiveness and efficiency of its operations within a broader context. See **Appendix C** for a list of electric utility-specific measures and metrics.
- 1.1.3** Clear rate-setting philosophies should be identified by Council which reconcile the often conflicting objectives of utility revenue stability and conservation pricing.

### **1.2 Sustainability Planning**

Overall sustainability planning for the City is presented in its Strategic Plan, which describes the five pillars upon which the City's Municipal Sustainability Framework is founded: environment, society, culture, economy and governance. The "environment" pillar is further expanded in the City's Environmental Master Plan, which was approved by Council in May of 2011. The Environmental Master Plan is a comprehensive



document based on a sound methodology (including public and stakeholder consultation and development of goals, metrics, timelines, policies, strategies and actions) that lays out a foundation for improving environmental management and measuring the results, including monitoring of potential secondary impacts associated with various forms of pollution, climate change, biodiversity, and loss of productive land.

It has multiple sections, each focusing on different aspects of the environment, including one on energy with the following goal: “To reduce energy use and move towards using renewable energy sources.” This section identifies EL&P as the lead for several broad initiatives related to the electricity function, including: installing Advance Metering Infrastructure (AMI), expanding the energy efficient street light program, exploring district energy potentials in high-density neighbourhoods and partnering with renewable energy providers. These initiatives are ranked according to impact, level of investment and priority, with two actions identified as being “top priority”: increasing energy conservation of buildings and increasing and promoting the use of renewable energy sources. Specific steps associated with the achievement of these outcomes are identified that include both the City and its community partners. While a general expected level of investment is identified for each activity (low, medium or high), the Environmental Master Plan does not link back specifically to City or department operating or capital budgets to ensure the availability of resources as required.

In 2009, EL&P purchased 15% of the City’s corporate power from green power sources, increasing to 22% in 2011 (according to data provided by Enmax regarding EL&P’s contract to purchase renewable energy). The Environmental Master Plan indicates plans to continue increasing total municipal green energy use to 24% in 2012, 30% by 2015, 40% by 2020, and 60% by 2035. Plans for increasing usage of energy from green sources include capturing methane from the landfill for heat or electricity generation (this currently represents less than 1% of Red Deer’s energy supply), increasing the amount of energy captured from the City’s wastewater facilities, incorporating renewable energy infrastructure in all new City facilities, reducing barriers and facilitating microgeneration, and additional procurement of green power.

Beyond the Environmental Master Plan, EL&P emphasizes sustainable energy usage by issuing news releases and brochures encouraging customers to practice energy conservation, especially at times of peak demand, and providing tools and tips on how to do so. As an electricity distributor EL&P is somewhat removed from both generation and retail, which are the two areas where conservation initiatives are seen to be most effective (e.g. through efficient or green power production and/or the ability to influence consumer behaviour and demand through direct usage rates and technology). However, the City’s commitment to purchase increasing proportions of its electricity from green sources through Enmax reflects the priority that is placed on ensuring responsible and sustainable energy creation and use.

Given EL&P’s limited ability to influence either generation or demand and its need for predictable revenue to support existing and future infrastructure needs, any modification to rates to significantly influence customer conservation must be approached with careful consideration and analysis to fully understand the impact to the customers, the utility and the City. However, this does not preclude the use of other tools and methods to influence customer demand in the interim, including the continuation of educational materials and programs or promoting competitions with prizes for households that successfully engage in conservation efforts that



result in a significant reduction in their monthly electricity usage. Prior to the implementation of the Environmental Master Plan, the utility had already engaged in a program to expand the energy efficiency of street lights, a Christmas light exchange program, investigation into AMI (although the decision was taken to not move forward until mandated by the province), and exploration of the use of electric powered vehicles by municipal staff. Spurred by the Environmental Master Plan, EL&P, along with Engineering Services, is currently engaged in a district energy feasibility study.

### **Recommendations**

- 1.2.1** EL&P should explore ways to more directly link its own business planning (through its Service plan or supplementary business planning efforts) by ensuring the Service Plan references the initiatives assigned to it within the City's Environmental Master Plan.
- 1.2.2** EL&P should continue to track and report on the percentage of electricity arising from renewable energy sources that flows through its system. As additional sources are acquired (e.g. methane from the landfill, wastewater facilities, microgeneration, etc.) this will require greater focus to ensure accurate monitoring and tracking of all renewable energy inputs.

### **1.3 Enterprise Risk Management**

Enterprise Risk Management (ERM) is a work in progress for the City. Financial Services has been tasked to lead the development of an ERM framework, with one person having this responsibility formally attached to their job. While a small number of high level financial risks are identified in the City's Annual Financial Report, there is no documented ERM plan or framework. As a result, there does not appear to be a clear, consistent methodology followed throughout the City and therefore, no enterprise approach to which EL&P can link its risk planning. The City recognizes this gap and the need to improve in this area.

Even though there is no formal ERM approach or plan, the City appears to discuss enterprise risks, especially during the budget development process and on an ad hoc basis as issues arise. This results in the development of mitigation strategies and the execution of these strategies, but these do not appear to be assembled anywhere as part of an overall risk strategy document. For example, safety has been identified as a high priority risk area and strong emphasis has been placed on establishing a safety-focused culture across the entire organization.

EL&P discusses risks internally and with its City counterparts. This is not done as part of a formal ERM approach but through recognition of the importance of this function and good management and communication. Some of its strategies and activities (e.g. maintenance, long term capital planning, asset management initiatives) are clearly related to mitigating risks, but are not presented with other risk management strategies and activities within a separate ERM document.

The lack of a comprehensive ERM plan presents various challenges, chiefly among which is the difficulty in understanding which risks have been fully assessed and for which mitigation strategies have been developed. This also makes it more difficult to review previously assessed risks to determine whether they are still relevant, if they have become higher or lower priority relative to other risks, or if key factors have changed.



An additional challenge associated with the lack of a formal ERM plan is that mitigation strategies are not linked to operating and capital budgets, and therefore have not been assigned resources to facilitate their implementation when needed.

### **Recommendations**

**1.3.1** The City should develop a best practice ERM framework. Once the framework has been established, City Administration should support departments in applying this framework to develop a risk plan and mitigation strategies, including linking the mitigation strategies back to operating and capital budgets when required.

## **1.4 Revenue and Rate Approach**

The City is currently engaged in a Rate Model Review project with the assistance of an outside consultant. This project includes developing an overall rate approach, a rate model, and formalizing and developing utility fiscal policies, which will eventually be approved by Council. The policies under development include:

- Revenue requirement
- Variable vs. fixed rates
- Cost of capital (rate of return)
- Dividends and special dividends
- Capital reserve and working capital operating reserve
- Asset accounting and depreciation
- Debt financing
- Municipal Consent and Access Fee (MCAF)
- Rate classes and cross-subsidization

It appears that all key aspects of a utilities approach to rate setting are under review and the resulting policies will form a solid foundation for the fiscal management of the utility, by defining and formalizing the relationship between the City and its utilities and putting in place policies that will allow the utilities to develop and maintain adequate reserve funds. A fiscal policy has been developed in draft form that addresses all of the key parameters necessary for effective rate setting.

Other items that are typically explored or evaluated as part of a rate model review include:

- Rates and fees that are reflective of the organization's desired outcomes.
- Rates and fees that reflect a strong understanding between costs and the services and programs delivered.
- Alignment between EL&P's revenue and rate approach and the overall corporate approach.
- Clarity and understanding around the philosophy behind the rate design.
- Rates and a rate design methodology that supports the rate philosophy and ensures that rates are equitable given different customer classes and support the organization's desired outcomes (e.g. conservation).
- Inclusion in the revenue requirement of all relevant expenditures, including reserves and dividends.





Rate approach and fiscal policies for comparable jurisdictions (including Kelowna, Lethbridge, Medicine Hat, Edmonton, Calgary, Waterloo, Oakville and Sacramento) were captured in the benchmarking exercise component of this review. This information, along with the detailed feedback on other areas described in the benchmarking questionnaire and interviews are included in **Appendix L**.

To date, EL&P’s rate philosophy has been focused on operating in a cost-sensitive fashion and keeping rates as low as possible with no debt, and to provide a return (including the MCAF as well as regular and special dividends) to the City. This approach has resulted in rates that are highly competitive when compared to other jurisdictions in Alberta and Canada. The following comparisons for the January 2012 Distribution Tariffs for Red Deer and select other Canadian electric utilities demonstrates the wide range in the types and amounts of fees across various customer classes.

**Figure 2: Select Canadian Electric Utility Distribution Tariffs, January 2012**

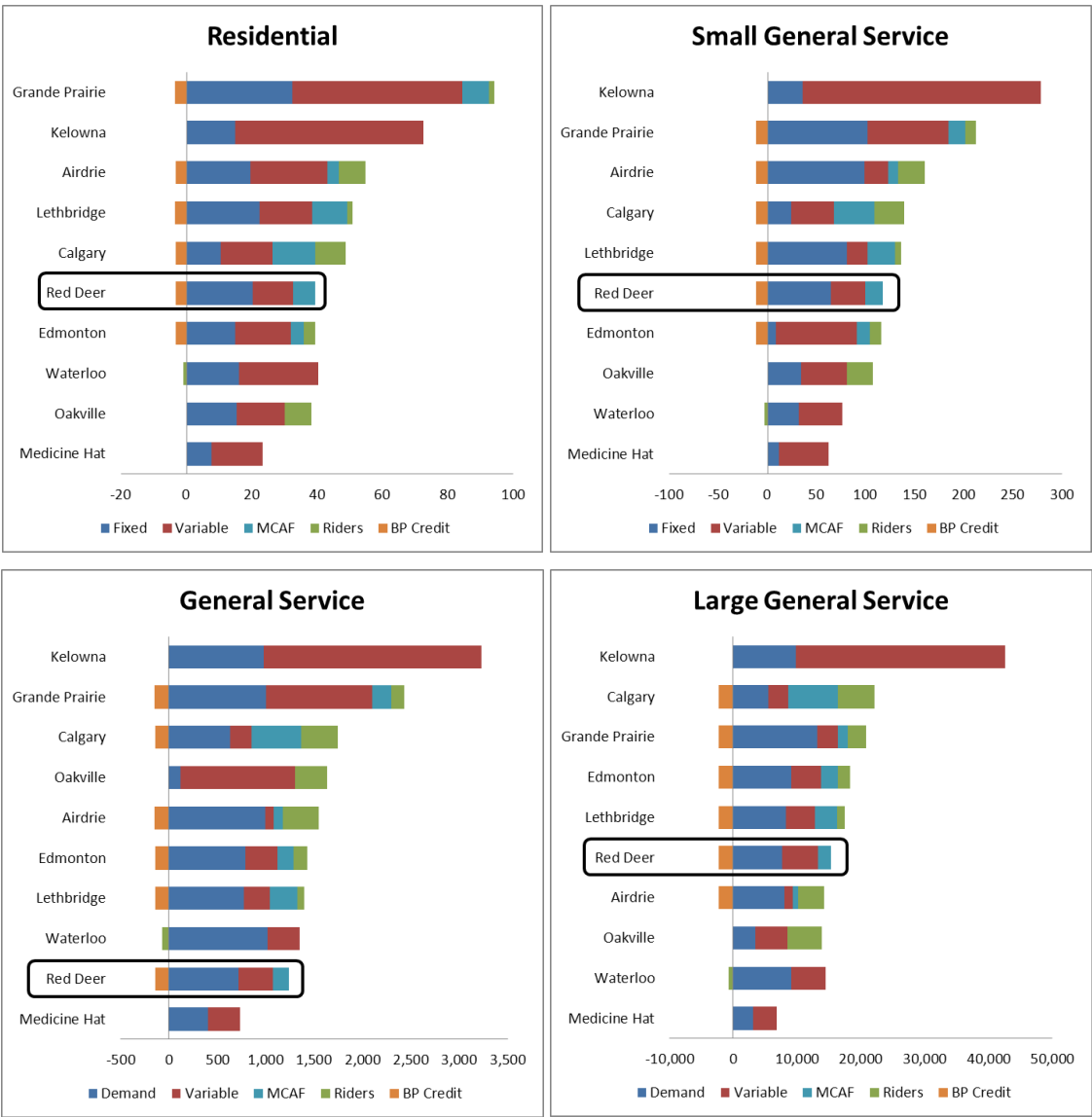




Table 1: Select Canadian Electric Utility Distribution Tariffs, January 2012

COMPARISON OF DISTRIBUTION TARIFF FOR JANUARY 2012 RESIDENTIAL							
For a Residential customer consuming 600 kWh (average month)							
Municipality	Distribution Tariff Charge (\$)						
	Fixed	Variable	SubTotal	MCAF	Riders	BP Credit	TOTAL
Grande Prairie	32.33	52.08	84.41	8.14	1.58	(3.47)	\$ 94.13
Kelowna	15.00	57.54	72.54	-	-	-	72.54
Airdrie	19.51	23.49	43.00	3.72	7.94	(3.36)	54.66
Lethbridge	22.41	16.14	38.55	10.53	1.80	(3.42)	50.88
Calgary	10.45	15.86	26.31	13.11	9.35	(3.39)	48.77
Red Deer	20.21	12.48	32.69	6.71	-	(3.41)	39.40
Edmonton	14.79	17.06	31.85	3.96	3.48	(3.41)	39.29
Waterloo	16.00	24.24	40.24	-	(1.03)	-	39.21
Oakville	15.28	14.76	30.04	-	8.10	-	38.14
Medicine Hat	7.61	15.78	23.39	-	-	-	23.39

COMPARISON OF DISTRIBUTION TARIFF FOR JANUARY 2012 SMALL GENERAL SERVICE							
For a Small General Service customer consuming 2000 kWh (average month)							
Municipality	Distribution Tariff Charge (\$)						
	Fixed	Variable	SubTotal	MCAF	Riders	BP Credit	TOTAL
Kelowna	35.48	242.86	278.34	-	-	-	\$ 278.34
Grande Prairie	102.06	81.90	183.96	17.73	10.74	(11.58)	212.43
Airdrie	98.69	23.80	122.49	10.60	27.01	(11.31)	160.10
Calgary	23.93	43.73	67.66	41.48	30.06	(11.31)	139.20
Lethbridge	80.69	21.40	102.09	27.87	6.00	(11.40)	135.96
Red Deer	64.47	34.80	99.27	18.28	-	(11.38)	117.55
Edmonton	8.21	82.42	90.63	13.20	11.60	(11.38)	115.43
Oakville	34.52	46.00	80.52	-	27.00	-	107.52
Waterloo	32.08	43.80	75.88	-	(3.42)	-	72.46
Medicine Hat	11.67	50.40	62.07	-	-	-	62.07

COMPARISON OF DISTRIBUTION TARIFF FOR JANUARY 2012 GENERAL SERVICE							
For a General Service customer (111 kVA) consuming 25,000 kWh (average month)							
Municipality	Distribution Tariff Charge (\$)						
	Demand	Variable	SubTotal	MCAF	Riders	BP Credit	TOTAL
Kelowna	984.57	2,244.72	3,229.29	-	-	-	\$ 3,229.29
Grande Prairie	1,005.63	1,095.00	2,100.63	202.50	134.25	(144.75)	2,437.38
Calgary	636.00	215.28	851.27	519.09	376.00	(141.40)	1,746.36
Oakville	122.99	1,178.11	1,301.10	-	337.50	-	1,638.60
Airdrie	996.67	87.48	1,084.14	93.78	375.63	(144.73)	1,553.55
Edmonton	788.14	332.25	1,120.39	165.00	145.00	(142.25)	1,430.39
Lethbridge	774.37	267.50	1,041.87	284.43	75.00	(142.50)	1,401.30
Waterloo	1,018.43	337.50	1,355.93	-	(70.84)	-	1,285.09
Red Deer	722.52	352.50	1,075.02	168.68	-	(142.25)	1,243.70
Medicine Hat	405.80	330.00	735.80	-	-	-	735.80

COMPARISON OF DISTRIBUTION TARIFF FOR JANUARY 2012 LARGE GENERAL SERVICE / INDUSTRIAL							
For a Large General Service customer (1,111 kVA) consuming 400,000 kWh (average month)							
Municipality	Distribution Tariff Charge (\$)						
	Demand	Variable	SubTotal	MCAF	Riders	BP Credit	TOTAL
Kelowna	9,854.57	32,717.22	42,571.79	-	-	-	\$ 42,571.79
Calgary	5,547.07	3,119.76	8,666.83	7,755.09	5,782.40	(2,262.40)	22,204.32
Grande Prairie	13,178.39	3,240.00	16,418.39	1,582.73	2,788.00	(2,308.00)	20,789.13
Edmonton	9,048.89	4,695.08	13,743.97	2,640.00	1,892.00	(2,276.00)	18,275.97
Lethbridge	8,310.26	4,480.00	12,790.26	3,491.74	1,200.00	(2,280.00)	17,482.00
Red Deer	7,674.37	5,560.00	13,234.37	2,093.63	-	(2,276.00)	15,328.00
Airdrie	7,988.39	1,399.60	9,387.99	812.06	4,085.78	(2,315.60)	14,285.84
Oakville	3,437.21	5,078.94	8,516.15	-	5,400.00	-	13,916.15
Waterloo	9,041.16	5,400.00	14,441.16	-	(709.02)	-	13,732.14
Medicine Hat	3,079.78	3,760.00	6,839.78	-	-	-	6,839.78

Red Deer's current rate model currently bases rates on projected revenue requirements and a 100% cost recovery shared across the rate base with no cross-subsidization between rate classes. Rates are developed using a recognized cost of service methodology and rate model and demonstrate a strong understanding of the relationship between utility costs and utility services provided. The current model was developed by an external consultant under the previous EL&P manager and some institutional knowledge regarding its development and assumptions was lost with the departure of the manager. However, all required information continues to be available via the model and the consultant, and the the departed manager remains cooperative and responsive to questions or to provide clarification when requested. As time goes on any knowledge gaps have narrowed considerably and the development of the new rate model (which will be applied across all City utilities) will support a broader institutional understanding of the model's inputs and considerations, which will mitigate the risk of knowledge attrition in the future.

The link between rate planning and sustainability planning has become more complex as electric utilities are recognizing the disconnect between conservation pricing philosophies and utility fiscal well-being from the perspective of sustaining current and future infrastructure. This has led to a focus on increasing the proportion of fixed rates which, while not providing an incentive for customers to reduce their electricity usage, ensures the utility is able to support the maintenance and new construction necessary to provide safe and reliable service to its customers.



## Recommendations

**1.4.1** EL&P should continue to play an active role in the Rate Model Review and ultimately implement the resulting fiscal policies and rate model, providing a solid foundation for the financial management of the utility moving forward.

## 1.5 Budgeting and Capital Planning

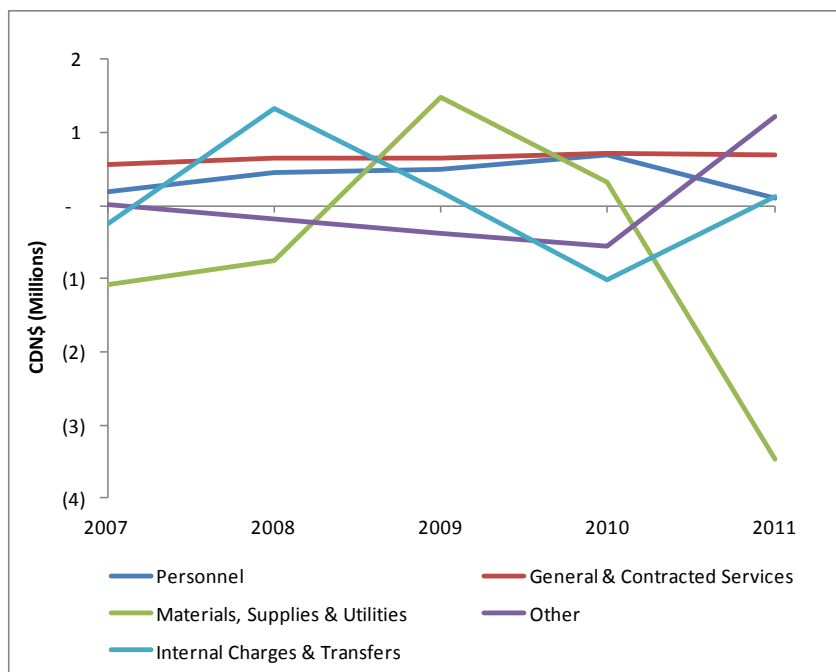
The overall City budget for 2012 is \$272 million; \$189 million of this is tax supported and the remaining \$83 million is the dividends and fees paid to the City by the self-funding utilities (of which EL&P comprises \$27 million). The City is focusing on improving the process for budgeting for outcomes and evaluating core businesses annually, which is considered to be a major undertaking.

EL&P follows the same extensive, City-wide budget development process followed by all City departments, which ensures that multiple levels of both oversight and delegation of authority are present. Budgets are typically based on the previous year's budgeted numbers rather than actual revenues and expenditures, and the systems used to develop and manage the budgets are considered to be accurate and user-friendly. While operating and capital budgets provide clear and appropriate direction to the utility, there is a recognized need for better integration between budgets and Service Plans.

## Operating Budget

A review of the five-year operating budget-actual variances reveals that general and contracted services and personnel costs consistently come in below the budgeted amounts. Actual costs for materials, supplies and utilities have experienced significant variances from the budget, primarily due to fluctuating electricity costs. A comparison of actual and budgeted internal charges and transfers expenditures also reveals significant variances with actuals alternating between falling above and below budgeted amounts on an almost annual basis.

Figure 3: EL&P Operating Budget-Actual Variances, 2007 to 2011





The majority of revenues and expenditures occur within the utility section compared to the Street Light and Traffic Lights program. Almost all revenues for the utility section arise from the residential and general service tariffs with a small proportion arising from recovery on the TFO revenue requirement.

Figure 4: EL&P Utility Section Expenditure Trends, 2005 to 2011

Within the Utility section, materials, supplies and utilities have been the largest cost driver over the past five years, and these costs have experienced a 108.5% increase since 2007, primarily due to the upward trend in electricity costs during this period. The second largest cost driver has been internal charges and transfers, which increased by 24.8% over the same period. Personnel costs, general and contracted services, and other expenses have remained consistently lower but have still experienced relatively large percentage-based increases over the period (58.4%, 42.1% and 35.7%, respectively).

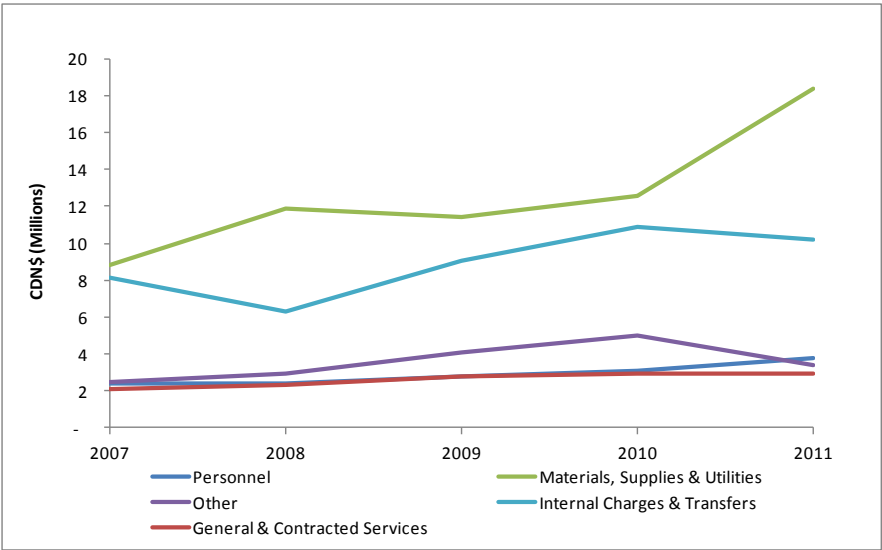
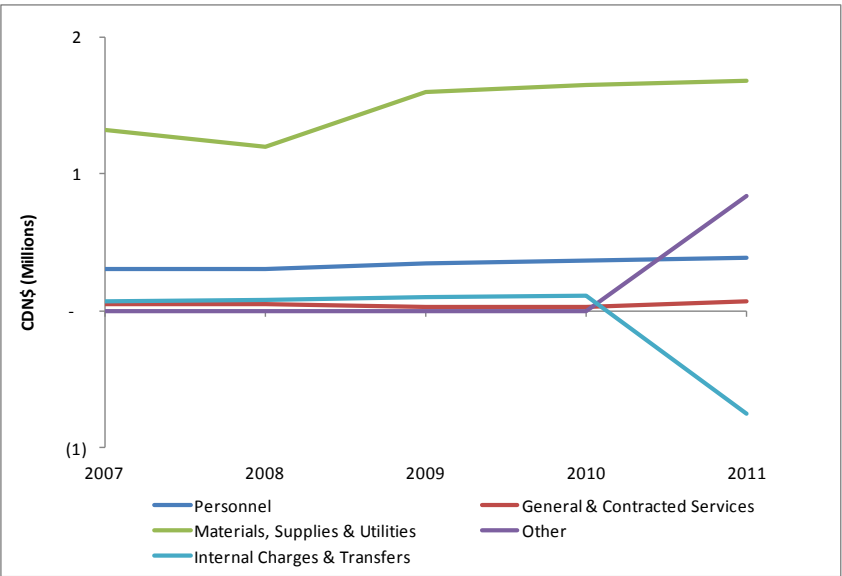


Figure 5: EL&P Street and Traffic Light Program Expenditure Trends, 2005 to 2011



The Street Light and Traffic Lights program does not generate revenue from operations, but is instead funded by a tax levy equivalent to actual annual expenditures. Within this function, more than half of total expenditures are the result of electricity purchases (materials, supplies and utilities), generally followed by personnel costs. However, expenses in the “other” category increased significantly from 2010 to 2011 due to the recognition of

depreciation expense for street and traffic light infrastructure which was not occurring before. The decrease in the internal charges and transfers category is primarily the result of an entry under the “equity transfer –



amortization” account, which appears to be a corresponding entry to reflect the depreciation amount recorded. With the exception of these two categories, expenditures in the Street and Traffic Light section have remained fairly consistent since 2007.

EL&P also prepares an operating budget summary that details specific changes to current year costs (e.g. addition of new personnel, inflationary impacts on costs, changes to depreciation rates, changes to internal transfers such as payments to the City or to reserves, etc.) as well as to revenues (e.g. additional usage, fee increases, etc.) that have been integrated into the development of the budget for the upcoming fiscal year.

The operating budget summary also compares the previous, current, and upcoming fiscal year in terms of anticipated revenues and/or expenditures for both the utility section and the Street Lights and Traffic Lights program. These comparisons are provided both on a category level (i.e. personnel; general and contracted services; materials, supplies and utilities; other; internal charges and transfers; revenue; and net tax levy) as well as detailing specific account codes within each category (e.g. breaking down revenue by customer or type of fee, breaking down personnel costs by regular or overtime, etc.).

This document also provides budgeted revenue and expenditures for the previous, current and upcoming fiscal years as well as actuals from the previous years for budget-actual comparison purposes for the utility section and the Street Light and Traffic Lights program as well as breaking these out for each BU within the programs.

**Figure 6: Percent Change in Budgeted Revenues / Expenditures Year-Over-Year**

The operating budget prepared in the fall of 2011 anticipates a larger increase in revenues and expenditures from 2011 to 2012 for the utility section relative to the increase from 2010 to 2011, primarily due to an increase in the AESO transmission tariff payment and increased transfers to reserves. A small increase in expenditures is anticipated for the Street Lights and Traffic Lights program for 2012, which is spread fairly evenly across the cost categories.







### Capital Budget

The capital budget reflects a long-term capital plan that establishes capital project priorities over the next ten years. Prioritization of projects is managed individually by each department and utility within the City. The prioritization process is not documented and appears to be primarily based on staff knowledge and expertise in the existing system and expected future needs.

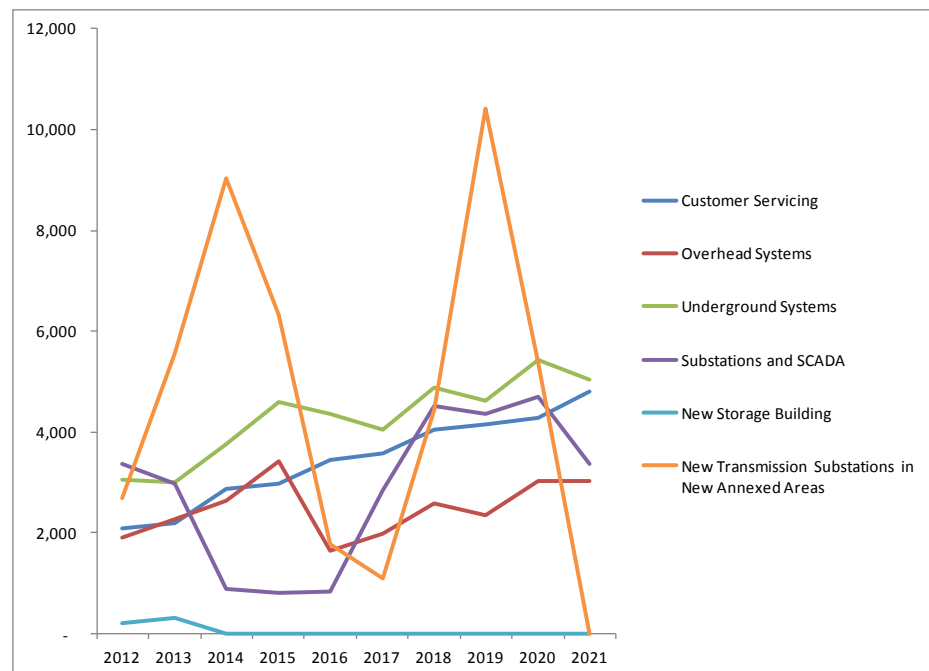
At the beginning of the budget process, anticipated capital expenditures are projected over the following ten year period, including both maintenance and new infrastructure. The capital budget request plan identifies how much of the total cost of capital projects is expected to be recovered through customer contribution and how much will be required from the capital reserve fund.

The capital plan is broken out into various project categories, including customer servicing, overhead systems, underground systems, substations and SCADA, and new or shorter term projects such as the new EL&P storage building and the new transmission substations in new annexed areas. Within each project category, costs are broken out by asset (or task if the project involves multiple phases or components) as well as by yearly expenditure for each.

The capital customer servicing expenditures are expected to be funded primarily through customer contributions, with a small proportion (\$50,000 per year) drawn from capital reserves. Overhead and underground systems, substations and SCADA, and the new EL&P storage building will be funded entirely through EL&P's capital reserves. The new transmission substation in the new annexed areas will be funded in part from capital reserves (approximately 56%) and supplemented by funding from debentures (approximately 44%).

**Figure 7: Capital Budget Projections**

The largest planned expenditures are for new transmission substations in new annexed areas with spending on this infrastructure expected to vary significantly from year to year, ranging from \$9.0 million in 2014 to a low of \$1.1 million in 2017 and back up to a high of \$10.4 million in 2019 (all values adjusted for expected inflation). Spending on underground systems and customer servicing is expected to remain fairly consistent

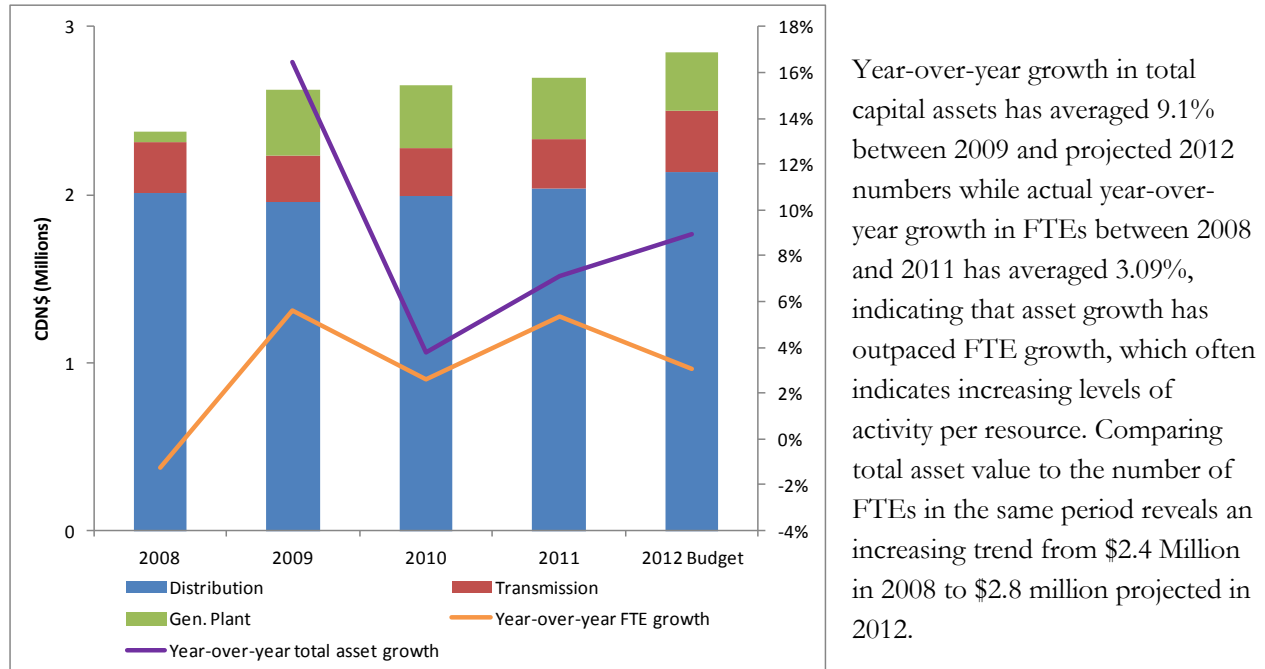


with a general upward trend during the period from 2012 to 2021. Planned spending on overhead systems



shows an upward trend from 2012 to 2015 followed by a large decrease in 2016 before again trending upward. Substations and SCADA capital expenditures are expected to vary throughout the 2012-2021 period, with a significant reduction from 2014 to 2016 followed by increased spending in 2017 onward. The new EL&P storage building will be completed in 2013 and is not expected to require additional capital investment in the 2012-2021 projection period.

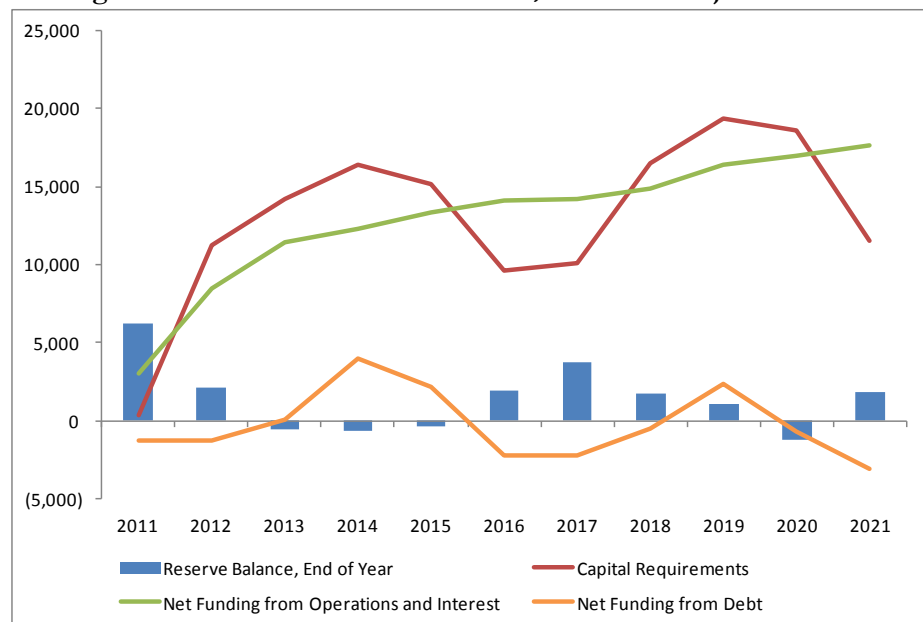
**Figure 8: Asset Value (CDN\$) per FTE and Year-Over-Year Growth in Assets and FTEs**



### **Stabilization Reserve**

Current projections for capital requirements and corresponding funding (through operations and interest as well as debt) indicate that EL&P's capital reserves appear to be, for the most part, sufficient for supporting capital infrastructure requirements over the next decade. While relatively small shortfalls are anticipated in 2013, 2014, 2015 and 2020,

**Figure 9: EL&P Stabilization Reserve, Ten Year Projection**





these occur during periods in which capital spending is expected to peak as a result of the construction of new transmission substations to support new areas annexed by the City.

**Recommendations**

- 1.5.1** Future fiscal policy needs to address how to appropriately fund forecasted capital funding requirements through the appropriate use of utility debt and reserves.
- 1.5.2** Based on projected growth, additional staff resources will likely be required to implement future capital plans and contingencies for this should be built into subsequent operating budgets.
- 1.5.3** The budgeting process should emphasize consideration of previous years' actual revenues and expenditures rather than focusing on budgeted numbers.



## 2 Management and Execution

### 2.1 Service Lines and Programs

EL&P provides service to the entire City of Red Deer, and is undergoing growth in its service area as the City's expands its boundaries. As of January 31, 2012, the utility had a total of 40,429 energized sites (three substations and 40,426 customer sites). The utility distributed power to 23,519 Regulated Rate Option (RRO) customers (58% of customer sites), just under 42% were serviced by competitive retailers, and a very small proportion were serviced by default supply or were self-retailers.

**Table 2: Energized Sites by Rate Class and Retailer Type, as at January 31, 2012**

Rate Class	Number	%	Retailer Type	Number	%
Residential	36,373	89.97%	Regulated Rate Option	23,519	58.17%
Small General Service	3,392	8.39%	Competitive Retailer	16,863	41.71%
General Service	629	1.56%	Default Supply	40	0.10%
Large General Service	30	0.07%	Self Retailer	4	0.01%
Street Lights	1	0.00%	Substations	3	0.01%
Traffic Lights	1	0.00%	<b>TOTAL</b>	<b>40,429</b>	
Unassigned Sites (substations)	3	0.01%			
<b>TOTAL</b>	<b>40,429</b>				

Comparing the utility's 826km of primary distribution wire against the total number of customers, EL&P's ratio of customers per km of wire is approximately 48.9 to 1. In 2011, EL&P's operational expenditure (\$38,592,394) per km of wire was approximately \$46,722 and per-customer expenditure was \$955. The following table provides comparable information for other Canadian electric utilities:

**Table 3: Select Budget, Distribution Wire and Customer Base Comparisons**

	EL&P	Edmonton	Calgary	Lethbridge	Medicine Hat
2011 Budget (Millions)	\$ 39	\$ 1,333	\$ 2,058	\$ 62	\$ 104
Km of Distribution Wire	826	5,000	7,600	2,459	700
Number of Customers	40,426	334,000	700,000	35,798	30,900
Customers per Km of Wire	48.9	66.8	92.1	14.6	44.1
Cost per Km of Wire	\$ 46,722	\$ 266,600	\$ 270,737	\$ 25,214	\$ 148,143
Cost per Customer	\$ 955	\$ 3,991	\$ 2,939	\$ 1,732	\$ 3,356



EL&P's customer per km of wire ratio falls in the middle of these benchmark organizations; higher than Lethbridge and Medicine Hat but lower than Edmonton and Calgary. Operational expenditures per km of wire are on the lower end, just above Lethbridge but lower than the other benchmarks. Expenditure per customer is lower in Red Deer than in all four of these benchmark utilities.

EL&P engages in two main types of business: distributing electricity through its system of distribution wires as a Distribution Facility Operator (DFO) and (to a much lesser degree) transmission infrastructure as a Transmission Facility Operator (TFO) and all the activities related to these. The distribution tariff rates are set by EL&P and approved by Council. Transmission tariffs are managed by the Alberta Electric System Operator (AESO), which collects access fees from TFOs for system access. The TFO then submits a Transmission Tariff filing to AESO to recover transmission costs.

When the electricity industry in Alberta was deregulated, the utility considered providing non-RRO retail services but decided against this because of the risk and the expense of the software and expertise required. As a result, the delivery of the RRO service is currently contracted out to Enmax Energy. Similarly, EL&P also decided to contract out the majority of data management functions required for meter management, load settlement and related activities and regulation as these functions also require a great deal of costly software and expertise. The current contractor for these functions is Enmax Power and Dataco, which provides this service to other rural municipal electricity distributors. EL&P is satisfied with these relationships and is therefore not considering becoming a regional service provider and bringing these functions in-house.

Unlike many other municipalities, EL&P provides construction and related services to developers for electricity hook-up. EL&P is currently the only provider of such services in the Red Deer service area and much of this work is performed by in-house staff rather than third party contractors. There is some question of whether EL&P should be doing so much contract work for developers using in-house staff, especially given that these resources could be utilized elsewhere for infrastructure maintenance or capital project activities and there is some concern that this external work has in the past taken priority over internal concerns such as routine maintenance. Further, while this activity generates revenue, the absence of private competitors suggests that the opportunity may not be as profitable or cost-effective as initially believed, which is exacerbated by the opportunity cost of reallocating scarce staff resources from internal projects to external activities.

EL&P's capacity to handle significant growth may be limited. This is of particular concern should Alberta's economy re-enter a boom phase as skilled electricians and labour could be drawn away from the municipal sector by a higher income potential offered by industry. It is important that effective management and forecasting of system needs is in place, which would ensure the utility has a good understanding of future human resource needs and can plan and hire accordingly. To this end, it is important that EL&P continue to engage with major customers, key suppliers and other key stakeholders to ensure an adequate understanding of future system needs.

EL&P's key priority is to deliver its core services in a safe and reliable manner, and while this includes sourcing green energy and promoting environmentally responsible use of electricity when appropriate, this is





not considered to be the primary goal of the utility. However, EL&P has engaged in some innovative approaches to conservation and has explored sustainable approaches to its infrastructure, load management, and services and programs (e.g. smart metering).

In the past the utility has engaged in efforts to assess the potential for discontinuing, changing, evolving or commencing various service lines and programs. Given the concerns regarding the cost-effectiveness of the developer service activities it may be prudent for EL&P to again review this function to assess whether it should continue to be engaged in this activity.

Information on the utility's service lines and descriptions of its programs are provided on its website and are detailed in City by-laws and related documents. The information contained in EL&P's section of the City website provides a good general description of the services that EL&P provides while also linking to other sources of information and contact details for the department if further information is needed. The information provided includes:

- A listing of the customer services provided by EL&P
- A description of what an electricity bill includes
- Answers to frequently asked questions about electricity deregulation
- An explanation of the Regulated Rate Option (RRO)
- An explanation of what is included in the distribution tariff
- The terms and conditions for accessing electricity distribution services
- How to apply for retail services
- How to apply for electric services and meters
- How to access connection services for micro-generators
- Answers to questions asked frequently by builders and developers

The website appears to provide an accurate description of the activities for which EL&P is responsible and echoes the type of information found on the websites of similar utilities.

EL&P is governed by one key bylaw, the Electric Utility Bylaw (No. 3273/2000), which has several appendices and related documents. These appendices and documents include:

- *Terms and Conditions for Distribution Access Services* – describes how electric distribution services will be accessed.
- *Terms and Conditions for Retail Access Services* – describes how retailers will access electric distribution services.
- *The Distribution Tariff* – identifies the effective date and describes the rates and its various components for the various rate classes.
- *The Distribution Access Services Schedule of Fees* – describes the fees to be charged for accessing distribution services, such as connection/disconnection/reconnection fee, emergency service fee, etc.
- *Terms and Conditions for the Regulated Rate Tariff* – describes the RRO and how it will be provided by EL&P.



- *The Regulated Rate Tariff* – identifies the effective date and describes the rates and its various components for the various rate classes.
- *The Regulated Rate Tariff Energy Price Setting Plan* – describes how power will be procured for the RRO and how the RRO rate will be set.
- *The Regulated Rate Tariff Fee Schedule* – describes the fees to be charged in relation to managing the RRO such as security deposits, owner search charge, etc.

There have been no issues or concerns raised in regards to these bylaws.

All services and programs appear to operate within this approved mandate and remain relevant to achieving the organization's goals and objectives. The rationale, goals and objectives of the various service lines and programs are known and appear to be well communicated to management and staff as well as to customers and other stakeholders; however, while the activities and priorities are formalized in EL&P's Service Plan, the goals are not formally stated in this document. Further, despite being described in the Service Plan, activities and priorities do not appear to be measured or evaluated in a quantitative manner (with the exception of reliability / service continuity, which is tracked and benchmarked through the Canadian Electricity Association).

## **2.2 Organization Structure and Staffing**

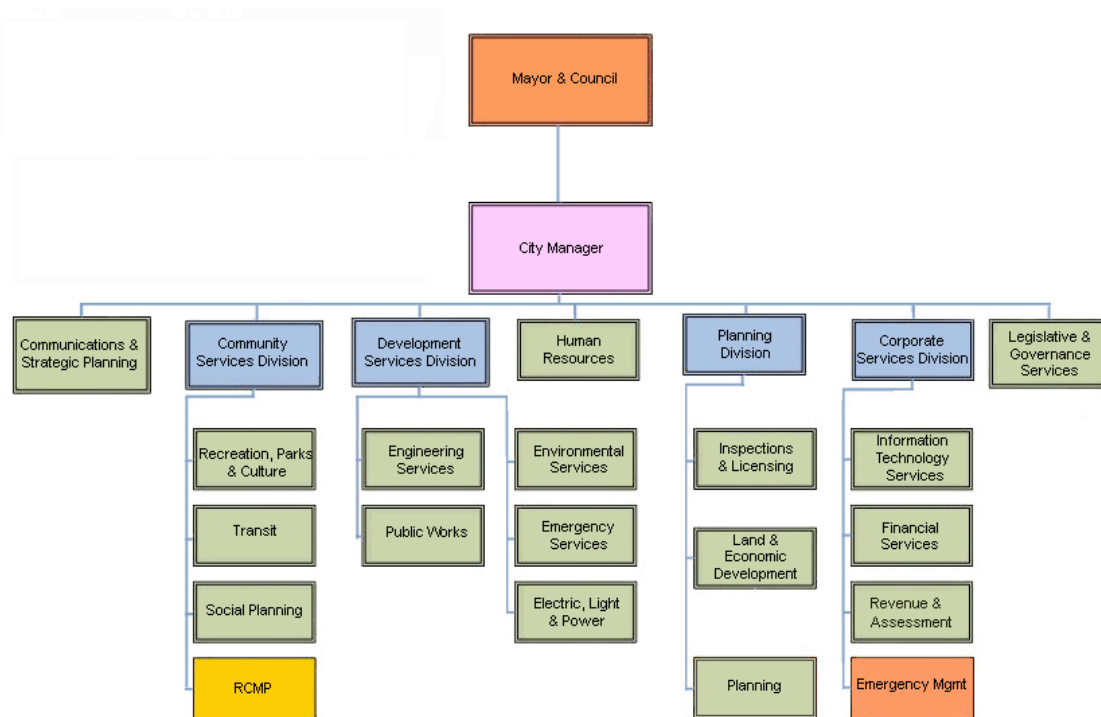
The organizational chart for the City of Red Deer indicates that under the City Manager there are four main line divisions, each led by a director and having a divisional controller:

- Community Services, which includes Recreation, Parks and Culture, Transit, Social Planning and RCMP
- Development Services, which includes Engineering Services, Public Works, Environmental Services (water, wastewater, waste management), Emergency Services and Electric Light and Power
- Planning, which includes Inspections and Licensing, Land and Economic Development, and Planning
- Corporate Services, which includes Information Technology Services, Financial Services, Revenue and Assessment, and Emergency Management.

In addition, the functions of Communications and Strategic Planning, Legislative and Governance Services, and Human Resources report directly to the City Manager. The Director of Corporate Services is the CFO for the entire organization and the Director of Development Services is the head engineer. Each division also has a Divisional Strategist, who acts as the liaison between the divisions and their units (including EL&P) and coordinates with the corporate approach to strategy and communications.



Figure 10: City of Red Deer Organizational Chart



EL&P is located in the Development Services division, which is headed by the Director of Development Services. The Division Controller for Development Services, who also has a dotted line reporting relationship with Financial Services, provides overall financial and accounting direction and support to EL&P and the other branches and utilities in this division. EL&P also works closely with Engineering Services and Public Works in coordinating projects.

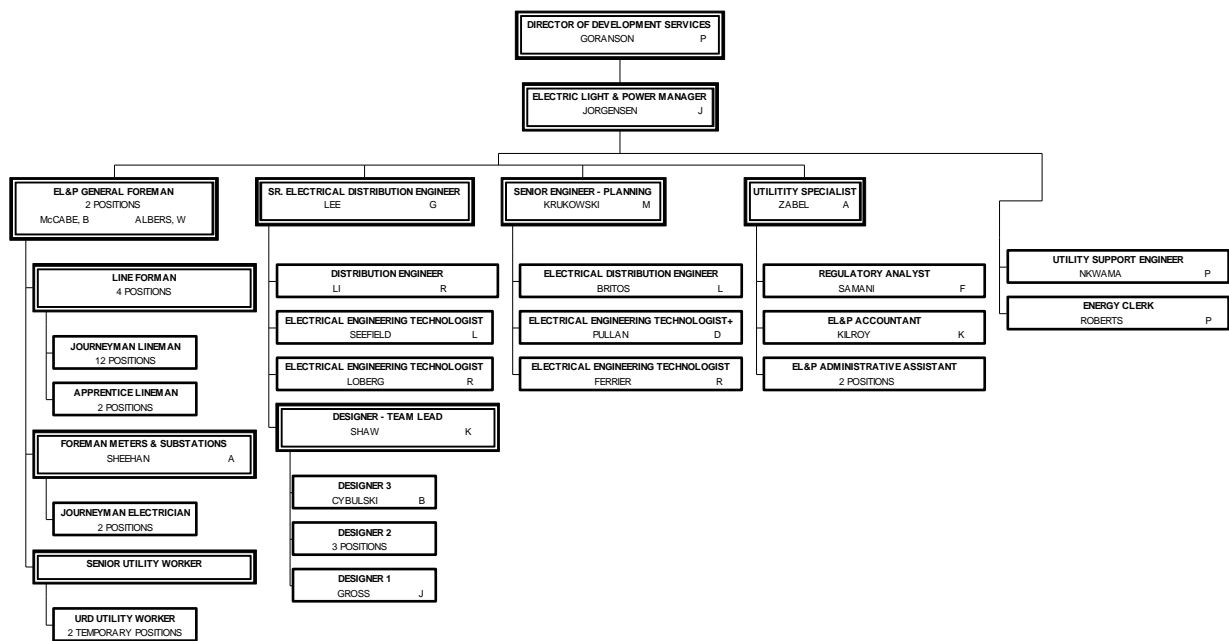
EL&P works closely with the Corporate Services division to access required services in IT, finance and accounting, and emergency management. The Corporate Services division is also responsible for corporate records management policies. EL&P coordinates with HR to access corporate HR services and works closely with the Planning Division in regards to supporting new development and planning new infrastructure.

EL&P is a relatively small, flat organization, currently housing 47 staff. The current organizational chart for EL&P indicates that it is led by a Manager, under which there are five sections:

- Construction and Operation, led by two General Foreman
- Engineering (Distribution), led by a Senior Engineer
- Planning (Transmission), led by a Senior Engineer
- Office and Regulatory, led by a Utility Specialist
- Market Support, which currently does not have a lead



Figure 11: EL&P Organizational Chart



This design appears to be appropriate for facilitating the organizations achievement of its goals and objectives, and the decision-making process appears to be clear and effective. This structure also generally allows for appropriate levels of oversight and delegation.

Table 4: Management to Staff Ratios

For EL&P as a whole, there is one department manager to oversee the activities of all 46 staff. Within EL&P, there is one

	Manager	Staff
Manager to all employees	1	46
All managers to all employees	1	7
General Foreman to Construction and Operation Staff	1	11.5
Senior Engineer (Distribution) to Engineering (Distribution) Staff	1	9
Senior Engineer (Transmission) to Planning (Transmission) Staff	1	4
Utility Specialist to Office and Regulatory Staff	1	4

manager for every seven employees, with one general foreman for every 11.5 construction and operation employees, one senior distribution engineer for every nine distribution engineering employees, one senior transmission engineer for every four transmission and planning employees, and one utility specialist for every four office and regulatory employees. These ratios of managers to staff members are generally adequate. However, the general foremen may be overburdened with project management or other work that impacts the amount of time available to focus on supervisory duties.

A review of EL&P’s organizational structure was carried out in 2009, resulting in the current structure. The review involved meetings with staff and a workshop facilitated by an external consultant. The result of this review was the creation of a new planning group with a new senior engineer appointed to lead it, an office



and regulatory group, and a new AMI group. It also proposed the addition of several new positions within the engineering, planning, office and regulatory, and AMI groups for consideration by Council. The review also provided brief descriptions of the roles and responsibilities of each existing and proposed position.

Most of the structural reorganization changes were implemented, with the exception of the creation of the AMI group. This is due to the decision by the provincial government to not move ahead with AMI, resulting in the re-alignment of this group into more of a general market support section, which currently houses two staff with no lead. While not all of the new positions recommended in the report were approved, some have since been created and filled.

A new position – Safety Coordinator – was proposed in EL&P's 2012 budget. This position was originally proposed to be located in the Construction and Operation Section at the same level as the General Foremen.

Under the current structure, EL&P's Manager and the various sections are responsible for the following tasks and duties:

- *Manager* – Overall management and accountability for all aspects of the utility, Plays a key role in budgeting, overall planning and liaising with the division, executive management and council.
- *Construction and Operation* – Carries out all maintenance and operational activities related to building, monitoring and maintaining the electricity distribution system and providing construction and site services to developers.
- *Engineering (Distribution)* – Carries out all design and overall management of the electric distribution system.
- *Planning (Transmission)* – Carries out all design and overall management of the transmission infrastructure.
- *Office and Regulatory* – Manages the rate model and develops rates, prepares regulatory submissions, and carries out financial management and accounting functions.
- *Market Support* – Engages in meter and energy management, working closely with Enmax Power, who is the contractor responsible for carrying out many of these functions.

This structure generally appears to be appropriate and effective; however the following represent two opportunities for further modification to alignment and reporting relationships that may be considered by the utility:

- The accountant and office administrative staff would likely be better aligned as direct reports to the Manager rather than to the Utility Specialist in the Regulatory group. The Utility Accountant is able and willing to increase her responsibilities, especially in the areas of budgeting, rate model support, and big-picture financial management. This expansion of duties would be most appropriately enacted under the oversight of the general Manager, who is ultimately responsible for many of these duties.
- The previous Manager undertook much of the regulatory and meter management work personally, leading these two sections to be under-utilized and resulting in the positioning of accounting and administrative functions within the Regulatory group. The removal of office administrative functions





from the Regulatory section would allow staff in this section to focus on regulatory and related utility specific matters, while realigning the general office management duties to the utility Manager.

Future staffing considerations include hiring a lead for the Market Support section, which should better align this group within the overall organizational structure. However, all decisions on future hiring have been placed on hold until the completion of this Value for Money audit.

### **Corporate Services**

EL&P works closely with the Corporate Services division to access required services in IT, finance and accounting, and emergency management as well as to obtain guidance regarding corporate records management policies. Other corporate and administrative services such as HR and communications and strategic planning are also provided at a corporate level. As internal service level agreements are not in place and service level metrics (e.g. expected service delivery times, quality) are not tracked or reported, data-driven analysis of the effectiveness and efficiency of the corporate services that EL&P receives is difficult. Further, there do not appear to be policies for the various corporate service functions laying out roles and responsibilities and the relationship with departments. However, comments made by staff in EL&P as well as staff in the various departments (with the exception of records management) for the most indicate that the level and quality of support that EL&P receives from the City for these corporate functions is good.

Perceptions regarding individual services are as follows:

- *Procurement and contract management* – This area is generally described as functioning well as EL&P carries out much of its own procurement and contract management, with the City procuring more general items. However, there is some question around how well documented and standardized the contract tendering and management process is in EL&P.
- *Billing* – Billing services are provided by Enmax for the RRO and this appears to be functioning well. Enmax reports monthly on a variety of metrics, including aged accounts receivable, which allows EL&P to identify issues in a timely manner and coordinate with Enmax to achieve their resolution.
- *Revenue and Assessment Services* - Revenue and Assessment Services provides all corporate accounts receivable support and prepares invoices for the services that EL&P carries out for developers and any other services it may provide. The current average number of days client and customer accounts are outstanding is 36.9. As at December 31, 2011, EL&P had \$353,300 in outstanding current receivables, \$6,488 at 30 days, \$59,357 at 60 days, and \$10,857 at more than 120 days. The utility calculates its allowance for doubtful accounts at 6% of outstanding receivables greater than 90 days, resulting in an allowance at December 31, 2011 of \$651.40. The relationship between EL&P and Revenue and Assessment Services is considered to be functioning well.
- *Information Technology* – The relationship between IT and EL&P is described by both groups as positive and effective. The utility does not track IT service metrics such as the percentage of IT incidents resolved within a specified time frame.
- *Human Resources* – While there is a good working relationship between EL&P and HR, there is an opportunity to clarify expectations. EL&P staff have no issue with the quality or abilities of the people in corporate HR, which is seen to be high, but express concern that the HR group appears to be resource constrained. From the point of view of the utility, this is resulting in the requirement for



EL&P staff to carry out HR functions (e.g. recruitment, interviewing, hiring), although this is understood by most to be primarily an issue of accessibility and availability rather than a shift in policy regarding responsibility for this function. Regardless of the driving factors, this has placed additional responsibilities onto EL&P staff and has resulted in some confusion and frustration. Corporate HR has indicated that it is striving to provide responsive, quality service but confirms that it is facing its own resource constraints. Given that there is some misalignment between the perspectives of staff in EL&P and staff in corporate HR on this topic, this matter should be discussed and resolved between the two departments to ensure clarity of roles and timing expectations.

- *Financial services* – The utility receives strong support on financial and accounting matters and is working closely with Financial Services in reviewing the rate model.
- *Records management* – Corporate records management policies have been developed and training in records management is offered to employees. EL&P acknowledges that it needs to improve in this area, although no serious issues with records management have been identified.

### **Corporate Cost Allocations**

Financial Services provides budgeted cost allocations for all corporate support services provided by the City to its departments, including EL&P. All of the departments, utilities and functions receiving corporate services are identified and the following cost drivers are used to allocate various services where appropriate:

- |   |                               |
|---|-------------------------------|
| • Square footage of space                     | • Inventory items             |
| • Number of PC's                              | • Purchasing – centralized    |
| • IT service hours                            | • Purchasing – decentralized  |
| • Active accounts                             | • Tax burden                  |
| • Accounts receivable (A/R) percentage effort | • Number of pay cheques       |
| • Accounts payable (A/P) transactions         | • Budgeted salary             |
| • Inventory transactions                      | • Total budgeted expenditures |

These cost drivers are then applied to calculate each department, utility, or function's costs for the following corporate functions:

- |   |                                    |
|---|------------------------------------|
| • City Hall                             | • Tax                              |
| • Corporate Services Director           | • Insurance (tax supported)        |
| • Information technology services (ITS) | • Human resources (HR)             |
| • Accounting                            | • Enterprise asset management      |
| • Audit                                 | • Postage and banking              |
| • Accounts receivable (A/R)             | • Communications                   |
| • Accounts payable (A/P)                | • Mayor, City Manager, Legal, etc. |
| • Risk Management                       | • LAS and Council                  |
| • Purchasing                            | • Red Deer 300K                    |
| • Stores                                | • Development Services Director    |
| • Assessment                            | • Community Services Director      |



For 2011, EL&P was allocated \$1.3 Million in corporate services costs, which represents approximately 5.4% of the \$24.5 Million total costs allocated across the City's departments, utilities and functions. As a percentage of specific Corporate Services Cost categories, EL&P comprises a large portion of the City's stores (26.9%), postage and banking (15.8%), Development Services (11.3%) and enterprise asset management (10.7%) costs.

**Table 5: EL&P Corporate Service Cost Allocation (2011)**

Corporate Service	EL&P Corporate Service Cost	Net Allocated Corporate Service Costs	EL&P % of Allocated Corporate Service Costs
Stores	\$ 97,587	\$ 362,860	26.9%
Postage and banking	11,822	74,590	15.8%
Dev Svcs Director	54,017	477,393	11.3%
Enterprise asset management	43,083	403,533	10.7%
LAS & Council	248,550	2,539,885	9.8%
Mayor, City Manager, etc.	97,448	1,200,020	8.1%
Communications	68,686	884,771	7.8%
ITS	397,385	6,138,388	6.5%
Financial Services	113,239	1,760,044	6.4%
Purchasing	39,891	695,475	5.7%
HR	136,611	2,837,362	4.8%
A/P	16,108	485,615	3.3%
A/R	7,519	475,468	1.6%
City Hall	-	2,022,084	0%
Corporate Svcs Director	-	587,092	0%
Assessment	-	1,559,210	0%
Tax Billing	-	344,477	0%
Insurance (tax supported)	-	659,630	0%
Red Deer 300K	-	116,178	0%
Comm Svcs Director	-	905,293	0%
<b>TOTAL</b>	<b>\$ 1,331,946</b>	<b>\$ 24,529,368</b>	<b>5.4%</b>



From a dollar perspective, the categories of ITS and LAS & Council are the largest corporate services expenditures within EL&P. However, these costs represent only a small portion of EL&P's overall costs in 2011 (1.1% and 0.7%, respectively). Overall, Corporate Services costs allocated to EL&P represent 3.8% of EL&P's overall expenses, which appears reasonable.

**Table 6: EL&P Corporate Service Costs as a Percent of Overall EL&P Expenditures (2011)**

Corporate Service	EL&P Corporate Service Cost	EL&P Overall Costs (Actual)	EL&P Corporate Service Cost as % of Overall Costs
ITS	\$ 397,385		1.13%
LAS & Council	248,550		0.70%
HR	136,611		0.39%
Accounting	113,239		0.32%
Stores	97,587		0.28%
Mayor, City Manager, etc.	97,448		0.28%
Communications	68,686		0.19%
Dev Svcs Director	54,017		0.15%
Enterprise asset management	43,083		0.12%
Purchasing	39,891		0.11%
A/P	16,108		0.05%
Postage and banking	11,822		0.03%
A/R	7,519		0.02%
City Hall	-		0%
Corporate Directors	-		0%
Assessment	-		0%
Tax	-		0%
Insurance (tax supported)	-		0%
Red Deer 300K	-		0%
Comm Svcs Director	-		0%
<b>TOTAL</b>	<b>\$ 1,331,946</b>	<b>\$ 35,288,688</b>	<b>3.77%</b>



When compared to other departments, utilities and functions in terms of corporate services cost allocations, EL&P ranks seventh out of 25 at 5.4%. Given that EL&P comprises approximately 10% (5.2% excluding electricity purchases) of the City's overall budget, this allocation appears to be reasonable.

**Table 7: Corporate Service Cost Allocation by Department, Utility and Function (2011)**

Department / Utility / Function	Allocated Corporate Service Cost	% of Allocated Corporate Service Costs	% of Total City Budget
Rec Parks & Culture	\$ 4,391,352	17.9%	12.2%
Emergency Services	2,931,624	12.0%	9.3%
LAS & Council	1,849,853	7.5%	N/A
Police	1,603,218	6.5%	9.4%
Transit	1,587,643	6.5%	4.3%
Public Works	1,481,504	6.0%	9.7%
EL&P	1,331,946	5.4%	10.0%
Engineering Admin	1,060,662	4.3%	2.0%
Inspections and Licensing	865,297	3.5%	1.9%
Garage	820,978	3.3%	0.0%
Enviro Services	796,591	3.2%	1.8%
Wastewater Utility	774,655	3.2%	5.6%
Water Utility	769,427	3.1%	5.5%
Mayor, City Manager, etc.	734,181	3.0%	0.4%
Community Services	680,237	2.8%	1.6%
Social Planning	627,658	2.6%	2.7%
Communications	520,129	2.1%	0.4%
Solid Waste Disposal	404,374	1.6%	*
Enterprise asset management	260,058	1.1%	N/A
Economic Development	260,020	1.1%	0.4%
Street and Traffic Lights	194,440	0.8%	1.1%
Parking	187,612	0.8%	0.7%
Subdivision Development	172,839	0.7%	0.4%
Solid Waste Collection	146,474	0.6%	*
Recycling	76,597	0.3%	*
<b>TOTAL</b>	<b>\$ 24,529,369</b>	<b>100%</b>	<b>0%</b>

*\* Note: The Solid Waste Utility comprises 4.3% of the City's 2011 Operating Fund budget*

### **Relationship with Enmax Power**

Enmax Power carries out a range of services for EL&P related to meter management, load settlement and site administration. This contractual relationship is managed through a formal Service Level Agreement (SLA). Enmax Power is also the provider of electricity to the City of Red Deer while Enmax Energy manages the RRO in the Red Deer service area. As EL&P contracts out the customer component of its business, many best practice customer measures and metrics are provided directly by Enmax.





In the contract with Enmax Power, the following items are included and are reported on monthly:

- Load settlement statistics
- Retailer prudential summary
- Aged accounts receivable
- Retailer invoice and wholesale remittance delivery record
- Post Final Adjustment Mechanisms (PFAM) received during the period
- Load settlement diagnostics
- Customer meter reading statistics showing
  - Number of cumulative meters with readings less than or equal to 65 days
  - Number of cumulative meters in meter data management (MDM) responsibility as at least of 2<sup>nd</sup> month
  - Number of cumulative meters with DCM generated less than or equal to 65 days
  - Number of cumulative meters for DCM calculation
  - Percentage of cumulative meters read
  - Percentage of DCM's generated
- Tariff billing code performance metrics (note: these include all settlement zones managed by Enmax Power and are not specific to Red Deer)
  - Currency of tariff bill file content
  - Tariff bill file completeness
  - Invalid tariff bill reject transactions
  - Invalid tariff bill dispute transactions
- Meter reading statistics
  - Number of active meters
  - Number of sites read
  - Percentage of sites read
    - Number of sites read in 0-2 months
    - Number of sites not read in greater than 65 days
- Confirmation if compliance with load settlement and meter data management requirements
- Updated contact information for Enmax Power Regulated Market Services staff and services

This reporting appears to be appropriate.

Enmax has been identified as a critical vendor on which EL&P is dependent both operationally and economically to provide services. However, according to staff at both EL&P and Enmax, the contracting relationship is working very well and Enmax has expressed keen interest in renewing the contract this year.

#### **Relationship with EL&P Contractors**

EL&P manages its other suppliers on a contractor-by-contractor basis, tracking costs and ensuring quality individually. In addition to Enmax, EL&P currently sources from eleven contractors who provide goods, twelve who provide various services related to electricity infrastructure, and a consultant engaged to



undertake the utility rate model study. While many of these contractor relationships do not involve formal service level agreements, no issues have been identified in this regard.

In general, EL&P carries out much of its work in-house, including system maintenance, system design, administration of the rate model, development of the transmission tariff filing, and construction work required to support development in the Red Deer service area. Further, all of the high voltage work in the area is carried out by EL&P staff. The methods of delivering services and programs and the allocation between out-sourcing, in-sourcing and partnering appear to be effective and efficient.

### **Recommendations**

- 2.2.1** Consideration should be given to realigning the reporting relationship of the utility Accountant from the Utility Specialist to the Manager. Further, it is recommended that this position assume a larger role in the budgeting and financial management activities carried out in the utility.
- 2.2.2** Responsibility for general office management and supervision of general administration staff would be more appropriately assigned to the utility Manager. This would have the added benefit of enabling the Utility Specialist to focus more time and energy on the rate model and regulatory duties.
- 2.2.3** The City should establish internal Service Level Agreements (SLAs) between the Corporate Services functions and the departments to which they provide services, including EL&P. In the absence of formal SLA's, metrics such as target service delivery times and quality (where measurable) should be established, monitored and tracked over time to ensure services are being delivered in an effective and efficient manner. This will facilitate the identification of opportunities for improvement as well as highlighting areas where success has been achieved.
- 2.2.4** In conjunction with corporate procurement, EL&P should review its tendering and contract management practices to ensure that a consistent process is being followed and contracts are structured to maximize contractor performance.
- 2.2.5** The decision to house the new Safety Coordinator in EL&P means that this position will likely be available to provide additional support to EL&P's General Foremen. The City and Council should also consider EL&P's request to hire a lead for the Market Support section.

### **2.3 Employee Management**

There are job descriptions for all of the positions in EL&P, although both HR and EL&P acknowledge that some of the job descriptions require updating. Despite this, staff indicate that they have a good understanding of that is expected from them in their respective roles and as part of the broader team. HR is in the process of describing positions in terms of a design ladder and some positions in EL&P have already been completed. The design ladder approach provides a more transparent and standardized approach for how employees can advance in their position and is seen to be a positive step.



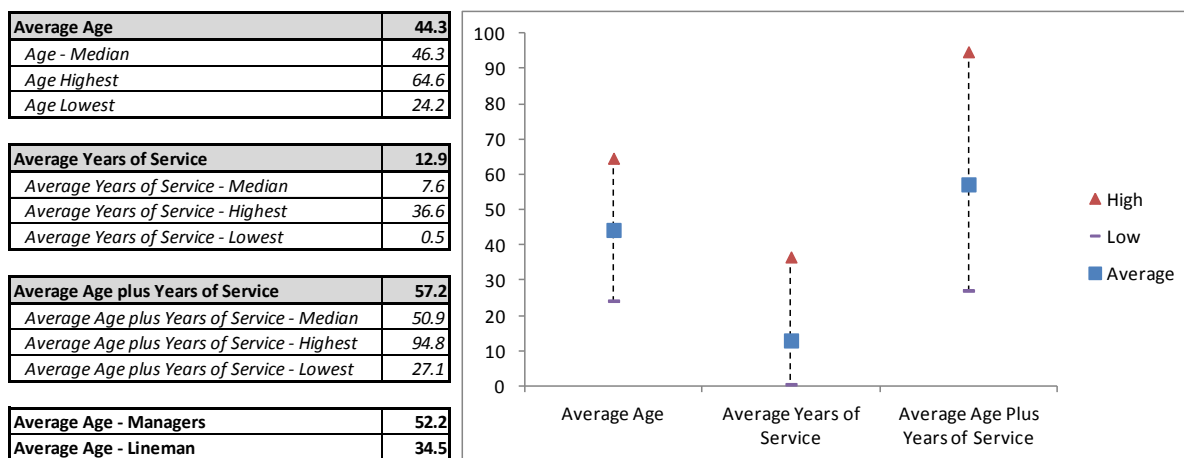
EL&P currently has 47 employees, broken down as follows:

- One Manager
- Two General Foreman and 23 staff for a total of 25 staff in the Construction and Operation section. Sixteen of these employees are linemen.
- One Senior Engineer and nine staff for a total of ten staff in the Engineering (Distribution) section.
- One Senior Engineer and four staff for a total of five staff the Planning (Transmission) section
- One Utility Specialist and four staff (including the Utility Accountant) for a total of five staff in the Office and Regulatory section.
- Two staff in the Market Support section.

In general, staffing levels and breakdowns by level and function appear to be appropriate for achieving the organization's goals and objectives in an effective and efficient manner. For example, based on the GIS data of 826km of wire, EL&P has one lineman for every 51.6kms of wire and one distribution section staff member for every 82.6kms of wire. Further, the workloads of most staff, with the exception of the General Foremen who are generally considered to be over-utilized, appear to be appropriate for achieving deadline and quality requirements and are sustainable in the long term.

Currently, the average age of EL&P employees is 44 while the average age of managers is 52. More than one-third (36%) of EL&P's staff are over the age of 50 (17 out of 47). The average number of years of service is 13 and the average age plus years of service is 57. Given these statistics and the lack of a succession plan or strategy in place for EL&P, it is clear that this is an area where immediate attention is required.

**Figure 12: EL&P Staff Age and Years of Service Demographics**





**Table 8: Personnel Costs as a Percentage of Total Operating Costs, 2007 to 2011**

Year	Operating Costs	Personnel Costs	Personnel Costs as % of Operating Costs
2007	\$ 21,730,497	\$ 2,379,188	10.9%
2008	24,044,153	2,407,381	10.0%
2009	25,255,524	2,801,557	11.1%
2010	28,747,287	3,081,313	10.7%
2011	35,288,688	3,769,297	10.7%

Personnel costs as a percentage of total operating expenditures has remained consistent over the past five years, averaging 10.7%.

While EL&P does not track vacancy metrics such as the length

of time a position remains open before it is filled, it was noted that finding highly qualified staff, especially engineers and linemen, has been a challenge for the utility.

**Table 9: Employer Recruiting Data for the Electrical Industry in Alberta (2011)**

Recruiting data for Alberta employers, as collected and compiled by the Government of Alberta, for

	<i>Electrical and Electronics Engineers</i>	<i>Electrical and Electronics Engineering Technologists and Technicians</i>	<i>Electrical Power Line and Cable Workers - Powerline Technician</i>
Employers that recruited in the last two years	98%	95%	100%
Recruiting employers that experienced hiring difficulties	64%	32%	54%
Employers with unfilled vacancies of over four months	35%	5%	15%
2011 vacancy rate	3%	1%	4%

engineers, technologists and linemen suggests that EL&P was not the only employer in Alberta to experience challenges in hiring staff. Nearly two-thirds (64%) of Alberta employers seeking electrical engineers indicated they faced difficulty in hiring these staff, with approximately one-third (35%) having unfilled vacancies lasting more than four months. More than half of Alberta employers (54%) faced challenges finding linemen while almost one-third (32%) had trouble finding electrical technologists and technicians; however these positions were less likely to remain unfilled for more than four months.

The primary reason suggested for the recruiting difficulty faced by EL&P was a perceived disparity in wages between industry and the City. The City has taken steps to address compensation issues, and has endeavoured to find an appropriate balance between alignment with industry and other City department wages. A comparison between 2011 average hourly wage and salary information for EL&P's staff suggests that wages paid to EL&P staff are competitive with Red Deer and Alberta market rates.

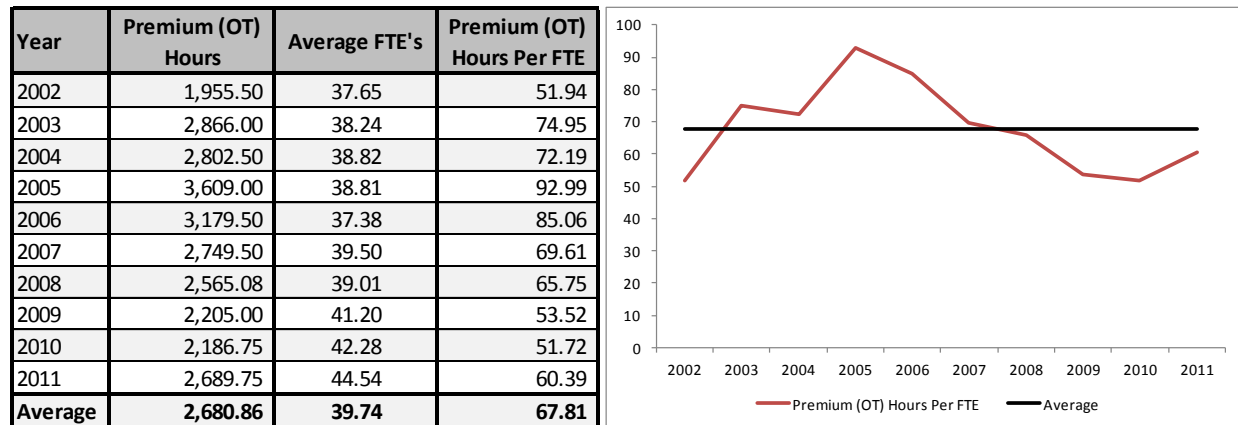
Many EL&P managers also expressed concern with staffing levels, especially in regards to general foremen and some transmission planning staff. Base hours per FTE have stayed the same over the last ten years. Premium, or overtime (OT), hours peaked in the mid-2000's but have since returned to lower levels, with a ten-year average of approximately 68 hours of overtime per year per FTE and an average of just over 60 hours in 2011. It is important to note that these statistics do not include overtime worked by certain staff (i.e. managers, general foremen, senior engineers, etc.) who are on salary and do not record their overtime hours, and therefore these numbers are not wholly reflective of the actual number of overtime hours worked by staff in the utility. Further, this does not preclude the possibility that workload has increased disproportionately for some employees (as these numbers represent averages and are not equally distributed). Feedback heard during



interviews with several staff in multiple areas indicated that the General Foremen are required to work a significant amount of overtime to manage their workload and additional capacity in this area would be beneficial.

Sixty hours of overtime per year does not appear to be unreasonable, but given the strong likelihood that this is disproportionately allocated to specific roles or individuals (based on numerous comments noted during staff interviews), it is highly likely that additional capacity could be beneficial to support specific functions.

**Figure 13: EL&P Premium (Overtime) Hours, 2002 to 2011**



Five EL&P employees have Supervisory Control and Data Acquisition (SCADA) alarms. SCADA is monitored 24 hours a day, seven days a week and at least one qualified EL&P employee must be available at all times to react to an alarm. On-call hours have been trending very slightly downward since 2007, averaging just over 1,000 hours per year, or 1.15% of total base and premium (OT) hours worked. Weeks of stand-by time have remained consistent between 2007 and 2011.

**Table 10: Premium (Overtime) and Stand-By Hours per Year, 2007 to 2011**

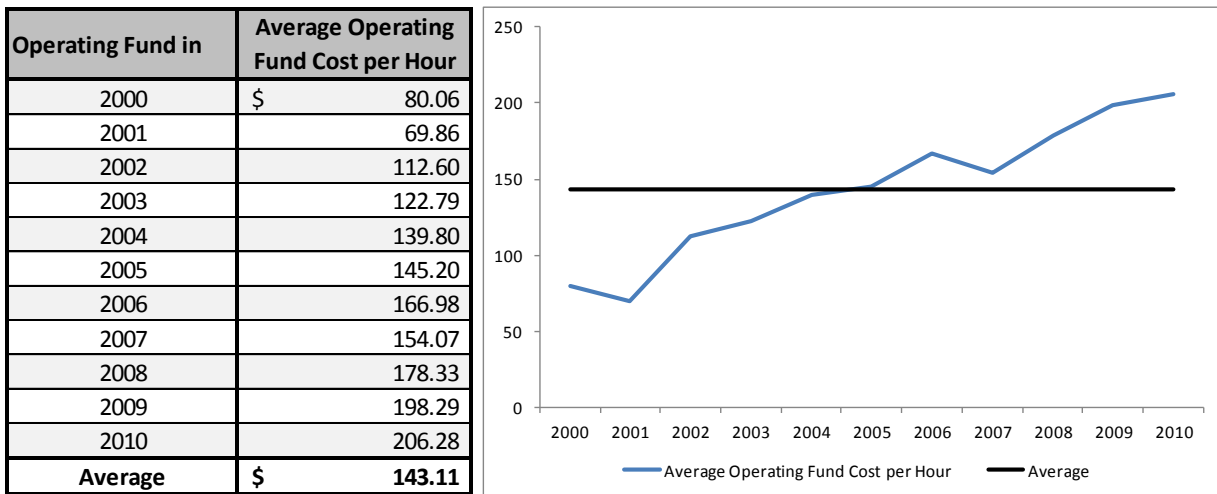
Year	Base and Premium (OT) Hours	On-Call Hours	On-Call Hours as a % of Total Hours	Year	Stand-By Weeks
2007	84,623.08	1,034.50	1.22%	2007	104.0
2008	83,451.96	1,045.00	1.25%	2008	103.0
2009	87,650.25	1,030.50	1.18%	2009	104.0
2010	89,873.44	981.50	1.09%	2010	105.0
2011	95,072.74	986.75	1.04%	2011	103.0
<b>Average</b>	<b>88,134.29</b>	<b>1,015.65</b>	<b>1.15%</b>	<b>Average</b>	<b>103.8</b>





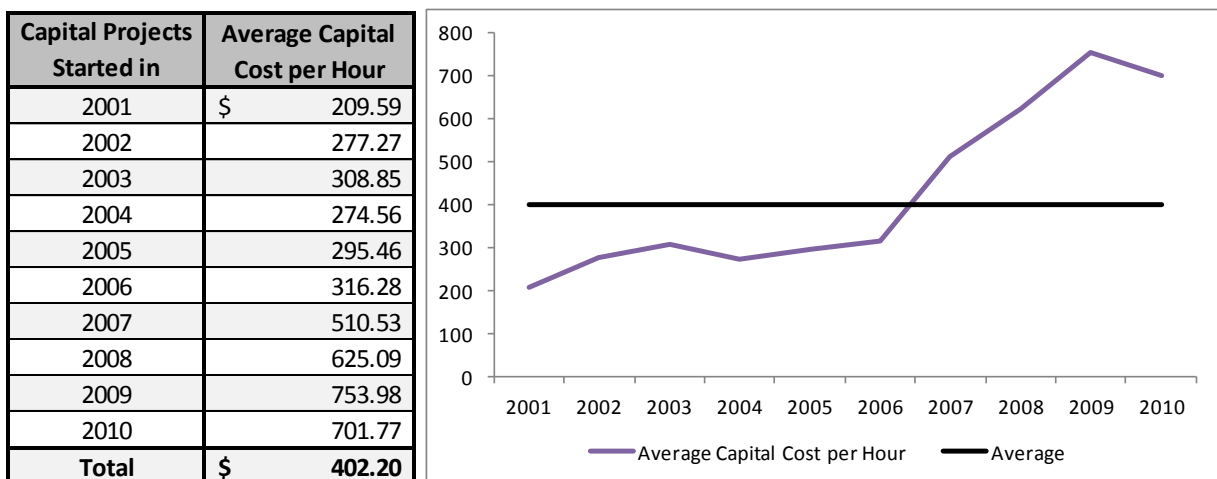
Total operating expenses per FTE hour have been trending upward, increasing from \$80.06 per hour in 2000 to \$206.28 per hour in 2010, with an average rate of \$143.11 per hour over this period. Average yearly percent increase in cost per hour was 11.3%, compared to an average annual inflation rate of 2.09% during the same period.

**Figure 14: EL&P Total Operating Expenditures per FTE Hour**



Capital expenditures per FTE hour have also been trending upward since 2001, increasing from \$209.59 per hour in 2001 to \$701.77 per hour in 2010 and averaging a rate of \$402.20 per hour over this ten year period. The average yearly increase in capital cost per hour of 10.2% exceeds the inflationary increase of 2.01% during this period.

**Figure 15: EL&P Capital Expenditures per FTE Hour for Projects Started by Year, 2001 to 2010**



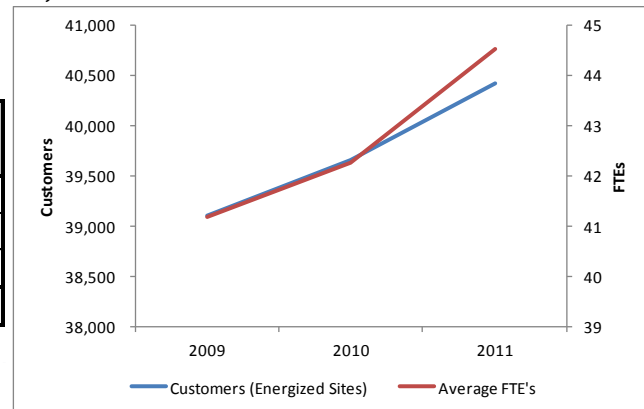
Taken together, these trends suggest that existing FTEs are carrying out an increasing level of operational and capital activity over time, and that these trends should be monitored to ensure that workload is managed proactively and appropriately.



The customers per FTE has remained fairly consistent over the past three years as both the number of customers serviced by EL&P and the number of FTEs in the utility have increased in a proportional manner.

**Figure 16: Average Number of Customers per FTE, 2009 to 2011**

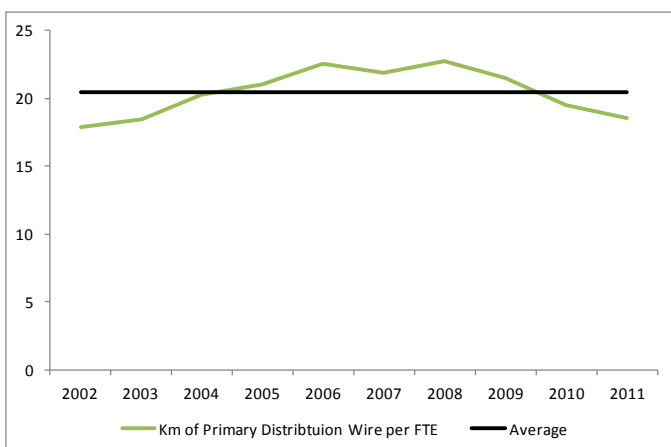
Year	Customers (Energized Sites)	Average FTE's	Customers Per FTE
2009	39,104	41.20	949.1
2010	39,666	42.28	938.2
2011	40,426	44.54	907.6
<b>Average</b>	<b>39,732</b>	<b>42.67</b>	<b>931.64</b>



The number of FTEs per km of primary has remained fairly consistent between 2002 and 2011, with an average of one FTE for every 20.43 km of primary distribution wire. *Note: the 2010 conversion for GeoMedia (GIS) uncovered some duplicate records, resulting in a downward restatement of the km of wire.*

**Figure 17: Km of Primary Distribution Wire per EL&P FTE (2002 to 2011)**

Year	Km of Primary Distribution Wire	Average FTE's	Km of Wire Per FTE
2002	672	37.65	17.85
2003	706	38.24	18.46
2004	787	38.82	20.27
2005	815	38.81	21.00
2006	842	37.38	22.53
2007	864	39.50	21.87
2008	887	39.01	22.74
2009	887	41.20	21.53
2010	826	42.28	19.54
2011	826	44.54	18.55
<b>Average</b>	<b>811.20</b>	<b>39.74</b>	<b>20.43</b>



In general, it appears that staffing is appropriate given customer growth, overtime and on-call hours, and km of wire, but capital and operating expenditures per FTE have far outpaced inflation. This suggests that while staffing levels from an overall perspective are appropriate, ongoing monitoring is necessary to ensure that current pressure points are addressed and that bottlenecks do not develop in the future.

## Training

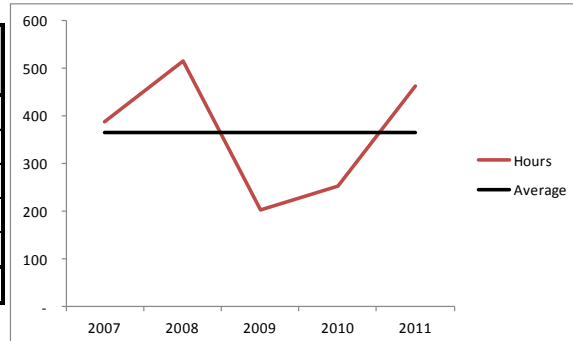
Staff in EL&P have access to training provided by the City as well as training provided by the utility. Training provided and accessed through the City is tracked corporately while EL&P tracks both City and utility-specific training for each employee through the Supervisor's Employee Management Information (SEMI) system. As availability and engagement in training opportunities are related to effective succession planning, this should be an area of focus for the utility.



Figure 18: EL&amp;P Staff Training Hours (City Records), 2007 to 2011

Hours spent engaging in training recorded by the City has fluctuated over the last five years, from a high of 515.5 hours (average of 13.2 per FTE) in 2008 to a low of 203.0

Year	Hours	Average Hours per FTE
2007	388.0	9.8
2008	515.5	13.2
2009	203.0	4.9
2010	253.0	6.0
2011	463.0	10.4
<b>Average</b>	<b>364.5</b>	<b>8.9</b>



(average of 4.9 per FTE) in 2009. EL&P staff spent an average of 10.4 hours per FTE in City-provided training during 2011, exceeding the five-year average of 8.9.

It appears that all staff have the required education and training to safely and effectively perform their jobs. However, ongoing training should be a priority for all organizations, especially those involved in regulated or potentially dangerous activities. The five-year average of just 8.9 hours per FTE per year appears to be somewhat low when compared against benchmark organizations such as Epcor or Enmax where average annual training per employee in 2010 was approximately 24 and 13 hours, respectively. It is recognized that time available to engage in training may be limited for many staff, which is why it is critical that the importance of this activity be emphasized not only by management at the utility but also by City Administration.

Table 11: EL&amp;P Staff Training Hours (SEMI Records), 1993 to 2011

Year	Total Hours	Office Staff	Field Staff
1993	80.0	32.0	48.0
1994	-	-	-
1995	166.0	102.0	64.0
1996	220.0	160.0	60.0
1997	146.0	94.0	52.0
1998	220.0	168.0	52.0
1999	86.0	66.0	20.0
2000	38.0	38.0	-
2001	57.0	33.0	24.0
2002	46.5	18.5	28.0
2003	4.0	-	4.0
2004	54.0	22.0	32.0
2005	448.5	215.5	233.0
2006	73.0	69.5	3.5
2007	373.0	182.0	191.0
2008	405.0	164.5	240.5
2009	181.0	104.0	77.0
2010	231.5	176.5	55.0
2011	517.5	320.0	197.5
<b>Total</b>	<b>3,347.0</b>	<b>1,965.5</b>	<b>1,381.5</b>

Hours spent in training as recorded in EL&P's SEMI system are, with the exception of 2011, lower than City records, which suggests that the SEMI system is not capturing all training provided by the City. The following tables show training records per the SEMI system for office and field staff by year and by type of training.

Safety training has clearly been a priority, particularly for field staff, while office staff have also frequently engaged in technical and management training.

Table 12: EL&amp;P Staff Training Type (SEMI Records), 1993 to 2011

Type	Total Hours	Office Staff	Field Staff
Safety	1,586.0	527.0	1,059.0
Technical	637.5	589.0	48.5
Management	596.0	400.0	196.0
FOIP & Records Management	78.0	76.0	2.0
Equipment	24.0	-	24.0
Other	425.5	373.5	52.0
<b>Total</b>	<b>3,347.0</b>	<b>1,965.5</b>	<b>1,381.5</b>



### **Performance Assessment**

The corporate HR function has designed and distributed an employee evaluation standard template to all City departments and utilities, and it is up to each department to carry out these evaluations and submit them to HR. According to records provided by HR, it appears that EL&P is lagging in submission of completed evaluations as only three performance reviews have been completed and submitted by EL&P to HR since January 2007. It is unclear whether the reviews have not been occurring or if they have been occurring but are not being submitted to HR. According to EL&P, the carrying out of formal employee evaluation is likely sporadic. Without formal documentation it is difficult to assess whether staff are receiving appropriate feedback and recognition for their efforts; however, staff in the utility did not describe any issues around a lack of feedback or recognition.

Apart from the issues identified with respect to formal employee evaluations, EL&P's employee management approach appears to be well aligned with the overall corporate approach to employee management.

### **Recommendations**

- 2.3.1** EL&P should further review workflow and overtime worked to determine trends in workloads and to identify current and future pressure points, and should take immediate steps to assess the workloads of the two General Foremen and address any capacity issues as necessary.
- 2.3.2** EL&P, in conjunction with HR, should ensure that all job descriptions are updated and that as many positions as possible are transitioned to using the design ladder approach.
- 2.3.3** EL&P should identify training goals and standards. Greater emphasis should be placed on ensuring staff engage in safety and skills development specific to their role and management should commit to ensuring that adequate time is made available for employees to participate in this training.
- 2.3.4** The Manager of EL&P should ensure that all supervisors of employees are carrying out (at a minimum) annual face-to-face employee evaluations using the City's process and templates and should make it mandatory that these evaluations are provided to the Manager as well as being provided to HR for inclusion in the employee's file.
- 2.3.5** Compensation benchmarks for similar roles across the province appear to indicate that EL&P has established a fair and appropriate level of compensation for its employees. It is recommended that the utility and HR continue to review municipal and industry benchmarks, particularly if hiring becomes increasingly challenging, to ensure it remains competitive and is able to hire and retain qualified staff. This is especially critical given the challenges the utility faces regarding aging staff, succession planning and smooth knowledge transitioning.
- 2.3.6** EL&P should immediately begin work to implement a succession plan to address upcoming retirements within the utility workforce. If economic conditions and high demand for engineers result in an inability to find suitable candidates outside the organization, it may become necessary to rapidly accelerate training and development for current EL&P personnel to bring promising junior staff to a level where they can begin taking on more senior responsibilities. This may involve the



development of a formal talent management program that facilitates this process and provides a clear development plan for individual employees. Another option for grooming potential senior staff is to create additional supervisory positions by sharing the duties of existing positions. This would allow more junior staff to take on some additional responsibility while reducing the burden on more senior personnel, which could be particularly beneficial in the case of the General Foremen.

- 2.3.7** In the short term EL&P requires an immediate "disaster plan" to ensure business continuity in the event that one or several key resources leaves on short notice or becomes suddenly unavailable. To manage an immediate crisis, EL&P should immediately identify any current employees that may be able to step into key roles on short notice as a stopgap measure until a permanent replacement can be found. Internally, EL&P can begin to address this eventuality by ensuring that senior personnel are passing on knowledge and information with their staff so there is a shared understanding of various functions and duties. This should result in the availability of multiple staff members who are capable of carrying out critical functions in the short term. This may require the identification of these critical functions so training can be appropriately prioritized. Delegation of individual tasks and duties rather than entire roles will allow the primary functions of the job to be more quickly disseminated without relying on a single employee to take over the complete portfolio, thus diminishing the impact of staff attrition and enhancing knowledge capture and transfer.

## 2.4 Working Environment

Employee turnover in EL&P has averaged 7.5% over the past five years, and apart from an unusual high of 17.1% in 2007 has remained fairly low. Following a turnover rate of 0.0% in 2009, turnover has increased somewhat to 8.7% in 2011. As low turnover ratios are often indicative of a healthy work environment, this reflects positively on the utility.

**Figure 19: EL&P Turnover Percentage, 2007 to 2011**





**Table 13: Reasons for EL&P Employee Absences, 2011**

Reason for Absence	2011	% of Absences	% of Standard Work Hours
Sick Time	2,075.5	12.9%	2.2%
Medical Appointment	375.3	2.3%	0.4%
Vacation / Banked / Flex Leave	13,050.3	80.9%	14.1%
Family Leave	443.0	2.7%	0.5%
Other	185.5	1.2%	0.2%
<b>Total</b>	<b>16,129.6</b>	<b>100.0%</b>	<b>17.4%</b>

This is supported by analysis of EL&P employee absenteeism in 2011. Just 12.9% of employee absences were due to sick time (2.2% of standard working hours based on 40 hours per week, 52 weeks per year, and 44.54 FTEs in 2011), while the majority (80.9%) of absences were due to

vacation time, flex time, or banked overtime.

EL&P's culture appears to be very positive and is conducive to achieving the organization's goals and objectives. Employees express a sense of pride in working for the utility, they desire to do a very good job, and working relationships appear to be effective. However, many feel their work life is very busy and describe it as stressful (i.e. too much work to be done and too little time to do it). While all field personnel and some office staff work in a union environment and other office staff are non-union, the relationship between these groups appears to be positive and functional. However, there is some indication of a cultural disconnect between the City and EL&P, which may be partly the result of the utility's self-funding status.

Employee surveys appear to be conducted on a three year cycle, the most recent being 2009, preceded by surveys in 2006 and 2003. As the results are fairly old, and the 2009 survey did not break out respondents by department, it is difficult to determine the applicability of the results to EL&P as it currently operates. However, the 2006 and 2003 surveys identified some specific issues as having been rated relatively low compared to overall City results. These issues centred on communication, empowerment, availability of resources, morale, recognition of accomplishments, performance management, training, and change management. While not assessed quantitatively during this review, it appears that the utility has made progress in addressing some of these concerns.

### **Safety**

The City and EL&P have recently placed an increased emphasis on safety. EL&P has an extensive, documented health and safety management system that includes guidelines and templates pertaining to hazard identification, evaluation and control, with control guides for various hazards. Further, formal safety meetings are now being conducted on a monthly basis, and are documented using a standard format that lists the staff in attendance at the meeting as well as describing previous and new safety initiatives that are occurring.

Workload has been identified as one of the main issues affecting safety, as staff indicate feeling tension between completing work as quickly as possible and completing work safely.

When safety incidents occur, all City staff are required to report the incident using a template provided by the City. This template classifies the incident into one of six classes based on damage and/or injury and cause of the incident. This information is reported back to the City where it is compiled and compared with other City



departments, utilities and functions. According to data from 2011, it appears that EL&P's safety record is within City averages.

**Table 14: Safety Incidents Reported by EL&P and City-Wide (2011)**

As of December 31, 2011, EL&P had experienced 212 injury free work days (83,165 injury-free hours). During 2011, there were four injuries in EL&P compared to 5.53 per average City department, and four vehicle accidents compared to 8.26 per average City Department.

It is important to note that the volume of safety incidents is only one indicator of a safe work environment, and the gravity or severity of each incident must also be taken into consideration. In 2011, EL&P experienced three Class 1 incidents (4.95 City average), zero Class 2 incidents (0.58

City average), four Class 3 incidents (5.26 City average), zero Class 4 incidents (0.05 City average), two Class 5 incidents (2.26 City average), and zero Class 6 incidents (0.53 City average). The incident classes are defined as follows:

2011	EL&P	City Average per Department
<b>Date of Last Lost Time Injury</b>	Jun 2, 2011	
<b>Injury Free Work Days</b>	212	
<b>Hours Worked</b>	83,165	115,722
<b>Injury Totals</b>	<b>4</b>	<b>5.53</b>
<i>Injury - Lost Time Injury</i>	1	1.58
<i>Injury - Medical Aid</i>	2	1.89
<i>Injury - First Aid</i>	0	0.84
<i>Injury - Incident</i>	1	1.21
<b>Frequency Rate*</b>	2.40	2.73
<b>Vehicle Accidents - YTD</b>	4	8.26
<b>Incident Class</b>		
<i>Class 1</i>	3	4.95
<i>Class 2</i>	0	0.58
<i>Class 3</i>	4	5.26
<i>Class 4</i>	0	0.05
<i>Class 5</i>	2	2.26
<i>Class 6</i>	0	0.53

*\* Number of Lost Time incidents x 200,000 / total hours worked*

- Class 1: An event that resulted in damage and/or lost time injury from a situation that was unforeseen or unavoidable and where the employee took every reasonable precaution to prevent the damage or injury from occurring.
- Class 2: An event that resulted in damage and/or any injury from a situation that occurred due to inadequate job procedure being in place.
- Class 3: An event that resulted in damage and/or lost time injury from a situation that occurred due to the non-adherence to safe work practices and where the employee did not do everything reasonable to prevent the situation from occurring.
- Class 4: An event that resulted in NO damage and/or NO injury from a situation that occurred due to inadequate job procedure being in place.



- Class 5: An event that resulted in NO damage and/or NO lost time injury from a situation that was unforeseen or unavoidable and where the employee took every reasonable precaution to prevent the damage or injury from occurring.
- Class 6: An event that resulted in NO damage and/or NO lost time injury from a situation that occurred due to the non-adherence to safe work practices and where the employee did not do everything reasonable to prevent the situation from occurring.

Despite the high proportion of EL&P safety incidents falling into Classes 1 and 3 (7 of the 9 total incidents in 2011) and resulting in damage and/or injury, the number of incidents in these classes as well as the number of incidents overall were below the City average per department for 2011 (9 EL&P, 13.6 City average per department).

### **Recommendations**

**2.4.1** Continue with efforts to emphasize the safe and efficient completion of work through continuation of monthly safety meetings and ongoing training. This is an area where the “tone at the top” is critical, as staff must not feel they will be chastised or punished for taking longer than usual (within reason) to ensure work is conducted safely.

## **2.5 Operations and Maintenance Planning and Execution**

EL&P does not appear to have formal operations and maintenance plans beyond the identification of projects in the capital plan and work orders that are developed for specific jobs, and does not have a formal, documented project management process. The utility acknowledges these gaps and recognizes the importance of engaging in more formal operation and maintenance planning. Despite the lack of formal processes and methodologies, operations and maintenance activities appear to be carried out according to recommended policies, guidelines, standards and specifications.

Project management is currently handled by the two General Foremen and it is carried out using personal practices developed over time. This process appears to work because of strong communication among supervisors and staff, the dedication and many years of accumulated knowledge and expertise of the general foreman, and the relatively small size of the utility. Further, a “work order process” is used to manage and account for work carried out for each project, and time and materials used are traced on daily time sheets. Together, these factors facilitate the identification and implementation of many project and maintenance activities and support a smooth process for executing projects.

Project management is also supported by high level annual planning during the budget process that includes the preparation of a Gantt chart for planned capital projects during the upcoming fiscal year. This schedule outlines expected timelines and required manpower for various City and developer projects to be undertaken by EL&P in the end of 2011 and throughout 2012. The chart prioritizes projects relative to one another and provides additional information for some jobs such as the status of the budget as of the date the chart was prepared, components of the job that have specific requirements or deadlines, or specific crews responsible



for the work. The chart appears to be comprehensive but, for obvious reasons, does not take into account new jobs that arise during the year and emergency maintenance that must take priority over scheduled work.

Reviews of the prior year's projects also occur, including review of planned residential subdivision developer work. One example of documentation on this activity presents residential development projects scheduled for 2010 and deferred until 2011. It includes information such as the name of the residential subdivision and the type of work required (e.g. lots, system, duplex, pole moves, lighting, etc.), the number of single lots, the project estimated cost (including GST) and cost per lot, the estimated number of labour and backhoe hours required, the expected project launch date, and the requesting party. Seven projects were scheduled for 2010 totalling \$948,555 (including GST) while five were deferred to 2011 totalling and additional \$873,797. Costs associated with performing this work are not included on this spreadsheet.

EL&P acknowledges that a lack of formal project management processes and systems and the heavy reliance on the General Foremen is a risk for the utility as this approach does not optimize delegation to and involvement of more junior staff and therefore does not support longer term training and succession planning. There is a need for improvement in this regard, but the right balance must be struck between maintaining the flexibility and straight-forward nature of the current approach and mitigating risk and enhancing delegation through consistent process and documentation.

It is expected that planned systems improvements (including Hansen and the recently implemented GIS) will improve job tracking as the current system (JDE) does not provide the functionality required. For example, Hansen allows for the creation of fields specific to the utility's needs that will ensure all pertinent information related to each job is entered and tracked through the system rather than being managed manually. One such example is the ability to enter the physical location of each asset into the system, a function that is not currently available under the JDE. GIS, in conjunction with Hansen and the use of laptops in the field, is expected to increase the sophistication of maintenance planning and coordination through enabling real-time information sharing between the office and field staff. These new systems are expected to eliminate the need for manual tracking.

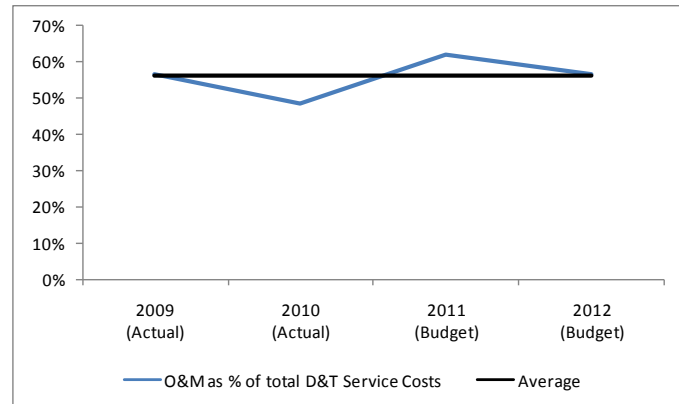
It appears that development services work and new projects take precedence over maintenance work (e.g. smaller substations). EL&P acknowledges that required maintenance work is sometimes not done in a timely manner and that it should be doing more maintenance in general and more planned maintenance specifically (estimations suggest that planned proactive maintenance represents about 40% of maintenance work done while the balance is reactive; however, this metric is not tracked and was therefore unable to be confirmed through quantitative or documented data sources). The utility intends to establish a more formal operation and maintenance planning process, which will be supported by the newer and better systems.

Equipment utilization rates are not tracked by the utility, but operational staff believe that the utilization rate is quite high and estimated fleet utilization at 80% to 90%.



**Figure 20: Operations and Maintenance Costs as a Percentage of Distribution and Transmission Costs, 2009 (Actual) to 2012 (Budget)**

Operations and maintenance (O&M) costs are predicted to increase going forward, as are general distribution and transmission costs. On a percentage basis, O&M costs were expected to average 56.1% of overall distribution and transmission service costs between 2009 and 2012 (based on actual results for 2009 and 2010 and budgeted expenditures for 2011 and 2012). O&M costs include general and administrative



expenses, billing and collection, maintenance, and bulk transmission

	2009 Actual	2010 Actual	2011 Budget	2012 Budget
Total O&M	\$ 16,390,436	\$ 18,321,422	\$ 23,976,590	\$ 24,374,387
Total D&T Service Costs	\$ 28,833,333	\$ 37,674,731	\$ 38,578,385	\$ 43,028,204
<b>O&amp;M as % of total D&amp;T Service Costs</b>	<b>57%</b>	<b>49%</b>	<b>62%</b>	<b>57%</b>

charges such as AESO fees, transmission charges, and regulatory filings. Non-operating costs comprising the balance of the total distribution and transmission service costs include property taxes, depreciation, local access fees, ROR, other TFO costs, and contributions to the capital and operating funds.

On a per-FTE basis, O&M costs is expected to average \$475,099 between 2009 actuals and 2012 budget, trending generally upward over time. Over this same timeframe, O&M costs are expected to average \$519 per customer (energized site), and approximately \$28 per MWh sales at meter, and average \$267,482 per square km of service area, and \$23,684 per km of primary distribution wire between 2009 and 2011. *Note: the 2009 km of primary distribution wire uses the re-stated 2010 GIS information rather than the 2009 MicroStation data to reduce overstatement of O&M per km of wire.*

**Table 15: O&M Cost Comparisons, 2009 (Actual) to 2012 (Budget)**

	2009 Actual	2010 Actual	2011 Budget	2012 Budget	Average
Total O&M	\$ 16,390,436	\$ 18,321,422	\$ 23,976,590	\$ 24,374,387	\$ 20,765,709
Number of FTEs	41.20	42.28	44.54	45.91	43.48
O&M per FTE	\$ 397,826	\$ 433,335	\$ 538,316	\$ 530,917	\$ 475,099
Number of customers (energized sites)	39,102	39,664	40,096	40,848	39,928
O&M per customer	\$ 419	\$ 462	\$ 598	\$ 597	\$ 519
MWh sales at meter (distribution)	731,433	728,509	743,992	753,324	739,314.60
O&M per MWh sales at meter	\$ 22	\$ 25	\$ 32	\$ 32	\$ 28
Square km of service area	71.00	74.00	74.00	N/A	73.00
O&M per km of service area	\$ 230,851	\$ 247,587	\$ 324,008	N/A	\$ 267,482
Km of primary distribution wire (GIS data)	826	826	826	N/A	826.00
O&M per km of primary distribution wire	\$ 19,843	\$ 22,181	\$ 29,027	N/A	\$ 23,684

These projections reflect the trend of increasing O&M costs experienced by the utility, but do not appear to indicate that any significant issues are anticipated in

this regard. However, it is important that ongoing monitoring of actual O&M costs versus budgeted costs continue to occur to proactively identify any issues that may impact the utility's ability to perform these activities.





Measurement Canada regulations require that different meters are verified for accuracy within a certain tolerance every specified number of years. For instance, a brand new meter may require re-certification after 10 or 12 years, but meters that have been in service for some time may require testing at shorter intervals (e.g. 2, 3 or 4 years or more). The year that a meter is due to be tested is called its Seal Expiry Year. While individual meters are not tested every year, all meters currently in place have a seal year of 2012 or later and EL&P has already initiated the removal of meters due for testing this year.

**Table 16: Meter Inventory and Malfunctioning Meters as a Percent of Total, 2007 to 2012**

Year	Total Number of Meters	In-Stock	Rejected	% Rejected
2007	38,624	600	125	0.3%
2008	39,398	600	61	0.2%
2009	40,701	600	666	1.6%
2010	41,209	600	700	1.7%
2011	41,327	600	330	0.8%
2012	41,853	1,100	356	0.9%
Average	40,519	683	373	0.9%

Meter failure rate is quite low, averaging 0.9% between 2007 and 2012 (estimated). After increasing significantly in 2009 and 2009 it is anticipated that percent rejection will decrease to average levels in 2012. *Note: the 2012 "Rejected" value in this table reflects the Measurement Canada testing value anticipated for the upcoming year.*

EL&P has customer service guidelines that inform electrical contractors, consultants and other stakeholders of the utility's requirements for the installation of customer services and revenue metering. The guidelines provide clear standards for hooking up to the distribution system and no issues with these standards were reported.

The utility uses CYME Power Engineering software to analyze the performance of its electrical system. This software produces comprehensive technical information on a variety of aspects of the electrical system such as load flow analysis, and assists in system management through simulations such as duct bank analysis and optimization. The use of software such as CYME to actively carry out analysis and simulations is critical for the maintenance and planning of the system.

System losses as a percentage of supply have not been confirmed recently through a load study, but the system is believed to lose an average of 3.6%, which appears to be fairly accurate as the unaccounted for energy (UFE) tends to hover around zero ( $\pm 1\%$ ). Overall system loss for Epcor in 2010 was 2.49%, and was 3.09% for the majority of Enmax's Calgary customer classes (with the exception of large commercial primary customers, with a loss value of 1.89%). System losses reported by Enmax in the Red Deer area were 2.4% for primary and 3.9% for secondary, and ranged from 3.84% to 9.89% for other areas in Alberta. FortisBC reported system losses of 8.42% in 2010.

Distribution system losses are calculated using actual records of meter databases, which include readings at the Point of Delivery (POD), i.e. at each 138/25 kV substation power transformer (25 kV side), and readings from all customer meters. Thus, the calculated losses equal the difference between the total energy delivered to EL&P PODs and the total energy delivered to customers. This is a very meaningful metric for EL&P as it indicates whether the system as a whole performs well and is economically efficient. Minimizing system losses requires that the transmission, substation, and the feeder levels are harmoniously planned and



designed, taking into account all technical factors, the initial capital cost as well as O&M costs during expected life of the system components.

Loss reduction methods include larger conductors, higher voltages (e.g. up-rating distribution line voltage from 4 kV to 25 kV) or system design to shorten feeders (e.g. by adding transmission lines and substations). EL&P uses sophisticated computer software, including CYME, in the system planning and design, which supports loss reduction through detailed system modeling and simulation of real operating conditions. This allows for a more precise tuning of the system (e.g. by optimal feeder configuration or routing). A number of loss reduction initiatives have already been implemented, although shortage of qualified personnel limits further accomplishments.

EL&P utilizes two types of power transformers and one type of distribution transformer. The first type of power transformers (138/25 kV – 50 MVA, 32 MVA) are rigorously tested. The transformers were built in 1978, 1982, and 1993, and there have been no failures but individual transformers are occasionally shut down for scheduled maintenance (based on test results such as bushing replacement, oil processing, gauges calibration, etc.). The second type of power transformers (25/4 kV – 5 MVA, 3 MVA) have again experienced no failures, but individual transformers are occasionally shut down for scheduled maintenance. The distribution transformers (25 kV and 4 kV systems) are monitored and all failures are recorded in the Outage Management System.

## **Recommendations**

**2.5.1** EL&P should develop an operations and maintenance planning approach that is linked to an asset management system. This system should identify activities to be completed monthly and yearly, which should then be implemented through the work order process.

**2.5.2** EL&P should identify and document a best practice approach to project management, which puts in place protocols and templates to be followed for every project (this does not have to be overly complex but should standardize and improve the undocumented approach already being used successfully by the General Foremen).

## **2.6 Financial Management and Rate Model**

### **Financial Management**

Overall financial management for EL&P is carried out by Corporate Services through the Financial Services section, but the division controller as well as the utility manager, specialist and accountant also play critical roles. The City has books of account and maintains financial records as required by municipal statutes and requirements of stakeholders such as AESO and AUB. The City has appropriate financial policies and procedures and no issues have been identified in this regard.

The City's cost of equity is 9.00% and is in accordance with the rate specified in the AUC's 2009 Generic Cost of Capital report (Decision 2009-206) issued on November 12, 2009. This report specifies the Generic ROE for 2009 and 2010 (and 2011 on an interim basis) at 9.0%. In the absence of a more recent report



during budget preparation, this rate was again been used to forecast the 2012 numbers. On December 8, 2011, the AUC issued Decision 2011-474 setting the Generic ROE for 2011 and 2012 (and 2013 on an interim basis) at 8.75%. Prior to the 2009 decision, the Cost of Equity was calculated by summing the Long Term Canada Bond Yield and the Equity Premium per EUB Decision 2005-149. This same AUC decision reaffirmed the City's awarded equity ratio of 37%.

The embedded cost of debt is calculated as the embedded debt (as per T-filing, 5.02%) plus the City's internal debt premium (0.25%) and is 5.27% for 2012. The cost of new debt is calculated as the Alberta Capital Finance Authority (ACFA) fifteen year rate as of July 1, 2011 (3.66%) plus the City's internal debt premium (0.25%), and is 3.91% for 2012.

The City's 2012 weighted average cost of capital is 6.62% and is calculated using the deemed equity and debt ratios (embedded and new), taking into consideration expected additions to the asset base during 2012 and the estimated mid-year total asset base.

The Allowance for Funds Used During Construction (AFUDC) cost of capital is calculated as the City's deemed equity ratio (37%) times its cost of equity (9%) plus the deemed debt ratio (63%) times the short term lending rate (ACFA's three-year rate as of July 1, 2011 was 1.93%), resulting in a rate of 4.55% for 2012.

The agreed-upon Local Access Fee (MCAF) effective January 1, 2012 is 33%.

### ***Internal Controls***

In 2011, EL&P underwent an AESO Alberta Reliability Standards Compliance Monitoring audit that covered all pertinent standards as of March 31, 2011. EL&P was identified as four (of a total of seven) functional entity types: Demand Customer, Transmission Facility Owner, Wire Owner, and Wire Service Provider. The scope of the audit covered ten applicable Alberta reliability standards, including:

- CIP-001-AB-1: Sabotage Reporting
- EOP-003-AB-1: Load Shedding Plans
- EOP-004-AB-1: Disturbance Reporting
- FAC-003-AB-1: Transmission Vegetation Management Program
- FAC-501-WECC-AB-1: Transmission Maintenance
- PRC-001-AB-1: Protection System Coordination
- PRC-004-AB-1: Analysis and Mitigation of Transmission and Generation Protection System Misoperation
- PRC-004-WECC-AB-1: Protection System and Remedial Action Scheme Misoperation
- PRC-021-AB-1: Under Voltage Load Shedding Program Data
- TOP-005-AB-1: Operational Reliability Information

No suspected contraventions were identified during the audit period and therefore no mitigation actions were recommended.



### EL&P Budget

EL&P prepares its operating and capital budgets annually, and while there is a good understanding of both internal and external costs drivers, a large portion of its annual costs are beyond the control of the utility. Productivity data does not appear to be generated or analyzed.

**Table 17: EL&P Utility Historical Operating Results, 2007 to 2011**

230 EL&P UTILITY SECTION	2007	% change	2008	% change	2009	% change	2010	% change	2011	2007 to 2011 % change
Revenue Summary	\$ 23,876,564	8.5%	\$ 25,898,722	16.3%	\$ 30,126,738	14.3%	\$ 34,449,299	12.0%	\$ 38,592,395	61.6%
Expenditure Object Summary										
Personnel	2,379,188	1.2%	2,407,381	16.4%	2,801,557	10.0%	3,081,313	22.3%	3,769,297	58.4%
General & Contracted Services	2,051,720	13.7%	2,332,395	17.4%	2,738,930	5.8%	2,896,721	0.6%	2,915,028	42.1%
Materials, Supplies & Utilities	8,805,270	34.9%	11,879,308	(3.6%)	11,450,757	10.0%	12,591,892	45.8%	18,357,762	108.5%
Other	2,484,418	19.4%	2,966,494	38.7%	4,113,894	21.4%	4,995,554	(32.5%)	3,371,721	35.7%
Internal Charges & Transfers	8,155,969	(22.6%)	6,313,144	42.9%	9,021,600	20.6%	10,883,819	(6.5%)	10,178,586	24.8%
<b>Total of Expenditure Objects</b>	<b>23,876,565</b>	<b>8.5%</b>	<b>25,898,722</b>	<b>16.3%</b>	<b>30,126,738</b>	<b>14.3%</b>	<b>34,449,299</b>	<b>12.0%</b>	<b>38,592,394</b>	<b>61.6%</b>
Net of Revenue and Expenditure	1		-		-		-		1	0.0%
Less: Surplus Reserve Entries	(2,146,069)	(13.6%)	(1,854,569)	162.7%	(4,871,214)	17.1%	(5,702,012)	(42.1%)	(3,303,707)	53.9%
<b>Total Operating Costs</b>	<b>\$ 21,730,497</b>	<b>10.6%</b>	<b>\$ 24,044,153</b>	<b>5.0%</b>	<b>\$ 25,255,524</b>	<b>13.8%</b>	<b>\$ 28,747,287</b>	<b>22.8%</b>	<b>\$ 35,288,688</b>	<b>62.4%</b>

**Table 18: EL&P Street and Traffic Lights Historical Operating Results, 2007 to 2011**

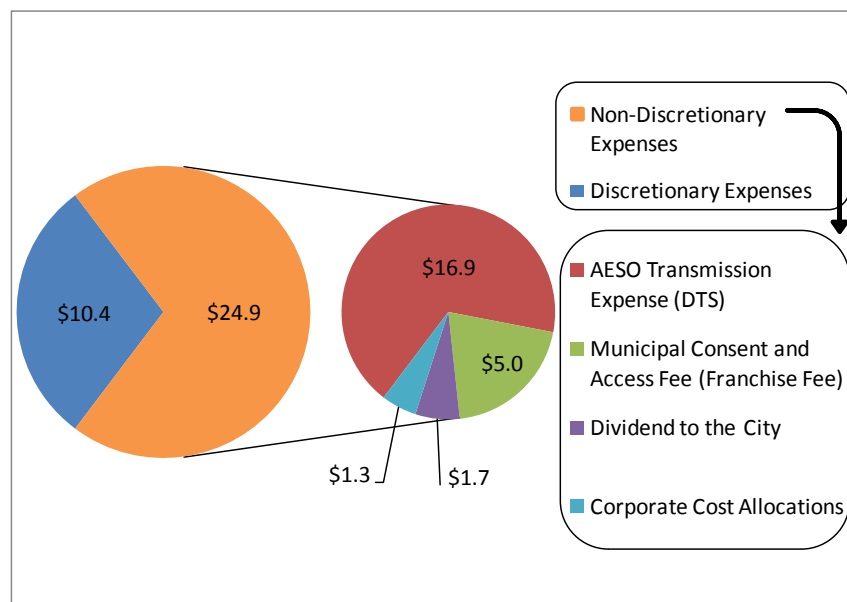
250 STREET & TRAFFIC LIGHTS	2007	% change	2008	% change	2009	% change	2010	% change	2011	2007 to 2011 % change
Revenue Summary	\$ -		\$ -		\$ (352)		\$ (449)		\$ -	N/A
Expenditure Object Summary										
Personnel	309,986	(2.2%)	303,115	15.9%	351,337	5.8%	371,717	3.3%	383,942	23.9%
General & Contracted Services	49,404	(5.6%)	46,636	(43.3%)	26,434	14.0%	30,138	128.3%	68,815	39.3%
Materials, Supplies & Utilities	1,316,326	(9.0%)	1,198,185	33.5%	1,599,826	2.9%	1,646,639	2.0%	1,680,007	27.6%
Other	-		-		262	98.5%	520	161628.1%	840,986	N/A
Internal Charges & Transfers	65,168	29.6%	84,464	18.1%	99,769	5.9%	105,651	(810.9%)	(751,067)	(1252.5%)
<b>Total of Expenditure Objects</b>	<b>1,740,884</b>	<b>(6.2%)</b>	<b>1,632,400</b>	<b>27.3%</b>	<b>2,077,628</b>	<b>3.7%</b>	<b>2,154,665</b>	<b>3.2%</b>	<b>2,222,683</b>	<b>27.7%</b>
Net of Revenue and Expenditure	\$ 1,740,884		\$ 1,632,400		\$ 2,077,276		\$ 2,154,216		\$ 2,222,683	27.7%

The utility section budget is comprised of both discretionary and non-discretionary expenses. Discretionary expenses are primarily related to personnel and contracted services, and the utility has entered into procurement agreements with key suppliers to manage costs where possible.

**Figure 21: EL&P Utility Discretionary and Non-Discretionary Expenses by Type, 2011 (CDN\$ Millions)**

The non-discretionary expenditures include the AESO Transmission Expense, the Municipal Consent and Access Fee (MCAF), the return paid to the City, and corporate cost allocations.

While the non-discretionary costs are beyond EL&P's ability to control, the allocation of corporate costs are within the





City's control, as are the rates used to calculate the MCAF and the dividend to the City. The AESO transmission tariff is beyond the control of both EL&P and the City. However, it has been noted that some discretionary expenses are driven by non-discretionary expenses. For example, if the 2011 AESO transmission expenses had been lower, this likely would have translated into an increase in transfers to the City or to the utility's reserves.

Overall utility expenditures increased by 62.4% during the period from 2007 to 2011, but when these non-discretionary expenditures are removed the resulting increase was just 25.3%, indicating that increasing utility costs are being primarily driven by those expenses beyond EL&P's control. City driven expenses increased by 37.7% during the 2007 to 2011 period, whereas non-City driven expenses increased by 121.6% (total inflation in Canada from February of 2007 to February of 2012 was 9.98%, averaging 1.92% per year).

**Table 19: EL&P Discretionary and Non-Discretionary Operating Costs, 2007 to 2011**

230 EL&P UTILITY SECTION	2007	% change	2008	% change	2009	% change	2010	% change	2011	2007 to 2011 % change
EL&P Total Operating Costs	\$ 21,730,497	10.6%	\$ 24,044,153	5.0%	\$ 25,255,524	13.8%	\$ 28,747,287	22.8%	\$ 35,288,688	62.4%
EL&P Non-Discretionary Expenses										
City Driven	5,835,611	1.1%	5,900,632	24.8%	7,362,593	4.5%	7,691,263	4.5%	8,038,263	37.7%
Non-City Driven	7,619,531	39.6%	10,640,383	(3.1%)	10,310,182	9.5%	11,294,163	49.5%	16,881,214	121.6%
<b>Total EL&amp;P Discretionary Expenses</b>	<b>8,275,355</b>	<b>(9.3%)</b>	<b>7,503,137</b>	<b>1.1%</b>	<b>7,582,748</b>	<b>28.7%</b>	<b>9,761,861</b>	<b>6.2%</b>	<b>10,369,210</b>	<b>25.3%</b>

The AESO Transmission Expense is set by AESO and approved by the Alberta Utilities Commission (AUC). This fee is designed to offset the costs of operating Alberta's electric transmission system and is structured to allocate costs among stakeholders.

The MCAF is a local access fee paid by EL&P directly to the City for use of roads, rights-of-way and other City-owned properties and lands for the purpose of placing and maintaining electrical distribution facilities. This fee is a set rate (2011 – 32%, 2012 – 33%) based on the Distribution Access Charge (DAC) component of the Distribution Tariff (DT) with no assessment against the System Access Charge (SAC) component. This approach is similar to some other municipalities, though differences in operating models and ownership have resulted in a variety of LAF models across the province.

The dividend paid to the City is the annual amount paid by EL&P to the owner as a return on investment. This is calculated as 50% of the annual return on rate base and does not include special dividends paid to the City.

Corporate cost allocations are allocated based on various factors such as square footage of space, budgeted salary and expenditures, actual usage of services such as IT, accounting, or purchasing, inventory, etc. Costs are allocated from various support functions including accounting, IT, purchasing, HR, communications, etc.

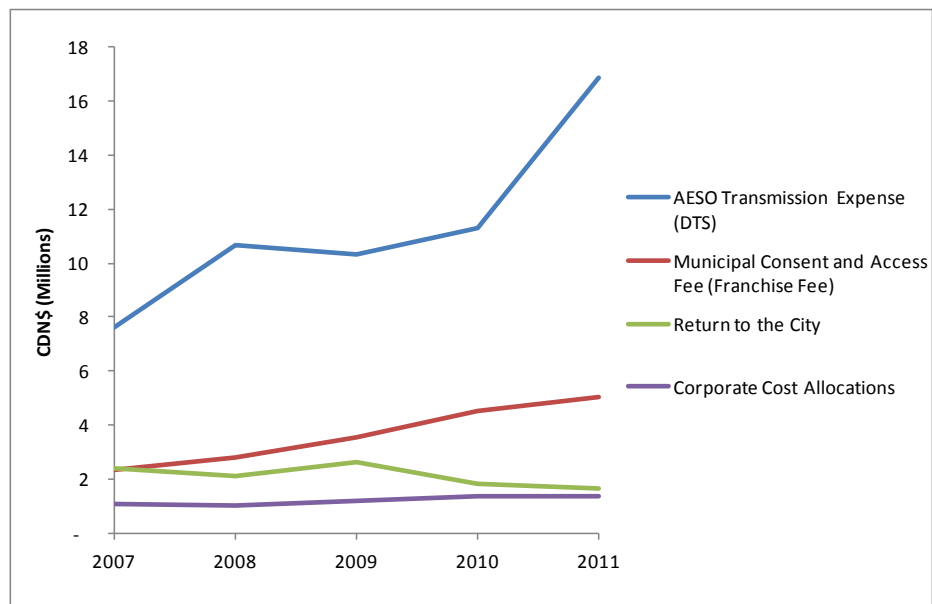
**Table 20: EL&P's Non-Discretionary Expenditures by Type, 2007 to 2011**

UTILITY SECTION NON-DISCRETIONARY EXPENDITURES	2007	% change	2008	% change	2009	% change	2010	% change	2011	2007 to 2011 % change
AESO Transmission Expense (DTS)	7,619,531	39.6%	10,640,383	(3.1%)	10,310,182	9.5%	11,294,163	49.5%	16,881,214	121.6%
Municipal Consent and Access Fee (Franchise Fee)	2,356,511	18.1%	2,782,515	27.9%	3,557,793	26.7%	4,508,963	11.9%	5,045,463	114.1%
Dividend to the City	2,398,000	(12.3%)	2,104,200	23.2%	2,592,000	(29.6%)	1,824,400	(9.0%)	1,660,800	(30.7%)
Corporate Cost Allocations	1,081,100	(6.2%)	1,013,917	19.6%	1,212,800	12.0%	1,357,900	(1.9%)	1,332,000	23.2%
<b>Total</b>	<b>\$ 13,455,142</b>		<b>\$ 16,541,016</b>		<b>\$ 17,672,776</b>		<b>\$ 18,985,426</b>		<b>\$ 24,919,478</b>	<b>85.2%</b>





Figure 22: Trends in Non-Discretionary Expenditures, 2007 to 2011



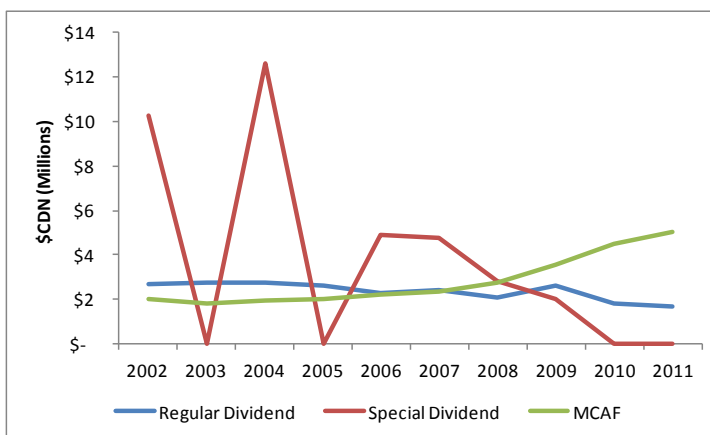
Non-discretionary costs have been trending generally upward over the past five years, with the most significant increases in the AESO transmission expense. However, the return paid to the City has shown a decreasing trend during this time.

The annual dividend paid by EL&P to the City (approved by Council) has fluctuated somewhat

over the last ten years but has been on a general downward trend. In the past, any amounts in the EL&P's Reserve over and above \$4 million were transferred to the Capital Replacement Reserve through the payment of a special dividend. This practice effectively capped EL&P's reserve accumulation at \$4 million and was ended in 2010 as capital needs for EL&P increased. Due to the previously applied limitation on reserve accumulation, the City has been obligated to use debt for capital infrastructure costs related to EL&P's portion of the Civic Yards, and future capital projects are expected to require debt financing support. The MCAF shows a generally increasing trend, which is to be expected as demand and costs increase.

Figure 23: EL&amp;P Payments to the City, 2002 to 2011

Year	Regular Dividend	Special Dividend	MCAF
2002	\$2,716,000	\$10,275,128	\$2,011,000
2003	2,739,000	-	1,802,000
2004	2,748,000	12,619,041	1,950,000
2005	2,595,000	-	2,012,000
2006	2,293,000	4,903,965	2,238,800
2007	2,398,000	4,754,055	2,356,511
2008	2,104,200	2,827,126	2,782,515
2009	2,592,000	2,000,000	3,557,793
2010	1,824,400	-	4,508,963
2011	1,660,800	-	5,045,463



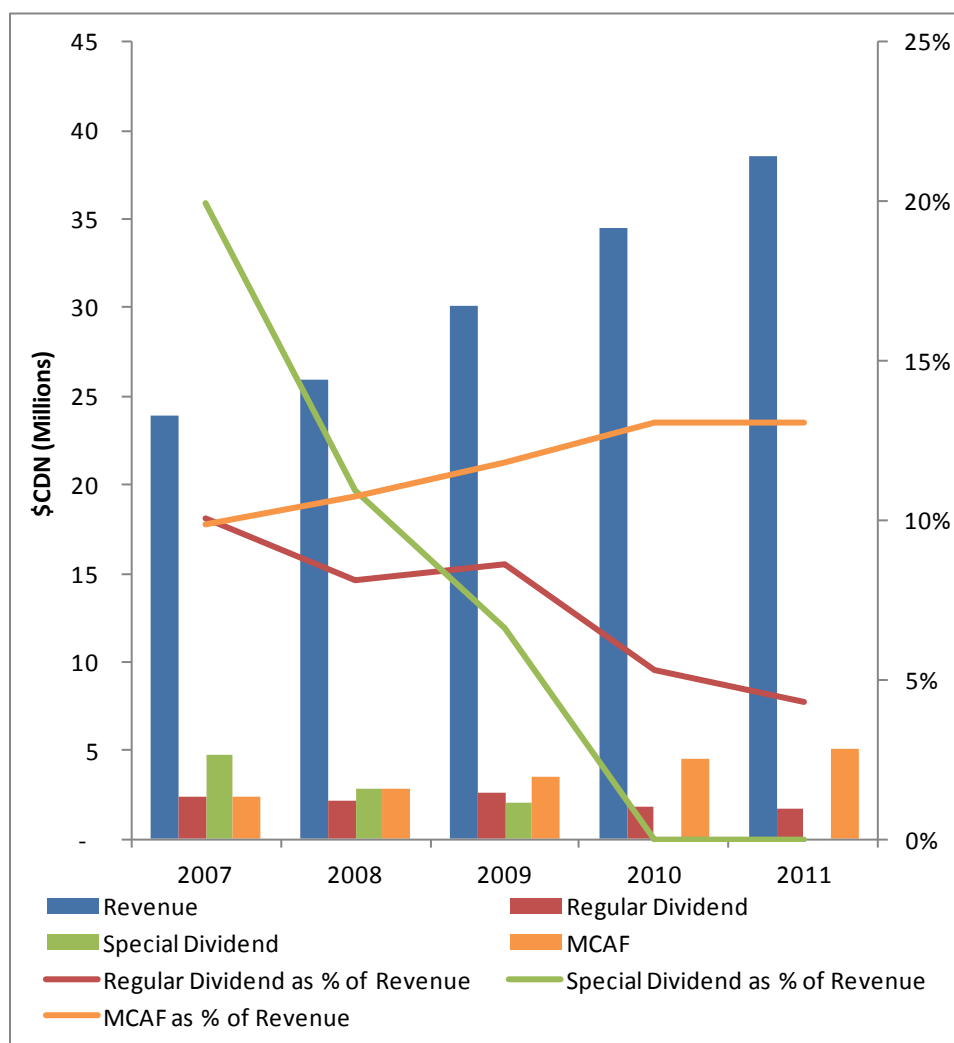


As a percent of EL&P's revenue, these payments follow a similar trend, with reductions seen for the regular and special dividends and an increasing trend seen for the MCAF.

**Table 21: EL&P Payments to the City as a Percentage of EL&P Revenue, 2007 to 2011**

	2007	2008	2009	2010	2011
Revenue	23,876,564	25,898,722	30,126,738	34,449,299	38,592,395
Regular Dividend	2,398,000	2,104,200	2,592,000	1,824,400	1,660,800
Regular Dividend as % of Revenue	10%	8%	9%	5%	4%
Special Dividend	4,754,055	2,827,126	2,000,000	-	-
Special Dividend as % of Revenue	20%	11%	7%	0%	0%
MCAF	2,356,511	2,782,515	3,557,793	4,508,963	5,045,463
MCAF as % of Revenue	10%	11%	12%	13%	13%

**Figure 24: Trends in EL&P Payments to the City, 2007 to 2011**





The question has been raised as to how the City compares to other Alberta municipalities in terms of its MCAF and what other options are available for calculating this fee. There are several ways in which a municipality can calculate LAFs or MCAFs:

1. Apply a percentage to distribution tariff charges within the municipality.
2. Apply a set rate based on kWh of consumption.
3. Use a mixture of the previous two options and apply a percentage to distribution tariff charges as well as a set rate per kWh of consumption.
4. Do not charge a LAF and instead charge property taxes or other fees for the use of and access to the municipality's land to construct, maintain and operate the distribution systems within the municipal boundaries.

As evidenced in the benchmarking initiative, different municipalities across Alberta utilize each of the above options. The following tables show the relative percentage of the total distribution tariff that is comprised by the MCAF or LAF in each respective municipality (where applicable).

**Table 22: Comparison of MCAF as a Percentage of Total Distribution Tariff by Customer Class for Select Canadian Electric Utilities (January 2012)**

COMPARISON OF MCAF AS % OF TOTAL DISTRIBUTION TARIFF FOR JANUARY 2012 RESIDENTIAL			
For a Residential customer consuming 600 kWh (average month)			
Municipality	Distribution Tariff Charge (\$)		
	MCAF	Total	MCAF % of Total
Calgary	\$ 13.11	\$ 48.77	26.9%
Lethbridge	10.53	50.88	20.7%
<b>Red Deer</b>	<b>6.71</b>	<b>39.40</b>	<b>17.0%</b>
Edmonton	3.96	39.29	10.1%
Grande Prairie	8.14	94.13	8.6%
Airdrie	3.72	54.66	6.8%
<b>AVERAGE</b>			<b>15.0%</b>

COMPARISON OF MCAF AS % OF TOTAL DISTRIBUTION TARIFF FOR JANUARY 2012 SMALL GENERAL SERVICE			
For a Small General Service customer consuming 2000 kWh (average month)			
Municipality	Distribution Tariff Charge (\$)		
	MCAF	Total	MCAF % of Total
Calgary	\$ 41.48	\$ 139.20	29.8%
Lethbridge	27.87	135.96	20.5%
<b>Red Deer</b>	<b>18.28</b>	<b>117.55</b>	<b>15.6%</b>
Edmonton	13.20	115.43	11.4%
Grande Prairie	17.73	212.43	8.3%
Airdrie	10.60	160.10	6.6%
<b>AVERAGE</b>			<b>15.4%</b>

COMPARISON OF MCAF AS % OF TOTAL DISTRIBUTION TARIFF FOR JANUARY 2012 GENERAL SERVICE			
For a General Service customer (111 kVA) consuming 25,000 kWh (average month)			
Municipality	Distribution Tariff Charge (\$)		
	MCAF	Total	MCAF % of Total
Calgary	\$ 519.09	\$ 1,746.36	29.7%
Lethbridge	284.43	1,401.30	20.3%
<b>Red Deer</b>	<b>168.68</b>	<b>1,243.70</b>	<b>13.6%</b>
Edmonton	165.00	1,430.39	11.5%
Grande Prairie	202.50	2,437.38	8.3%
Airdrie	93.78	1,553.55	6.0%
<b>AVERAGE</b>			<b>14.9%</b>

COMPARISON OF MCAF AS % OF TOTAL DISTRIBUTION TARIFF FOR JANUARY 2012 LARGE GENERAL SERVICE / INDUSTRIAL			
For a Large General Service customer (1,111 kVA) consuming 400,000 kWh (average month)			
Municipality	Distribution Tariff Charge (\$)		
	MCAF	Total	MCAF % of Total
Calgary	\$ 7,755.09	\$ 22,204.32	34.9%
Lethbridge	3,491.74	17,482.00	20.0%
Edmonton	2,640.00	18,275.97	14.4%
<b>Red Deer</b>	<b>2,093.63</b>	<b>15,328.00</b>	<b>13.7%</b>
Grande Prairie	1,582.73	20,789.13	7.6%
Airdrie	812.06	14,285.84	5.7%
<b>AVERAGE</b>			<b>16.1%</b>

The City's MCAF rate, when considered as a percentage of the overall distribution tariff, appears to be fairly average when compared to other Alberta electrical utilities subject to this fee. EL&P residential and small general service customers pay slightly more than the average, with residential customers paying 17.0% compared to an average of 15.0% of the total distribution charge, and small general services customers paying 15.6% compared to an average of 15.4%. However, general service and large general service customers pay slightly less than average, with general services customers paying 13.6% compared to an average of 14.9%,



and large general services customers paying 13.7% compared to an average of 16.1%. Overall, this suggests that the MCAF rate charged by the City is in line with other Alberta municipalities that charge this fee.

It is important to note that there can be a significant amount of variability in the percentages and rates as these are up to the municipality's discretion. The following describes the manner in which each municipality in the above tables calculates its respective MCAF or LAF:

- **Calgary:** Calgary calculates its LAF based on two components. The first is the LAF wires component, calculated at 11.11% of the total revenue from the distribution tariff rate charges in the billing period. Added to this is the LAF energy component, calculated at 11.11% of the monthly RRO energy charge per kWh of energy delivered.
- **Lethbridge:** Lethbridge charges a LAF calculated as 27.3% of the distribution tariff.
- **Edmonton:** Edmonton charges a LAF based on kWh consumed. The 2011 rate was \$0.0066/kWh, with a proposed rate increase to \$0.0069/kWh in 2012.
- **Grande Prairie:** Grande Prairie calculates its LAF as 9.64% of the distribution tariff.
- **Airdrie:** Airdrie charges a LAF calculated as 8.65% of the distribution tariff.
- **Note:** Kelowna, Oakville, Waterloo and Medicine Hat, although benchmarked, are excluded from the above table as these municipalities do not charge an MCAF or LAF.

**Table 23: Overall Annual Impact of Alternate Approaches to MCAF Calculation**

TOTAL ANNUAL IMPACT OF ALTERNATIVE MCAF CALCULATION METHODS						
For all customer classes						
	Airdrie MCAF Calculation	Grande Prairie MCAF Calculation	Edmonton MCAF Calculation	Red Deer MCAF Calculation	Lethbridge MCAF Calculation	Calgary MCAF Calculation
<b>2011 Red Deer MCAF</b>				\$5,045,463		
<b>Total Annual Impact on MCAF</b>	(\$2,879,749)	(\$2,548,503)	(\$1,510,269)	-	\$3,360,389	\$5,007,956
<b>Total Annual Revised 2011 MCAF</b>	<b>\$2,165,714</b>	<b>\$2,496,960</b>	<b>\$3,535,194</b>	<b>\$5,045,463</b>	<b>\$8,405,852</b>	<b>\$10,053,419</b>

The impact on the total annual MCAF returned to the City would vary significantly were the City to adopt one of the above approaches instead of its current MCAF calculation method. Based on 2011

rates, the adoption of the methods used by Airdrie, Grande Prairie or Edmonton would result in an overall reduction in the MCAF collected by the City while use of the Lethbridge or Calgary MCAF calculation methods would result in a higher MCAF.

The monthly impact on various customer classes also varies depending on the different approaches. Applying the MCAF calculation methods of Airdrie and Grand Prairie, all customer classes would pay a lower MCAF fee. Under the methods used by Lethbridge and Calgary, all customer classes would pay more. Using the system employed in Edmonton, lower usage customers (residential and small general service) would pay less while higher usage customers (general service and large general service) would pay more; however, the decrease for smaller customers would outweigh the increase experienced by the larger customers, resulting in an overall decrease in MCAF funding for the City.



Table 24: Monthly Impact of Alternative MCAF Calculation by Customer Class

MONTHLY IMPACT OF ALTERNATIVE MCAF CALCULATION FOR RESIDENTIAL CUSTOMERS (2011)						
For a Residential customer consuming 600 kWh (average month)						
	Airdrie MCAF Calculation	Grande Prairie MCAF Calculation	Edmonton MCAF Calculation	Red Deer MCAF Calculation	Lethbridge MCAF Calculation	Calgary MCAF Calculation
2011 Red Deer Average Distribution Tariff (\$31.28)	\$ 2.71	\$ 3.02	\$ 3.96	\$ 5.50	\$ 8.54	\$ 10.04
Average Monthly Customer Charge	\$ 32.75	\$ 33.06	\$ 34.00	\$ 35.54	\$ 38.58	\$ 40.08
Total Monthly Impact on MCAF	(\$219,912)	(\$195,540)	(\$121,231)	-	\$239,226	\$357,000

MONTHLY IMPACT OF ALTERNATIVE MCAF CALCULATION FOR SMALL GENERAL SERVICE CUSTOMERS (2011)						
For a Small General Service customer consuming 2000 kWh (average month)						
	Airdrie MCAF Calculation	Grande Prairie MCAF Calculation	Edmonton MCAF Calculation	Red Deer MCAF Calculation	Lethbridge MCAF Calculation	Calgary MCAF Calculation
2011 Red Deer Average Distribution Tariff (\$101.02)	\$ 8.74	\$ 9.74	\$ 13.20	\$ 15.40	\$ 27.58	\$ 33.09
Average Monthly Customer Charge	\$ 105.62	\$ 106.62	\$ 110.08	\$ 112.28	\$ 124.45	\$ 129.97
Total Monthly Impact on MCAF	(\$17,486)	(\$14,861)	(\$5,771)	-	\$31,977	\$46,461

MONTHLY IMPACT OF ALTERNATIVE MCAF CALCULATION FOR GENERAL SERVICE CUSTOMERS (2011)						
For a General Service customer consuming 25000 kWh (average month)						
	Airdrie MCAF Calculation	Grande Prairie MCAF Calculation	Red Deer MCAF Calculation	Edmonton MCAF Calculation	Lethbridge MCAF Calculation	Calgary MCAF Calculation
2011 Red Deer Average Distribution Tariff (\$1,134.94)	\$ 98.17	\$ 109.41	\$ 146.04	\$ 165.00	\$ 309.83	\$ 399.48
Average Monthly Customer Charge	\$ 1,181.34	\$ 1,192.58	\$ 1,229.21	\$ 1,248.17	\$ 1,393.01	\$ 1,482.65
Total Monthly Impact on MCAF	(\$2,466)	(\$1,887)	-	\$977	\$8,439	\$13,058

MONTHLY IMPACT OF ALTERNATIVE MCAF CALCULATION FOR LARGE GENERAL SERVICE / INDUSTRIAL CUSTOMERS (2011)						
For a Large General Service customer consuming 40000 kWh (average month)						
	Airdrie MCAF Calculation	Grande Prairie MCAF Calculation	Red Deer MCAF Calculation	Edmonton MCAF Calculation	Lethbridge MCAF Calculation	Calgary MCAF Calculation
2011 Red Deer Average Distribution Tariff (\$13,782.99)	\$ 1,192.23	\$ 1,328.68	\$ 1,773.32	\$ 2,640.00	\$ 3,762.76	\$ 5,905.56
Average Monthly Customer Charge	\$14,147.22	\$ 14,283.67	\$14,728.31	\$15,594.99	\$ 16,717.75	\$ 18,860.55
Total Monthly Impact on MCAF	(\$114)	(\$87)	-	\$170	\$390	\$811

Given the variety of approaches in calculating consent and access fees, the general best practice is to consider the impact on the average customer's bill and select a rate and calculation methodology according to the City's requirement.

### Rate Model

The Electric Utility Bylaw and its associated Schedules detail the utility's fiscal policies pertaining to rates and fees charged for services. Other policies relate to the rate of return (determined by the AUC), dividends and special dividends, reserves, debt (limited to 1.5 times revenue per Alberta Regulation 255/2000 and a debt to equity ratio of 63% : 37% per AUC Decision 2011-474), the local access fee (MCAF), and cost of service reviews.

The City is currently engaged in a rate model review that seeks to address many of the issues around fair and equitable rate development, including:

- Establishing processes that are sufficiently understandable, transparent and consistent for:
  - Rate development;
  - The utility's acquisition of debt; and
  - Determining dividends;
- Charging variable and fixed rates based on a rationale that is consistent with achieving goals and targets;
- Calculating a rate of return using an acceptable and recognized methodology that reflects all requirements, such as reserves and dividends;
- Developing a reserve management approach that reflects realistic future operating and capital needs, and is based on comprehensive infrastructure integrity assessments; and
- Ensuring that debt levels, the debt-to-equity ratio, dividends, assets and associated depreciation, the LAF, and operating and capital reserves are accounted for using an acceptable and recognized methodology.



***Distribution Rates***

Distribution rates are developed using a standard cost of service methodology and are approved by Council. The cost of service analysis (COSA) is conducted on an annual basis and uses historical information to extrapolate expected future demand, which drives the utility's expected costs and future rates.

Rate escalation factors considered in the 2012 COSA included analysis of revenues such as pole rentals by Telus, SOM revenue and other miscellaneous revenues which were not expected to increase over 2011 levels. Expenses such as labour, materials and supplies, equipment, insurance and purchased power were all expected to increase by 2% over the previous year. The on-peak average pool price is expected to rise to \$141.75 per MWh (\$90.42 in 2011), the off-peak average to \$89.25 for (\$56.93 in 2011), and the all-time average to \$105.00 per MWh (\$66.98 in 2011).

Load growth (in kWh sales) is also expected to increase, with the largest increases in traffic lights (2.1%) and residential (2.0%), mid-level increases in small general service and general service (1.0% each), and smaller increases in large general service (0.5%) and street lights (0.3%). Load growth (in number of sites or kVa billing demand) is expected to increase for residential (2.0%), small general (0.8%), and general service (0.5%) while remaining consistent for large general service and street and traffic lights.

The primary loss factor used in the cost of service analysis is expected to increase by 3% over 2011 for all service classes, and the secondary loss factor is expected to increase by 1.0% for all classes except large general service which is expected to remain at the 2011 level. The power factor of general service and large general service customers is anticipated to increase by 82% and 87%, respectively, while street and traffic lights are expected to double (100% increase).

The revenue, expense, primary and secondary loss factors and the power factor escalation rates are consistent with previous years. The pool price and load growth (both in terms of kWh sales as well as the number of sites or kVa billing demand) demonstrate fluctuating increases (or decreases) year-to-year.

The Distribution Tariff (DT) for EL&P customers includes several components, including a basic or demand distribution access charge (DAC) and system access charge (SAC), a variable DAC and SAC, a balancing pool allocation, the MCAF set by the City, and the minimum monthly charge. The SAC is a charge designed to allow EL&P to recover the monthly transmission charges paid to AESO for all the Red Deer Loads. This fee accounts for 35% to 40% of the total revenue requirement and is charged for the purpose of recovering EL&P's share of the regulated costs of building and maintaining the provincial transmission grid to deliver electricity to customers. The DAC is a charge to recover the cost of operating and maintaining the local distribution system.



Effective January 1, 2012, rates for EL&P's four customer classes (residential, small general service, general service, and large general service) changed as follows:

**Table 25: Distribution Rate Changes by Customer Class Effective January 1, 2012**

				Residential	Small General Service	General Service	Large General Service / Industrial
				Rate Class 61	Rate Class 63	Rate Class 64	Rate Class 78
2011	Distribution Tariff	Basic / Demand	DAC	0.3363	0.9705	0.0863	0.0906
			SAC	0.3036	1.2065	0.1410	0.1480
		Variable	DAC	0.0116	0.0093	0.0066	0.0062
			SAC	0.0081	0.0081	0.0081	0.0081
	Balancing Pool Allocation			(0.00207)	(0.00207)	(0.00207)	(0.00207)
	Local Access Fee			32% of DAC	32% of DAC	32% of DAC	32% of DAC
	Minimum Monthly Charge			Total Basic DT + LAF	Total Basic DT + LAF	Total Basic DT + LAF	Total Basic DT + LAF
2012	Distribution Tariff	Basic / Demand	DAC	0.3984	1.1180	0.0966	0.1037
			SAC	0.2660	1.0015	0.1174	0.1234
		Variable	DAC	0.0137	0.0107	0.0074	0.0071
			SAC	0.0071	0.0067	0.0067	0.0068
	Balancing Pool Allocation			(0.00569)	(0.00569)	(0.00569)	(0.00569)
	Local Access Fee			33% of DAC	33% of DAC	33% of DAC	33% of DAC
	Minimum Monthly Charge			Total Basic DT + LAF	Total Basic DT + LAF	Total Basic DT + LAF	Total Basic DT + LAF
% change	Distribution Tariff	Basic / Demand	DAC	18.5%	15.2%	11.9%	14.5%
			SAC	(12.4%)	(17.0%)	(16.7%)	(16.6%)
		Variable	DAC	18.1%	15.1%	12.1%	14.5%
			SAC	(12.3%)	(17.3%)	(17.3%)	(16.0%)
	Balancing Pool Allocation			174.9%	174.9%	174.9%	174.9%
	Local Access Fee			1.0%	1.0%	1.0%	1.0%
	Minimum Monthly Charge			N/A	N/A	N/A	N/A

On average, the Distribution Access Charge of the Distribution Tariff increased by approximately 15% while the System Access Charge decreased by an average of 15.7%. The Balancing Pool Allocation rate increased for each customer class by 175% and the Local Access Fee rate increased by 1%. Budgeted revenue for 2012 is expected to increase by approximately 12%.

### **Transmission Rates**

EL&P's TFO General Tariff Application for 2009 to 2011 follows the reporting guidelines specified by the AUC, making note of areas that are not applicable to the municipal utility. The application describes EL&P's transmission infrastructure and the shared nature of their ownership with AltaLink L.P., and outlines the actual revenue requirement (including operating costs, depreciation, cost of capital, income tax and deferral and reserve accounts) for 2006-2008 as well as the forecasted revenue requirement for 2009-2011.

The majority of the balance of the report contains a detailed explanation of costs and revenues associated with transmission and distribution, describes the rate base of each, and provides information on other operational and administrative costs as well as other relevant supplementary information (e.g. related studies and reports, deferral accounts, accounting policies, etc.) all of which support the utility's rate requirement case.

### **Recommendations**

**2.6.1** Acceptance of a revised Utility Fiscal Policy will provide the utility with the needed direction for effective financial management and rate setting.



- 2.6.2** The City should continue to allow EL&P to build reserves without capping the amount held in reserves or requiring that the utility pay a special dividend to the City. The use of debt in purchasing capital infrastructure is not an uncommon practice for similar organizations, but long term planning should aim to use a mixture of reserves and debt to fund capital maintenance, replacement and expansion.

## 2.7 Infrastructure and Asset Management

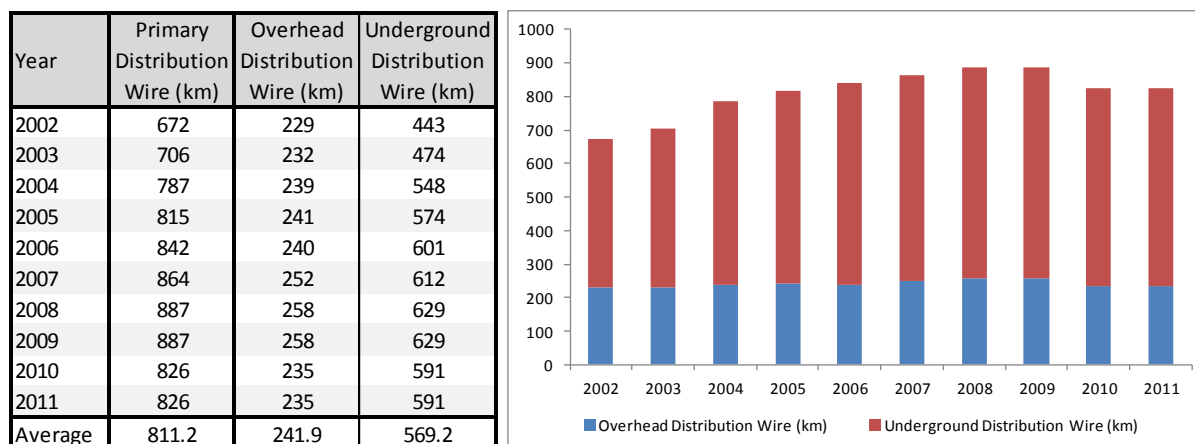
### Assets

EL&P owns and operates transmission facilities consisting of three 138/25 substations (jointly owned with AltaLink) and eleven smaller substations. In addition, EL&P is considered the Transmission Facility Operator (TFO) of other transmission infrastructure, which includes six power transformers, 38 circuit breakers, associated switches, protection, control and telecommunications, automation and SCADA systems, and substation buildings. EL&P currently does not own any transmission lines.

EL&P is currently planning a new 138/25 kV substation with an estimated cost of \$20 Million (spread over 2012 to 2015) and an expected completion date in 2015. This project has been endorsed by AESO, and also includes a 2x3 km 138 kV transmission line which is also being planned (at an additional cost of \$4.5 Million). Another substation is planned for completion by 2020, which will include a 2x7 km transmission line. These projects are being planned to maintain the system, facilitate growth and to earn a return on the transmission system through the transmission tariff, which will be enhanced by owning transmission lines.

Further to its current and planned transmission assets, EL&P owns and maintains a network of distribution wires and related components and equipment. Based on information reported in MicroStation, EL&P's historical data system, the utility has approximately 887km of primary distribution line. However, the 2010 implementation of GIS resulted in a downward restatement to 826km due to the discovery of some duplicate records. According to GIS data, overhead primary wire is 235km and underground primary wire is 591km. The following shows the breakdown of total, overhead and underground primary distribution wire over the past ten years (note: pre-2010 information uses MicroStation data and is subject to the issue noted above).

**Figure 25: Km of Distribution Wire (2002 to 2009 MicroStation Data, 2010 and 2011 GIS Data)**





EL&P also has street light and traffic light assets (representing approximately 25% of total assets). Assets are described as being in relatively good condition given their age, and capital plans have been developed that outline the replacement of key infrastructure and building of new required infrastructure. In total, EL&P's assets had an original cost of \$111.6 million and currently have a total net book value (NBV) of \$67.3 million, indicating that the utility's assets have an average NBV of approximately 60% of original cost.

**Table 26: EL&P Transmission and Distribution Assets by Type (as at December 31, 2010)**

<b>Asset Type</b>	<b>Original Cost</b>	<b>Net Book Value</b>
Landscaping	\$ 24,608	\$ 23,153
Buildings	15,722,005	13,747,107
<i>Shell</i>	9,432,348	8,164,204
<i>Electrical / Lighting</i>	1,118,929	1,018,436
<i>Plumbing / Mechanical</i>	2,133,568	1,939,454
<i>Fire / Life Systems</i>	87,434	79,405
<i>HVAC</i>	416,400	378,388
<i>Roof Coverings</i>	1,187,511	1,025,114
<i>Fixed Equipment</i>	56,047	45,753
<i>Floor Coverings</i>	119,073	86,520
<i>Interior Finish</i>	1,170,695	1,009,833
Substations	2,753,781	1,281,036
Scada Fibre Link	516,212	373,400
Scada Master Stations	1,822,498	683,760
Meters	2,136,274	1,292,822
<i>Cumulative Meters</i>	1,065,832	736,541
<i>Interval Meters</i>	1,070,442	556,280
Pooled Shop Equipment	19,179	17,362
Office Furniture and Equipment	133,508	115,886
<i>Pooled Office Furniture</i>	89,309	80,533
<i>Office Equipment</i>	37,535	30,022
<i>Audiovisual Equipment</i>	6,665	5,331
Structures and Improvements	655,170	285,574
Station and Line	8,885,015	3,523,237
<i>Transformers</i>	3,928,437	1,502,122
<i>Switches</i>	3,118,654	1,530,673
<i>Protection</i>	249,428	49,462
<i>Cables / Equipment</i>	889,414	163,163
<i>Reclosers</i>	699,082	277,817
Transformers	14,362,439	9,112,290
Distribution Poles	2,674,581	1,415,460
Overhead Distribution	3,619,797	2,027,907
Underground Secondary Distribution	5,697,543	2,553,951
Underground Residential Distribution	18,663,587	11,940,680
Switchgear	4,585,414	1,402,915
<b>TOTAL</b>	<b>\$ 82,271,610</b>	<b>\$ 49,796,538</b>

**Table 27: EL&P Street and Traffic Light Assets by Type (as at December 31, 2011)**

Asset Type	Original Cost	Net Book Value
Distribution Poles	\$ 4,944,337	\$ 2,120,119
Streetlight Poles	993,663	857,378
Streetlight Wire	540,385	500,759
Streetlight Fixtures	2,191,790	482,456
Traffic Controllers	1,878,111	1,011,599
Traffic Cantilevers	3,780,252	1,989,277
Traffic Signal Heads	2,237,622	1,954,657
Traffic Signal Detectors	864,995	438,396
Traffic Ducts	11,318,827	7,790,652
Traffic Wire	563,475	331,355
<b>TOTAL</b>	<b>\$ 29,313,456</b>	<b>\$ 17,476,650</b>

Asset values for 2011 are not yet finalized, but are estimated as having an original value of approximately \$90,560,000 and a NBV of \$57,900,000 (63.9% of original cost). PSAB did not require established asset balances until the end of 2010, and therefore there is no reliable history of this metric prior to that time.

Overall numbers from the City's asset register and those from EL&P do not match due to the recent GIS project that resulted in a downward correction of the asset values historically used by EL&P. Both the City and EL&P are aware of this discrepancy.

**Table 28: Average Inventory Turnover Rate (2009 to 2011)**

Inventory turnover varies significantly by type of asset, ranging from more than once per year for smaller items such as paint, rope and lamps to once every six to ten years for sonatube, crossarms, and traffic signs. For those items of inventory that are turned over infrequently, it may be beneficial for the utility to consider holding fewer on hand to reduce holding costs and capital tied up in inventory.

### Asset Management

In 2010, the City engaged a consultant to review several areas of City assets, including those owned and operated by EL&P, and to document an asset management plan for six asset portfolios. These plans were designed to support the utility in delivering quality service to customers while effectively managing costs and risks. This report fully documents EL&P's assets and describes an asset management approach that includes levels of service,

Asset Type	Average Quantity on Hand	Average Annual Usage (2009 to 2011)	Inventory Turnover Rate	Replacement frequency (every X years)
Paint	171.3	539.0	3.15	0.3
Rope	31,400.0	75,283.0	2.40	0.4
Lamps	59.4	112.9	1.90	0.5
Lumber	104.3	144.3	1.38	0.7
Safety Glasses	39.0	47.5	1.22	0.8
Duct and Coupling	227.2	244.4	1.08	0.9
Concrete	14.4	14.1	0.98	1.0
Gloves	19.3	16.8	0.87	1.2
Tools	11.6	9.6	0.83	1.2
Flagging	320.0	227.0	0.71	1.4
Poles	54.7	37.4	0.68	1.5
Bushing, Plugs, Fuses	157.1	103.0	0.66	1.5
Meters	59.2	35.8	0.61	1.7
Traffic	51.3	30.4	0.59	1.7
Insulation	89.3	46.3	0.52	1.9
Wire	3,031.7	1,530.9	0.50	2.0
Fuses and Switches	19.5	8.0	0.41	2.5
Hardware	177.4	66.2	0.37	2.7
Sleeve and Connector	233.5	87.0	0.37	2.7
Transformers, Pads and Poles	7.5	2.6	0.35	2.9
Heat Shrink	882.5	289.8	0.33	3.0
Miscellaneous	6.3	1.5	0.24	4.2
Connectors	71.0	15.4	0.22	4.6
Splice	22.7	4.8	0.21	4.7
Sonatube	12.0	2.0	0.17	6.0
Crossarm	99.7	15.2	0.15	6.5
Traffic Signs	154.5	14.5	0.09	10.7





lifecycle analysis (including risk management) and lifecycle management strategies, a long term funding analysis (including potential impacts on asset condition), short term investment priorities, and future improvements to the asset management plan. This report appears to provide an excellent foundation for a comprehensive asset management strategy, and the implementation of these plans would result in alignment between EL&P's asset management strategy and the corporate asset management approach.

On a more recent and consistent basis, the integrity of assets is known and managed through very good communication among supervisors and staff, and many years of accumulated knowledge and expertise, which leads to the identification of any problems and steps to address them. Wood distribution poles, streetlight poles, station equipment and network transformers are physically inspected on a regular basis. The rest of the infrastructure is assessed as needed rather than on a set or regular schedule. The “need” is primarily based on the age of the asset, and the inspection timing is primarily based on the experience and knowledge of the operations and maintenance staff. For example, monitoring has been increased for substations and network transformers as they are nearing the end of their useful lives. EL&P does not currently track the percentage of critical assets that require immediate refurbishment or replacement. It is recognized that the current asset management approach could be improved through a more formal, documented and comprehensive program.

Two specific issues have been identified in the area of asset management, both of which are known to EL&P and the City and are being addressed. One issue has been identified around the potential that some assets could be counted twice in the financial system. This may occur when an asset is recorded in the job through the financial system, added to the asset register and depreciated over its useful life. If it is replaced with another asset, the original asset is put into inventory at a weighted average cost. This appears to make sense from an operational perspective, but may have an impact on financial statements (the extent of which has yet to be determined). An example where this may occur is when meters are removed for testing and replaced with another meter from inventory.

Another issue was identified in 2008 by the City auditor, who described the risk associated with inventory obsolescence. It was noted that the City annually calculates an inventory obsolescence charge, which has been accumulating for 15 years, and nets this against inventory. As of July 22, 2010 the accumulated obsolescence charge was 28.7% of the year-end inventory balance. The risk associated with this practice is that accumulated obsolete inventory is not reconciled to year-end inventory and this could result in the inclusion of an allowance for items that are no longer held in year-end inventories. The inclusion of these items would result in overstated obsolescence and understated inventory. In response, the City agreed to perform an annual reconciliation of obsolete inventory to inventory on-hand and EL&P is working with Financial Services to address this issue and put a better process in place for 2012. However, there may be some difference of opinion between Financial Services and the utility in terms of when a piece of inventory is considered obsolete.

## **Recommendations**

- 2.7.1** Introduce new asset tracking metrics such as the percentage of critical assets that require immediate refurbishment or replacement to gain a better understanding of asset condition and priority maintenance activities.



- 2.7.2** Continue with current initiatives to apply the asset management plan and address identified asset management concerns.

## **2.8 Operating Risk and Business Continuity**

### **Planning**

Corporate Services has overall responsibility for emergency planning and business continuity and works with departments, including EL&P, to develop their plans and ensure they are in place. EL&P has several emergency plans, including a union strike emergency plan, a pandemic plan, a mutual emergency assistance agreement between EL&P and AltaLink, and a municipal emergency management plan supplemented by Incident Command System (ICS) and Emergency Operations Centres (EOC) training. Apart from the municipal emergency management plan, these plans do not appear to be explicitly linked to a wider City emergency plan or business continuity plan but could certainly support such a process.

The union strike and pandemic plans provide guiding principles, which includes identifying specific people who will be responsible for specific functions to ensure business continuity. These plans also identify the basic business functions that need to be maintained, in order of priority, and how they will be maintained. The mutual emergency assistance agreement between EL&P and AltaLink describes how EL&P and AltaLink will support one another to maintain or restore electrical service when the service has been disrupted by the elements, equipment malfunctions, accidents or any other occurrence where emergency assistance is required. It also describes in detail how this assistance will be requested and provided. The municipal emergency management plan is guided by the City's emergency management bylaw (pursuant to the provincial Emergency Management Act) and provides governance for organizational emergency management activities that are consistent and interoperable with municipal-wide emergency management governance structures. This plan establishes and assigns specific duties and responsibilities to an emergency management committee, an emergency management agency, and a director of emergency management, including required membership, meeting frequency, and authorities. Although not formally documented, EL&P and neighbouring utilities have discussed emergency planning and EL&P has supported other utilities on at least one occasion through the temporary provision of management and crews.

In addition to these emergency plans, EL&P also has specific templates used for security reporting, including substation reads and physical sabotage reporting, SCADA sabotage and intrusion reporting, and AESO information document sabotage event reporting. These documents facilitate the description and reporting of breaches to security at substations and other sites and cyber intrusions to the SCADA system. AESO has provided its own template for use in reporting potential sabotage or security breaches. According to EL&P, there is a perception that thefts and break-ins are on the rise, especially theft of valuable material like copper. The number and type of security incidents or breaches is not formally tracked, but it is believed that a total of three copper thefts occurred from substation 15 during 2011. The utility is currently looking into the options of surveillance systems and security guards to address this. Apart from this, the utility does not indicate any other major concerns with physical or data security.

**Risk Identification and Mitigation**

As with ERM, operating risks are discussed during the budget process and activities are carried out to mitigate operating risks on an as-needed basis as identified, such as maintenance of key infrastructure. This leads to mitigation strategies being implemented, but not documented as such. Mitigation strategies are identified in the union strike and pandemic emergency plans and have been developed for some critical assets (e.g. transmission planning). While EL&P identifies key vendors and customers upon which it is highly dependent on for both delivering services and for revenue in its Departmental Representation Letter, mitigation strategies are not linked to these risks.

Other key operating risks that have been identified include: dependence on the knowledge and experience of a few key individuals, losing and being able to recruit new qualified staff, aging infrastructure, increasing demand, and regulatory experience and knowledge.

An infrastructure risk analysis was also completed as part of the consultant's asset management report, as risk management supports lifecycle analysis and is therefore part of best practice asset management. The risk profiles are very comprehensive for each type of asset.

EL&P appears to have adequate insurance, and insurance has not been identified as a critical issue as having adequate insurance is part of the requirements for the transmission filing. EL&P acknowledges that it may be beneficial to review insurance coverage in more depth to ensure adequate, cost effective coverage.

**Recommendations**

- 2.8.1** Corporate Services, in conjunction with EL&P and within the broader ERM approach currently being developed by the City, should develop business continuity plans for a wider range of scenarios and identify mitigation strategies that can be implemented in the short term to support these plans.
- 2.8.2** EL&P should review all activities and functions to determine if there are other emergency scenarios for which key risks can be identified and mitigation activities can be implemented.



## 3 Customer, Citizen and Stakeholder Engagement

### 3.1 Citizen Engagement

EL&P has only a tangential relationship with citizens but recognizes that “keeping the lights on” is a major concern for citizens and understands that communicating the importance of managing demand during peak times has the potential to significantly lessen the strain on the system. The utility does not appear to have a documented citizen engagement strategy or plan, nor does it appear to be part of a larger City strategy or plan. However, when required, EL&P’s citizen engagement strategies are aligned with the overall corporate approach to citizen engagement. This is demonstrated through the “Let’s Talk” initiative, which involves City departments setting up booths at shopping malls and engaging with citizens who choose to stop and chat. EL&P has five brochures available to citizens in regards to electricity which indicates that the utility has taken some steps to engage with citizens. These brochures provide general information as well as tips for conserving energy, and include:

- Keeping your lights on
- Energy conservation for your business
- Energy conservation in your home
- Is renewable energy in your home something you may be considering?
- Power Outages

EL&P does not currently track metrics such as the average number of hours or days to respond to citizen complaints or inquiries and does not conduct customer or citizen satisfaction surveys to evaluate satisfaction with its services and programs. However, there is a requirement for public consultation and engagement within the provincial regulatory approval process that EL&P is obligated to follow during the construction of the new substation planned for 2015. The utility also recognizes that the location of electrical infrastructure such as transmission substations and related wire is a critical issue for citizens.



## Recommendations

- 3.1.1** EL&P should work with Communications to develop a citizen engagement strategy to inform potentially affected citizens about the new substations and lines and to listen to and address their concerns where possible.

## 3.2 Customer Relationship Management

The utility does not appear to have a documented customer engagement strategy but the existence of the previously mentioned brochures and news releases demonstrates that EL&P has taken initiative to engage with customers. Further, efforts have been made to meet with large customers who could be significantly affected by service interruptions. EL&P also strives to inform customers about outages and how long they are expected to last through the use of tools such as the City's facebook page. From time to time, EL&P also issues news releases regarding increasing pressure on the electrical system and tips for customers to reduce use. For example, the Kill-a-Watt program provides citizens with tools to reduce energy consumption such as performing their own home energy audits.

As previously described under section 2.2 Organization Structure and Staffing, Enmax Power carries out a range of services for EL&P related to meter management, load settlement and site administration. This contractual relationship is managed through a formal Service Level Agreement (SLA). Enmax Power reports on its activities, including tracking the following customer measures:

- Aged accounts receivable for all bills (\$3M in revenue per month),
- The number of meter readings complete, and
- Metrics to measure the billing performance: currency of tariff bill file, tariff bill file completeness, invalid tariff bill reject transactions, and invalid tariff bill dispute transactions.

According to information provided by Enmax, there do not appear to be any systematic or persistent customer issues. While most customers contact Enmax directly when experiencing service issues, EL&P maintains a Trouble Call Log System in the form of a spreadsheet that tracks customer calls regarding electric distribution issues and failures. This spreadsheet shows the type of call (e.g. defective equipment, interference, lightening, etc.), date of the call, location of the call, the number of customers affected, the total hours affected, action requested and action taken. EL&P believes that the length and time of outages is a good proxy measure for customer responsiveness, and information suggests that these are both typically quite short. EL&P is responsible for responding to calls regarding distribution infrastructure and has a process for managing this but response times and other metrics are not tracked.

Select metrics such as the number of customer complaints per 1,000 customers, the number of technical complaints per 1,000 customers, the average number of hours or days to respond to client or customer inquiries are not currently tracked, but the trouble call log system could provide a preliminary foundation of data to support this type of tracking going forward. Other metrics such as the cost of customer care and billing per customer, the average number of days to start and stop service, and general customer satisfaction with the services and programs provided are not tracked and could not be calculated with existing data.





The number of error-driven billing adjustments per 1,000 customers does not appear to be tracked or reported, but according to the Enmax SLA report for December 2011 the number of Invalid Tariff Bill Reject Transactions for the month was zero, which meets the defined target of zero. In the previous 19 months this number was 4 once, 2 once, 1 six times, and 0 eleven times. Further, the number of Invalid Tariff Bill Dispute Transactions for the month of December was one, which exceeded the target of zero by one. In the previous 19 months this number hit 18 once, 2 once, 1 six times, and was 0 eleven times.

### **Developer Relationships**

EL&Ps only direct customers are developers (and the City in its role as an approving authority). Developer relationships are described as being very strong in terms of responsiveness, quality and price, although EL&P is sometimes challenged to act like a private company in terms of working longer or more flexible hours to take advantage of temperate weather or to complete a project. While developers have the option to use other contractors for these services the primary choice has been EL&P. However, others have indicated that there are no other options for this service in new developments, which leads some to question whether EL&P is charging a competitive, sustainable price that is truly profitable or exceeds basic cost recovery of both direct and overhead expenses. If EL&P were charging rates reflective of true economic recovery and profit than it would be expected that competitors would enter the market, but the absence of these suggests that prices may be too low.

It should be noted that EL&P, except for its direct customers (developers), is one step removed from electricity consumers as its primary function is as a distribution wires utility. Enmax Energy handles service delivery and billing for all RRO customers while other customers are serviced and billed by their chosen private retailers. Therefore, direct customer management activities should be handled by Enmax or other retailers. However, it is recognized that in the eyes of citizens of the City of Red Deer, EL&P is responsible for “keeping the lights on”. Therefore, its customer relationship management strategy should focus on developers and on outages (reliability), as other aspects of customer relationships, such as billing and meter management, are handled by third parties.

### **Recommendations**

- 3.2.1** As part of a citizen engagement strategy, EL&P should communicate not only when outages occur and how long they are expected to last, but should also provide information about the number and length of outages (trends and comparisons to others) which are quite favourable.
- 3.2.2** EL&P should make an effort to meet with large customers to identify any strategies to minimize or mitigate disruptions.
- 3.2.3** EL&P should undertake a comprehensive cost-benefit analysis of the developer services activities that considers all direct and indirect costs associated with the activity, including opportunity costs such as staff effort directed at external projects rather than internal maintenance needs.



### **3.3 Partnerships and Stakeholder Relations**

EL&P does not have a documented stakeholder engagement strategy. Stakeholder relationships such as those with AESO, Enmax or the City water treatment plant are managed on a case-by-case and as required basis, and all stakeholders interviewed described EL&P as very professional and responsive. The utility appears to have a good understanding of the expectations of its partners and key stakeholders and understands the basis for these expectations. Further, it appears that partner and stakeholder concerns and priorities are taken into consideration during planning and execution activities carried out by EL&P.

The utility has been involved on AESO committees and benchmarking initiatives, and has a very positive relationship with Enmax (as both a vendor and a contractor). Internal to the City, EL&P and management of the water treatment plant have met on multiple occasions to discuss and formalize future contract work to be carried out by EL&P for the plant.

Metrics such as the average number of hours or days to respond to stakeholder inquiries or partner and stakeholder satisfaction with the relationship and services and programs provided or received are not currently tracked, but stakeholders do not indicate any major issues

#### **Recommendations**

**3.3.1** As the number and complexity of EL&P's stakeholders increase (with the building of transmission substations and lines and potentially more regional relationships), EL&P should consider working with Communications to develop a stakeholder engagement assessment and plan, which should be linked with the citizen engagement strategy.

### **3.4 Regional and Other Integrated Planning**

EL&P is expanding its service territory as the City grows and assumes responsibility for current Fortis Alberta territory. Preliminary contact has been made with Fortis to initiate this process, and EL&P has plans in place to manage the transition.

In general, the utility does not appear to have a documented regional or other type of integrated planning strategy or plan, nor does it appear that it is part of a larger City strategy or plan. The Transmission Master Plan addresses some aspects of regional and demand growth, including population demographics, but does not focus specifically on integrated planning with regional partners.

#### **Recommendations**

**3.4.1** EL&P should consider developing a regional expansion strategy, aligned with projected City growth, that identifies communication and stakeholder engagement strategies to facilitate this growth.



## 4 Monitoring, Measurement and Results

### 4.1 Performance Monitoring and Reporting

Neither the City nor EL&P have a formal performance management system for tracking and monitoring corporate-wide performance. There are a variety of disparate measures that are being tracked at a City level, including:

- Safety metrics such as number, type and severity of incidents;
- HR information such as employee evaluations submitted, training hours and turnover; and
- Financial information presented in quarterly reports (which includes variances as well as information on the progress of projects and outcomes).

Department Service Plans do not include measures. EL&P tracks a variety of industry standard and operational metrics, including:

- Safety incidents;
- System data (e.g. kms of wire, number of customers);
- Distribution tariffs;
- Reliability / service disruptions (as part of the Canadian Electricity Association (CEA) benchmarking);
- Customer metrics and other measures (as part of the SLA with Enmax Power); and
- Other measures calculated less regularly, such as the costs to service a residential lot.

Monthly variance reports (which are issued on a quarterly basis), are prepared and distributed by Financial Services.

To facilitate the collection and communication of complete, credible and fair information that satisfies decision making and accountability requirements, the City is in the beginning stages of developing a more formal performance management system. As a foundation for this, the Corporate Strategist and City Manager's Office is leading a project to articulate what each department does for the dollars invested. The more immediate goal is for all Service Plans to have performance measures within the next two years. The



vision is for a City-wide performance measurement framework that is both broadly applied and specific to the department, utility, or function. This is motivated by the recognition by the City and EL&P that measures are required for Council, management and operations, and are important to demonstrating value to citizens, customers and stakeholders.

This value-for-money project is expected to form a key part in developing a performance culture in the City and the utility.

### Internal Performance Tracking

EL&P tracks a number of performance and reliability measures in the Call Log Database maintained by the ITS department. Included in this database is information on:

- Number of customers served;
- Number of customers interrupted;
- The duration of customer interruptions;
- System average interruption frequency index (SAIFI);
- System average interruption duration index (SAIDI);
- Customer average interruption duration index (CAIDI); and
- Index of reliability.

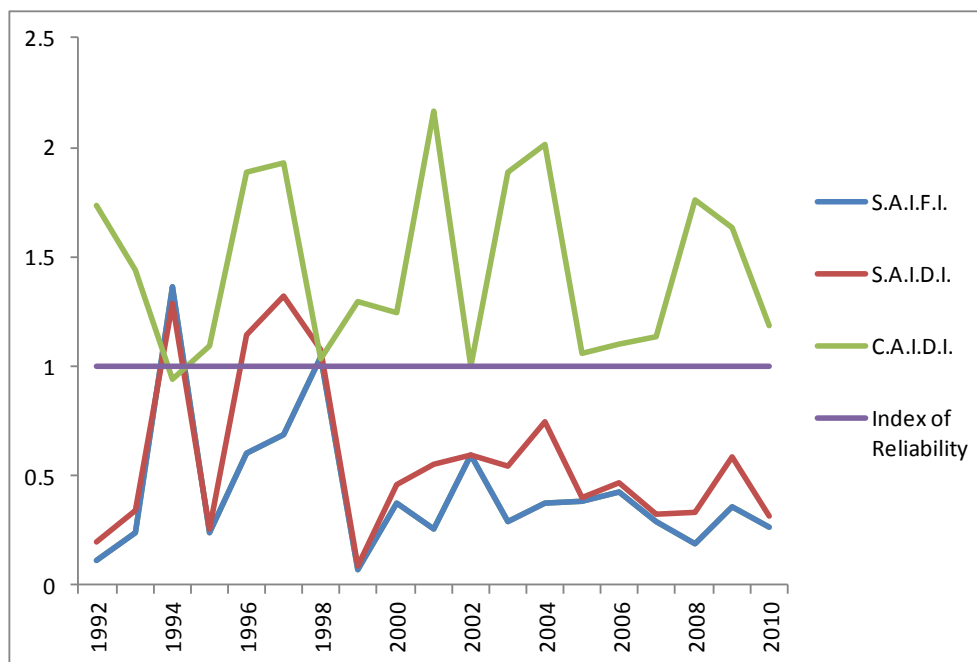
Table 29: EL&P Reliability Statistics, 1992 to June 30, 2011

Year	Customers Served	Customers Interrupted	% of Customers Interrupted	Customer Interruption Duration	S.A.I.F.I.	S.A.I.D.I.	C.A.I.D.I.	Index of Reliability
1992	24,024	2,714	11.3%	4,710	0.1130	0.1961	1.7354	0.999978
1993	24,578	5,812	23.6%	8,360	0.2365	0.3401	1.4384	0.999961
1994	24,729	33,706	136.3%	31,805	1.3630	1.2861	0.9436	0.999853
1995	25,034	5,942	23.7%	6,480	0.2374	0.2588	1.0905	0.999970
1996	25,738	15,613	60.7%	29,497	0.6066	1.1461	1.8893	0.999869
1997	26,090	17,832	68.3%	34,431	0.6835	1.3197	1.9309	0.999849
1998	26,600	27,735	104.3%	28,672	1.0427	1.0779	1.0338	0.999877
1999	27,496	1,936	7.0%	2,504	0.0704	0.0911	1.2936	0.999990
2000	28,325	10,518	37.1%	13,094	0.3713	0.4623	1.2449	0.999947
2001	28,824	7,358	25.5%	15,906	0.2553	0.5518	2.1617	0.999937
2002	30,432	18,052	59.3%	18,052	0.5932	0.5932	1.0000	0.999932
2003	31,890	9,202	28.9%	17,317	0.2886	0.5430	1.8819	0.999938
2004	32,950	12,255	37.2%	24,624	0.3719	0.7473	2.0093	0.999915
2005	34,248	12,996	37.9%	13,724	0.3795	0.4007	1.0560	0.999954
2006	35,767	15,312	42.8%	16,841	0.4281	0.4708	1.0998	0.999946
2007	37,219	10,672	28.7%	12,128	0.2867	0.3258	1.1364	0.999963
2008	38,268	7,228	18.9%	12,721	0.1889	0.3324	1.7600	0.999962
2009	39,000	13,998	35.9%	22,836	0.3589	0.5855	1.6314	0.999933
2010	39,432	10,357	26.3%	12,279	0.2627	0.3114	1.1856	0.999964
<b>AVERAGE</b>	<b>30,560</b>	<b>12,591</b>	<b>42.8%</b>	<b>17,157</b>	<b>0.4283</b>	<b>0.5811</b>	<b>1.4486</b>	<b>0.999934</b>
June 30 2011	39,600	2,657	6.7%	6392	0.0671	0.1614	2.4058	0.999982



As demonstrated in the following graph, EL&P's SAIFI, SAIDI, and CAIDI measures have fluctuated significantly during the period from 1992 to 2010, with the index of reliability remaining consistently close to one. Since 2000, fluctuation in SAIFI and SAIDI appears to have diminished while fluctuation in CAIDI remains high.

**Figure 26: EL&P Reliability Statistics, 1992 to June 30, 2011**



EL&P's SAIFI has fluctuated between a high of 1.3630 in 1994 and a low of 0.0704 in 1999, with a nineteen year average of 0.4283. Over the past three years for which full-year data is available (2008, 2009 and 2010) EL&P's SAIFI has averaged 0.2702, which is stronger than the industry average of 1.3967 over the same period.

The SAIDI for EL&P has followed a similar pattern to the SAIFI, peaking at 1.3197 in 1997 and reaching a low of 0.0911 in 1999. The nineteen year average for this index is 0.5811, with the most recent three year average of 0.4098 (compared to 1.7967 for the industry as a whole).

Statistics beginning in 1992 for the CAIDI also demonstrate ongoing fluctuation. A high of 2.1617 was reached in 2001 while the lowest recorded value for this index during the nineteen year period was 0.9436 in 1994. Between 1992 and 2010 EL&P's CAIDI averaged 1.4486, increasing to an average of 1.5256 between 2008 and 2010. This index is not as favourable compared to the industry average of 1.2900 over this three year period.

EL&P's Index of Reliability has remained consistently high and has experienced very little volatility since 1992, with the highest value of 0.999990 occurring in 1999 while the lowest was 0.999849 in 1997. The average over the three most recent full years (2008, 2009 and 2010) was 0.999953, which is more favourable than the industry average of 0.999795.





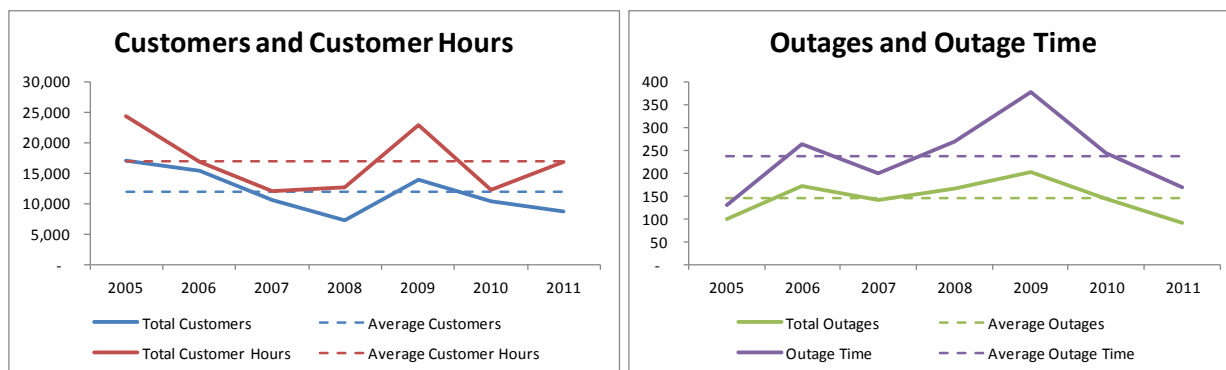
Table 30: EL&amp;P Customer and Outage Data, 2005 to 2011

EL&P also tracks outages by neighbourhood, including the number of outages, the number of customers interrupted, the number of customer hours interrupted, and the total outage time.

Year	Total Outages	Total Customers	Total Customer Hours	Outage Time
2005	99	16,945	24,310	129
2006	172	15,312	16,841	264
2007	142	10,661	12,127	198
2008	167	7,221	12,728	268
2009	203	13,998	22,837	377
2010	144	10,357	12,279	243
2011	90	8,733	16,910	170
<b>Average</b>	<b>145</b>	<b>11,890</b>	<b>16,862</b>	<b>235</b>
<b>High</b>	<b>203</b>	<b>16,945</b>	<b>24,310</b>	<b>377</b>
<b>Low</b>	<b>90</b>	<b>7,221</b>	<b>12,127</b>	<b>129</b>

These results indicate the number of residential customers and customer hours have fluctuated between 2005 and 2011, with the highest levels in 2005 and the lowest in 2007 and 2008. Despite a decrease in the number of customers in 2011, total customer hours have increased to average levels. Total outages have experienced a decrease in the past two years, as have outage times, after peaking in 2009.

Figure 27: EL&amp;P Customer and Outage Data, 2005 to 2011



The CEA conducts an annual service continuity survey and reports on distribution system performance in electrical utilities. This annual review, in which EL&P participates, gathers electric reliability statistics from a range of utilities in Canada and elsewhere, which allows participating utilities to compare to other jurisdictions. In 2010, 32 utilities participated, and the report includes the following:

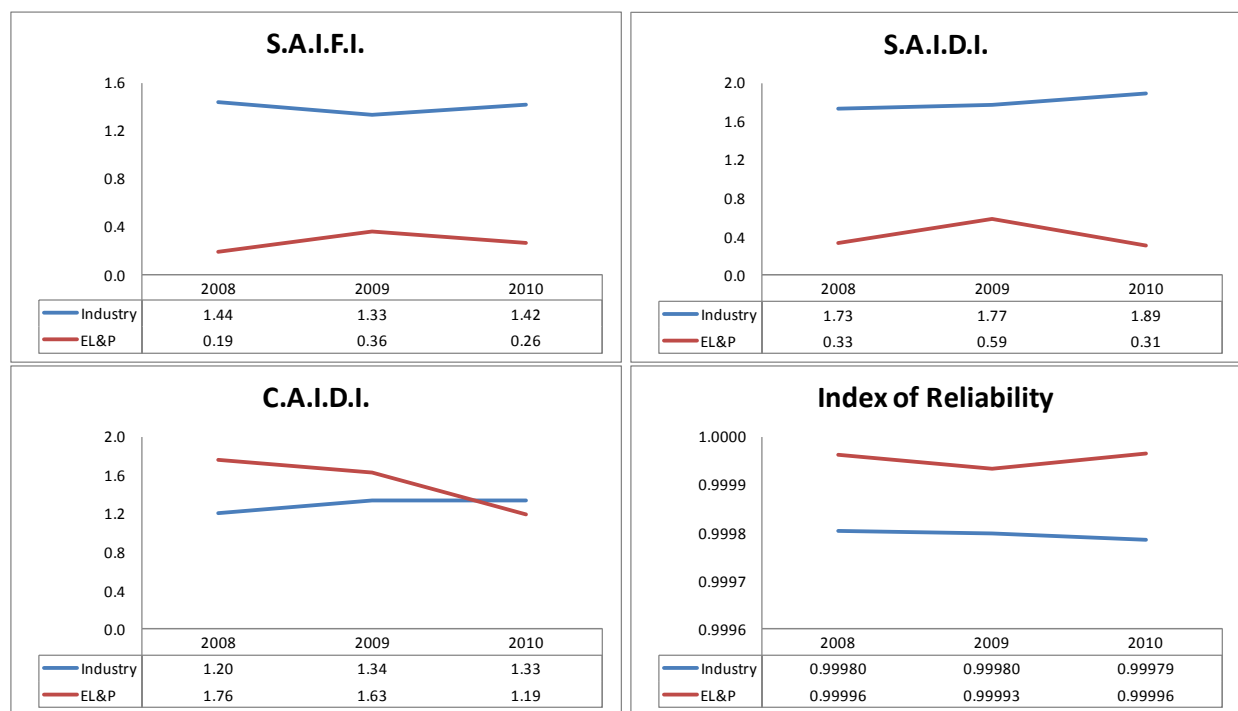
- Definitions
- Performance of the utilities overall, in aggregate
- Tabulation and analysis of service interruption data by utility
- Summary of overall results
- System causes of service outages based on customer data
- Tabulation of service interruption data by region for urban and rural utilities



According to the 2010 report, EL&P compares very well to other jurisdictions that participate in this study and is ranked first on a number of metrics. Further total outage time in 2010 was the lowest it had been in three years and total outages was the lowest in six years. Compared to other utilities, in 2010 EL&P:

- Had the least number of interruptions (SAFI);
- Had the least number of hours interrupted (SAIDI);
- Was in the middle of the pack (18<sup>th</sup> out of 32) in terms of the number of hours interrupted per interruption (CAIDI); and
- Was first on the Index of Reliability (number of customer hours when service is available).

**Figure 28: Comparative Reliability Averages for Industry and EL&P, 2008 to 2010**



It is important to note the discrepancy between EL&P's number one ranking for SAIFI, SAIDI and the Index of Reliability compared to the lower ranking for CAIDI. These results indicate that while system average interruption frequency and duration are very low and the proportion of customer hours that service is available is very high, the average duration of each interruption per customer is somewhat longer than might be expected. This is primarily influenced by the utility's lack of round-the-clock staffing, which means that outages occurring during non-business hours experience a longer response time due to delays associated with the notification and response of on-call staff.

Based on 826 km of primary distribution line in place in 2010, the number of customer interruptions per km of distribution wire was 12.54 and customer interruption duration was 14.87. Both calculations are favourable when compared with data for comparable Canadian organizations (23.90 customer interruptions per km and 49.17 customer hour interruptions per km of distribution wire). Note: data for Canadian comparators



excludes significant events experienced during 2010, including abnormally high amounts of snow or rain, heavy winds, and hurricanes, which if included would increase these values to 24.86 and 58.54, respectively.

Other benchmarking initiatives in which EL&P has participated include:

- Currently engages in benchmarking of distribution tariffs against Edmonton, Calgary, Lethbridge, Airdrie, and Grande Prairie;
- Currently participates in the CEA Annual Service Continuity Report;
- Is investigating the Ontario Municipal Benchmarking Initiative (OMBI) for best practices, including potential performance measures; and
- Previously but no longer participates in the CEA's safety survey.

## **Recommendations**

**4.1.1** Building on efforts currently underway, develop a performance management framework that can be applied to all departments, utilities and functions in the City, with both general and specific measures as well as a roll-up to department level dashboards and a City-wide dashboard.

See **Appendix M - Best Practice Guide for Developing Measures and Metrics** for recommended measures and metrics that could be used by the utility to assess whether or not it is effective.

## **4.2 Regulatory Compliance and Reporting**

EL&P is subject to oversight from a variety of regulatory and stakeholder parties, including City Council, AESO, AUB, and the Safety Codes Council. The utility appears to comply fully with all regulatory requirements, by making regulator submission (e.g. Transmission Tariff filing) and meeting regulatory requirements as set out in regulatory reports (e.g. AESO reliability standards, Safety Code QMP compliance).

AESO regulates EL&P's relatively small amount of transmission assets under section 23 of the Transmission Regulation, while the AUC regulates transmission costs. EL&P is responsible for ongoing self-monitoring and must demonstrate compliance to AESO every three years. Recent submissions indicate that EL&P does not have any suspected contraventions of AESO reliability standards.

AESO reliability standards undergo frequent changes as they are adopted directly from the North America Electric Reliability Corporation, which engages in continual review and refinement of its standards. Adaptation to these ever-evolving transmission reliability requirements has been identified as a potential challenge for the utility.

On the distribution side, the utility's regulator is City council. Therefore, any documents required by council for managing the distribution tariff and the RRO (i.e. bylaws and related documents) are part of regulatory submissions. This structure does raise one concern in that City Council as a whole may not have the best understanding of the utility and how it operates under the utility rate model.



Compliance with safety standards is monitored by the Alberta Safety Codes Council. All organizations accredited under the Safety Codes Act are required to administer their safety system in accordance with their Quality Management Plan (QMP). A recent review indicated that no major deficiencies within the scope of the utility's QMP were identified. However, three suggestions for improvement were provided:

- The utility should develop a better tracking process and summary sheet for completed jobs.
- The utility should develop a better process to ensure that all applicable incidents or accidents covered by the Safety Codes Act are reported.
- The utility should conduct an internal review each year and forward a copy to the Safety Codes Council, as per Council policy.

One area where EL&P has experienced regulatory issues is in the storage and disposal of PCB's. PCB's were stored incorrectly at a substation which resulted in some leakage and disposal issues. Environment Canada performed an investigation, including conducting tests and obtaining documentation from EL&P. The utility is well aware of this issue and is taking steps to ensure it does not happen again.

### **Recommendations**

**4.2.1** As part of the Rate Model Review Project, EL&P and City management should strive to educate Council about the utility and how it operates under the utility rate model.

### **4.3 Financial Reporting**

The City's Annual Financial Report describes how the City is organized, including the self funding utilities. It includes a report from the Director of Corporate Services, which outlines key strategies undertaken, discusses operating results, financial position, high level financial metrics, and high level risk areas, and presents detailed financial statements and notes. EL&P provides information to Financial Services, which is rolled up into this report.

Supplementing the information provided for the City's financial report is the Departmental Representation Letter, which documents what has occurred in the department or utility in the past year, in several different respects:

- Municipal accounting principles and regulatory authority
- Controls
- Fraud/illegal acts
- Contingent liabilities
- Claims
- Environmental disclosure
- Estimates
- Subsequent events
- Related party transactions
- Grant revenue



- Fixed asset registry

Financial Services and the Division Controller assist each department or utility in developing this letter. It is signed by the Department Manager and the Development Services Controller and is used to confirm compliance in all these major areas as well as to identify any major issues and indicate how they will be addressed so the City as a whole feels comfortable in signing off on its Annual Financial Report.

Based on a review of EL&P's 2011 draft letter, the utility is in compliance in all the major areas identified above. The letter also indicates that EL&P is aware of the following outstanding issues and, where possible, is working to address them:

- Recording and reporting the disposal of assets;
- A potential liability for the leakage of PCB's from a substation; and
- The potential that assets may be counted twice in the financial system.

The letter also identifies EL&P's dependence on key contractors including Enmax Power for wholesale billing, meter installation and the meter inventory management system, and Dataco for meter reading; and key customers such as Olymel, Alberta Health Services and other municipal services, which account for a large percentage of revenue.

In addition to the Annual Report, the Operating EL&P monthly report for all business units and the Capital job balance report by job type are run each month following close and are distributed around the 18<sup>th</sup> to the 20<sup>th</sup> of each month. Quarterly operating variance reports were prepared for April, June, August, October and December in 2011. In 2012 these quarterly variance reports will be prepared for June, August and December. The April, June, August and October reports are usually ready for management review 25 working days (five weeks) after the period close date. The December variance report is usually delayed due to the year-end process, and is usually ready in early April.

Year-end is generally closed in the third week of January, depending on the AP accrual. Closing year-end entries (## entries) are targeted for completion by mid- to late-February, but have extended beyond this target deadline in the past few years. Once this process is complete (early March), the auditors take three to four weeks to review the information. The audit committee meeting is scheduled for the first or second week in April so that Council can review and approve the statements before April 30 (the provincial deadline).

No issues have been identified regarding the timelines or level of detail or accuracy of the financial summaries and statements. They are seen to be accurate and provide appropriate explanations for the numbers, they facilitate a good understanding of financial matters and whether or not financial goals and objectives have been achieved, and are aligned with the overall corporate approach to financial reporting.

## **Recommendations**

- 4.3.1** The issues identified in the Representation Letter should be linked to strategies in the annual Service Plan, ERM and operational risk planning.





# Summary of Recommendations

## Strategic and Business Planning

- 1.1.1** In alignment with the City's efforts, EL&P should strive to improve its annual Service Plan by including linkages to operating and capital budgets and performance measures, which will measure progress toward the achievement of goals. However, as performance measures are driven by City Administration and are designed to be applicable to all departments, utilities and functions equally, EL&P must ensure that any performance measures presented in its Service Plan are in line with the City's direction. Further EL&P is not permitted to change the content or presentation of its Service Plan to include any additional information at this time.
- 1.1.2** With this noted, it may be of benefit to EL&P to track and benchmark electric-utility-specific metrics independently and outside the scope of the Service Plan. The establishment of a database of metrics that are informative regarding the utility's operation as a utility, rather than as a City department, will likely provide important insight into the effectiveness and efficiency of its operations within a broader context.
- 1.1.3** Clear rate-setting philosophies should be identified by Council which reconcile the often conflicting objectives of utility revenue stability and conservation pricing.

## Sustainability Planning

- 1.2.1** EL&P should explore ways to more directly link its own business planning (through its Service plan or supplementary business planning efforts) by ensuring the Service Plan references the initiatives assigned to it within the City's Environmental Master Plan.
- 1.2.2** EL&P should continue to track and report on the percentage of electricity arising from renewable energy sources that flows through its system. As additional sources are acquired (e.g. methane from the landfill, wastewater facilities, microgeneration, etc.) this will require greater focus to ensure accurate monitoring and tracking of all renewable energy inputs.

## Enterprise Risk Management

- 1.3.1** The City should develop a best practice ERM framework. Once the framework has been established, City Administration should support departments in applying this framework to develop a risk plan



and mitigation strategies, including linking the mitigation strategies back to operating and capital budgets when required.

### **Revenue and Rate Approach**

- 1.4.1** EL&P should continue to play an active role in the Rate Model Review and ultimately implement the resulting fiscal policies and rate model, providing a solid foundation for the financial management of the utility moving forward.

### **Budgeting and Capital Planning**

- 1.5.1** Future fiscal policy needs to address how to appropriately fund forecasted capital funding requirements through the appropriate use of utility debt and reserves.
- 1.5.2** Based on projected growth, additional staff resources will likely be required to implement future capital plans and contingencies for this should be built into subsequent operating budgets.
- 1.5.3** The budgeting process should emphasize consideration of previous years' actual revenues and expenditures rather than focusing on budgeted numbers.

### **Organization Structure and Staffing**

- 2.2.1** Consideration should be given to realigning the reporting relationship of the utility Accountant from the Utility Specialist to the Manager. Further, it is recommended that this position assume a larger role in the budgeting and financial management activities carried out in the utility.
- 2.2.2** Responsibility for general office management and supervision of general administration staff would be more appropriately assigned to the utility Manager. This would have the added benefit of enabling the Utility Specialist to focus more time and energy on the rate model and regulatory duties.
- 2.2.3** The City should establish internal Service Level Agreements (SLAs) between the Corporate Services functions and the departments to which they provide services, including EL&P. In the absence of formal SLA's, metrics such as target service delivery times and quality (where measurable) should be established, monitored and tracked over time to ensure services are being delivered in an effective and efficient manner. This will facilitate the identification of opportunities for improvement as well as highlighting areas where success has been achieved.
- 2.2.4** In conjunction with corporate procurement, EL&P should review its tendering and contract management practices to ensure that a consistent process is being followed and contracts are structured to maximize contractor performance.
- 2.2.5** The decision to house the new Safety Coordinator in EL&P means that this position will likely be available to provide additional support to EL&P's General Foremen. The City and Council should also consider EL&P's request to hire a lead for the Market Support section.



### **Employee Management**

- 2.3.1** EL&P should further review workflow and overtime worked to determine trends in workloads and to identify current and future pressure points, and should take immediate steps to assess the workloads of the two General Foremen and address any capacity issues as necessary.
- 2.3.2** EL&P, in conjunction with HR, should ensure that all job descriptions are updated and that as many positions as possible are transitioned to using the design ladder approach.
- 2.3.3** EL&P should identify training goals and standards. Greater emphasis should be placed on ensuring staff engage in safety and skills development specific to their role and management should commit to ensuring that adequate time is made available for employees to participate in this training.
- 2.3.4** The Manager of EL&P should ensure that all supervisors of employees are carrying out (at a minimum) annual face-to-face employee evaluations using the City's process and templates and should make it mandatory that these evaluations are provided to the Manager as well as being provided to HR for inclusion in the employee's file.
- 2.3.5** Compensation benchmarks for similar roles across the province appear to indicate that EL&P has established a fair and appropriate level of compensation for its employees. It is recommended that the utility and HR continue to review municipal and industry benchmarks, particularly if hiring becomes increasingly challenging, to ensure it remains competitive and is able to hire and retain qualified staff. This is especially critical given the challenges the utility faces regarding aging staff, succession planning and smooth knowledge transitioning.
- 2.3.6** EL&P should immediately begin work to implement a succession plan to address upcoming retirements within the utility workforce. If economic conditions and high demand for engineers result in an inability to find suitable candidates outside the organization, it may become necessary to rapidly accelerate training and development for current EL&P personnel to bring promising junior staff to a level where they can begin taking on more senior responsibilities. This may involve the development of a formal talent management program that facilitates this process and provides a clear development plan for individual employees. Another option for grooming potential senior staff is to create additional supervisory positions by sharing the duties of existing positions. This would allow more junior staff to take on some additional responsibility while reducing the burden on more senior personnel, which could be particularly beneficial in the case of the General Foremen.
- 2.3.7** In the short term EL&P requires an immediate "disaster plan" to ensure business continuity in the event that one or several key resources leaves on short notice or becomes suddenly unavailable. To manage an immediate crisis, EL&P should immediately identify any current employees that may be able to step into key roles on short notice as a stopgap measure until a permanent replacement can be found. Internally, EL&P can begin to address this eventuality by ensuring that senior personnel are passing on knowledge and information with their staff so there is a shared understanding of various functions and duties. This should result in the availability of multiple staff members who are capable



of carrying out critical functions in the short term. This may require the identification of these critical functions so training can be appropriately prioritized. Delegation of individual tasks and duties rather than entire roles will allow the primary functions of the job to be more quickly disseminated without relying on a single employee to take over the complete portfolio, thus diminishing the impact of staff attrition and enhancing knowledge capture and transfer.

### **Working Environment**

- 2.4.1** Continue with efforts to emphasize the safe and efficient completion of work through continuation of monthly safety meetings and ongoing training. This is an area where the “tone at the top” is critical, as staff must not feel they will be chastised or punished for taking longer than usual (within reason) to ensure work is conducted safely.

### **Operations and Maintenance Planning and Execution**

- 2.5.1** EL&P should develop an operations and maintenance planning approach that is linked to an asset management system. This system should identify activities to be completed monthly and yearly, which should then be implemented through the work order process.
- 2.5.2** EL&P should identify and document a best practice approach to project management, which puts in place protocols and templates to be followed for every project (this does not have to be overly complex but should standardize and improve the undocumented approach already being used successfully by the General Foremen).

### **Financial Management and Rate Model**

- 2.6.1** Acceptance of a revised Utility Fiscal Policy will provide the utility with the needed direction for effective financial management and rate setting.
- 2.6.2** The City should continue to allow EL&P to build reserves without capping the amount held in reserves or requiring that the utility pay a special dividend to the City. The use of debt in purchasing capital infrastructure is not an uncommon practice for similar organizations, but long term planning should aim to use a mixture of reserves and debt to fund capital maintenance, replacement and expansion.



### **Infrastructure and Asset Management**

- 2.7.1** Introduce new asset tracking metrics such as the percentage of critical assets that require immediate refurbishment or replacement to gain a better understanding of asset condition and priority maintenance activities.
- 2.7.2** Continue with current initiatives to apply the asset management plan and address identified asset management concerns.

### **Operating Risk and Business Continuity**

- 2.8.1** Corporate Services, in conjunction with EL&P and within the broader ERM approach currently being developed by the City, should develop business continuity plans for a wider range of scenarios and identify mitigation strategies that can be implemented in the short term to support these plans.
- 2.8.2** EL&P should review all activities and functions to determine if there are other emergency scenarios for which key risks can be identified and mitigation activities can be implemented.

### **Citizen Engagement**

- 3.1.1** EL&P should work with Communications to develop a citizen engagement strategy to inform potentially affected citizens about the new substations and lines and to listen to and address their concerns where possible.

### **Customer Relationship Management**

- 3.2.1** As part of a citizen engagement strategy, EL&P should communicate not only when outages occur and how long they are expected to last, but should also provide information about the number and length of outages (trends and comparisons to others) which are quite favourable.
- 3.2.2** EL&P should make an effort to meet with large customers to identify any strategies to minimize or mitigate disruptions.
- 3.2.3** EL&P should undertake a comprehensive cost-benefit analysis of the developer services activities that considers all direct and indirect costs associated with the activity, including opportunity costs such as staff effort directed at external projects rather than internal maintenance needs.

### **Partnerships and Stakeholder Relations**

- 3.3.1** As the number and complexity of EL&P's stakeholders increase (with the building of transmission substations and lines and potentially more regional relationships), EL&P should consider working with Communications to develop a stakeholder engagement assessment and plan, which should be linked with the citizen engagement strategy.





**Regional and Other Integrated Planning**

**3.4.1** EL&P should consider developing a regional expansion strategy, aligned with projected City growth, that identifies communication and stakeholder engagement strategies to facilitate this growth.

**Performance Monitoring and Reporting**

**4.1.1** Building on efforts currently underway, develop a performance management framework that can be applied to all departments, utilities and functions in the City, with both general and specific measures as well as a roll-up to department level dashboards and a City-wide dashboard.

**Regulatory Compliance and Reporting**

**4.2.1** As part of the Rate Model Review Project, EL&P and City management should strive to educate Council about the utility and how it operates under the utility rate model.

**Financial Reporting**

**4.3.1** The issues identified in the Representation Letter should be linked to strategies in the annual Service Plan, ERM and operational risk planning.

**Recommendations Summary Table**

The following table presents a summary of the above recommendations and is intended to be read in conjunction with the preceding report. This table rates the relative priority and complexity of each recommendation as follows:

*Priority:* A relative indicator using a scale of high, medium and low. Interpretation of this scale should be taken in the context that all recommendations are considered to be important, with some prioritized over others.

*Complexity:* A relative indicator using a scale of high, medium and low. Determination of this scale is based on an assessment of the amount of change necessary, requirement for consultation with internal and external stakeholders, and the amount of new learning or knowledge needed for the action to be implemented.

Business Sphere	Business Attribute	#	Recommendation	Relative Priority	Relative Complexity
Management and Execution	Financial Management and Rate Model	2.6.1	Acceptance of a revised Utility Fiscal Policy will provide the utility with the needed direction for effective financial management and rate setting.	High	Low
Management and Execution	Financial Management and Rate Model	2.6.2	The City should continue to allow EL&P to build reserves without capping the amount held in reserves or requiring that the utility pay a special dividend to the City.	High	Low
Strategic Design and Alignment	Strategic and Business Planning	1.1.1	In alignment with the City's efforts, EL&P should work with City Administration to improve its annual Service Plan by including linkages to operating and capital budgets and performance measures.	High	Medium
Strategic Design and Alignment	Strategic and Business Planning	1.1.2	EL&P should track and benchmark electric-utility-specific metrics independently and outside the scope of the Service Plan.	High	Medium
Strategic Design and Alignment	Enterprise Risk Management	1.3.1	The City should develop a best practice Enterprise Risk Management (ERM) framework and support departments in its application.	High	Medium
Strategic Design and Alignment	Revenue and Rate Approach	1.4.1	EL&P should continue to play an active role in the Rate Model Review and ultimately implement the resulting fiscal policies and rate model.	High	Medium
Management and Execution	Operations and Maintenance Planning and Execution	2.5.1	EL&P should develop an operations and maintenance planning approach that is linked to an asset management system.	High	Medium
Management and Execution	Operations and Maintenance Planning and Execution	2.5.2	EL&P should identify and document a best practice approach to project management, which puts in place protocols and templates to be followed for every project.	High	Medium
Management and Execution	Infrastructure and Asset Management	2.7.2	Continue with current initiatives to apply the asset management plan and address identified asset management concerns.	High	Medium
Monitoring, Measurement and Results	Regulatory Compliance and Reporting	4.2.1	EL&P and City management should strive to educate Council about the utility and how it operates under the utility rate model.	High	Medium

Business Sphere	Business Attribute	#	Recommendation	Relative Priority	Relative Complexity
Strategic Design and Alignment	Strategic and Business Planning	1.1.3	Clear rate-setting philosophies should be identified by Council which reconcile the often conflicting objectives of utility revenue stability and conservation pricing.	High	High
Strategic Design and Alignment	Budgeting and Capital Planning	1.5.1	Future fiscal policy needs to address how to appropriately fund forecasted capital funding requirements through the appropriate use of utility debt and reserves.	High	High
Monitoring, Measurement and Results	Performance Monitoring and Reporting	4.1.1	The City should develop a performance management framework that can be applied to all departments, utilities and functions in the City, with both general and specific measures as well as a roll-up to department level dashboards and a City-wide dashboard.	High	High
Strategic Design and Alignment	Sustainability Planning	1.2.1	EL&P should explore ways to more directly link its own business planning to the City's Environmental Master Plan.	Medium	Low
Strategic Design and Alignment	Budgeting and Capital Planning	1.5.3	The budgeting process should emphasize consideration of previous years' actual revenues and expenditures rather than focusing on budgeted numbers.	Medium	Low
Management and Execution	Organization Structure and Staffing	2.2.5	The City and Council should consider EL&P's request to hire a Safety Coordinator and a lead for the Market Support section.	Medium	Low
Management and Execution	Employee Management	2.3.4	All supervisors of employees should be carrying out (at a minimum) annual face-to-face employee evaluations using the City's process and templates.	Medium	Low
Management and Execution	Employee Management	2.3.5	The utility and HR should continue to review municipal and industry compensation benchmarks to ensure it remains competitive on this front.	Medium	Low
Management and Execution	Employee Management	2.3.7	EL&P should develop a "disaster plan" to ensure business continuity in the event that one or several key resources leaves on short notice or becomes suddenly unavailable.	Medium	Low
Management and Execution	Working Environment	2.4.1	Continue with City-wide efforts to emphasize the safe and efficient completion of work.	Medium	Low
Customer, Citizen and Stakeholder Engagement	Citizen Engagement	3.1.1	EL&P should work with Communications to develop a citizen engagement strategy to inform potentially affected citizens about the new substations and lines.	Medium	Low

Business Sphere	Business Attribute	#	Recommendation	Relative Priority	Relative Complexity
Customer, Citizen and Stakeholder Engagement	Customer Relationship Management	3.2.1	As part of a citizen engagement strategy, EL&P should communicate not only when outages occur and how long they are expected to last, but should also provide information about the number and length of outages (trends and comparisons to others) which are quite favourable.	Medium	Low
Strategic Design and Alignment	Sustainability Planning	1.2.2	EL&P should continue to track and report on the percentage of electricity arising from renewable energy sources that flows through its system.	Medium	Medium
Management and Execution	Organization Structure and Staffing	2.2.1	The utility accountant position should assume a larger role in the budgeting and financial management activities carried out in the utility.	Medium	Medium
Management and Execution	Organization Structure and Staffing	2.2.3	The City should establish internal Service Level Agreements (SLAs) between the Corporate Services functions and the departments to which they provide services, including EL&P. In the absence of formal SLA's, metrics such as target service delivery times and quality (where measurable) should be established, monitored and tracked over time to ensure services are being delivered in an effective and efficient manner.	Medium	Medium
Management and Execution	Employee Management	2.3.1	EL&P should further review workflow and overtime worked to determine trends in workloads and to identify current and future pressure points, and should take immediate steps to assess the workloads of the two General Foremen and address any capacity issues as necessary.	Medium	Medium
Management and Execution	Employee Management	2.3.6	EL&P should immediately begin work to implement a succession plan to address upcoming retirements within the utility workforce.	Medium	Medium
Management and Execution	Infrastructure and Asset Management	2.7.1	Introduce new asset tracking metrics to gain a better understanding of asset condition and priority maintenance activities.	Medium	Medium
Management and Execution	Operating Risk and Business Continuity	2.8.1	Corporate Services, in conjunction with EL&P and within the broader ERM approach currently being developed by the City, should develop business continuity plans for a wider range of scenarios and identify mitigation strategies that can be implemented in the short term to support these plans.	Medium	Medium

Business Sphere	Business Attribute	#	Recommendation	Relative Priority	Relative Complexity
Monitoring, Measurement and Results	Financial Reporting	4.3.1	The issues identified in the Representation Letter should be linked to strategies in the annual Service Plan, ERM and operational risk planning.	Medium	Medium
Customer, Citizen and Stakeholder Engagement	Customer Relationship Management	3.2.3	EL&P should undertake a comprehensive cost-benefit analysis of the developer services activities that considers all direct and indirect costs associated with the activity, including opportunity costs such as staff effort directed at external projects rather than internal maintenance needs.	Medium	High
Strategic Design and Alignment	Budgeting and Capital Planning	1.5.2	Based on projected growth, contingencies for additional staff resources should be built into subsequent operating budgets.	Low	Low
Management and Execution	Organization Structure and Staffing	2.2.2	Responsibility for general office management and supervision of general administration staff would be more appropriately assigned to the utility Manager.	Low	Low
Management and Execution	Organization Structure and Staffing	2.2.4	In conjunction with corporate procurement, EL&P should review its tendering and contract management practices to ensure that a consistent process is being followed and contracts are structured to maximize contractor performance.	Low	Low
Customer, Citizen and Stakeholder Engagement	Customer Relationship Management	3.2.2	EL&P should make an effort to meet with large customers to identify any strategies to minimize or mitigate disruptions.	Low	Low
Customer, Citizen and Stakeholder Engagement	Partnership and Stakeholder Relations	3.3.1	EL&P should consider working with Communications to develop a stakeholder engagement assessment and plan, which should be linked with the citizen engagement strategy.	Low	Low
Management and Execution	Employee Management	2.3.2	EL&P, in conjunction with HR, should ensure that all job descriptions are updated and that as many positions as possible are transitioned to using the design ladder approach.	Low	Medium
Management and Execution	Employee Management	2.3.3	EL&P should identify training goals and standards and management should commit to ensuring that adequate time is made available for employees to participate in this training.	Low	Medium



Business Sphere	Business Attribute	#	Recommendation	Relative Priority	Relative Complexity
Management and Execution	Operating Risk and Business Continuity	2.8.2	EL&P should review all activities and functions to determine if there are other emergency scenarios for which key risks can be identified and mitigation activities can be implemented.	Low	Medium
Customer, Citizen and Stakeholder Engagement	Regional and Other Integrated Planning	3.4.1	EL&P should consider developing a regional expansion strategy, aligned with projected City growth, that identifies communication and stakeholder engagement strategies to facilitate this growth.	Low	Medium



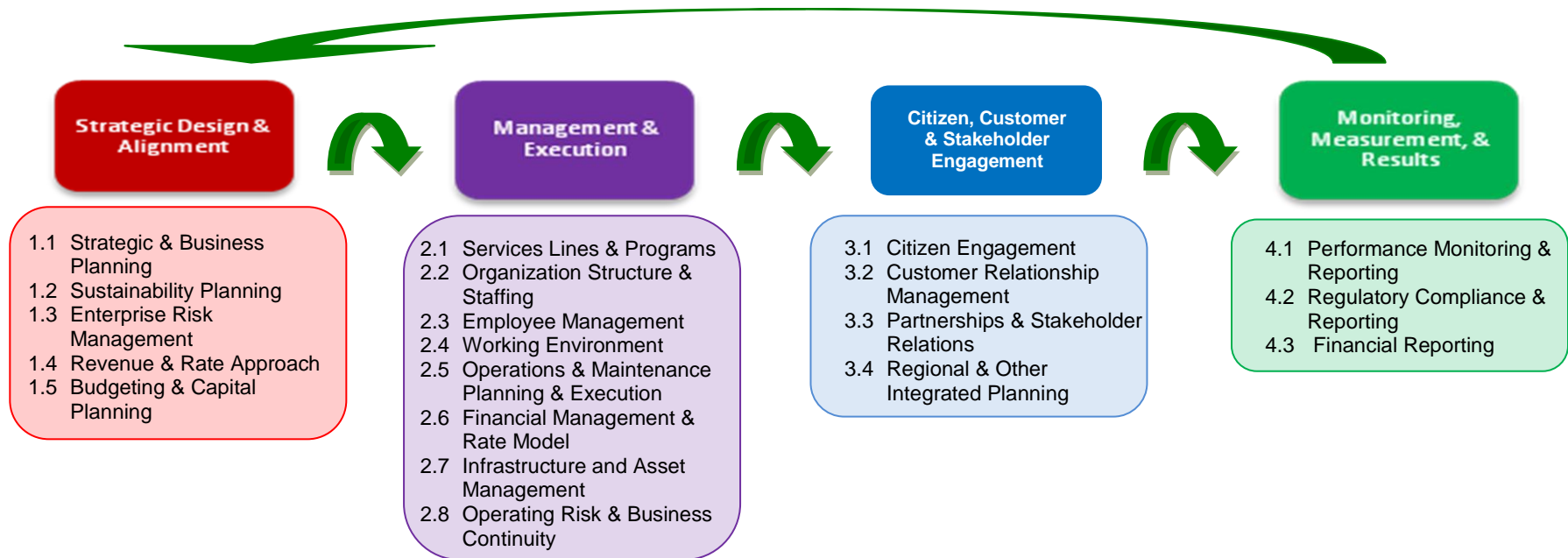
## Appendices



## **Appendix A**

### **Evaluation Framework – Overview**

## Appendix A - Evaluation Framework – Overview



Business Sphere	Business Attribute	Best Practice Assessment			Criteria (Diagnostic Questions)	
		Management Practice	Documents	Measures/Metrics	General	Department/Utility/Function Specific
<i>Which business sphere is being evaluated?</i>	<i>Which business attribute is being evaluated?</i>	<i>What best practice management practices are typically seen when managing this business attribute?</i>	<i>What best practice documents are typically used when managing this business attribute?</i>	<i>What best practice measures/metrics are typically used to assess the effectiveness and efficiency (VFM) of this business attribute?</i>	<i>What questions relevant to overall management need to be answered about this business attribute in order to evaluate it?</i>	<i>What questions specific to this department / utility/function need to be answered about this business attribute in order to evaluate it?</i>
i.e. Strategic Design and Alignment	i.e. Working Environment	<ul style="list-style-type: none"> <li>Assessed via interviews and documents</li> </ul>	<ul style="list-style-type: none"> <li>Assessed to provide evidence of management practice and measures/metrics</li> </ul>	<ul style="list-style-type: none"> <li>Assessed via documents and benchmarking</li> </ul>	<ul style="list-style-type: none"> <li>Developed based on management practice, documents, measures/metrics</li> </ul>	<ul style="list-style-type: none"> <li>Developed based on management practice, documents, measures/metrics</li> </ul>



## **Appendix B**

### **Evaluation Framework – Best Practice Assessment Guide**



## Appendix B - Evaluation Framework – Best Practice Assessment Guide

Business Sphere	Business Attribute	Best Practice Assessment		
		Management Practice	Documents	Measures/Metrics
<i>Which business sphere is being evaluated?</i>	<i>Which business attribute is being evaluated?</i>	<i>What best practice management practices are typically seen when managing this business attribute?</i>	<i>What best practice documents are typically used when managing this business attribute?</i>	<i>What best practice measures/metrics are typically used to assess the effectiveness and efficiency (VFM) of this business attribute?</i>
1. Strategic Design and Alignment	1.1. Strategic and Business Planning	<ul style="list-style-type: none"> <li>• Strategic and/or business plans are developed and implemented, which include the organization's vision, mission, goals, strategies and activities.</li> <li>• The planning process follows a recognized methodology and includes all required parties.</li> <li>• Plans address important issues and trends in the organization's strategic environment and provide clear direction and priorities.</li> <li>• Plans are communicated and understood by management and staff.</li> <li>• Plans are linked to operating and capital budgets so they have the resources to be implemented.</li> <li>• When required, the organization's plans are aligned with a broader corporate process for strategic and/or business planning.</li> <li>• Plans enable the organization to adapt and respond successfully to changing needs and circumstances.</li> <li>• Other similar strategic and/or business planning processes are undertaken as required, i.e. service plans, master plans, development plans.</li> </ul>	<ul style="list-style-type: none"> <li>• Strategic plans or frameworks</li> <li>• Guidance documents</li> <li>• Business plans</li> <li>• Service plans</li> <li>• Master plans</li> <li>• Development plans</li> </ul>	<ul style="list-style-type: none"> <li>• Existence of a strategic plan that uses a recognized methodology (Yes/No)</li> <li>• Existence of a business plan that uses a recognized methodology (Yes/No)</li> <li>• Successful completion of identified strategies and initiatives (Yes/No)</li> </ul>

Business Sphere	Business Attribute	Best Practice Assessment		
		Management Practice	Documents	Measures/Metrics
	1.2. Sustainability Planning	<ul style="list-style-type: none"> <li>• Sustainability plans are developed and implemented, which include the organization's vision, mission, goals, strategies and activities.</li> <li>• The planning process follows a recognized methodology and includes all required parties.</li> <li>• Plans provide clear direction and priorities.</li> <li>• Plans are communicated and understood by management and staff.</li> <li>• Plans are linked to operating and capital budgets so they have the resources to be implemented.</li> <li>• Plans explain secondary impacts and include strategies to monitor and address them.</li> <li>• When required, the organization's plans are aligned with a broader corporate direction such as the Triple Bottom Line, Five Pillars, an Environmental Master Plan.</li> </ul>	<ul style="list-style-type: none"> <li>• Sustainability plans</li> <li>• Environmental plans</li> <li>• Guidance documents</li> <li>• News releases, brochures, web sites, etc. that describe sustainability initiatives</li> </ul>	<ul style="list-style-type: none"> <li>• Existence of a sustainability plan that uses a recognized methodology (Yes/No)</li> <li>• The organization has explored sustainable or green approaches to its infrastructure, services and programs (Yes/No)</li> </ul> <p><i>Electric Utility</i></p> <ul style="list-style-type: none"> <li>• Percentage of electricity that is sourced through renewable energy sources</li> </ul>
	1.3. Enterprise Risk Management	<ul style="list-style-type: none"> <li>• An approach to enterprise risk management is developed and implemented, which facilitates risk identification into planning.</li> <li>• This approach follows a recognized methodology and includes all required parties.</li> <li>• This approach provides clear direction and priorities.</li> <li>• This approach is communicated and understood by management and staff.</li> <li>• This approach evaluates both the potential likelihood and impact of risks.</li> <li>• Mitigation strategies have been developed and implemented.</li> <li>• Mitigation strategies are linked to operating and capital budgets so they have the resources to be implemented.</li> </ul>	<ul style="list-style-type: none"> <li>• Strategic plans or business plans (risk component)</li> <li>• ERM guidance documents</li> <li>• ERM plans</li> </ul>	<ul style="list-style-type: none"> <li>• Existence of an enterprise risk management approach that uses a recognized methodology (Yes/No)</li> <li>• Existence of mitigation strategies and evidence of implementation (Yes/No)</li> </ul>

Business Sphere	Business Attribute	Best Practice Assessment		
		Management Practice	Documents	Measures/Metrics
		<ul style="list-style-type: none"> <li>When required, the organization's enterprise risk management approach is aligned with a broader corporate process.</li> </ul>		
	1.4. Revenue and Rate Approach	<ul style="list-style-type: none"> <li>Rates and fees are developed according to a recognized methodology.</li> <li>Rates and fees are fair and equitable given the characteristics of different client and customer groups.</li> <li>The design of rates and fees reflects the organization's other desired outcomes.</li> <li>The setting of rates and fees reflects a strong understanding between costs and the services and programs delivered.</li> <li>When required, the revenue and rate approach of the organization is aligned with the overall corporate approach.</li> </ul> <p><i>Electric Utility</i></p> <ul style="list-style-type: none"> <li>The philosophy behind rate design is clear and understood.</li> <li>Rate design facilitates this philosophy (i.e. rates are equitable given different customer classes and they support desired outcomes such as energy conservation).</li> <li>A recognized methodology is used when developing rates.</li> <li>The rate setting approach reflects a strong understanding of the relationship between utility costs and utility services provided.</li> <li>The calculation of the annual revenue requirement includes all relevant requirements such as reserves and dividends.</li> </ul>	<ul style="list-style-type: none"> <li>Revenue policies</li> <li>Rate model overview</li> <li>Rate model policies</li> <li>Fees and charges summary</li> </ul>	<ul style="list-style-type: none"> <li>Existence of a revenue or rate model (Yes/No)</li> </ul>

Business Sphere	Business Attribute	Best Practice Assessment		
		Management Practice	Documents	Measures/Metrics
	1.5. Budgeting and Capital Planning	<ul style="list-style-type: none"> <li>• Budgets and capital plans are developed and implemented, which include all required data and information.</li> <li>• The budgeting and capital planning process follows a recognized methodology and includes all required parties.</li> <li>• The organization's budgeting and capital planning is aligned with the overall corporate process for budgeting and capital planning.</li> <li>• Operating and capital budgets provide clear and appropriate direction.</li> <li>• There are appropriate levels of both oversight and delegation of authority, so the budgets are both accountable and reflective of business unit requirements.</li> <li>• Operating and capital budgets are linked to or integrated with strategic, business, capital and/or other plans.</li> <li>• Operating and capital budgets are communicated and understood by management and staff.</li> <li>• The systems used to develop and manage the operating and capital budgets are accurate and user friendly.</li> <li>• There is a long term capital plan, which sets out priorities for the next ten years or longer.</li> <li>• The process for developing the long term capital plan follows a recognized methodology and includes all required parties.</li> <li>• The capital plan includes an effective prioritization process.</li> <li>• The capital plan provides clear and appropriate</li> </ul>	<ul style="list-style-type: none"> <li>• Most recent operating budget (summary and detail)</li> <li>• Most recent capital budget (summary and detail)</li> <li>• Summary of operating budgets and actuals for past 5 to 10 years</li> <li>• Summary of capital budgets and actuals for past 5 to 10 years</li> <li>• Capital plan and related summary documents</li> <li>• Budget submission documents</li> <li>• Budget analysis and prioritization templates and results</li> <li>• Analysis of revenues or cost drivers</li> <li>• Capital and operating reserves and projections</li> </ul>	<ul style="list-style-type: none"> <li>• Existence of operating and capital budgets and a long term capital plan that uses a recognized methodology (Yes/No)</li> <li>• Operating and capital budgets are linked to or integrated with strategic, business, capital and other plans (Yes/No)</li> <li>• Actual capital expenditures as a percentage of budgeted capital expenditures</li> <li>• Existence of a rate stabilization reserve (Yes/No)</li> <li>• Reserve allocation as a percentage of total revenue</li> </ul>

Business Sphere	Business Attribute	Best Practice Assessment		
		Management Practice	Documents	Measures/Metrics
		<p>direction.</p> <ul style="list-style-type: none"> <li>The organization has achieved an appropriate balance between how money is spent, i.e. operations vs capital, overhead vs. operations and maintenance, capacity utilization of major resources, etc.</li> </ul>		
2. Management and Execution	2.1. Service Lines and Programs	<ul style="list-style-type: none"> <li>All services and programs operate within an approved mandate.</li> <li>All services and programs are relevant to achieving the organization's goals and objectives.</li> <li>The rationale, goals and objectives of various services and programs are known.</li> <li>Service line and program goals and priorities provide clear and appropriate direction.</li> <li>Core service delivery priorities have been formalized.</li> <li>Goals and priorities are communicated and understood by management and staff.</li> <li>Goals and priorities are measurable and have been evaluated.</li> <li>The potential for discontinuing, changing, evolving or starting various services lines and programs is considered regularly.</li> </ul> <p><i>Electric Utility</i></p> <ul style="list-style-type: none"> <li>The utility evaluates the option of providing other utility services, i.e. becoming more vertically integrated by in-sourcing currently out-sourced activities or vice-versa</li> <li>The utility evaluates its service area to determine if contraction or expansion would be beneficial.</li> <li>The utility has explored new and innovative way, i.e. smart metering, to improve efficient use of</li> </ul>	<ul style="list-style-type: none"> <li>Service line and program descriptions (paper or web)</li> <li>Summary of key service delivery infrastructure</li> <li>Summary of customer or client numbers and segmentation</li> <li>Service level summaries or agreements</li> <li>Evaluations of services and programs</li> </ul>	<ul style="list-style-type: none"> <li>Existence of service line and program descriptions and core service delivery priorities (Yes/No)</li> <li>The organization has explored sustainable or green approaches to its infrastructure, services and programs (Yes/No)</li> </ul> <p><i>Electric Utility</i></p> <ul style="list-style-type: none"> <li>Number of km of distribution wire</li> <li>Customers per km of distribution wire</li> </ul>



Business Sphere	Business Attribute	Best Practice Assessment		
		Management Practice	Documents	Measures/Metrics
		<p>infrastructure, load management and the customer experience.</p> <ul style="list-style-type: none"> <li>The utility evaluates the contract services it provides, to determine if they are being provided effectively and efficiently and meeting customer needs.</li> </ul>		
	2.2. Organization Structure and Staffing	<ul style="list-style-type: none"> <li>The organization has up-to-date, accurate and sufficiently detailed organizational charts.</li> <li>The organization's design is appropriate for achieving its goals and objectives.</li> <li>The organization's design allows for appropriate levels of oversight and delegation.</li> <li>The decision making process is clear and effective.</li> <li>Corporate functions (i.e. HR, IT, finance, procurement, billing, records management and privacy and freedom of information, etc.) are delivered or provided effectively and efficiently.</li> <li>The methods of delivering services and programs (i.e. out-sourcing vs in-sourcing, partnering) are effective and efficient.</li> </ul>	<ul style="list-style-type: none"> <li>Current organization charts</li> <li>Descriptions of unit and sub-unit functions</li> <li>Organizational reviews or plans</li> <li>Policies for corporate services</li> <li>Corporate cost allocations</li> <li>internal service level agreements</li> <li>List of contractors and their functions</li> <li>External service level agreements?</li> </ul>	<ul style="list-style-type: none"> <li>Existence of organizational charts (Yes/No)</li> <li>Existence of policies for corporate services (Yes/No)</li> <li>Existence of internal service level agreements (Yes/No)</li> <li>Existence of service level agreements with contractors (Yes/No)</li> <li>Management to staff ratio</li> <li>Cost of various corporate services, i.e. HR, IT, finance, procurement, billing, records management and privacy and freedom of information, etc as a percentage of overall costs</li> <li>Cost of various corporate services, i.e. HR, IT, finance, procurement, billing, records management and privacy and freedom of information, etc per employee</li> <li>Percentage of IT incidents resolved within agreed service levels</li> <li>Internal service level</li> </ul>

Business Sphere	Business Attribute	Best Practice Assessment		
		Management Practice	Documents	Measures/Metrics
				agreement measures <ul style="list-style-type: none"> <li>External service level agreement measures</li> </ul>
	2.3. Employee Management	<ul style="list-style-type: none"> <li>Current staffing levels are known by type (full time, part time, temporary, seasonal) and function.</li> <li>Staffing levels and breakdowns by level and function are appropriate for achieving the organization's goals in an effective and efficient manner.</li> <li>The workloads of various staff are appropriate for achieving timelines and quality, and are sustainable in the long term.</li> <li>The organization has all the staff it needs in the right jobs to be efficient and effective.</li> <li>Job descriptions exist, which are up-to-date and accurate.</li> <li>Staff know what is expected from them at work.</li> <li>The recruitment process is effective by providing needed, qualified staff in a timely and efficient manner.</li> <li>Staff receive appropriate feedback and are recognized for their efforts</li> <li>There is a standard performance evaluation framework that is followed and effective.</li> <li>Compensation is fair and in line with relevant comparators.</li> <li>Staff have all the required education/training for their jobs</li> <li>Staff have opportunities for training and learning that supports their development and effectiveness.</li> <li>The organization has a succession strategy that is clear and effective</li> </ul>	<ul style="list-style-type: none"> <li>Summary document describing number of employees by type and function</li> <li>Summary documents showing hours worked, both standard and overtime</li> <li>Summary documents describing employing age by type, level and function</li> <li>Job postings</li> <li>Job descriptions</li> <li>Compensation schemes</li> <li>Compensation reviews or analysis</li> <li>Professional development and training policies</li> <li>Summary of professional development or training hours</li> <li>Summary of the employee evaluation process</li> <li>Employee evaluation template</li> <li>Succession plans</li> </ul>	<ul style="list-style-type: none"> <li>Existence of current staffing levels by type and function (Yes/No)</li> <li>Clients or customers per employee</li> <li>Staff cost as a percentage of total cost</li> <li>Overtime hours worked as a percentage of total hours worked</li> <li>Number of hours on-call as a percentage of total hours worked</li> <li>Average number of response capable back-up staff for critical operations and maintenance functions</li> <li>Existence of job descriptions for each employee (Yes/No)</li> <li>Average days elapsed from a vacancy occurring to the acceptance of an offer</li> <li>Existence of an employee evaluation process (Yes/No)</li> <li>Percentage of staff who receive an annual face-to-face performance evaluation</li> </ul>

Business Sphere	Business Attribute	Best Practice Assessment		
		Management Practice	Documents	Measures/Metrics
		<ul style="list-style-type: none"> <li>When required, the organization's employee management approach is aligned with the overall corporate approach to employee management.</li> </ul>		<ul style="list-style-type: none"> <li>Average days per employee (FTE) invested in development and training</li> <li>Percentage of employees aged 50 or over</li> <li>Percentage of vacant management positions that are filled internally</li> </ul> <p><i>Electric utility</i></p> <ul style="list-style-type: none"> <li>Number of linemen per km of distribution wire</li> <li>Number of on-call and stand-by hours</li> </ul>
	2.4. Working Environment	<ul style="list-style-type: none"> <li>The organization's culture is conducive to achieving its goals and objectives.</li> <li>The organization supports change through communication, transparency, clarity, training, planning and other required supports.</li> <li>The organization does not experience a high rate of undesired turnover.</li> <li>The organization actively recognizes and promotes a healthy workplace.</li> <li>The organization provides a safe environment for its staff, contractors, clients and the public.</li> </ul>	<ul style="list-style-type: none"> <li>Employee satisfaction surveys and results</li> <li>Healthy work policies</li> <li>Safety policies and procedures</li> <li>Summary of safety incidents</li> <li>Safety audits or reports</li> </ul>	<ul style="list-style-type: none"> <li>Turnover ratio (employees leaving as a percentage of total employees)</li> <li>Average days per employee (FTE) lost due to absence</li> <li>Number of safety meetings</li> <li>Number of days lost to injury per 100 employees</li> <li>Employee job satisfaction rating</li> </ul>
	2.5. Operations and Maintenance	<ul style="list-style-type: none"> <li>The organization engages in active and on-going operations and maintenance planning.</li> <li>The organization has up-to-date and realistic</li> </ul>	<ul style="list-style-type: none"> <li>Operations and Maintenance Plans</li> <li>Operating and maintenance</li> </ul>	<ul style="list-style-type: none"> <li>Existence of operations and maintenance plans (Yes/No)</li> <li>Existence of a documented</li> </ul>

Business Sphere	Business Attribute	Best Practice Assessment		
		Management Practice	Documents	Measures/Metrics
	Planning and Execution	<p>operations and maintenance plans.</p> <ul style="list-style-type: none"> <li>• The process for carrying out operations and maintenance planning follows a recognized methodology.</li> <li>• Operations and maintenance planning provides clear and appropriate direction and prioritizes activities.</li> <li>• Operations and maintenance planning is communicated and understood by management and staff.</li> <li>• The processes and/or systems in place for operational maintenance and planning effectively facilitate this function.</li> <li>• Operation and maintenance activities are carried out according to required and recommended policies, guidelines, standards or specifications.</li> <li>• Staff are aware of these policies, guidelines, standards or specifications and compliance monitored.</li> <li>• The organization follows a standard and consistent approach to project management.</li> <li>• The processes and/or systems in place for project management effectively facilitate this function.</li> <li>• The organization explores innovative ways to manage or delivery products and services.</li> <li>• The organization responds well to changes in its operating environment.</li> </ul> <p><i>Electric Utility</i></p> <ul style="list-style-type: none"> <li>• The utility consistently engages in load studies and simulations.</li> </ul>	<p>policies, guidelines, standards or specifications</p> <ul style="list-style-type: none"> <li>• Project management processes or guidelines and related templates</li> <li>• Operations and maintenance efficiency and effective analyses or evaluations</li> </ul> <p><i>Electric Utility</i></p> <ul style="list-style-type: none"> <li>• Load studies and simulations</li> </ul>	<p>project management process (Yes/No)</p> <ul style="list-style-type: none"> <li>• Cost of the O&amp;M function as a percentage of overall costs</li> <li>• Cost of the O&amp;M function per employee</li> <li>• Cost of the O&amp;M function per client or customer</li> <li>• Percentage of maintenance that is planned (hours)</li> <li>• Percentage of maintenance that is planned (dollars)</li> </ul> <p><i>Electric Utility</i></p> <ul style="list-style-type: none"> <li>• O&amp;M costs per km of service area</li> <li>• O&amp;M costs per km of distribution wire</li> <li>• O&amp;M costs per electricity distributed</li> <li>• Equipment utilization rates</li> <li>• Number of malfunctioning meters as a percentage of total meters</li> <li>• System losses as a percentage of supply</li> <li>• Number of transformer failures</li> </ul>

Business Sphere	Business Attribute	Best Practice Assessment		
		Management Practice	Documents	Measures/Metrics
	2.6. Financial Management and Rate Model	<ul style="list-style-type: none"> <li>• The organization's books of account and financial records are in accordance with sound financial policies and procedures.</li> <li>• The processes and/or systems in place for financial management effectively facilitate this function.</li> <li>• The organization has internal controls in place, which are actively monitored for compliance.</li> <li>• The organization has a demonstrated and solid understanding of internal and external costs.</li> <li>• The organization employs life-cycle cost accounting.</li> <li>• The organization generates cost and productivity data that is consistent and understandable.</li> <li>• The organization knows if its service and product standards are being met at the least cost.</li> <li>• The organization enters into agreements with key suppliers to reduce costs.</li> <li>• Third party contractors are effectively managed to achieve time, cost and quality expectations.</li> <li>• When required, the organization's financial management is aligned with the overall corporate approach to financial management.</li> </ul> <p><i>Electric Utility</i></p> <ul style="list-style-type: none"> <li>• The utility determines rates and tariffs using a best practice rate model that accounts for all costs and other charges.</li> <li>• The process for developing rates is sufficiently understandable, transparent and consistent.</li> <li>• The utility engages in regular cost of service studies.</li> <li>• The utility charges variable and fixed charges based on a rationale consistent with achieving its goals and</li> </ul>	<ul style="list-style-type: none"> <li>• Key financial and accounting policies</li> <li>• Internal control frameworks</li> <li>• Variance reports and analysis</li> <li>• Project tracking and monitoring documents</li> <li>• Procurement agreements with suppliers</li> <li>• Audit reports and recommendations</li> </ul> <p><i>Electric Utility</i></p> <ul style="list-style-type: none"> <li>• Tariff applications</li> <li>• Summary of current rates</li> <li>• Utility fiscal policies</li> </ul>	<ul style="list-style-type: none"> <li>• Existence of books of account, financial records and financial policies and procedures (Yes/No)</li> <li>• Existence of regular reviews or audits of internal controls (Yes/No)</li> <li>• Number of control deficiencies and material weaknesses</li> <li>• Total cost per client or customer</li> <li>• The percentage of variation of key revenue and cost items at each quarter and year end</li> <li>• Average number of days to pay for accounts payable</li> <li>• Average number of days client and customer accounts are outstanding</li> <li>• Number of suppliers with which there are procurement agreements</li> <li>• The percentage of variation of project costs and contractor costs</li> </ul> <p><i>Electric Utility</i></p> <ul style="list-style-type: none"> <li>• Existence of utility fiscal policies (Yes/No)</li> <li>• Existence of a rate stabilization reserve (Yes/No)</li> </ul>



Business Sphere	Business Attribute	Best Practice Assessment		
		Management Practice	Documents	Measures/Metrics
		<p>objectives.</p> <ul style="list-style-type: none"> <li>• The utility calculates its rate of return using an acceptable and recognized methodology.</li> <li>• The rate of return reflects all requirements, i.e. reserves and dividends.</li> <li>• The process for the utility to take on debt is sufficiently understandable, transparent and consistent.</li> <li>• Debt levels and the debt-to-equity ratio are determined using an acceptable and recognized methodology.</li> <li>• The utility determines and manages operating and capital reserves using an acceptable and recognized methodology.</li> <li>• Reserve management reflects realistic future operating and capital needs, and is it based on comprehensive infrastructure integrity assessments.</li> <li>• The process for determining dividends is sufficiently understandable, transparent and consistent.</li> <li>• The utility determines dividends using an acceptable and recognized methodology.</li> <li>• The utility determines the local area franchise fee that customers will pay using an acceptable and recognized methodology.</li> <li>• The utility account for its assets and associated depreciation using an acceptable and recognized methodology.</li> </ul>		<ul style="list-style-type: none"> <li>• All-in distribution rates as compared to the rates for other similar utilities</li> <li>• Total expenditures per electricity distributed</li> <li>• Total expenditures per km of distribution wire</li> <li>• Existence of utility fiscal policies (Yes/No)</li> <li>• Number of rate and tariff adjustments per year</li> <li>• Debt-to-equity ratio</li> <li>• Dividends as a percentage of total revenue</li> <li>• Local area franchise fee as a percentage of total revenues and compared to other municipalities</li> </ul>
	2.7. Infrastructure and Asset Management	<ul style="list-style-type: none"> <li>• The organization has a good understanding of its assets in terms of original cost, depreciation and replacement cost.</li> <li>• The processes and/or systems in place for asset management effectively facilitate this function.</li> </ul>	<ul style="list-style-type: none"> <li>• Summary of assets such as a Tangible Capital Asset (TCA) register</li> <li>• Reports on asset status and</li> </ul>	<ul style="list-style-type: none"> <li>• Existence of a comprehensive asset management system (Yes/No)</li> <li>• Existence of assessments of the status and integrity of</li> </ul>

Business Sphere	Business Attribute	Best Practice Assessment		
		Management Practice	Documents	Measures/Metrics
		<ul style="list-style-type: none"> <li>• The organization carries out comprehensive infrastructure integrity assessments as required.</li> <li>• The organization has an effective program for maintaining, refurbishing, replacing and upgrading its infrastructure.</li> <li>• Inventory is managed efficiently and effectively.</li> <li>• When required, the organization's asset management is aligned with the overall corporate approach to asset management.</li> </ul>	integrity	assets (Yes/No) <ul style="list-style-type: none"> <li>• Percentage of critical assets that have been fully assessed</li> <li>• Percentage of critical assets that require immediate refurbishment or replacement</li> <li>• Percentage of assets refurbished or replaced by asset class (annually)</li> <li>• Total dollars set aside for asset replacement as a percentage of total asset value (annually)</li> <li>• Average age of inventory by asset class</li> </ul>
	2.8. Operating Risk and Business Continuity	<ul style="list-style-type: none"> <li>• The organization has identified significant financial, organizational and employee operating risks.</li> <li>• The organization understands the risk of impairment or loss of its key assets</li> <li>• Mitigation strategies have been developed and implemented.</li> <li>• The organization has emergency planning and/or business continuity planning in place to respond to various types of emergencies.</li> <li>• The process for developing emergency plans and/or business continuity plans is effective.</li> <li>• Emergency plans and/or business continuity plans are communicated and understood by management and staff.</li> <li>• The organization has adequate levels of insurance.</li> <li>• When required, business continuity planning is aligned</li> </ul>	<ul style="list-style-type: none"> <li>• Risk assessments</li> <li>• Emergency plans</li> <li>• Business continuity plans</li> <li>• Assistance agreements</li> <li>• Insurance policies</li> <li>• Security policies and reporting templates</li> </ul>	<ul style="list-style-type: none"> <li>• Existence of mitigation strategies (Yes/No)</li> <li>• Existence of emergency plans and/or business continuity plans (Yes/No)</li> <li>• Existence of assistance agreements (Yes/No)</li> <li>• Existence of adequate insurance policies (Yes/No)</li> <li>• Number of security incidents or breaches</li> </ul>

Business Sphere	Business Attribute	Best Practice Assessment		
		Management Practice	Documents	Measures/Metrics
		<p>with the overall corporate approach to business continuity.</p> <ul style="list-style-type: none"> <li>• When available, the organization has effective assistance agreements in place with key stakeholders and/or partner organizations.</li> <li>• The organization has effective corporate and site security in place.</li> </ul>		
3. Citizen, Customer and Stakeholder Engagement	3.1. Citizen Engagement	<ul style="list-style-type: none"> <li>• The organization knows the expectations of its citizens and understands the basis for these expectations.</li> <li>• The organization has a citizen engagement strategy that is being implemented.</li> <li>• Citizen concerns and priorities are taken into consideration during planning and execution.</li> <li>• The organization evaluates citizens' satisfaction with its services and programs and attains good results.</li> <li>• When required, citizen engagement activities are aligned with the overall corporate approach to citizen engagement.</li> </ul>	<ul style="list-style-type: none"> <li>• Citizen engagement plans</li> <li>• Public satisfaction surveys</li> <li>• News releases, brochures, summaries, etc.</li> </ul>	<ul style="list-style-type: none"> <li>• Existence of a citizen engagement strategy (Yes/No)</li> <li>• Average number of hours/days to respond to citizen inquiries</li> <li>• Citizen satisfaction rating</li> </ul>
	3.2. Customer Relationship Management	<ul style="list-style-type: none"> <li>• The organization knows the expectations of its customers and understands the basis for these expectations.</li> <li>• The organization has a customer engagement strategy that is being implemented.</li> <li>• The processes and/or systems are in place for customer relationship management effectively facilitate this function.</li> <li>• Customer concerns and priorities are taken into consideration during planning and execution.</li> <li>• The organization evaluates customer satisfaction with</li> </ul>	<ul style="list-style-type: none"> <li>• Customer management plans or approaches</li> <li>• Customer analyses, i.e. complaints</li> <li>• Customer satisfaction surveys and results</li> <li>• News releases, brochures, summaries, etc.</li> </ul>	<ul style="list-style-type: none"> <li>• Existence of a customer management strategy (Yes/No)</li> <li>• Cost of customer care and billing per customer</li> <li>• Number of customer complaints per 1,000 customers</li> <li>• Number of customer technical complaints per 1,000 customers</li> <li>• Average number of hours/days</li> </ul>

Business Sphere	Business Attribute	Best Practice Assessment		
		Management Practice	Documents	Measures/Metrics
		<p>it services and programs and attains good results.</p> <ul style="list-style-type: none"> <li>When required, customer relationship management activities are aligned with the overall corporate approach to customer relationship management.</li> </ul> <p><i>Electric Utility</i></p> <ul style="list-style-type: none"> <li>The utility billing function is carried out in an efficient manner that meets the needs of customers.</li> <li>The utility has an effective process for receiving and managing customer feedback and complaints.</li> </ul>		<p>to respond to client or customer inquiries</p> <ul style="list-style-type: none"> <li>Number of error driven billing adjustments per 1,000 customers</li> <li>Average number of days to start and stop service</li> <li>Customer satisfaction with the services and programs provided</li> </ul> <p><i>Electric Utility</i></p> <ul style="list-style-type: none"> <li>Meter reading frequency and accuracy</li> </ul>
	3.3. Partnerships and Stakeholder Relations	<ul style="list-style-type: none"> <li>The organization knows the expectations of its partners and key stakeholders and understands the basis for these expectations.</li> <li>The organization has a stakeholder engagement strategy that is being implemented.</li> <li>Partner and stakeholder concerns and priorities are taken into consideration during planning and execution.</li> <li>The organization evaluates partner and stakeholder satisfaction with it services and programs and attains good results.</li> <li>When required, partnerships and relations with key stakeholders are aligned with the overall corporate approach to these partners and key stakeholders.</li> </ul>	<ul style="list-style-type: none"> <li>Stakeholder engagement plans</li> <li>Stakeholder analyses,</li> <li>Description of partner organizations (paper or web)</li> <li>Partnership plans or agreements</li> </ul>	<ul style="list-style-type: none"> <li>Existence of a stakeholder engagement strategy (Yes/No)</li> <li>Average number of hours/days to respond to stakeholder inquiries</li> <li>Partner and stakeholder satisfaction with the services and programs provided</li> </ul>

Business Sphere	Business Attribute	Best Practice Assessment		
		Management Practice	Documents	Measures/Metrics
	3.4. Regional and Other Integrated Planning	<ul style="list-style-type: none"> <li>• The organization knows the expectations of its regional partners and understands the basis for these expectations.</li> <li>• The organization has a regional planning strategy that is being implemented.</li> <li>• Regional issues and priorities are taken into consideration during planning and execution.</li> <li>• When required, regional and other integrated planning is aligned with the overall corporate approach to regional and other integrated planning.</li> </ul>	<ul style="list-style-type: none"> <li>• Regional plans, frameworks or agreements</li> <li>• Description of regional partners</li> <li>• Service agreements or standards</li> </ul>	<ul style="list-style-type: none"> <li>• Existence of a regional planning strategy (Yes/No)</li> </ul>
4. Monitoring, Measurement and Results	4.1. Performance Monitoring and Reporting	<ul style="list-style-type: none"> <li>• The organization has a formal performance management system in place.</li> <li>• The organization monitors and report on its progress towards achieving its strategic and operational goals and objectives.</li> <li>• The organization assesses its overall effectiveness and efficiency in carrying out its activities.</li> <li>• Management receives complete, credible and fair information that satisfies its decision making and accountability requirements.</li> <li>• The organization benchmarks itself against other organizations or industry standards.</li> <li>• When required, the organization's performance monitoring and reporting aligns with and supports an overall corporate approach to performance management.</li> </ul> <p><i>Electric Utility</i></p> <ul style="list-style-type: none"> <li>• The utility engages in reliability monitoring and reporting.</li> </ul>	<ul style="list-style-type: none"> <li>• Summary of key performance indicators (KPI's) and the most recent results</li> <li>• Performance dashboards</li> <li>• Results of benchmarking initiatives</li> <li>• Electric Utility</li> <li>• Reliability monitoring and reporting</li> </ul>	<ul style="list-style-type: none"> <li>• Existence of a formal performance management system (Yes/No)</li> <li>• Evidence of participation in benchmarking initiatives (Yes/No)</li> </ul> <p><i>Electric Utility</i></p> <ul style="list-style-type: none"> <li>• System average interruption frequency index (SAIFI)</li> <li>• System average interruption duration index (SAIDI)</li> <li>• Customer average interruption duration index (CAIDI)</li> <li>• Customer interruptions per km of distribution wire</li> <li>• Index of reliability</li> </ul>



Business Sphere	Business Attribute	Best Practice Assessment		
		Management Practice	Documents	Measures/Metrics
		<ul style="list-style-type: none"> <li>The utility benchmarks its reliability against other utilities and industry standards.</li> </ul>		
	4.2. Regulatory Compliance and Reporting	<ul style="list-style-type: none"> <li>The organization understands, monitors and reports on regulatory requirements.</li> <li>The organization understands, plans for and addresses changing regulatory requirements.</li> <li>The organization has processes and/or systems in place for regulatory compliance and reporting that effectively facilitate this function.</li> </ul> <p><i>Electric Utility</i></p> <ul style="list-style-type: none"> <li>The utility monitors and submits data required for compliance with electric distribution and transmission standards.</li> </ul>	<ul style="list-style-type: none"> <li>Regulatory compliance processes and activities</li> <li>Regulatory submissions</li> <li>Regulatory reports</li> </ul>	<ul style="list-style-type: none"> <li>Existence of regulatory submissions and reports (Yes/No)</li> </ul> <p><i>Electric Utility</i></p> <ul style="list-style-type: none"> <li>Compliance with AESO reliability standards</li> </ul>
	4.3. Financial Reporting	<ul style="list-style-type: none"> <li>The organization prepares regular (i.e. quarterly, annually) financial summaries and statements.</li> <li>These summaries and statements are accurate and provide explanations for the numbers.</li> <li>These summaries and statements facilitate a good understanding of financial matters and if financial goals and objectives have been achieved.</li> <li>When required, financial reporting is aligned with the overall corporate approach to financial reporting.</li> </ul>	<ul style="list-style-type: none"> <li>Required submission documents</li> <li>Regular reports like annual reports</li> <li>Regular financial statements</li> <li>Analysis of financial cycle reporting times</li> </ul>	<ul style="list-style-type: none"> <li>Existence of financial summaries and statements (Yes/No)</li> <li>Cycle time in working days from period-end closure to the distribution of routine financial reports</li> <li>Cycle time in working days from year-end closure to submission of audited accounts</li> </ul>



## **Appendix C**

### **Measures and Metrics**

## **Appendix C – Measures and Metrics**

The following are select metrics commonly used by electric utilities in assessing operational performance. This list is not intended to be exhaustive, but instead highlights measures relevant to obtaining an overall understanding of operational efficiency and effectiveness.

### *Operations and Performance*

- Percentage of electricity that is sourced through renewable energy sources
- O&M costs per km of service area
- O&M costs per km of distribution wire
- O&M costs per electricity distributed
- System losses as a percentage of supply
- Number of transformer failures
- Customers per km of distribution wire
- System average interruption frequency index (SAIFI)
- System average interruption duration index (SAIDI)
- Customer average interruption duration index (CAIDI)
- Customer interruptions per km of distribution wire
- Index of reliability

### *Employee Management*

- Average days per employee (FTE) invested in development and training
- Number of linemen per km of distribution wire
- Turnover ratio (employees leaving as a percentage of total employees)
- Number of days lost to injury per 100 employees

### *Financial Management*

- All-in distribution rates as compared to the rates for other similar utilities
- Total expenditures per electricity distributed
- Total expenditures per km of distribution wire
- Number of rate and tariff adjustments per year
- Debt-to-equity ratio
- Dividends as a percentage of total revenue
- Local area franchise fee as a percentage of total revenues

### *Customer Relationship Management*

- Cost of customer care and billing per customer
- Number of customer complaints per 1,000 customers
- Customer satisfaction with the services and programs provided



## **Appendix D**

### **Evaluation Framework – Criteria (Diagnostic Questions)**

## Appendix D - Evaluation Framework – Criteria (Diagnostic Questions)

Business Sphere	Business Attribute	Criteria (Diagnostic Questions)	
		General	Department/Utility/ Function Specific
<i>Which business sphere is being evaluated?</i>	<i>Which business attribute is being evaluated?</i>	<i>What general questions relevant to overall management need to be answered about this business attribute in order to evaluate it?</i>	<i>What specific questions relevant to this specific department/utility/ function need to be answered about this business attribute in order to evaluate it?</i>
1.Strategic Design and Alignment	1.1. Strategic and Business Planning	<p><i>Description</i></p> <ul style="list-style-type: none"> <li>• How does your organization carry out strategic and business planning?</li> <li>• What are your key priorities and business goals?</li> </ul> <p><i>SWOT</i></p> <ul style="list-style-type: none"> <li>• What is working well and what could be improved in the way the organization carries out strategic and business planning?</li> <li>• What are the key challenges and opportunities facing the organization in this area moving forward?</li> </ul> <p><i>Management Practice</i></p> <ul style="list-style-type: none"> <li>• Does the organization follow best management practice in strategic and business planning? <ul style="list-style-type: none"> <li>○ Do strategic, business and/or other plans exist, which include vision, mission, goals, strategies and actions?</li> <li>○ Does the process for carrying out strategic, business and/or other planning follow a recognized methodology and include all required parties?</li> </ul> </li> </ul>	

Business Sphere	Business Attribute	Criteria (Diagnostic Questions)	
		General	Department/Utility/ Function Specific
		<ul style="list-style-type: none"> <li>○ Does the organization identify and assess important issues and trends in its environment and incorporate them into planning (i.e. through environmental scans or SWOT analyses)?</li> <li>○ Do plans provide clear and appropriate direction and prioritize activities?</li> <li>○ Are plans communicated and understood by management and staff?</li> <li>○ Are plans linked to operating and capital budgets so they have the resources to be implemented?</li> <li>○ Is the organization's planning process and resulting plans aligned with a broader corporate process (if required)?</li> <li>○ To what degree does the organization have a history of being able to adapt or respond successfully to changing needs, circumstances, etc?</li> <li>○ Does the organization have other similar planning processes, i.e. master plans, service plans, development plans, etc.</li> </ul> <p><i>Measures/Metrics</i></p> <ul style="list-style-type: none"> <li>● The existence of planning documents and processes.</li> </ul> <p><i>Documents</i></p> <ul style="list-style-type: none"> <li>● Can we have copies of any related documents such as strategic plans or frameworks, guidance documents, business plans, service plans, master plans, or development plans?</li> </ul>	



Business Sphere	Business Attribute	Criteria (Diagnostic Questions)	
		General	Department/Utility/ Function Specific
	1.2. Sustainability Planning	<p><i>Description</i></p> <ul style="list-style-type: none"> <li>• How does your organization undertake sustainability planning?</li> <li>• What are your sustainability priorities and goals?</li> </ul> <p><i>SWOT</i></p> <ul style="list-style-type: none"> <li>• What is working well and what could be improved in the way the organization carries out sustainability planning?</li> <li>• What are the key challenges and opportunities facing the organization in this area moving forward?</li> </ul> <p><i>Management Practice</i></p> <ul style="list-style-type: none"> <li>• Does the organization follow best management practice in sustainability planning? <ul style="list-style-type: none"> <li>○ Do sustainability plans exist, which include vision, mission, goals, strategies and actions?</li> <li>○ Does the process for carrying out sustainability planning follow a recognized methodology and include all required parties?</li> <li>○ Do sustainability plans provide clear and appropriate direction and prioritize activities?</li> <li>○ Are sustainability plans communicated and understood by management and staff?</li> <li>○ Are plans linked to operating and capital budgets so they have the resources to be implemented?</li> <li>○ Are secondary impacts (social, economic, financial, and environmental, etc.) that the organization's activities, products, or services could have on customers, key</li> </ul> </li> </ul>	<p><i>Measures/Metrics</i></p> <ul style="list-style-type: none"> <li>• Does the utility track and can we have the results for: <ul style="list-style-type: none"> <li>○ Average electricity usage by customer class</li> <li>○ Percentage of electricity that is sourced through renewable energy sources</li> </ul> </li> </ul>

Business Sphere	Business Attribute	Criteria (Diagnostic Questions)	
		General	Department/Utility/ Function Specific
		<p>stakeholders, related organizations and programs, and/or the community at large understood, explained, monitored and addressed?</p> <ul style="list-style-type: none"> <li>○ Is the organization's planning process and resulting plans aligned with a broader corporate direction (if required)?, such as the Triple Bottom Line, Five Pillars, an Environmental Master Plan, etc.?</li> </ul> <p><i>Measures/Metrics</i></p> <ul style="list-style-type: none"> <li>● The existence of sustainability planning documents and processes, and if the organization has explored sustainable or green approaches.</li> </ul> <p><i>Documents</i></p> <ul style="list-style-type: none"> <li>● Can we have copies of any related documents such as sustainability plans, environmental plans, guidance documents, or news releases, brochures, web sites, etc. that describe sustainability initiatives?</li> </ul>	
	1.3. Enterprise Risk Management	<p><i>Description</i></p> <ul style="list-style-type: none"> <li>● How does your organization undertake enterprise risk management?</li> <li>● What are the key enterprise risks facing your organization?</li> </ul> <p><i>SWOT</i></p> <ul style="list-style-type: none"> <li>● What is working well and what could be improved in the</li> </ul>	

Business Sphere	Business Attribute	Criteria (Diagnostic Questions)	
		General	Department/Utility/ Function Specific
		<p>way the organization carries out enterprise risk management?</p> <ul style="list-style-type: none"> <li>• What are the key challenges and opportunities facing the organization in this area moving forward?</li> </ul> <p><i>Management Practice</i></p> <ul style="list-style-type: none"> <li>• Does the organization follow best management practice in enterprise risk management? <ul style="list-style-type: none"> <li>○ Does an enterprise risk management approach exist, which facilitates risk identification into planning?</li> <li>○ Does the process for carrying out enterprise risk management planning follow a recognized methodology and include all required parties?</li> <li>○ Does enterprise risk management planning provide clear and appropriate direction and prioritize activities?</li> <li>○ Is enterprise risk management planning communicated and understood by management and staff?</li> <li>○ Has both the potential likelihood and impact of risks been evaluated?</li> <li>○ Have mitigation strategies been developed and implemented for key risks?</li> <li>○ Are mitigation strategies linked to operating and capital budgets so they have the resources to be implemented?</li> <li>○ Is the organization's enterprise risk management approach aligned with a broader corporate process (if required)?</li> </ul> </li> </ul> <p><i>Measures/Metrics</i></p> <ul style="list-style-type: none"> <li>• The existence of an enterprise risk management approach</li> </ul>	

Business Sphere	Business Attribute	Criteria (Diagnostic Questions)	
		General	Department/Utility/ Function Specific
		<p>and mitigation strategies and evidence of their implementation.</p> <p><i>Documents</i></p> <ul style="list-style-type: none"> <li>• Can we have copies of any related documents such as strategic plans or business plans (risk component), ERM guidance documents or ERM plans?</li> </ul>	
	1.4. Revenue and Rate Approach	<p><i>Description</i></p> <ul style="list-style-type: none"> <li>• How is your organization funded? How does it generate revenue?</li> </ul> <p><i>SWOT</i></p> <ul style="list-style-type: none"> <li>• What is working well and what could be improved in the organization's revenue and rate approach?</li> <li>• What are the key challenges and opportunities facing the organization in this area moving forward?</li> </ul> <p><i>Management Practice</i></p> <ul style="list-style-type: none"> <li>• Does the organization follow best management practice in its revenue and rate approach? <ul style="list-style-type: none"> <li>○ Are rates and fees developed according to a recognized methodology?</li> <li>○ Are rates and fees fair and equitable given the characteristics of different client and customer groups?</li> <li>○ Does the design of rates and fees reflect the organization's other desired outcomes?</li> </ul> </li> </ul>	<p><i>Description</i></p> <ul style="list-style-type: none"> <li>• What is your utility's overall rate setting philosophy?</li> <li>• Do you the follow the standard utility rate model?</li> <li>• How do you determine your annual revenue requirement?</li> </ul> <p><i>Management Practice</i></p> <ul style="list-style-type: none"> <li>• Does the utility follow best management practice in its rate approach? <ul style="list-style-type: none"> <li>○ Is the philosophy behind rate design clear and understood?</li> <li>○ Does the rate design facilitate this philosophy? (i.e. rates are equitable given different customer classes and they support desired outcomes such as energy conservation)</li> <li>○ Is a recognized methodology used when developing rates?</li> <li>○ Does the rate setting approach reflect a strong understanding of the relationship between utility costs and utility services provided?</li> <li>○ Does the calculation of the annual revenue requirement</li> </ul> </li> </ul>

Business Sphere	Business Attribute	Criteria (Diagnostic Questions)	
		General	Department/Utility/ Function Specific
		<ul style="list-style-type: none"> <li>Does the setting of rates and fees reflect a strong understanding between costs and the services and programs delivered?</li> <li>Is the organization's revenue and rate approach aligned with the overall corporate revenue and rate approach (if required)?</li> </ul> <p><i>Measures/Metrics</i></p> <ul style="list-style-type: none"> <li>The existence of a revenue or rate model.</li> </ul> <p><i>Documents</i></p> <ul style="list-style-type: none"> <li>Can we have copies of any related documents such as revenue policies, rate model overview, rate model policies, or fees and charges summary?</li> </ul>	include all relevant requirements such as reserves and dividends?
	1.5. Budgeting and Capital Planning	<p><i>Description</i></p> <ul style="list-style-type: none"> <li>How does your organization carry out budgeting and capital planning?</li> </ul> <p><i>SWOT</i></p> <ul style="list-style-type: none"> <li>What is working well and what could be improved in the way the organization carries out budgeting and capital planning?</li> <li>What are the key challenges and opportunities facing the organization in this area moving forward?</li> </ul>	

Business Sphere	Business Attribute	Criteria (Diagnostic Questions)	
		General	Department/Utility/ Function Specific
		<p><i>Management Practice</i></p> <ul style="list-style-type: none"> <li>• Does the organization follow best management practice in budgeting and capital planning? <ul style="list-style-type: none"> <li>○ Are there operating and capital budgets, which include all required data and information?</li> <li>○ Does the process for carrying out budgeting and capital planning follow a recognized methodology and include all required parties?</li> <li>○ Is the organization's budgeting and capital planning aligned with the overall corporate process for budgeting and capital planning (if required)?</li> <li>○ Do operating and capital budgets provide clear and appropriate direction?</li> <li>○ Are there appropriate levels of both oversight and delegation of authority, so budgets are both accountable and reflective of business unit requirements?</li> <li>○ Are operating and capital budgets linked to or integrated with strategic, business, capital and/or other plans?</li> <li>○ Are operating and capital budgets communicated and understood by management and staff?</li> <li>○ Are the systems used to develop and manage the operating and capital budgets accurate and user friendly?</li> <li>○ Is there a long term capital plan, which sets out priorities for the next ten years or longer?</li> <li>○ Does the process for developing the long term capital plan follow a recognized methodology and include all required parties?</li> <li>○ Does the capital plan include an effective prioritization process?</li> </ul> </li> </ul>	



Business Sphere	Business Attribute	Criteria (Diagnostic Questions)	
		General	Department/Utility/ Function Specific
		<ul style="list-style-type: none"> <li>○ Does the capital plan provide clear and appropriate direction?</li> <li>○ Is there an appropriate balance between how money is spent, i.e. operations vs. capital, overhead vs. operations and maintenance, capacity utilization of major resources, etc.?</li> </ul> <p><i>Measures/Metrics</i></p> <ul style="list-style-type: none"> <li>● The existence of operating and capital budgets and a long term capital plan that uses a recognized methodology, and if operating and capital budgets are linked to or integrated with strategic, business, capital and other plans.</li> <li>● Does the organization track and can we have the results for: <ul style="list-style-type: none"> <li>○ Actual capital expenditures as a percentage of budgeted capital expenditures</li> </ul> </li> </ul> <p><i>Documents</i></p> <ul style="list-style-type: none"> <li>● Can we have a copy of the most recent operating and capital budgets (summary and detail)?</li> <li>● Can we have a summary of the budgets and actuals for operating and capital for the last 5 to 10 years?</li> <li>● Can we have a copy of the capital plan and related summary documents?</li> <li>● Can we have a copy of any other related documents such as budget submissions, budget analysis and prioritization templates and results, cost allocation policies and results, analysis of revenue or cost drivers, or capital and</li> </ul>	

Business Sphere	Business Attribute	Criteria (Diagnostic Questions)	
		General	Department/Utility/ Function Specific
		operating reserves and projections?	
2.Management and Execution	2.1. Service Lines and Programs	<p><i>Description</i></p> <ul style="list-style-type: none"> <li>• What are your organization's main service lines and programs?</li> <li>• How many customers or clients do you serve?</li> <li>• Do you have formalized service levels or service level agreements?</li> </ul> <p><i>SWOT</i></p> <ul style="list-style-type: none"> <li>• What is working well and what could be improved in the organization's service lines and programs?</li> <li>• What are the key challenges and opportunities facing the organization in this area moving forward?</li> </ul> <p><i>Management Practice</i></p> <ul style="list-style-type: none"> <li>• Does the organization follow best management practice in its service lines and programs? <ul style="list-style-type: none"> <li>○ Are all services and programs operating within an approved mandate?</li> <li>○ Are all services and programs relevant to achieving the organization's goals and objectives?</li> <li>○ Are the rationale, goals and objectives of various services and programs known?</li> <li>○ Do service line and program goals and priorities provide clear and appropriate direction?</li> </ul> </li> </ul>	<p><i>Description</i></p> <ul style="list-style-type: none"> <li>• Which of the main electric utility services do you provide – generation, transmission, distribution, metering, load settlement, retail and billing?</li> <li>• What is your service area, including total population and total number of customers served?</li> <li>• What are your various customer rate classes and the numbers in each?</li> <li>• How much total electricity is consumed and by each customer class?</li> <li>• What are your key pieces of service infrastructure and length (kms) of distribution line?</li> <li>• How many customers are on the regulated rate option (RRO) and how many have contracts with independent retailers?</li> <li>• Do you provide any contract services? If so, please describe how they are sourced and managed.</li> </ul> <p><i>Management Practice</i></p> <ul style="list-style-type: none"> <li>• Does the organization follow best management practice in its utility service lines and programs? <ul style="list-style-type: none"> <li>○ Has the utility evaluated the option of providing other utility services, i.e. becoming more vertically integrated by in-sourcing currently out-sourced activities or vice-versa?</li> </ul> </li> </ul>

Business Sphere	Business Attribute	Criteria (Diagnostic Questions)	
		General	Department/Utility/ Function Specific
		<ul style="list-style-type: none"> <li>○ Have core service delivery priorities been formalized?</li> <li>○ Are goals and priorities communicated and understood by management and staff?</li> <li>○ Are goals and priorities measurable and have they been evaluated?</li> <li>○ Is the potential for discontinuing, changing, evolving or starting various services lines and programs considered regularly?</li> </ul> <p><i>Measures/Metrics</i></p> <ul style="list-style-type: none"> <li>● The existence of service line and program descriptions and core service delivery priorities, and if the organization has explored sustainable or green approaches.</li> </ul> <p><i>Documents</i></p> <ul style="list-style-type: none"> <li>● Can we have a description or summary of these service lines and programs, including key service delivery infrastructure and any customer or client numbers and segmentation?</li> <li>● Can we have a copy of any service level summaries or agreements?</li> <li>● Can we have a copy of any evaluations of services and programs?</li> </ul>	<ul style="list-style-type: none"> <li>○ Has the utility evaluated its service area to determine if contraction or expansion would be beneficial?</li> <li>○ Has the utility explored new and innovative way, i.e. smart metering, to improve efficient use of infrastructure, load management and the customer experience?</li> <li>○ Has the utility evaluated the contract services it provides, to determine if they are being provided effectively and efficiently and meeting customer needs?</li> </ul> <p><i>Measures/Metrics</i></p> <ul style="list-style-type: none"> <li>● Does the utility track: <ul style="list-style-type: none"> <li>○ Number of km of distribution wire</li> <li>○ Customers per km of distribution wire</li> </ul> </li> </ul> <p><i>Documents</i></p> <ul style="list-style-type: none"> <li>● Can we have a description or summary of service area, customer classes, electricity consumption, key service infrastructure, RRO vs. retail customers, and contracted services provided?</li> </ul>
	2.2. Organization Structure and Staffing	<p><i>Description</i></p> <ul style="list-style-type: none"> <li>● How is your organization structured?</li> <li>● What are the units and sub-units and their functions?</li> <li>● How are corporate functions such as HR, IT, finance,</li> </ul>	

Business Sphere	Business Attribute	Criteria (Diagnostic Questions)	
		General	Department/Utility/ Function Specific
		<p>procurement, billing, records management and privacy and freedom of information, etc. delivered?</p> <ul style="list-style-type: none"> <li>• Is your organization part of a corporate shared services model? If so, please describe.</li> <li>• Does your organization contract out any functions? If so, please describe.</li> </ul> <p><i>SWOT</i></p> <ul style="list-style-type: none"> <li>• What is working well and what could be improved in the organization's organization and staffing?</li> <li>• What are the key challenges and opportunities facing the organization in this area moving forward?</li> </ul> <p><i>Management Practice</i></p> <ul style="list-style-type: none"> <li>• Does the organization follow best management practice in its organization structure and staffing? <ul style="list-style-type: none"> <li>○ Does the organization have up-to-date, accurate and sufficiently detailed organizational charts?</li> <li>○ Is the organization's design appropriate for achieving its goals and objectives?</li> <li>○ Does the organization's design allow for appropriate levels of oversight and delegation?</li> <li>○ Is the decision making process clear and effective?</li> <li>○ Are corporate functions (i.e. HR, IT, finance, procurement, billing, records management and privacy and freedom of information, etc.) delivered or provided effectively and efficiently? Are internal service level agreements in place?</li> <li>○ Are the methods of delivering services and programs</li> </ul> </li> </ul>	

Business Sphere	Business Attribute	Criteria (Diagnostic Questions)	
		General	Department/Utility/ Function Specific
		<p>(i.e. out-sourcing vs. in-sourcing, partnering) effective and efficient? Are service level agreements with contractors in place?</p> <p><i>Measures/Metrics</i></p> <ul style="list-style-type: none"> <li>• The existence of organizational charts, policies for corporate services, internal service level agreements, and service level agreements with contractors.</li> <li>• Does the organization track and can we have the results for: <ul style="list-style-type: none"> <li>○ <i>Management to staff ratio</i></li> <li>○ <i>Cost of various corporate services, i.e. HR, IT, finance, procurement, billing, records management and privacy and freedom of information, etc as a percentage of overall costs</i></li> <li>○ <i>Cost of various corporate services, i.e. HR, IT, finance, procurement, billing, records management and privacy and freedom of information, etc per employee</i></li> <li>○ <i>Percentage of IT incidents resolved within agreed service levels</i></li> <li>○ <i>Internal service level agreement measures</i></li> <li>○ <i>External service level agreement measures</i></li> </ul> </li> </ul> <p><i>Documents</i></p> <ul style="list-style-type: none"> <li>• Can we have a copy of the most current organization chart?</li> <li>• Can you provide a description of unit and sub-unit functions?</li> <li>• Can we have a copy of any other related documents such</li> </ul>	

Business Sphere	Business Attribute	Criteria (Diagnostic Questions)	
		General	Department/Utility/ Function Specific
		<p>as organizational reviews or plans?</p> <ul style="list-style-type: none"> <li>• Can we have a copy of any policies for corporate services, corporate cost allocations, and internal service level agreements?</li> <li>• Can we have a list of contractors and their functions?</li> <li>• Can we have a copy of any external service level agreements?</li> </ul>	
	2.3. Employee Management	<p><i>Description</i></p> <ul style="list-style-type: none"> <li>• How many employees does your organization have overall and by type (full time, part time, temporary, seasonal) and function?</li> <li>• What is the age breakdown of your employees by level and function?</li> <li>• What are the typical working hours and the average workload in terms of standard and overtime hours?</li> <li>• How does your organization carry out the main functions of employee management: <ul style="list-style-type: none"> <li>○ recruitment,</li> <li>○ roles and responsibilities (job descriptions),</li> <li>○ performance management,</li> <li>○ compensation,</li> <li>○ professional development and training, and</li> <li>○ succession?</li> </ul> </li> <li>• Are staff performing to stated and agreed expectations?</li> </ul> <p><i>SWOT</i></p> <ul style="list-style-type: none"> <li>• What is working well and what could be improved in the way the organization carries out employee management?</li> </ul>	<p><i>Measures/Metrics</i></p> <ul style="list-style-type: none"> <li>• Does the utility track and can we have the results for: <ul style="list-style-type: none"> <li>○ Number of linemen per km of distribution wire</li> <li>○ Number of on-call and stand-by hours</li> </ul> </li> </ul> <p><i>Documents</i></p> <ul style="list-style-type: none"> <li>• Can we have any summary documents describing on-call and stand-by hours?</li> </ul>



Business Sphere	Business Attribute	Criteria (Diagnostic Questions)	
		General	Department/Utility/ Function Specific
		<ul style="list-style-type: none"> <li>• What are the key challenges and opportunities facing the organization in this area moving forward?</li> </ul> <p><i>Management Practice</i></p> <ul style="list-style-type: none"> <li>• Does the organization follow best management practice in employee management?               <ul style="list-style-type: none"> <li>○ Are current staffing levels known, by type (full time, part time, temporary, seasonal) and function?</li> <li>○ Are staffing levels and breakdowns by level and function appropriate for achieving the organization's goals in an effective and efficient manner?</li> <li>○ Are the workloads of various staff appropriate for achieving timelines and quality, and are they sustainable in the long term?</li> <li>○ Does the organization have all the staff it needs in the right jobs to be efficient and effective?</li> <li>○ Do job descriptions exist, which are up-to-date and accurate?</li> <li>○ Do staff know what is expected from them at work?</li> <li>○ Is the recruitment process effective by providing needed, qualified staff in a timely and efficient manner?</li> <li>○ Do staff receive appropriate feedback and recognition for their efforts?</li> <li>○ Is there a standard performance evaluation framework that is it followed and is it effective?</li> <li>○ Is compensation fair and in line with relevant comparators?</li> <li>○ Do staff have the required education/training for their jobs?</li> <li>○ Do staff have opportunities for training and learning that</li> </ul> </li> </ul>	

Business Sphere	Business Attribute	Criteria (Diagnostic Questions)	
		General	Department/Utility/ Function Specific
		<p>supports their development and effectiveness?</p> <ul style="list-style-type: none"> <li>Does the organization have a succession strategy that is clear and effective?</li> <li>Is the organization's employee management approach aligned with the overall corporate approach to employee management (if required)?</li> </ul> <p><i>Measures/Metrics</i></p> <ul style="list-style-type: none"> <li>The existence of current staffing levels by type and function, job descriptions for each employee, and an employee evaluation process.</li> <li>Does the organization track and can we have the results for: <ul style="list-style-type: none"> <li>Clients or customers per employee</li> <li>Staff cost as a percentage of total cost</li> <li>Overtime hours worked as a percentage of total hours worked</li> <li>Number of hours on-call as a percentage of total hours worked</li> <li>Average number of response capable back-up staff for critical operations and maintenance functions</li> <li>Average days elapsed from a vacancy occurring to the acceptance of an offer</li> <li>Percentage of staff who receive an annual face-to-face performance evaluation</li> <li>Average days per employee (FTE) invested in development and training</li> <li>Percentage of employees aged 50 or over</li> <li>Percentage of vacant management positions that are</li> </ul> </li> </ul>	

Business Sphere	Business Attribute	Criteria (Diagnostic Questions)	
		General	Department/Utility/ Function Specific
		<p>filled internally</p> <p><i>Documents</i></p> <ul style="list-style-type: none"> <li>• Can we have any summary documents describing number of employees by type?</li> <li>• Can we have any summary documents showing hours worked, both standard and overtime?</li> <li>• Can we have any summary documents describing employing age by type, level and function?</li> <li>• Can we have copies of any related documents such as job postings, job descriptions, compensation schemes, compensation reviews or analysis, professional development and training policies, summary of professional development or training hours, summary of the employee evaluation process, employee evaluation template, or succession plans?</li> </ul>	
	2.4. Working Environment	<p><i>Description</i></p> <ul style="list-style-type: none"> <li>• How would you describe your organization's culture and the employee experience?</li> <li>• What are your organization's approaches to ensuring a positive and healthy work environment?</li> <li>• What is your organization's approach to safety?</li> </ul> <p><i>SWOT</i></p> <ul style="list-style-type: none"> <li>• What is working well and what could be improved in the organization's working environment?</li> <li>• What are the key challenges and opportunities facing the</li> </ul>	

Business Sphere	Business Attribute	Criteria (Diagnostic Questions)	
		General	Department/Utility/ Function Specific
		<p>organization in this area moving forward?</p> <p><i>Management Practice</i></p> <ul style="list-style-type: none"> <li>• Does the organization follow best management practice in its working environment? <ul style="list-style-type: none"> <li>○ Is the organization's culture conducive to achieving its goals and objectives?</li> <li>○ Does the organization support change through communication, transparency, clarity, training, planning and other required supports?</li> <li>○ Does the organization experience a high rate of undesired turnover?</li> <li>○ Does the organization actively recognize and promote a healthy workplace?</li> <li>○ Is the organization providing a safe environment for its staff, contractors, clients and the public?</li> </ul> </li> </ul> <p><i>Measures/Metrics</i></p> <ul style="list-style-type: none"> <li>• Does the organization track and can we have the results for: <ul style="list-style-type: none"> <li>○ Turnover ratio (employees leaving as a percentage of total employees)</li> <li>○ Average days per employee (FTE) lost due to absence</li> <li>○ Number of safety meetings</li> <li>○ Number of days lost to injury per 100 employees</li> <li>○ Employee job satisfaction rating</li> </ul> </li> </ul> <p><i>Documents</i></p>	

Business Sphere	Business Attribute	Criteria (Diagnostic Questions)	
		General	Department/Utility/ Function Specific
		<ul style="list-style-type: none"> <li>Can we have copies of any related documents such as employee satisfaction surveys, healthy work policies, safety policies and procedures, summary of safety incidents, safety audits or reports?</li> </ul>	
	2.5. Operations and Maintenance Planning and Execution	<p><i>Description</i></p> <ul style="list-style-type: none"> <li>How does your organization carry out operations and maintenance planning?</li> <li>What systems are in place?</li> <li>How does this planning flow through to execution?</li> <li>How does your organization carry out project management?</li> </ul> <p><i>SWOT</i></p> <ul style="list-style-type: none"> <li>What is working well and what could be improved in the way the organization carries out operations and maintenance planning and execution?</li> <li>What are the key challenges and opportunities facing the organization in this area moving forward?</li> </ul> <p><i>Management Practice</i></p> <ul style="list-style-type: none"> <li>Does the organization follow best management practice in operations management planning and execution?               <ul style="list-style-type: none"> <li>Does the organization engage in active and on-going operations and maintenance planning?</li> <li>Are there up-to-date and realistic operations and maintenance plans?</li> <li>Does the process for carrying out operations and</li> </ul> </li> </ul>	<p><i>Management Practice</i></p> <ul style="list-style-type: none"> <li>Does the utility carry out load flow studies and simulations?</li> </ul> <p><i>Measures/Metrics</i></p> <ul style="list-style-type: none"> <li>Does the utility track and can we have the results for:               <ul style="list-style-type: none"> <li>O&amp;M costs per km of service area</li> <li>O&amp;M costs per km of distribution wire</li> <li>O&amp;M costs per electricity distributed</li> <li>Equipment utilization rates</li> <li>Number of malfunctioning meters as a percentage of total meters</li> <li>System losses as a percentage of supply</li> <li>Number of transformer failures</li> </ul> </li> </ul> <p><i>Documents</i></p> <ul style="list-style-type: none"> <li>Can we have a copy of any load studies or simulations?</li> </ul>

Business Sphere	Business Attribute	Criteria (Diagnostic Questions)	
		General	Department/Utility/ Function Specific
		<p>maintenance planning follow a recognized methodology?</p> <ul style="list-style-type: none"> <li>○ Does operations and maintenance planning provide clear and appropriate direction and prioritize activities?</li> <li>○ Is operations and maintenance planning communicated and understood by management and staff?</li> <li>○ Are there processes and/or systems in place for operational maintenance and planning and do they effectively facilitate this function?</li> <li>○ Are operations and maintenance activities carried out according to required and recommended policies, guidelines, standards or specifications?</li> <li>○ Are staff aware of these policies, guidelines, standards or specifications and is compliance monitored?</li> <li>○ Does the organization follow a standard and consistent approach to project management?</li> <li>○ Are there processes and/or systems in place for project management and do they effectively facilitate this function?</li> <li>○ Has the organization explored innovative ways to manage or delivery products and services?</li> <li>○ How well does the organization respond to changes in its operating environment?</li> </ul> <p><i>Measures/Metrics</i></p> <ul style="list-style-type: none"> <li>● The existence of operations and maintenance plans, and a documented project management process.</li> <li>● Does the organization track and can we have the results for: <ul style="list-style-type: none"> <li>○ Cost of the O&amp;M function as a percentage of overall</li> </ul> </li> </ul>	



Business Sphere	Business Attribute	Criteria (Diagnostic Questions)	
		General	Department/Utility/ Function Specific
		<p>costs</p> <ul style="list-style-type: none"> <li>○ Cost of the O&amp;M function per employee</li> <li>○ Cost of the O&amp;M function per client or customer</li> <li>○ Percentage of maintenance that is planned (hours)</li> <li>○ Percentage of maintenance that is planned (dollars)</li> </ul> <p><i>Documents</i></p> <ul style="list-style-type: none"> <li>• Can we have a copy of any related documents such as operation and maintenances plans, operating and maintenance policies, guidelines, standards or specifications, project management processes or guidelines and related templates, or operations and maintenance efficiency and effective analyses or evaluations?</li> </ul>	
	2.6. Financial Management and Rate Model	<p><i>Description</i></p> <ul style="list-style-type: none"> <li>• How does your organization undertake financial management to manage and administer revenues and expenses?</li> <li>• What are your organization's key financial policies and internal controls?</li> </ul> <p><i>SWOT</i></p> <ul style="list-style-type: none"> <li>• What is working well and what could be improved in the way the organization carries out financial management?</li> <li>• What are the key challenges and opportunities facing the organization in this area moving forward?</li> </ul>	<p><i>Description</i></p> <ul style="list-style-type: none"> <li>• How does your utility determine the tariff to be charged for distribution? Transmission? What are the current rates, by customer class?</li> <li>• How does the utility determine the exact costs that need to be accounted for in the rate model?</li> <li>• How does your utility determine the split between fixed and variable charges? What is the current split?</li> <li>• How does your utility determine the rate of return on rate base or equity that the utility will use? What is the current rate?</li> <li>• How does your utility determine if it will take on debt? What is the current debt level?</li> <li>• How does your utility determine the debt-to-equity ratio?</li> </ul>

Business Sphere	Business Attribute	Criteria (Diagnostic Questions)	
		General	Department/Utility/ Function Specific
		<p><i>Management Practice</i></p> <ul style="list-style-type: none"> <li>Does the organization follow best management practice in financial management? <ul style="list-style-type: none"> <li>Are the organization's books of account and financial records in accordance with sound financial policies and procedures?</li> <li>Are there processes and/or systems in place for financial management and do they effectively facilitate this function?</li> <li>Does the organization have internal controls in place, which are actively monitored for compliance?</li> <li>Does the organization have a demonstrated and solid understanding of internal and external costs?</li> <li>Does the organization employ live-cycle cost accounting?</li> <li>Does the organization generate cost and productivity data that is consistent and understandable?</li> <li>Does the organization know if its service and product standards are being met at the least cost?</li> <li>Does the organization enter into agreements with key suppliers to reduce costs?</li> <li>Are third party contractors effectively managed to achieve time, cost and quality expectations?</li> <li>Is financial management aligned with the overall corporate approach to financial management (if required)?</li> </ul> </li> </ul> <p><i>Measures/Metrics</i></p> <ul style="list-style-type: none"> <li>The existence of books of account, financial records and</li> </ul>	<p>What is the current ratio?</p> <ul style="list-style-type: none"> <li>How does your utility determine operating and capital reserves? What is the current structure and levels?</li> <li>How does your utility determine the dividends to be paid? What is the current policy?</li> <li>How does your utility determine the local area franchise fee that customers will pay?</li> <li>How does your utility carry out asset accounting and account for depreciation?</li> </ul> <p><i>Management Practice</i></p> <ul style="list-style-type: none"> <li>Does the organization follow best management practice in utility rate setting? <ul style="list-style-type: none"> <li>Does the utility determine rates and tariffs using a best practice rate model that accounts for all costs and other charges?</li> <li>Is the process for developing rates sufficiently understandable, transparent and consistent?</li> <li>Does the utility engage in regular cost of service studies?</li> <li>Does the utility charge variable and fixed charges based on a rationale consistent with achieving its goals and objectives?</li> <li>Does the utility calculate its rate of return using an acceptable and recognized methodology?</li> <li>Does the rate of return reflect all requirements, i.e.</li> </ul> </li> </ul>

Business Sphere	Business Attribute	Criteria (Diagnostic Questions)	
		General	Department/Utility/ Function Specific
		<p>financial policies and procedures, and regular reviews or audits of internal controls.</p> <ul style="list-style-type: none"> <li>Does the organization track and can we have the results for: <ul style="list-style-type: none"> <li>Number of control deficiencies and material weaknesses</li> <li>Total cost per client or customer</li> <li>The percentage of variation of key revenue and cost items at each quarter and year end</li> <li>Average number of days to pay for accounts payable</li> <li>Average number of days client and customer accounts are outstanding</li> <li>Number of suppliers with which there are procurement agreements</li> <li>The percentage of variation of project costs and contractor costs</li> </ul> </li> </ul> <p><i>Documents</i></p> <ul style="list-style-type: none"> <li>Can we have copies of any related documents such as key financial and accounting policies, internal control frameworks, variance reports and analysis, project monitoring or tracking documents, procurement agreements with suppliers, or auditor reports and recommendations?</li> </ul>	<p>reserves and dividends?</p> <ul style="list-style-type: none"> <li>Is the process for the utility to take on debt sufficiently understandable, transparent and consistent?</li> <li>Are debt levels and the debt-to-equity ratio determined using an acceptable and recognized methodology?</li> <li>Does the utility determine and manage operating and capital reserves using an acceptable and recognized methodology?</li> <li>Does reserve management reflect realistic future operating and capital needs, and is it based on comprehensive infrastructure integrity assessments?</li> <li>Is the process for determining dividends sufficiently understandable, transparent and consistent?</li> <li>Does the utility determine dividends using an acceptable and recognized methodology?</li> <li>Does the utility determine the local area franchise fee that customers will pay using an acceptable and recognized methodology?</li> <li>Does the utility account for its assets and associated depreciation using an acceptable and recognized methodology?</li> </ul> <p><i>Measures/Metrics</i></p> <ul style="list-style-type: none"> <li>The existence of utility fiscal policies and a rate stabilization reserve.</li> <li>Does the utility track and can we have the results for: <ul style="list-style-type: none"> <li>All-in distribution rates as compared to the rates for other similar utilities</li> <li>Total expenditures per electricity distributed</li> <li>Total expenditures per km of distribution wire</li> </ul> </li> </ul>

Business Sphere	Business Attribute	Criteria (Diagnostic Questions)	
		General	Department/Utility/ Function Specific
			<ul style="list-style-type: none"> <li>○ Number of rate and tariff adjustments per year</li> <li>○ Debt-to-equity ratio</li> <li>○ Reserve allocation as a percentage of total revenue</li> <li>○ Dividends as a percentage of total revenue</li> </ul> <p><i>Documents</i></p> <ul style="list-style-type: none"> <li>● Can we have a copy of any tariff by-laws or applications and related documents such as a summary of current rates by customer class?</li> <li>● Can we have a copy of any documents related to the fixed vs variable split such as analyses?</li> <li>● Can we have a copy of any documents related to the policy or calculation of rate of return?</li> <li>● Can we have a copy of any documents related to debt policy, current debt structure and the debt-to-equity ratio?</li> <li>● Can we have a copy of any documents related to capital and operating reserves such as policies, summaries and projections?</li> <li>● Can we have a copy of any documents related to dividends such as policy and a summary of dividends paid?</li> <li>● Can we have a copy of any documents related to how asset accounting and accounting for depreciation is carried out?</li> <li>● Can we have copy of the cost of service study and any related documents?</li> </ul>

Business Sphere	Business Attribute	Criteria (Diagnostic Questions)	
		General	Department/Utility/ Function Specific
	2.7. Infrastructure and Asset Management	<p><i>Description</i></p> <ul style="list-style-type: none"> <li>• What are your organization's key capital and other assets, broken down by categories?</li> <li>• How does your organization carry out asset management?</li> </ul> <p><i>SWOT</i></p> <ul style="list-style-type: none"> <li>• What is working well and what could be improved in the way the organization carries out asset management?</li> <li>• What are the key challenges and opportunities facing the organization in this area moving forward?</li> </ul> <p><i>Management Practice</i></p> <ul style="list-style-type: none"> <li>• Does the organization follow best management practice in asset management? <ul style="list-style-type: none"> <li>○ Does the organization have a good understanding of its assets in terms of original cost, depreciation and replacement cost?</li> <li>○ Are there processes and/or systems in place for asset management and do they effectively facilitate this function?</li> <li>○ Does the organization carry out comprehensive infrastructure integrity assessments as required?</li> <li>○ Does the organization have an effective program for maintaining, refurbishing, replacing and upgrading its infrastructure?</li> <li>○ Is inventory managed efficiently and effectively?</li> <li>○ Is asset management aligned with the overall corporate</li> </ul> </li> </ul>	

Business Sphere	Business Attribute	Criteria (Diagnostic Questions)	
		General	Department/Utility/ Function Specific
		<p>approach to asset management (if required)?</p> <p><i>Measures/Metrics</i></p> <ul style="list-style-type: none"> <li>• The existence of a comprehensive asset management system and assessments of the status and integrity of assets.</li> <li>• Does the organization track and can we have the results for: <ul style="list-style-type: none"> <li>○ Percentage of critical assets that have been fully assessed</li> <li>○ Percentage of critical assets that require immediate refurbishment or replacement</li> <li>○ Percentage of assets refurbished or replaced by asset class (annually)</li> <li>○ Total dollars set aside for asset replacement as a percentage of total asset value (annually)</li> <li>○ Average age of inventory by asset class</li> </ul> </li> </ul> <p><i>Documents</i></p> <ul style="list-style-type: none"> <li>• Can we have a description or summary of capital assets such as your Tangible Capital Asset (TCA) register or other similar summaries, and asset status or integrity reports?</li> </ul>	
	2.8. Operating Risk and Business Continuity	<p><i>Description</i></p> <ul style="list-style-type: none"> <li>• What is your organization's approach to managing operating risk and business continuity?</li> </ul>	



Business Sphere	Business Attribute	Criteria (Diagnostic Questions)	
		General	Department/Utility/ Function Specific
		<ul style="list-style-type: none"> <li>• What are the key operating risks facing your organization?</li> </ul> <p><i>SWOT</i></p> <ul style="list-style-type: none"> <li>• What is working well and what could be improved in the way the organization manages operating risk and business continuity?</li> <li>• What are the key challenges and opportunities facing the organization in this area moving forward?</li> </ul> <p><i>Management Practice</i></p> <ul style="list-style-type: none"> <li>• Does the organization follow best management practice in managing operating risk and business continuity?               <ul style="list-style-type: none"> <li>○ Has the organization identified significant financial, organizational and employee operating risks?</li> <li>○ Does the organization understand the risk of impairment or loss of its key assets?</li> <li>○ Have mitigation strategies been developed and implemented?</li> <li>○ Does the organization have emergency planning and/or business continuity planning in place to respond to various types of emergencies?</li> <li>○ Is the process for developing emergency plans and/or business continuity plans effective?</li> <li>○ Are emergency plans and/or business continuity plans communicated and understood by management and staff?</li> <li>○ Does the organization have adequate levels of insurance?</li> <li>○ Is business continuity planning aligned with the overall</li> </ul> </li> </ul>	

Business Sphere	Business Attribute	Criteria (Diagnostic Questions)	
		General	Department/Utility/ Function Specific
		<p>corporate approach to business continuity (if required)?</p> <ul style="list-style-type: none"> <li>Does the organization have effective assistance agreements in place with key stakeholders and/or partner organizations (when available)?</li> <li>Does the organization have effective corporate and site security in place?</li> </ul> <p><i>Measures/Metrics</i></p> <ul style="list-style-type: none"> <li>The existence of mitigation strategies, emergency plans and/or business continuity plans, assistance agreements, and adequate insurance policies?</li> <li>Does the organization track and can we have the results for: <ul style="list-style-type: none"> <li>Number of security incidents or breaches</li> </ul> </li> </ul> <p><i>Documents</i></p> <ul style="list-style-type: none"> <li>Can we have copies of any related documents such as risk assessments, emergency plans, business continuity plans, assistance agreements, insurance policies, privacy and freedom of information protocols, or security policies or reporting templates?</li> </ul>	
3. Citizen, Customer and Stakeholder Engagement	3.1. Citizen Engagement	<p><i>Description</i></p> <ul style="list-style-type: none"> <li>What is your organization's overall approach to engaging with citizens?</li> <li>Does your organization undertake any regular or one-off citizen engagement initiatives?</li> </ul>	

Business Sphere	Business Attribute	Criteria (Diagnostic Questions)	
		General	Department/Utility/ Function Specific
		<p><i>SWOT</i></p> <ul style="list-style-type: none"> <li>• What is working well and what could be improved in the way the organization carries out citizen engagement?</li> <li>• What are the key challenges and opportunities facing the organization in this area moving forward?</li> </ul> <p><i>Management Practice</i></p> <ul style="list-style-type: none"> <li>• Does the organization follow best management practice in citizen engagement? <ul style="list-style-type: none"> <li>○ Does the organization know the expectations of its citizens and understand the basis for these expectations?</li> <li>○ Does the organization have a citizen engagement strategy that is being implemented?</li> <li>○ Are citizen concerns and priorities taken into consideration during planning and execution?</li> <li>○ Does the organization evaluate citizens' satisfaction with its services and programs, and does it achieve good results?</li> <li>○ Are citizen engagement activities aligned with the overall corporate approach to citizen engagement (if required)?</li> </ul> </li> </ul> <p><i>Measures/Metrics</i></p> <ul style="list-style-type: none"> <li>• The existence of a citizen engagement strategy.</li> <li>• Does the organization track and can we have the results for: <ul style="list-style-type: none"> <li>○ Average number of hours/days to respond to citizen</li> </ul> </li> </ul>	

Business Sphere	Business Attribute	Criteria (Diagnostic Questions)	
		General	Department/Utility/ Function Specific
		<p>inquiries</p> <ul style="list-style-type: none"> <li>○ Citizen satisfaction rating</li> </ul> <p><i>Documents</i></p> <ul style="list-style-type: none"> <li>• Can we have copies of any related documents such as citizen engagement plans, public satisfaction surveys, news releases, brochures, summaries, etc.?</li> </ul>	
	3.2. Customer Relationship Management	<p><i>Description</i></p> <ul style="list-style-type: none"> <li>• Who are the organization's customers and clients?</li> <li>• Does your organization have a formal customer relationship management (CRM) system?</li> <li>• What customer and client management activities does your organization engage in?</li> </ul> <p><i>SWOT</i></p> <ul style="list-style-type: none"> <li>• What is working well and what could be improved in the way the organization carries out customer relationship management?</li> <li>• What are the key challenges and opportunities facing the organization in this area moving forward?</li> </ul> <p><i>Management Practice</i></p> <ul style="list-style-type: none"> <li>• Does the organization follow best management practice in customer relationship management? <ul style="list-style-type: none"> <li>○ Does the organization know the expectations of its customers and understand the basis for these</li> </ul> </li> </ul>	<p><i>Management Practice</i></p> <ul style="list-style-type: none"> <li>• Does the utility follow best management practice in customer relationship management?</li> <li>• Is the utility billing function carried out in an efficient manner that meets the needs of customers? <ul style="list-style-type: none"> <li>○ Does the utility have an effective process for receiving and managing customer feedback and complaints?</li> <li>○ Does the utility regularly read meters?</li> </ul> </li> </ul> <p><i>Measures/Metrics</i></p> <ul style="list-style-type: none"> <li>• Does the utility track and can we have the results for: <ul style="list-style-type: none"> <li>○ The frequency and accuracy of meter reading</li> </ul> </li> </ul>

Business Sphere	Business Attribute	Criteria (Diagnostic Questions)	
		General	Department/Utility/ Function Specific
		<p>expectations?</p> <ul style="list-style-type: none"> <li>○ Does the organization have a customer management strategy that is being implemented?</li> <li>○ Are there processes and/or systems in place for customer relationship management and do they effectively facilitate this function?</li> <li>○ Are customer concerns and priorities taken into consideration during planning and execution?</li> <li>○ Does the organization evaluate customer satisfaction with its services and programs, and does it achieve good results?</li> <li>○ Are customer relationship management activities aligned with the overall corporate approach to citizen engagement (if required)?</li> </ul> <p><i>Measures/Metrics</i></p> <ul style="list-style-type: none"> <li>● The existence of a customer management strategy.</li> <li>● Does the organization track and can we have the results for: <ul style="list-style-type: none"> <li>○ Cost of customer care and billing per customer</li> <li>○ Number of customer complaints per 1,000 customers</li> <li>○ Number of customer technical complaints per 1,000 customers</li> <li>○ Average number of hours/days to respond to client or customer inquiries</li> <li>○ Number of error driven billing adjustments per 1,000 employees</li> <li>○ Average number of days to start or stop service</li> <li>○ Customer satisfaction with the services and programs</li> </ul> </li> </ul>	

Business Sphere	Business Attribute	Criteria (Diagnostic Questions)	
		General	Department/Utility/ Function Specific
		<p>provided</p> <p><i>Documents</i></p> <ul style="list-style-type: none"> <li>• Can we have copies of any related documents such as customer management plans or approaches, customer analyses, i.e. complaints, customer satisfaction surveys and results, news releases, brochures, summaries, etc.?</li> </ul>	
	3.3. Partnerships and Stakeholder Relations	<p><i>Description</i></p> <ul style="list-style-type: none"> <li>• Who are your organization's key partners and stakeholders?</li> <li>• What is your organization's overall approach to engaging partners and stakeholders?</li> <li>• What partnership and stakeholder relation activities does your organization engage in?</li> </ul> <p><i>SWOT</i></p> <ul style="list-style-type: none"> <li>• What is working well and what could be improved in the way the organization carries out partnerships and stakeholder relations?</li> <li>• What are the key challenges and opportunities facing the organization in this area moving forward?</li> </ul> <p><i>Management Practice</i></p> <ul style="list-style-type: none"> <li>• Does the organization follow best management practice in partnerships and stakeholder relations? <ul style="list-style-type: none"> <li>○ Does the organization know the expectations of its</li> </ul> </li> </ul>	



Business Sphere	Business Attribute	Criteria (Diagnostic Questions)	
		General	Department/Utility/ Function Specific
		<p>partners and key stakeholders and understand the basis for these expectations?</p> <ul style="list-style-type: none"> <li>○ Does the organization have a stakeholder engagement strategy that is being implemented?</li> <li>○ Are partner and stakeholder concerns and priorities taken into consideration during planning and execution?</li> <li>○ Does the organization evaluate partner and stakeholder satisfaction with its services and programs, and does it achieve good results?</li> <li>○ Are partnerships and relations with key stakeholders aligned with the overall corporate approach to these partners and key stakeholders (if required)?</li> </ul> <p><i>Measures/Metrics</i></p> <ul style="list-style-type: none"> <li>● The existence of a stakeholder engagement strategy.</li> <li>● Does the organization track and can we have the results for: <ul style="list-style-type: none"> <li>○ Average number of hours/days to respond to stakeholder inquiries</li> <li>○ Partner and stakeholder satisfaction with the services and programs provided</li> </ul> </li> </ul> <p><i>Documents</i></p> <ul style="list-style-type: none"> <li>● Can we have copies of any related documents such as stakeholder engagement plans, stakeholder analyses, description of partner organizations or partnership plans or agreements?</li> </ul>	

Business Sphere	Business Attribute	Criteria (Diagnostic Questions)	
		General	Department/Utility/ Function Specific
	3.4. Regional and Other Integrated Planning	<p><i>Description</i></p> <ul style="list-style-type: none"> <li>• Does your organization engage in any regional or similar integrated planning?</li> <li>• Who are your organization's key regional partners?</li> </ul> <p><i>SWOT</i></p> <ul style="list-style-type: none"> <li>• What is working well and what could be improved in the way the organization carries out regional and other integrated planning?</li> <li>• What are the key challenges and opportunities facing the organization in this area moving forward?</li> </ul> <p><i>Management Practice</i></p> <ul style="list-style-type: none"> <li>• Does the organization follow best management practice in regional and other integrated planning? <ul style="list-style-type: none"> <li>○ Does the organization know the expectations of its regional partners and understand the basis for these expectations?</li> <li>○ Does the organization have a regional planning strategy that is being implemented?</li> <li>○ Are regional issues and priorities taken into consideration during planning and execution?</li> <li>○ Is regional and other integrated planning aligned with the overall corporate approach to regional and other integrated planning (if required)?</li> </ul> </li> </ul> <p><i>Measures/Metrics</i></p>	

Business Sphere	Business Attribute	Criteria (Diagnostic Questions)	
		General	Department/Utility/ Function Specific
		<ul style="list-style-type: none"> <li>• The existence of a regional planning strategy.</li> </ul> <p><i>Documents</i></p> <ul style="list-style-type: none"> <li>• Can we have copies of any related documents such as regional plans, frameworks or agreements, description of regional partners, or service agreements or standards?</li> </ul>	
4. Monitoring, Measurement and Results	4.1. Performance Monitoring and Reporting	<p><i>Description</i></p> <ul style="list-style-type: none"> <li>• How does your organization carry out performance monitoring and reporting?</li> <li>• What are the key measures and metrics that your organization monitors and reports on?</li> <li>• What financial metrics are tracked?</li> <li>• Have stated strategic and operational goals and objectives been achieved?</li> </ul> <p><i>SWOT</i></p> <ul style="list-style-type: none"> <li>• What is working well and what could be improved in the way the organization carries out performance monitoring and reporting?</li> <li>• What are the key challenges and opportunities facing the organization in this area moving forward?</li> </ul> <p><i>Management Practice</i></p> <ul style="list-style-type: none"> <li>• Does the organization follow best management practice in performance monitoring and reporting? <ul style="list-style-type: none"> <li>○ Does the organization have a formal performance</li> </ul> </li> </ul>	<p><i>Management Practice</i></p> <ul style="list-style-type: none"> <li>• Does the organization follow best management practice in utility benchmarking? <ul style="list-style-type: none"> <li>○ Does the utility engage in reliability monitoring and reporting?</li> <li>○ Does the utility benchmark its reliability against other utilities and industry standards?</li> </ul> </li> </ul> <p><i>Measures/Metrics</i></p> <ul style="list-style-type: none"> <li>• Does the utility track and can we have the results for: <ul style="list-style-type: none"> <li>○ System average interruption frequency index (SAIFI)</li> <li>○ System average interruption duration index (SAIDI)</li> <li>○ Customer average interruption duration index (CAIDI)</li> <li>○ Customer interruptions per km of distribution wire</li> <li>○ Index of reliability</li> </ul> </li> </ul> <p><i>Documents</i></p> <ul style="list-style-type: none"> <li>• Can we have copies of any documents relating to reliability monitoring and reporting that your utility carries</li> </ul>

Business Sphere	Business Attribute	Criteria (Diagnostic Questions)	
		General	Department/Utility/ Function Specific
		<p>management system in place?</p> <ul style="list-style-type: none"> <li>Does the organization monitor and report on its progress towards achieving its strategic and operational goals and objectives?</li> <li>Does the organization assess its overall effectiveness and efficiency in carrying out its activities?</li> <li>Does management receive complete, credible and fair information that satisfies its decision making and accountability requirements?</li> <li>Does the organization benchmark itself against other organizations or industry standards?</li> <li>Does the organization's performance monitoring and reporting align with and support an overall corporate approach to performance management (if required)?</li> </ul> <p><i>Measures/Metrics</i></p> <ul style="list-style-type: none"> <li>The existence of a formal performance management system and evidence of participation in benchmarking initiatives.</li> </ul> <p><i>Documents</i></p> <ul style="list-style-type: none"> <li>Can we have copies of any related documents such as a summary of key performance indicators (KPI's) and the most recent results, performance dashboards or the results of benchmarking initiatives?</li> </ul>	<p>out?</p>

Business Sphere	Business Attribute	Criteria (Diagnostic Questions)	
		General	Department/Utility/ Function Specific
	4.2. Regulatory Compliance and Reporting	<p><i>Description</i></p> <ul style="list-style-type: none"> <li>Does your organization engage in any regulatory compliance and reporting? If so, what type and how is it carried out?</li> </ul> <p><i>SWOT</i></p> <ul style="list-style-type: none"> <li>What is working well and what could be improved in the way the organization carries out regulatory compliance and reporting?</li> <li>What are the key challenges and opportunities facing the organization in this area moving forward?</li> </ul> <p><i>Management Practice</i></p> <ul style="list-style-type: none"> <li>Does the organization follow best management practice in regulatory compliance and reporting? <ul style="list-style-type: none"> <li>Does the organization understand, monitor and report on regulatory requirements?</li> <li>Does the organization understand, plan for and address changing regulatory requirements?</li> <li>Does the organization have processes and/or systems in place for regulatory compliance and reporting that effectively facilitate this function?</li> </ul> </li> </ul> <p><i>Measures/Metrics</i></p> <ul style="list-style-type: none"> <li>The existence of regulatory submissions and reports.</li> </ul>	<p><i>Management Practice</i></p> <ul style="list-style-type: none"> <li>Does the utility follow best management practice in regulatory compliance and reporting? <ul style="list-style-type: none"> <li>Does the utility monitor and submit the data required for compliance with electric distribution and transmission standards?</li> </ul> </li> </ul> <p><i>Measures/Metrics</i></p> <ul style="list-style-type: none"> <li>Does the utility track and can we have the results for: <ul style="list-style-type: none"> <li>Compliance with AESO reliability standards</li> </ul> </li> </ul> <p><i>Documents</i></p> <ul style="list-style-type: none"> <li>Can we have any documents related to regulatory compliance with electric distribution and transmission standards?</li> </ul>

Business Sphere	Business Attribute	Criteria (Diagnostic Questions)	
		General	Department/Utility/ Function Specific
		<p><i>Documents</i></p> <ul style="list-style-type: none"> <li>• Can we have copies of any related documents such as regulatory compliance processes and activities, regulatory submissions or regulatory reports?</li> </ul>	
	4.3. Financial Reporting	<p><i>Description</i></p> <ul style="list-style-type: none"> <li>• How does your organization carry out financial reporting?</li> </ul> <p><i>SWOT</i></p> <ul style="list-style-type: none"> <li>• What is working well and what could be improved in the way the organization carries out financial reporting?</li> <li>• What are the key challenges and opportunities facing the organization in this area moving forward?</li> </ul> <p><i>Management Practice</i></p> <ul style="list-style-type: none"> <li>• Does the organization follow best management practice in financial reporting? <ul style="list-style-type: none"> <li>○ Does the organization prepare regular (i.e. quarterly, annually) financial summaries and statements?</li> <li>○ Are these summaries and statements accurate and do they provide explanations for the numbers?</li> <li>○ Do these summaries and statements facilitate a good understanding of financial matters and if financial goals and objectives have been achieved?</li> <li>○ Is financial reporting aligned with the overall corporate approach to financial reporting (if required)?</li> </ul> </li> </ul>	



Business Sphere	Business Attribute	Criteria (Diagnostic Questions)	
		General	Department/Utility/ Function Specific
		<p><i>Measures/Metrics</i></p> <ul style="list-style-type: none"> <li>• The existence of financial summaries and statements.</li> <li>• Does the organization track and can we have the results for: <ul style="list-style-type: none"> <li>○ Cycle time in working days from period-end closure to the distribution of routine financial reports</li> <li>○ Cycle time in working days from year-end closure to submission of audited accounts</li> </ul> </li> </ul> <p><i>Documents</i></p> <ul style="list-style-type: none"> <li>• Can we have copies of any related documents such as required submission documents, regular reports like annual or regular financial statements, or analysis of financial reporting cycle times?</li> </ul>	



## **Appendix E**

### **List of Documents Reviewed**

## **Appendix E - List of Documents Reviewed**

### **City of Red Deer**

#### *General Information*

- Information on the EL&P Web Site
  - Electric Light & Power
  - Your Electricity Bill
  - Electricity Deregulation Frequently Asked Questions
  - Regulated Rate Option
  - Distribution Tariff
  - Terms and Conditions for Distribution Access Services
  - Apply for Retail Services
  - Applying for Electric Services and Meters
  - Micro-Generation
  - Builder & Developer Frequently Asked Questions

#### *Strategic and Business Planning*

- City of Red Deer Strategic Implementation – Internal Effectiveness Charter
- EL&P Service Plan 2012-14
- EL&P Transmission System 2011-2025 Master Plan

#### *Sustainability Planning*

- City of Red Deer Environmental Master Plan
- See **Citizen Engagement** – Brochures re: energy conservation
- See **Customer Relationship Management** – News releases re: managing electricity usage

#### *Enterprise Risk Management*

- *None*

#### *Revenue and Rate Approach*

- Draft Recommendations for Utility Fiscal Policies (part of the Utility Rate Model Review)
- See **Performance Monitoring and Reporting** – Comparison of Distribution Tariff for January 2012 – Residential, Small General Service, General Service and Large General Service/Industrial

#### *Budgeting and Capital Planning*

- EL&P Five Year Budget/Actual Summary
- EL&P Summary Budget by Business Unit
- EL&P 2012,2013, 2014 Budgets – Funding Adjustment Recommendation
- EL&P Department Operating Budget Summary 2012

- EL&P 2012 Capital Budget Request
- EL&P Stabilization Reserve
- Budgeting and Asset Management of Street Lights and Traffic Lights (provided by Karen Yetter)

#### *Service Lines and Programs*

- Legislation and Regulation
  - Bylaws Relevant to EL&P
    - No. 3273/2000 - Electric Utility Bylaw
    - Appendix A to Bylaw 3273/2000 - Distribution Tariff
    - Appendix B to Bylaw 3273/2000 – Distribution Access Services Schedule of Fees
    - Appendix C to Bylaw 3273/2000 - Regulated Rate Tariff Energy Price Setting Plan
    - Appendix D to Bylaw 3273/2000 - Regulated Rate Tariff
    - Appendix E to Bylaw 3273/2000 – Regulated Rate Tariff Fee Schedule
  - Regulated Rate Tariff – Terms and Conditions
  - Distribution Access Services – Terms and Conditions
  - Retail Access Services – Terms and Conditions
- Distribution Service Area Approval and Map
- Distribution Wire Infrastructure (km by type)
- Number of Energized Sites by Rate Class – January 31, 2012 (provided by Paula Robertson)
- Number of Retailer Types – January 31, 2012 (provided by Paula Robertson)

#### *Organization Structure and Staffing*

- Organizational Charts for the City of Red Deer and EL&P
- EL&P Organizational Review 2009
- Summary of EL&P Work Group Functions and Detailed Roles and Responsibilities (provided by Garfield Lee with contributions from unit managers)
- Preliminary Support Cost Allocations – 2012 Budget
- City of Red Deer 2011 Operating Fund Budget Summary
- Enmax Power Service Level Agreement (SLA) Report
- EL&P Contractors

#### *Employee Management*

- EL&P Job Descriptions
- EL&P Permanent Employees Age Plus Years of Service
- EL&P Hours and FTE's - 2002-2011 (provided by Sara-Mae Dippel)
- On-Call Hours, Stand-By Weeks and Stand-By Stats (provided by Sara-Mae Dippel)
- Total Cost and Total Hours for Operating Activities 2000-2010 (provided by Tim Hoffman)
- Total Cost and Total Hours for Capital Activities 2000-2010 (provided by Tim Hoffman)
- Employee wage information for salary and hourly staff (2011)
- Performance Reviews Submitted (provided by Sara-Mae Dippel)
- EL&P Training History – 2007-2011 (provided by Sara-Mae Dippel)
- EL&P Training History – 1993 to 2011 (SEMI System)

- EL&P Professional Development / Training policies
- Standard Employee Evaluation Template

#### *Working Environment*

- The City of Red Deer Employee Surveys: 2003, 2006, 2009
- Employee Turnover Analysis (provided by Sara-Mae Dippel)
- 2011 Employee Absences
- Health and Safety Management System and Related Documents
- Example – EL&P Safety Meeting Minutes (December 21, 2011)
- Incident Assessment template
- City of Red Deer Safety Incidents by Department
- CEA 2008 Safety Incident Statistics – Executive Summary Report

#### *Operations and Maintenance Planning and Execution*

- EL&P Customer Service Guidelines
- Examples of Cyme studies
- Total number and number of malfunctioning meters, 2007 to 2012 est. (provided by Jim Jorgenson)

#### *Financial Management and Rate Model*

- See **Revenue and Rate Approach** – Draft Recommendations for Utility Fiscal Policies (part of the Utility Rate Model Review)
- See **Organization and Staffing Structure** - Enmax Power Service Level Agreement (SLA) Reporting
- See **Organization and Staffing Structure** - Preliminary Support Cost Allocations – 2012 Budget
- Revision to Distribution Tariff Effective January 1, 2012
- AESO Transmission Cost 2011 Background (provided by Jim Jorgenson)
- Transmission Facility Operator (TFO) General Tariff Application (2009-2011)
- Example of Variance Reporting (Operating): Summary of EL&P's Operating Budget for 2011 as at September 30, 2011 and Cost Centre Detail Monthly Operating Report by Obj and Sub – Operating Report Without Sub Ledger for the period ending September 30, 2011
- EL&P – Non-Discretionary O&M (2007-2011)
- Summary of 2010 Residential Subdivision Projects
- Example of Project Tracking (Capital): Summary Gantt Chart and Jobs Detail
- Allowance for Doubtful Accounts –General Trade Receivables for the period ending December 31, 2011
- Examples of Procurement Agreements – Three Phase Padmount Transformer Agreement with Cam Tran Co. and Electrical Cable Agreement with Nexans Canada
- EL&P 10 Year (2012-2012) Cash Flow and Reserve Balance Forecast – 2012 Budget
- Red Deer Rates of Return for 2012 Budget
- Debt to Equity Ratio (provided by Karen Yetter)
- Cost of Service Analysis (COSA) Model (for rates effective January 1, 2012)
- EL&P 2012 COSA – Escalation Factors
- Summary of Dividends Paid to the City (2006-2011)
- Summary of Reserve Balances (2005-2011)

- Summary of Year End Debt (2008-2011)
- Utility Rate Policy Review Presentation (February 27, 2012)

#### *Infrastructure and Asset Management*

- Assets for EL&P – Fixed Asset Total Cost by Asset Item as of December 31, 2011
- Summary of EL&P Assets by Asset Code (provided by Garfield Lee)
- Summary of Transmission Infrastructure (provided by Mark Krukowski)
- Ten-year historical km of primary distribution wire (provided by Jim Jorgenson)
- Ten-year historical square km of service area (provided by Jim Jorgenson)
- Asset Management Plan – City of Red Deer – Asset Management Overview Report – Electrical Light and Power (Prior and Prior Associates)
- Auditor's Report on Obsolete Inventory
- EL&P Inventory Turnover

#### *Operating Risk and Business Continuity*

- ELA&P Emergency Plan – Union Strike
- EL&P Pandemic Plan
- Emergency Management Bylaw
- Mutual Emergency Assistance Agreement between City of Red Deer Electric Utility and AltaLink
- Security Reporting Templates: Substation Reads and Physical Sabotage Reporting, SCADA Sabotage and Intrusion Reporting, and AESO Information Document Sabotage Event Reporting

#### *Citizen Engagement*

- EL&P Brochures
  - Keeping your lights on
  - Energy conservation for your business
  - Energy conservation in your home
  - Is renewable energy in your home something you may be considering?
  - Power Outages

#### *Customer Relationship Management*

- See **Organization and Staffing Structure** - Enmax Power Service Level Agreement (SLA) Reporting
- News Release (November 23, 2010) re: the Electricity Rush Hour Advertising Campaign
- News Release (November 8, 2011) re: the Kill A Watt Program
- Example of Trouble Call Log System reports

#### *Partnerships and Stakeholder Relations*

- Minutes of EL&P and Water Treatment Plant Coordination Meetings (March 10 and 14, 2011)



*Regional and Other Integrated Planning*

- EL&P Service Territory Expansion Meeting PowerPoint (November 9, 2010) and resulting correspondence with Fortis Alberta

*Performance Monitoring and Reporting*

- Comparison of Distribution Tariff for January 2012 – Residential, Small General Service, General Service and Large General Service/Industrial
- Reliability Analysis (1992-2010)
- Outages by Neighbourhood (2009-2011)
- 2010 Annual Service Continuity Report on Distribution System Performance in Electrical Utilities – Canadian Electricity Association

*Regulatory Compliance and Reporting*

- AESO Alberta Reliability Standards – Compliance Monitoring Audit Report – The City of Red Deer (March 31, 2011)
- Executive Summary Report and Confirmation of Monitoring Results for EL&P's Quality Management Plan (QMP)

*Financial Reporting*

- The City of Red Deer 2010 Annual Financial Report
- Departmental Representation Letter for EL&P (2010) and draft Departmental Representation Letter for EL&P (2011)
- Financial Reporting Cycle Times

**Measures and Metrics**

- Ontario Municipal Benchmarking Initiative (OMBI) 2009 Benchmarking Report
- Ontario Municipal Benchmarking Initiative (OMBI) Indicators
- Effective Utility Management – A Primer for Water and Wastewater Utilities
- Value for Money in public sector corporate services – A joint project by the UK Public Sector Audit Agencies
- Monitoring Performance of Electric Utilities – Indicators and Benchmarking in Sub-Saharan Africa (World Bank)

**Benchmarking***Kelowna*

- City of Kelowna Web Site
- 2011 City of Kelowna Financial Plan
- 2012 City of Kelowna Electricity Rates Bylaw
- City of Kelowna Official Community Plan
- FortisBC December 2011 Operations Metrics

*Lethbridge*

- City of Lethbridge Web Site
- 2010 Distribution Tariff Breakdown
- 2012 Distribution Tariff Rate Forecast Model
- 2011 Corporate Cost Allocation Excerpt
- 2009 to 2011 City of Lethbridge Operating Budget
- 2012 to 2014 Draft City of Lethbridge Operating Budget
- Electric Utility 2012-2014 Business Plan
- RRO, Distribution Tariff, and Electric System Regulation Bylaws
- Electric Utility Capital Improvement Projects 2011-2020, Budget and Project Descriptions
- City of Lethbridge Org Chart

*Medicine Hat*

- City of Medicine Hat Web Site
- 2010 City of Medicine Hat Annual Report
- 2012-2016 Electric Utility Business Plan, and Operating and Capital Budgets
- 2012 Utility Rate Brochure
- City of Medicine Hat Electric Utility Bylaw
- Electric Utility Standard Charges Fees and Guide

*Edmonton*

- Epcor Web Site
- City of Edmonton Web Site
- City of Edmonton Distribution Tariff Bylaw
- City of Edmonton 2010 Annual Report
- Epcor 2011 Annual Report

*Calgary*

- Enmax Web Site
- City of Calgary Web Site
- Enmax 2010 Annual Report
- City of Calgary 2012-2014 Business Plan and Budgets
- City of Calgary LAF, effective April 1, 2012

*Waterloo*

- Waterloo North Hydro Web Site
- Waterloo North Hydro 2008 Conservation and Demand Annual Report
- 2011 Waterloo North Hydro Operating and Capital Budgets
- Waterloo North Hydro Board Staff Interrogatories
- Ontario Electricity Time-of-Use Price Periods, effective November 1, 2011
- Waterloo North Hydro Written Responses regarding System Reliability Standards
- Waterloo North Hydro Written Responses regarding Cost of Service Technical Conference

*Oakville*

- Oakville Hydro Web Site
- Town of Oakville Web Site
- Town of Oakville 2009-2018 Capital Budget and Financial Plan
- 2011 Oakville Hydro Annual Report
- Oakville Hydro Board Mandate and Charter
- Oakville Hydro Finance and Audit Committee Mandate and Charter
- Oakville Hydro Governance and Risk Committee Mandate and Charter
- Oakville Hydro Human Resources Committee Mandate and Charter
- Oakville Hydro Consumer Demand Strategy
- Oakville Hydro Community Relations Support Policies and Procedures
- Oakville Hydro Electricity Distribution License, Valid Until November 25, 2023
- Smart Meters Answer Book

*Sacramento*

- 2010 Sacramento Municipal Utility District (SMUD) Annual Report
- 2012 SMUD Budget Letter and Summary
- 2011 General Manager's Report and Recommendation on Open Access Transmission Tariff
- 2011 General Manager's Report and Recommendation on Rates and Services
- Resolution 11-08-06 Rate Schedules
- SMUD Board Policy: Enterprise Risk Management



## **Appendix F**

### **Interview Participants**

**Appendix F - Interview Participants****Internal Interviews**

<b>Division</b>	<b>Title</b>	<b>Name</b>	<b>Date</b>
City Managers Division	City Manager	Craig Curtis	December 7
Corporate Services Division	Director of Corporate Services	John Knoch	December 8
Corporate Services Division	Financial Services Manager	Dean Krejci	December 12
Corporate Services Division	Information Technology Services Manager	Dan Newton	December 8
City Managers Division	Human Resources	Christine Rowland	January 10
Development Services Division	Director of Development Services	Paul Goranson	December 8
Development Services Division	Division Controller	Karen Yetter	January 10
City Managers Division	Division Strategist	Lisa Perkins	January 11
Development Services Division	Engineering Services Manager	Frank Colosimo	December 13
Development Services Division	Divisional Strategist	Darren Kuz	December 12
Development Services Division	EL&P Manager	Jim Jorgenson	December 13
Development Services Division	EL&P Accountant	Karen Kilroy	December 1
Development Services Division	EL&P Senior Electrical Distribution Engineer	Garfield Lee	December 1
Development Services Division	EL&P Senior Engineer - Planning (Transmission)	Mark Krukowski	January 10
Development Services Division	EL&P Utility Specialist	Andreas Zabel	December 8
Development Services Division	EL&P General Foreman	Wes Albers	December 7
Development Services Division	EL&P General Foreman	Brent McCabe	January 10

**External Interviews**

Category	Organization	Name	Date
Electricity Service Provider	Enmax Power	Lorne McKay and Penny McQuarrie	January 17
	Enmax Energy	Mark McGillivray	January 20
Regulators	AESO	Ligong Gan	January 16
	AUC	Ann Glass	January 17
Regulatory Consultant	Chymko Consulting	Nigel Chymko	January 11
Developers	Melcor	Guy Pelletier	January 17





## **Appendix G**

### **Interview Guide – City of Red Deer**

## **Appendix G - Interview Guide – City of Red Deer**

### **Red Deer Value-For-Money**

#### **Interview Guide – City of Red Deer**

*Please note, the following is a comprehensive and all inclusive interview guide. It is not anticipated that all questions will be asked to all interviewees.*

#### ***Roles and Responsibilities***

- 1 What is your role and what are your primary responsibilities as they pertain to the Electric, Light and Power (EL&P) Utility?

#### ***Strategic Design and Alignment***

##### ***Strategic and Business Planning***

- 2 How does your organization carry out strategic and business planning?
- 3 What are your key priorities and business goals?
- 4 What is working well and what could be improved in the way the organization carries out strategic and business planning?
- 5 What are the key challenges and opportunities facing the organization in this area moving forward?

*Supplement with more specific questions regarding management practice, measures/metrics and or specific documents (see Evaluation Framework) as required and depending on the roles and responsibility of the interviewee.*

##### ***Sustainability Planning***

- 6 How does your organization undertake sustainability planning?
- 7 What are your sustainability priorities and goals?
- 8 What is working well and what could be improved in the way the organization carries out sustainability planning?
- 9 What are the key challenges and opportunities facing the organization in this area moving forward?

*Supplement with more specific questions regarding management practice, measures/metrics and or specific documents (see Evaluation Framework) as required and depending on the roles and responsibility of the interviewee.*

***Enterprise Risk Management***

- 10 How does your organization undertake enterprise risk management?
- 11 What are the key enterprise risks facing your organization?
- 12 What is working well and what could be improved in the way the organization carries out enterprise risk management?
- 13 What are the key challenges and opportunities facing the organization in this area moving forward?

*Supplement with more specific questions regarding management practice, measures/metrics and or specific documents (see Evaluation Framework) as required and depending on the roles and responsibility of the interviewee.*

***Revenue and Rate Approach***

- 14 How is your organization funded? How does it generate revenue?
- 15 What is working well and what could be improved in the organization's revenue and rate approach?
- 16 What are the key challenges and opportunities facing the organization in this area moving forward?

*Supplement with more specific questions regarding management practice, measures/metrics and or specific documents (see Evaluation Framework) as required and depending on the roles and responsibility of the interviewee.*

***Budgeting and Capital Planning***

- 17 How does your organization carry out budgeting and capital planning?
- 18 What is working well and what could be improved in the way the organization carries out budgeting and capital planning?
- 19 What are the key challenges and opportunities facing the organization in this area moving forward?

*Supplement with more specific questions regarding management practice, measures/metrics and or specific documents (see Evaluation Framework) as required and depending on the roles and responsibility of the interviewee.*

***Management and Execution******Service Lines and Programs***

- 20 What are your organization's main service lines and programs?
- 21 How many customers or clients do you serve?
- 22 Do you have formalized service levels or service level agreements?
- 23 What is working well and what could be improved in the organization's service lines and programs?
- 24 What are the key challenges and opportunities facing the organization in this area moving forward?

*Supplement with more specific questions regarding management practice, measures/metrics and or specific documents (see Evaluation Framework) as required and depending on the roles and responsibility of the interviewee.*

***Organization Structure and Staffing***

- 25 How is your organization structured?
- 26 What are the units and sub-units and their functions?
- 27 How are corporate functions such as HR, IT, finance, procurement, etc. delivered?
- 28 Is your organization part of a corporate shared services model? If so, please describe.
- 29 Does your organization contract out any functions? If so, please describe.
- 30 What is working well and what could be improved in the organization's organization and staffing?
- 31 What are the key challenges and opportunities facing the organization in this area moving forward?

*Supplement with more specific questions regarding management practice, measures/metrics and or specific documents (see Evaluation Framework) as required and depending on the roles and responsibility of the interviewee.*

***Employee Management***

- 32 How many employees does your organization have overall and by type (full time, part time, temporary, seasonal) and function?
- 33 What is the age breakdown of your employees by level and function?
- 34 What are the typical working hours and the average workload in terms of standard and overtime hours?
- 35 How does your organization carry out the main functions of employee management:
  - recruitment,
  - roles and responsibilities (job descriptions),
  - performance management,
  - compensation,
  - professional development and training, and
  - succession?
- 36 Are staff performing to stated and agreed expectations?
- 37 What is working well and what could be improved in the way the organization carries out employee management?
- 38 What are the key challenges and opportunities facing the organization in this area moving forward?

*Supplement with more specific questions regarding management practice, measures/metrics and or specific documents (see Evaluation Framework) as required and depending on the roles and responsibility of the interviewee.*

***Working Environment***

- 39 How would you describe your organization's culture and the employee experience?
- 40 What are your organization's approaches to ensuring a positive and healthy work environment?
- 41 What is your organization's approach to safety?
- 42 What is working well and what could be improved in the organization's working environment?
- 43 What are the key challenges and opportunities facing the organization in this area moving forward?

*Supplement with more specific questions regarding management practice, measures/ metrics and or specific documents (see Evaluation Framework) as required and depending on the roles and responsibility of the interviewee.*

### ***Operations and Maintenance Planning and Execution***

- 44 How does your organization carry out operations and maintenance planning?
- 45 What systems are in place?
- 46 How does this planning flow through to execution?
- 47 How does your organization carry out project management?
- 48 What is working well and what could be improved in the way the organization carries out operations and maintenance planning and execution?
- 49 What are the key challenges and opportunities facing the organization in this area moving forward?

*Supplement with more specific questions regarding management practice, measures/ metrics and or specific documents (see Evaluation Framework) as required and depending on the roles and responsibility of the interviewee.*

### ***Financial Management and Rate Model***

- 50 How does your organization undertake financial management to manage and administer revenues and expenses?
- 51 What are your organization's key financial policies and internal controls?
- 52 What is working well and what could be improved in the way the organization carries out financial management?
- 53 What are the key challenges and opportunities facing the organization in this area moving forward?

*Supplement with more specific questions regarding management practice, measures/ metrics and or specific documents (see Evaluation Framework) as required and depending on the roles and responsibility of the interviewee.*

### ***Infrastructure and Asset Management***

- 54 What are your organization's key capital and other assets, broken down by categories?
- 55 How does your organization carry out asset management?
- 56 What is working well and what could be improved in the way the organization carries out asset management?
- 57 What are the key challenges and opportunities facing the organization in this area moving forward?

*Supplement with more specific questions regarding management practice, measures/ metrics and or specific documents (see Evaluation Framework) as required and depending on the roles and responsibility of the interviewee.*

### ***Operating Risk and Business Continuity***

- 58 What is your organization's approach to managing operating risk and business continuity?
- 59 What are the key operating risks facing your organization?

- 60 What is working well and what could be improved in the way the organization manages operating risk and business continuity?
- 61 What are the key challenges and opportunities facing the organization in this area moving forward?

*Supplement with more specific questions regarding management practice, measures/metrics and or specific documents (see Evaluation Framework) as required and depending on the roles and responsibility of the interviewee.*

### ***Citizen, Customer and Stakeholder Engagement***

#### ***Citizen Engagement***

- 62 What is your organization's overall approach to engaging with citizens?
- 63 Does your organization undertake any regular or one-off citizen engagement initiatives?
- 64 What is working well and what could be improved in the way the organization carries out citizen engagement?
- 65 What are the key challenges and opportunities facing the organization in this area moving forward?

*Supplement with more specific questions regarding management practice, measures/metrics and or specific documents (see Evaluation Framework) as required and depending on the roles and responsibility of the interviewee.*

#### ***Customer Relationship Management***

- 66 Who are the organization's customers and clients?
- 67 Does your organization have a formal customer relationship management (CRM) system?
- 68 What customer and client management activities does your organization engage in?
- 69 What is working well and what could be improved in the way the organization carries out customer relationship management?
- 70 What are the key challenges and opportunities facing the organization in this area moving forward?

*Supplement with more specific questions regarding management practice, measures/metrics and or specific documents (see Evaluation Framework) as required and depending on the roles and responsibility of the interviewee.*

#### ***Partnerships and Stakeholder Relations***

- 71 Who are your organization's key partners and stakeholders?
- 72 What is your organization's overall approach to engaging partners and stakeholders?
- 73 What partnership and stakeholder relation activities does your organization engage in?
- 74 What is working well and what could be improved in the way the organization carries out partnerships and stakeholder relations?
- 75 What are the key challenges and opportunities facing the organization in this area moving forward?



*Supplement with more specific questions regarding management practice, measures/ metrics and or specific documents (see Evaluation Framework) as required and depending on the roles and responsibility of the interviewee.*

### ***Regional and Other Integrated Planning***

- 76 Does your organization engage in any regional or similar integrated planning?
- 77 Who are your organization's key regional partners?
- 78 What is working well and what could be improved in the way the organization carries out regional and other integrated planning?
- 79 What are the key challenges and opportunities facing the organization in this area moving forward?

*Supplement with more specific questions regarding management practice, measures/ metrics and or specific documents (see Evaluation Framework) as required and depending on the roles and responsibility of the interviewee.*

### ***Monitoring, Measurement and Results***

#### ***Performance Monitoring and Reporting***

- 80 How does your organization carry out performance monitoring and reporting?
- 81 What are the key measures and metrics that your organization monitors and reports on?
- 82 What financial metrics are tracked?
- 83 Have stated strategic and operational goals and objectives been achieved?
- 84 What is working well and what could be improved in the way the organization carries out performance monitoring and reporting?
- 85 What are the key challenges and opportunities facing the organization in this area moving forward?

*Supplement with more specific questions regarding management practice, measures/ metrics and or specific documents (see Evaluation Framework) as required and depending on the roles and responsibility of the interviewee.*

#### ***Regulatory Compliance and Reporting***

- 86 Does your organization engage in any regulatory compliance and reporting? If so, what type and how is it carried out?
- 87 What is working well and what could be improved in the way the organization carries out regulatory compliance and reporting?
- 88 What are the key challenges and opportunities facing the organization in this area moving forward?

*Supplement with more specific questions regarding management practice, measures/ metrics and or specific documents (see Evaluation Framework) as required and depending on the roles and responsibility of the interviewee.*

#### ***Financial Reporting***

- 89 How does your organization carry out financial reporting?

90 What is working well and what could be improved in the way the organization carries out financial reporting?

91 What are the key challenges and opportunities facing the organization in this area moving forward?

*Supplement with more specific questions regarding management practice, measures/metrics and or specific documents (see Evaluation Framework) as required and depending on the roles and responsibility of the interviewee.*

***Other Comments***

92 If you could just change one thing at EL&P, which would make the biggest positive impact, what would it be?

93 Do you have any other comments or questions?



## **Appendix H**

### **Interview Guide – External Stakeholders**

**Appendix H - Interview Guide – External Stakeholders****Red Deer Value-For-Money****Interview Guide – External Stakeholders**

1. What is your organization's relationship with EL&P? What services do you provide to them or they to you, and what information do they provide to you or you to them?
2. How would you characterize the current relationship? Does EL&P provide you with what you need in a timely manner to the level of detail required? Are they responsive to requests? Are they competent? Are they professional?
3. Does EL&P work actively and consistently with you to understand your organization's needs and expectations? Is there good two-way communication?
4. What would you say are EL&P's biggest strengths when dealing with you? What do they do really well?
5. What would you say are the biggest challenges EL&P has when dealing with you? What could they do better?
6. Do you see your organization's relationship and level of interaction with EL&P staying the same, growing or declining in the future? Why?
7. Are you aware of how well EL&P is performing? Financially? Operationally? Environmentally? In relation to customers?
8. Do you see any big challenges or risks for EL&P going forward overall? What things do you think they need to address going forward, in order to be a high functioning, sustainable utility?
9. Do you have any other comments or questions for us?



## **Appendix I**

### **Summary of Interview Feedback, Documents Reviewed and Analysis Undertaken**

## Appendix I - Summary of Interview Feedback, Documents Reviewed and Analysis Undertaken

Business Sphere	Business Attribute	Interview Feedback	Documents	Analysis
1. Strategic Design and Alignment	1.1. Strategic and Business Planning	<p><i>City council direction and involvement</i></p> <ul style="list-style-type: none"> <li>• Council typically focuses on things that impact citizens and things they have a personal interest in</li> <li>• They identify areas they want to see change in and this doesn't typically involves things out of the public eye like utilities</li> <li>• For the utilities, this usually means a focus on things like conservation and how rates encourage this</li> <li>• Council is not involved in the details</li> <li>• A regular dialogue happens with council annually as the rates are discussed for approval;</li> <li>• Lately, council has been interested in the variable vs fixed rate debate</li> <li>• EL&amp;P goes to great lengths to try and accommodate council requests</li> </ul> <p><i>Overall approach</i></p> <ul style="list-style-type: none"> <li>• The city has won awards for strategic planning</li> <li>• The city is currently transforming its strategic planning policy by moving to a vision driven planning framework, which should be more effective</li> <li>• Departments used to do their own planning and then this was rolled up into a strategic plan</li> <li>• Strategic direction is set by council and there are six charters for strategic implementation and three internal charters for implementation</li> <li>• Not every department is referenced in the city's strategic plan,</li> </ul>	<ul style="list-style-type: none"> <li>• City of Red Deer Strategic Implementation – Internal Effectiveness Charter</li> <li>• EL&amp;P Service Plan 2012-14</li> <li>• EL&amp;P Transmission System 2011-2025 Master Plan</li> </ul>	<ul style="list-style-type: none"> <li>• Review documents</li> <li>• Determine existence of measures/metrics and calculate if possible</li> <li>• Assess management practice based on interview feedback and documents</li> </ul>



Business Sphere	Business Attribute	Interview Feedback	Documents	Analysis
		<p>which is focused on change and not on describing core businesses</p> <ul style="list-style-type: none"> <li>• Core businesses link up to the city's vision and mission</li> <li>• The city sets guidelines for service plans and looks for alignment</li> <li>• Departments are left to figure out how to articulate their core business and to develop objectives</li> <li>• Some believe there are good linkages throughout the corporation</li> <li>• However, some also believe the alignment between corporate level strategic planning and planning in the divisions and departments, including the utilities, is challenging and could be better</li> <li>• A few interviewees indicated that many people don't know how the strategies flow and align up and down the organization and that there are not good linkages now</li> <li>• For example, the city has strategic priorities, areas of emphasis, council priorities (which tend to trump everything else), divisional service plans and department service plans; and there is frustration with lining up and implementing these plans</li> <li>• Some believe there are too many goals/priorities so it is a struggle to focus and execute all of them</li> <li>• Some suggest that the city needs to focus on only three or so key goals</li> <li>• A general feeling is that staff just want to get out and accomplish something instead of spending a lot of time reviewing and aligning all these goals and strategies</li> </ul> <p><i>EL&amp;P link to strategy</i></p>		

Business Sphere	Business Attribute	Interview Feedback	Documents	Analysis
		<ul style="list-style-type: none"> <li>• As part of the city, the EL&amp;P must identify how it links to overall corporate goals and strategies and what it is doing to address city priorities</li> <li>• EL&amp;P links to strategy through its mandate and the high level corporate goal of providing safe, reliable services to citizens</li> <li>• This goal is stated in the utility's service plan, which is its business plan</li> <li>• Many believe this simple approach is all that is needed as the utility's mandate is very straight forward</li> <li>• EL&amp;P does not do any other strategic planning</li> <li>• Some indicated there is tension for the utility in trying to address city priorities while also running a self-funded utility that is run much like a business</li> </ul> <p><i>Development planning</i></p> <ul style="list-style-type: none"> <li>• According to many, the city does a very good job of development planning and the utilities work very well with development planning;</li> <li>• The city has taken steps to encourage internal communication, i.e. on the transmission master plan, which may not have occurred in the past</li> <li>• There has been an issue coordinating the acquisition of land for a new sub-station</li> </ul> <p><i>Transmission planning</i></p> <ul style="list-style-type: none"> <li>• EL&amp;P has a transmission master plan (15 years) and is working on it via a short , medium and long term plan</li> <li>• This plan was done mostly in-house with some help from a consultant</li> </ul>		

Business Sphere	Business Attribute	Interview Feedback	Documents	Analysis
		<ul style="list-style-type: none"> <li>• Sub-station and connecting line planning needs to align with Area Structure Plans and things like road planning, etc.</li> <li>• When some Area Structure Plans were done five years ago transmission planning was not included because the utility only started planning for new transmission two years ago</li> <li>• Coordinating with the rest of the city is not easy and it involves a lot of meetings</li> <li>• Purchasing land for the sub-stations and connecting lines is not easy because they weren't include in Area Plans</li> </ul>		
	1.2. Sustainability Planning	<ul style="list-style-type: none"> <li>• There is an Environmental Master Plan that sets out an approach to sustainability and has goals</li> <li>• The utility has only very recently started to look at energy conservation and believing it should be in that business</li> <li>• Some believe that conservation is an issue that should be tackled by generators and retailers, and not by EL&amp;P since it is only a distributor</li> </ul>	<ul style="list-style-type: none"> <li>• City of Red Deer Environmental Master Plan</li> <li>• See <b>Citizen Engagement</b> – Brochures re: energy conservation</li> <li>• See <b>Customer Relationship Management</b> – News releases re: managing electricity usage</li> </ul>	<ul style="list-style-type: none"> <li>• Review documents</li> <li>• Determine existence of measures/metrics and calculate if possible</li> <li>• Assess management practice based on interview feedback and documents</li> </ul>
	1.3. Enterprise Risk Management	<ul style="list-style-type: none"> <li>• Financial services was asked to deliver a corporate enterprise risk management program but hasn't been given the necessary resources and council has not formally approved it</li> <li>• At the moment, ERM is really only being handled by one person and there is no formal program</li> <li>• There is no risk identification and mitigation plan</li> <li>• The city has put an emphasis on safety but does realize that ERM goes far beyond safety</li> </ul>	<ul style="list-style-type: none"> <li>• <i>None</i></li> </ul>	<ul style="list-style-type: none"> <li>• Review documents</li> <li>• Determine existence of measures/metrics and calculate if possible</li> <li>• Assess management practice based on interview feedback and documents</li> </ul>

Business Sphere	Business Attribute	Interview Feedback	Documents	Analysis
	1.4. Revenue and Rate Approach	<p><i>Overall approach</i></p> <ul style="list-style-type: none"> <li>• The city is very interested in making sure the utilities are self-financing and self-sustaining</li> <li>• The city also wants to ensure that rate supported utilities are not subsidizing tax supported operations (i.e. street lights)</li> <li>• The general philosophy on rates is 100% cost recovery shared across the rate base, with no cross-subsidization between rate classes</li> <li>• Also, some profit returned back to the city as a dividend</li> <li>• It also needs to be determined if special dividends are appropriate</li> <li>• The rate increases for EL&amp;P have been significantly lower than for other utilities, which also means the rate of return has been lower</li> <li>• EL&amp;P has been run as a pretty lean operation</li> <li>• The city has to be able to defend the rate model and methodology to the AUC if asked</li> <li>• For some, there is a fundamental difference between how a utility looks at its revenues and costs and how an organization like the city does</li> <li>• For a utility it is about deciding what all the legitimate and necessary costs are, building the revenue requirement based on this and generating this revenue through rates</li> <li>• For the city it is about delivering programs and services to satisfy citizens as efficiently as possible in an environment of constant resource scarcity</li> </ul> <p>EL&amp;P also generates revenue from developers who pay for all the costs of electricity distribution infrastructure in their</p>	<ul style="list-style-type: none"> <li>• Draft Recommendations for Utility Fiscal Policies (part of the Utility Rate Model Review)</li> <li>• See <b>Performance Monitoring and Reporting</b> – Comparison of Distribution Tariff for January 2012 – Residential, Small General Service, General Service and Large General Service/Industrial for overall rate structure</li> </ul>	<ul style="list-style-type: none"> <li>• Review documents</li> <li>• Determine existence of measures/metrics and calculate if possible</li> <li>• Assess management practice based on interview feedback and documents</li> </ul>

Business Sphere	Business Attribute	Interview Feedback	Documents	Analysis
		<p>developments, and EL&amp;P acts as their contractor</p> <p><i>Rate model review</i></p> <ul style="list-style-type: none"> <li>• A rate model review is currently being done with the help of a consultant</li> <li>• This review may be the first time the city has looked at creating consistency amongst all the utilities through fundamental principles and policies</li> <li>• The study is looking at how to build the revenue requirement, all major fiscal policies like rate of return and depreciation, and allocations to different rate classes</li> <li>• The utilities and the city need to come to an understanding about the purpose of the utilities and their true costs</li> <li>• It needs to be determined if the utilities should be viewed as revenue generators for the city and/or should they be managed like private utilities, i.e. Epcor</li> <li>• At the moment, council is still deciding on principles</li> <li>• The next step will be to develop the pricing model, i.e. variable vs fixed rates, which council is very interested in</li> <li>• According to some, the review is not showing much change from a draft policy created ten years ago, i.e. paying 50% of the dividend to the owner with 50% staying in the utility</li> <li>• There are fiscal practices that have been used for years but no approved policies</li> <li>• The goals is to have council approved fiscal policies</li> </ul> <p><i>Variable vs. fixed rates</i></p> <ul style="list-style-type: none"> <li>• The current council and city management want the rate structure to encourage conservation, which means basing</li> </ul>		

Business Sphere	Business Attribute	Interview Feedback	Documents	Analysis
		<p>rates more on volume of use than on the fixed assets</p> <ul style="list-style-type: none"> <li>• However, they recognize there is a real issue with an asset heavy operation when volumes decrease and the revenue also decreases</li> <li>• Some don't understand why the rate structure can't work like taxes, i.e. when property values go down the city adjusts the rate to collect the same tax revenue so why can't utilities have a similar floating rate that would change with major fluctuations in volume?</li> <li>• Some believe that EL&amp;P should promote conservation and green energy on principle but shouldn't try to do this through rates since distribution is about fixed assets that don't change based on consumption and generators and retailers are in a better position to set rates based on consumption</li> <li>• According to some, since all or most of the utility's cost are associated with fixed assets, it does not make sense to have a variable component in the rate model (distribution tariff)</li> <li>• They believe the consumption or demand side of the equation is more appropriately managed by generators, who produce a lower amount of electricity as a result of decreased usage, and by retailers</li> <li>• They point out that if the distribution tariff has a higher variable component then if usage decreases, the rate will just have to be increased</li> <li>• They believe that EL&amp;P and the other utilities need to do a better job of explaining this to council, city management and customers</li> <li>• They believe that it should be emphasized that EL&amp;P is the wires and equipment, not the electricity flowing through it</li> </ul>		



Business Sphere	Business Attribute	Interview Feedback	Documents	Analysis
		<p><i>Current rate model</i></p> <ul style="list-style-type: none"> <li>• The current rate model was built by the previous manager and he was the only person who really understood all the nuts and bolts</li> <li>• EL&amp;P is sensitive to being seen as a “cash cow” by the city and many within the utility see it as a separate operation</li> <li>• Revenue isn’t really tied to consumption because EL&amp;P distributes electricity but does not generate it; the distribution wire have to be available and functioning no matter the volume</li> </ul>		
	1.5. Budgeting and Capital Planning	<ul style="list-style-type: none"> <li>• The utilities make up a very large portion of the city’s overall budget</li> <li>• The overall city budget is \$232M; \$156M of this is tech supported and the utilities make up \$76M (including waste management)</li> <li>• The utilities budgets appear to be going up at a much higher rate than other areas, which is concerning</li> <li>• It appears that their reserves have been depleted, leaving little money for major capital projects that are needed</li> <li>• New capital projects are being largely financed through debt, which means that rates must go up</li> </ul> <p><i>Budgeting process</i></p> <ul style="list-style-type: none"> <li>• The city wants to move to budgeting for outcomes and to evaluate budgets against outcomes, and to evaluate core businesses annually</li> <li>• According to many, the current budgeting process is extremely slow and cumbersome</li> <li>• The process starts in May/June/July and isn’t completed until</li> </ul>	<ul style="list-style-type: none"> <li>• EL&amp;P Five Year Budget/Actual Summary</li> <li>• EL&amp;P Summary Budget by Business Unit</li> <li>• EL&amp;P 2012,2013, 2014 Budgets – Funding Adjustment Recommendation</li> <li>• EL&amp;P Department Operating Budget Summary 2012</li> <li>• EL&amp;P 2012 Capital Budget Request</li> <li>• Budgeting and Asset Management of Street Lights and Traffic Lights</li> <li>• EL&amp;P – Non-Discretionary O&amp;M (2007-2011)</li> </ul>	<ul style="list-style-type: none"> <li>• Review documents</li> <li>• Determine existence of measures/metrics and calculate if possible</li> <li>• Assess management practice based on interview feedback and documents</li> </ul>

Business Sphere	Business Attribute	Interview Feedback	Documents	Analysis
		<p>November for the capital budget and the end of January for the operating budget</p> <ul style="list-style-type: none"> <li>• The consensus is that the budget should probably be completed before the new year</li> <li>• The process is very repetitive and labour intensive with a lot of internal levels, approvals and various supporting documentation required</li> <li>• The department/utility managers have to defend their budgets in front of council</li> <li>• The current city manager has brought in some good changes to the process, but there could still be more improvements</li> <li>• Some believe that budgets need to be developed on an exception basis instead of scrutinizing every item</li> <li>• Some believe the city should consider moving to a three year budget process because the current process is very onerous and seems to never ends</li> <li>• Therefore, there is very little real analysis of the numbers and there is no time to step back and think about the big picture or innovations</li> <li>• For some, it feels like there are pieces and snapshots of the budget here and there, but no real understanding of the big picture</li> <li>• A “funding request” summarizes department and utility budgets, indicating changes from the previous year’s budget</li> </ul> <p><i>EL&amp;P budgeting</i></p> <ul style="list-style-type: none"> <li>• Utility budgets are buried within the larger operating and capital budgets of the city and the budgeting process is structured using this integrated approach;</li> <li>• This leads some to question if they should be broken out, to</li> </ul>		

Business Sphere	Business Attribute	Interview Feedback	Documents	Analysis
		<p>encourage better understanding and management</p> <ul style="list-style-type: none"> <li>• Departments, including the utilities, budget fairly independently under the process and guidelines set out by the city</li> <li>• The previous manager asked his supervisors and general foreman to provide budgeting information for the line items they were responsible for</li> <li>• The manager would then compile the whole budget without any other assistance and for many this was too much micro-management</li> <li>• It is not known exactly how the new manager will handle budgeting but it is likely that the utility accountant will take on more of a role, compiling and coordinating budget information and requests from the supervisors and general foreman and assisting the manager in developing the utility budget</li> <li>• Some believe that when budgets are delegated to managers, they should be trusted to do the budget and there should be oversight but not micro-managing</li> </ul> <p><i>Operating budget</i></p> <ul style="list-style-type: none"> <li>• Actual results from past years don't seem to be taken into account; which results in budgeting based on previously budgeted numbers</li> <li>• The general foremen indicated that they do look at actuals from several previous years when developing their budgets</li> <li>• One person indicated that EL&amp;P budgets for an operating surplus every year</li> <li>• Operations appear lean and the major cost increases appear to be capital</li> <li>• The utilities are receiving a lot more attention on the capital</li> </ul>		

Business Sphere	Business Attribute	Interview Feedback	Documents	Analysis
		<p>side now but still not very much on the operational side, probably because they are very technical areas and a complicated rate model</p> <ul style="list-style-type: none"> <li>• The utilities need to take into consideration the requirement for corporate services and how they account for them</li> <li>• When looking at the 2011 budget, internal charges and transfers were down 2.3M and there was still a deficit of 2.0M, so there was a 2.0M deficit from the budgeted amounts, in addition to a decrease in some internal charges by 2.3M.</li> <li>• This is the case because in 2011 the depreciation was budgeted and recorded in the expense object codes and the equity transfer (offset) for amortization was done in the internal charges and transfers; there were no budgeted dollars, but the actual entries were done, leading to these results</li> <li>• In 2011, materials, supplies and utilities was \$4M higher than budget, which is the biggest variance, and was the result of the electricity purchase price going up</li> </ul> <p><i>Capital budget</i></p> <ul style="list-style-type: none"> <li>• At the beginning of the budget process, capital projects are compiled for the next year, which includes, maintenance, replacement and new infrastructure</li> <li>• Each utility is expected to manage their capital prioritization internally, as all their funding is self-generated so they can allocate it as they see fit;</li> <li>• All projects are identified in the Ten Year Capital Plan and a ten year cash flow projection is done</li> <li>• EL&amp;P's ten year projection does not look very good and there is a question of how the capital will be paid for</li> </ul>		

Business Sphere	Business Attribute	Interview Feedback	Documents	Analysis
		<ul style="list-style-type: none"> <li>• The entire capital budget is funded by the utility; with some money from the provinces and feds</li> <li>• In the past and up until now, capital requests from EL&amp;P have not generated much discussion at the council or senior management level and were always approved</li> <li>• There is a general understanding that when a utility asks for capital dollars it's because they need it to keep the system running, not for bells and whistles</li> <li>• For many years, there wasn't much of a need to fund EL&amp;P infrastructure through the capital budget (so it was covered under the operating) budget, as the infrastructure was fairly new;</li> <li>• Only recently has the need for major capital dollars arisen for EL&amp;P</li> <li>• The capital funding need appears to be more on the distribution side as a lot of the transmission infrastructure costs are recaptured through the AESO tariff</li> <li>• Approx. 40% of "distribution" costs are also recovered through this tariff</li> <li>• However, the utility does have to pay for all of these capital costs upfront and are then reimbursed through an application to the AESO</li> <li>• The other utilities have had major capital requests over the past ten years, which has also driven debt</li> <li>• There hasn't been much of a need in the past to prioritize capital projects, to pick and choose between various projects; however, there is becoming more of a need for this as the city approaches its debt cap</li> <li>• Capital is tracked separately as it comes out of reserves</li> <li>• There are no contingencies in the capital budget so if there are cost-overruns other projects are just delayed, but this isn't</li> </ul>		

Business Sphere	Business Attribute	Interview Feedback	Documents	Analysis
		<p>usually an issue because the capital budget is never completely spent each year</p> <ul style="list-style-type: none"> <li>• This could become an issue if a prospective change to funding capital projects is made, in which each project is only funded when it proceeds instead of a big pool of funds for capital that is approved and funded at the beginning of the year</li> <li>• Some believe that a pool of capital funds is required to allow for flexibility and shifting of dollars between projects because although a lot of work is planned, there is also a lot of ad hoc work and there are often delays and changes</li> </ul>		
2. Management and Execution	2.1. Service Lines and Programs	<ul style="list-style-type: none"> <li>• EL&amp;P manages the distribution system and a small amount of transmission and is responsible for providing the RRO option to customers in its service area</li> <li>• EL&amp;P is both a Transmission Facility Operator (TFO) and a Distribution Facility Operator (DFO)</li> <li>• It carries out a lot of the activities to do the above in-house and does not use a lot of contractors</li> <li>• Another major service that EL&amp;P engages in is acting as a contractor to developers, providing all the electric service that is required for new development</li> </ul> <p><i>Distribution and transmission system work</i></p> <ul style="list-style-type: none"> <li>• EL&amp;P staff do a majority of the work in-house to support the distribution and transmission business</li> <li>• The utility is obligated to provide the RRO and really gets nothing out of it; they believe it would be better if they didn't have to deliver it</li> <li>• EL&amp;P does all the high voltage work in its service area and because of this, there is the question if contractors are even</li> </ul>	<ul style="list-style-type: none"> <li>• Information on the EL&amp;P Web Site <ul style="list-style-type: none"> <li>○ Electric Light &amp; Power</li> <li>○ Your Electricity Bill</li> <li>○ Electricity Deregulation Frequently Asked Questions</li> <li>○ Regulated Rate Option</li> <li>○ Distribution Tariff</li> <li>○ Terms and Conditions for Distribution Access Services</li> <li>○ Apply for Retail Services</li> <li>○ Applying for Electric Services and Meters</li> <li>○ Micro-Generation</li> <li>○ Builder &amp; Developer</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Review documents</li> <li>• Determine existence of measures/metrics and calculate if possible</li> <li>• Assess management practice based on interview feedback and documents</li> </ul>



Business Sphere	Business Attribute	Interview Feedback	Documents	Analysis
		<p>available to be hired, in situations like a potential strike</p> <ul style="list-style-type: none"> <li>• The general perception appears to be that there were a lot of power outages last year</li> </ul> <p><i>Developer and construction services</i></p> <ul style="list-style-type: none"> <li>• EL&amp;P provides all the electric services for new development in its service area</li> <li>• Developers have the option of using a private contractor but so far they have chosen not to, indicating that EL&amp;P is providing quality and cost-effective service</li> <li>• Apparently EL&amp;P's costs for doing development work have been compared to private company costs and EL&amp;P is a much better deal for developers</li> <li>• Some wonder if it makes sense for EL&amp;P to do so much work in-house and to be the only contractor for development; is this cost effective?</li> <li>• Other municipalities typically don't do this type of work for developers</li> <li>• EL&amp;P contracts out some activities like trenching and digging</li> </ul> <p><i>Other potential services</i></p> <ul style="list-style-type: none"> <li>• EL&amp;P could have become a retailer when the electricity system was deregulated and could still do so at any time</li> <li>• They chose not to and most agree this was a wise decision because of the risk and it would have required expensive systems and more people</li> <li>• Many believe that looking at this option again (via a business case) would make sense, but indicated that the utility would have to get a lot bigger and a lot more sophisticated to take</li> </ul>	<p>Frequently Asked Questions</p> <ul style="list-style-type: none"> <li>• Legislation and Regulation <ul style="list-style-type: none"> <li>◦ Bylaws Relevant to EL&amp;P <ul style="list-style-type: none"> <li>▪ No. 3273/2000 - Electric Utility Bylaw</li> <li>▪ Appendix A to Bylaw 3273/2000 - Distribution Tariff</li> <li>▪ Appendix B to Bylaw 3273/2000 – Distribution Access Services Schedule of Fees</li> <li>▪ Appendix C to Bylaw 3273/2000 - Regulated Rate Tariff Energy Price Setting Plan</li> <li>▪ Appendix D to Bylaw 3273/2000 - Regulated Rate Tariff</li> <li>▪ Appendix E to Bylaw 3273/2000 – Regulated Rate Tariff Fee Schedule</li> </ul> </li> <li>◦ Regulated Rate Tariff</li> </ul> </li> </ul>	

Business Sphere	Business Attribute	Interview Feedback	Documents	Analysis
		<p>on this role</p> <ul style="list-style-type: none"> <li>• A longer term option could be EL&amp;P expanding into regional delivery, where it would manage and deliver all of the distribution/transmission services in a regional area</li> <li>• EL&amp;P is currently looking at how to be a facilitator/advisor for a private company that wants to use gas from the waste management plan for electricity generation</li> <li>• According to some, EL&amp;P has gotten involved in some things because the city suggests it should, i.e. solar panels, electric vehicles for the EL&amp;P fleet (this project has been put on hold for financial reasons); but the utility should be busy running the business and everything else is secondary</li> </ul> <p><i>Innovation</i></p> <ul style="list-style-type: none"> <li>• EL&amp;P has tried some initiatives like the Christmas light exchange</li> <li>• The utility is fairly innovative when it comes to automation</li> <li>• Worked with Engineering Services to change out incandescent traffic lights for LED lights, which was largely financially motivated (long term), and to do the same for lighting in new neighborhoods</li> <li>• EL&amp;P was instrumental in building the case for LED lighting and getting council approval</li> <li>• Along with Engineering Services, EL&amp;P is engaged in a district energy feasibility study (Riverlands) looking at the possibility of establishing a generation and distribution system for heat and power, for larger users in the area</li> <li>• In the utility business a lot of innovation is driven by business needs, i.e. to reduce peak load</li> <li>• City council is driven by doing the right thing, but the utility is</li> </ul>	<ul style="list-style-type: none"> <li>– Terms and Conditions</li> <li>○ Distribution Access Services – Terms and Conditions</li> <li>○ Retail Access Services – Terms and Conditions</li> <li>• Distribution Service Area Approval and Map</li> <li>• Distribution Wire Infrastructure (km by type)</li> <li>• Number of Energized Sites by Rate Class – January 31, 2012</li> <li>• Number of Retailer Types – January 31, 2012</li> </ul>	

Business Sphere	Business Attribute	Interview Feedback	Documents	Analysis
		<p>driven by business needs and saving money and infrastructure wear and tear</p> <ul style="list-style-type: none"> <li>• SMART metering has been put on hold by the province and EL&amp;P's approach is to not move ahead with SMART metering until mandated to by the province</li> </ul>		
	2.2. Organization Structure and Staffing	<p><i>Overall approach</i></p> <ul style="list-style-type: none"> <li>• Some believe there should be some "distance" between the utilities and the city, since utilities operate under a very different model (rate model) and have different goals and perspectives</li> <li>• For example, they believe the city often looks to cut costs and positions but if a utility does this, it simply means the revenue requirement is decreased and the rates go down, which means nothing is really gained</li> <li>• In this context, putting the utilities under the same hiring freeze or cost constrains as the city does not make sense, since if the utility needs people or equipment or systems to operate better, it should get them and factor the costs into the revenue requirement</li> <li>• Others acknowledge that the utilities operate differently and bring in their own revenues, but believe they are still part of the city and should align with city strategies, priorities, policies, compensation schemes, etc.</li> <li>• Utilities engage in a lot of engineering services so for the purposes of APEGGA Paul Gorenson is the city's engineer and Garfield Lee stamps drawings that his staff does for EL&amp;P</li> </ul> <p><i>Org structure</i></p> <ul style="list-style-type: none"> <li>• EL&amp;P divides the various components its business into</li> </ul>	<ul style="list-style-type: none"> <li>• Organizational Charts for the City of Red Deer and EL&amp;P</li> <li>• EL&amp;P Organizational Review 2009</li> <li>• Summary of EL&amp;P Work Group Functions and Detailed Roles and Responsibilities</li> <li>• Preliminary Support Cost Allocations – 2012 Budget</li> <li>• Enmax Power Service Level Agreement (SLA) Report</li> <li>• EL&amp;P Contractors</li> </ul>	<ul style="list-style-type: none"> <li>• Review documents</li> <li>• Determine existence of measures/metrics and calculate if possible</li> <li>• Assess management practice based on interview feedback and documents</li> </ul>

Business Sphere	Business Attribute	Interview Feedback	Documents	Analysis
		<p>business units</p> <ul style="list-style-type: none"> <li>• Currently there are the following units: <ul style="list-style-type: none"> <li>○ The distribution section (10 KV, 25</li> <li>○ The transmission or sub-station section</li> <li>○ The office and regulatory section</li> <li>○ The metering section</li> <li>○ A construction section</li> </ul> </li> <li>• Splitting distribution into the distribution and transmission (sub-station) sections a few years ago was a good decision, as prior to this all the day-to-day stuff took priority and transmission planning took a backseat</li> <li>• The utility is very small and there are is a lot of communication and close working relationships</li> </ul> <p><i>Distribution section</i></p> <ul style="list-style-type: none"> <li>• The distribution section deals with connecting customers to the system</li> <li>• It provides services for developers and is involved in GIS and data conversion</li> </ul> <p><i>Transmission section</i></p> <ul style="list-style-type: none"> <li>• The transmission section deals with sub-station and transmission line planning, which also involves coordination within the city</li> <li>• It also provides technical support and answers a lot of technical questions from the distribution section, especially for non-standard work</li> <li>• It does automation and control</li> <li>• It carries out load forecasts</li> </ul>		

Business Sphere	Business Attribute	Interview Feedback	Documents	Analysis
		<ul style="list-style-type: none"> <li>• It does its own checking and testing</li> </ul> <p><i>Office and regulatory section</i></p> <ul style="list-style-type: none"> <li>• The office manager is responsible for duties such as:               <ul style="list-style-type: none"> <li>◦ Developing the distribution rates using cost of service analysis (COSA)</li> <li>◦ Developing the transmission filing</li> <li>◦ Carrying out year-end procedures</li> <li>◦ Supervising the front end administration staff, who process service orders through the meter inventory management system</li> <li>◦ Supervising the utility accountant; this was a result of the re-org in 2009, at which time metering was put directly under control of the previous manager</li> </ul> </li> </ul> <p><i>Metering section</i></p> <ul style="list-style-type: none"> <li>• Currently this section is a work in progress</li> <li>• It deals with rates and metering, which involves reporting metering detail and managing the RRO through Enmax</li> <li>• The plan is to hire a marketing specialist so the metering section doesn't report directly to the manager, which everyone believes is a good idea</li> </ul> <p><i>Construction section</i></p> <ul style="list-style-type: none"> <li>• This group has two general foreman, supervisors and staff, and there are plans to hire a safety coordinator at the general foreman level</li> <li>• The general foreman supervise from 11 to 22 staff, depending on the situation and time of year</li> </ul>		

Business Sphere	Business Attribute	Interview Feedback	Documents	Analysis
		<ul style="list-style-type: none"> <li>• The two general foreman report directly to the EL&amp;P manager;</li> <li>• According to some (not the general foreman) the foreman are more involved in work on the ground than in other departments</li> <li>• This is probably the case because they know the system so well and can answer questions, provide direction and make decisions faster and better than anyone else</li> <li>• This can be very efficient and effective but can also be a risk to the utility because knowledge is not necessarily being spread around and it is difficult on the foremen who have to be available 24/7, even on holidays</li> <li>• The structure of the construction group and the direct reporting relationship to the manager may not be wrong, but it may be that another general foreman is required or supervisors under the general foreman are given more responsibility</li> <li>• The general foreman have a lot of varied duties and responsibilities, such as: <ul style="list-style-type: none"> <li>○ Carrying out capital projects and other work</li> <li>○ Working closely with the engineers on design and coordination</li> <li>○ Carrying out maintenance work</li> <li>○ Operating the control centre for SCADA (24/7)</li> <li>○ Handling trouble calls</li> <li>○ Managing time sheets</li> <li>○ Acting as safety codes officer who are responsible for the Quality Management Plan</li> <li>○ Ordering tools and other equipment and materials</li> <li>○ Managing the fleet and approving fleet rates</li> <li>○ Managing contracted out services</li> <li>○ Carrying out environmental disposal</li> </ul> </li> </ul>		



Business Sphere	Business Attribute	Interview Feedback	Documents	Analysis
		<ul style="list-style-type: none"> <li>○ Carrying out tree trimming</li> <li>○ New meter installations and disconnects</li> <li>○ Monitoring meter and substation traffic</li> <li>○ Streetlight and traffic light installation and maintenance</li> <li>○ Managing service trucks</li> </ul> <p><i>Outsourced services</i></p> <ul style="list-style-type: none"> <li>● The utility does a lot of things in-house so there are limited contracted services</li> <li>● Some limited construction services, i.e. backhoes, are contracted out</li> <li>● The decision to contract out is made on a case-by-case basis</li> <li>● However, transmission contracts out most of its construction as there is not the expertise in-house</li> <li>● The major area of contracted services is with Enmax</li> <li>● Enmax Energy manages the RRO (EL&amp;P doesn't pay Enmax but Enmax makes a margin off customers)</li> <li>● Enmax Power carries out a range of functions like load settlement, site administration, meter management and validation and representing EL&amp;P at AUC hearings like for Rule 21, etc.</li> <li>● There are several performance metrics that Enmax Power must meet and most have a related regulatory requirement</li> <li>● Each month Enmax Power send EL&amp;P a Service Level Agreement Report that details these measures</li> <li>● Enmax Energy develops the RRO rate and buys the power for RRO customers, which means it takes on the buying risk, and does the billing for RRO customers</li> <li>● About 60% of customers in the Red Deer service area are on the RRO</li> </ul>		

Business Sphere	Business Attribute	Interview Feedback	Documents	Analysis
		<ul style="list-style-type: none"> <li>• The power is procured through an energy price setting plan</li> <li>• The only leverage the city has on the RRO is who it decides to contract to provide it and other than that it is simply a flow through</li> <li>• The contract is up in 2012 and Enmax hopes it is renewed</li> <li>• For many, contracting out to Enmax makes sense as too take on those functions would require a lot of people, expertise and programs, which Enmax already has</li> <li>• All indications are that the city and EL&amp;P are happy with the service provided by Enmax and Enmax indicates a very positive working relationship</li> </ul> <p><i>Working with Engineering Services</i></p> <ul style="list-style-type: none"> <li>• EL&amp;P works closely with Engineering Services regarding traffic signals as EL&amp;P installs and maintains the signals but Engineering operates them</li> <li>• The coordination between the two departments works very well</li> </ul> <p><i>Shared services</i></p> <ul style="list-style-type: none"> <li>• Departments in the city have traditionally been silos and have taken on a lot of corporate functions</li> <li>• Some believe corporate services is working fairly well and others believe that some or major improvements are required</li> <li>• Some believe that the city and the utilities need to determine a reasonable allocation of corporate support services from the city</li> <li>• Some believe that shared service policies and service level expectations or agreements are required</li> </ul>		

Business Sphere	Business Attribute	Interview Feedback	Documents	Analysis
		<ul style="list-style-type: none"> <li>Costs for shared services are determined through support cost allocations</li> </ul> <p><i>Procurement and contract management</i></p> <ul style="list-style-type: none"> <li>Corporately, the City is looking to improve procurement and contractor management, although it is recognized that a lot of the details and knowledge reside in the departments</li> <li>Some in EL&amp;P believe that the city has given all the procurement over to them and is focusing more on legal matters and contracts</li> <li>The city procures a lot of the basics but EL&amp;P handles most of the purchasing</li> <li>A lot of contract tendering and management happens within the utility</li> <li>Many contractors are hired directly by the general foreman and other managers</li> <li>The process for EL&amp;P to hire contractors is not exactly clear</li> <li>Invoices for contracted out work and supplies are distributed by the utility accountant to the manager or supervisor responsible and these managers and supervisors create their own PO's</li> <li>EL&amp;P generally believes that the utility handling procurement and contract management is the better approach</li> <li>However, many in EL&amp;P believe they requires more resources to do this, as only one person is doing it now</li> <li>It sometimes takes a long time to receive materials and equipment and sometimes when it arrives it is wrong</li> </ul> <p><i>Billing</i></p>		

Business Sphere	Business Attribute	Interview Feedback	Documents	Analysis
		<ul style="list-style-type: none"> <li>Electricity billing is done through Enmax and billing to developers is done through Accounts Receivable (Revenue &amp; Assessment)</li> <li>The utility sends Enmax their wholesale cost for electricity and Enmax assigns it to customers and bills it out</li> </ul> <p><i>IT</i></p> <ul style="list-style-type: none"> <li>Corporate IT tries to have central control and standards, while also being responsive to the business needs of departments/utilities</li> <li>A key area for them is data security, i.e. firewall</li> <li>IT manages the enterprise asset management</li> <li>JDE is the enterprise system for the city, which has been in place since the mid-1990's and underwent a major upgrade in 2002, which allowed for better reporting</li> <li>JDE does not handle linear assets, which is a major problem for the utilities and PASB requires very specific and detailed asset reporting for linear assets</li> <li>JDE is good for financial tracking and depreciation at a high level</li> <li>Hansen is a system that will satisfy 80% of the needs of various departments but the benefit is that it is a corporate wide system</li> <li>IT is building integration points between JDE and Hansen</li> <li>It would be great to have one system that does it all but that just isn't available</li> <li>A major upgrade to JDE is planned for 2012</li> <li>Hansen is available on tablets and laptops for public works and environmental services and EL&amp;P will be getting it soon</li> <li>Some believe that engineering works very closely with IT and</li> </ul>		

Business Sphere	Business Attribute	Interview Feedback	Documents	Analysis
		<p>that staff are flexible between the two organizations and get stuff done regardless of lines of reporting</p> <ul style="list-style-type: none"> <li>• For many, the IT department has a good client orientation and is very responsive</li> <li>• Some in EL&amp;P believe the utility should be able to hire their own IT people for priority projects like GIS, as utility IT priorities may not be city IT priorities and the utility has the means and the right to fund the people and systems it needs through the rate model</li> <li>• A lot of the utility's critical systems have no involvement from corporate IT</li> <li>• The utility has its own SCADA system, managed by a utility engineer, which is not supported through IT, but IT offers some consulting support if asked</li> <li>• The previous manager wrote a lot of the programs for metering data management</li> <li>• It probably makes sense for corporate IT to provide more general and enterprise wide support and for the utility to manage its specific programs, which are at the manager's discretion</li> <li>• The utility is getting frustrated with the systems for asset management, but some progress is being made</li> </ul> <p><i>HR</i></p> <ul style="list-style-type: none"> <li>• Corporate services does not include HR, as the HR function reports directly to the city manager (as of 2010)</li> <li>• There is an assigned HR person for EL&amp;P, who also covers other departments</li> <li>• This person, along with a recruitment assistant, supports the utilities recruitment and hiring activities and deals with issues</li> </ul>		

Business Sphere	Business Attribute	Interview Feedback	Documents	Analysis
		<p>like absenteeism, performance</p> <ul style="list-style-type: none"> <li>• HR provides a general orientation for new employees, while EL&amp;P has a more specific orientation and training</li> <li>• HR and EL&amp;P need to ensure that the orientation process is aligned and coordinated</li> <li>• The hiring process involves: <ul style="list-style-type: none"> <li>○ Approval to hire</li> <li>○ Developing a posting, which is drafted by HR</li> <li>○ Discussing where to post it</li> <li>○ EL&amp;P reviewing the posting</li> <li>○ Taking in resumes</li> <li>○ Reviewing resumes, which EL&amp;P does and HR may do</li> <li>○ Short listing candidates</li> <li>○ Holding interviews, which HR attends</li> <li>○ Choosing a candidate; the EL&amp;P manager makes the final decision</li> <li>○ Checking references</li> <li>○ Sending an offer letter</li> </ul> </li> <li>• Some believe that HR is not providing required support to the utility, not because of the people, but because they are spread too thin</li> <li>• This has led HR to not be responsive in terms of interviews, offer letters, etc.</li> <li>• This has led the utility to lose a few prospective employees</li> <li>• According to many in the utility, what HR is saying through its approach is that they don't have the resources to provide a dedicated HR function for all departments and so the departments have to take on more</li> <li>• There appears to have been a switch in the model of delivering HR but this has not been made clear to the departments</li> </ul>		



Business Sphere	Business Attribute	Interview Feedback	Documents	Analysis
		<ul style="list-style-type: none"> <li>• Some perceive this change as a drop in service</li> <li>• HR does let the utility take on necessary HR functions, which is a good thing, but what is supposed to happen is not clear</li> <li>• In some cases it makes sense for the departments to take on some HR functions like recruitment and interviewing; and the utility wants to play a role in these things</li> <li>• Everyone agrees that managers need to play a role in HR, i.e. employee evaluation, recruitment, etc. but that corporate HR needs to provide overall policy for consistency</li> <li>• There needs to be the right balance and the right HR functions performed by the department and centrally; for example, corporate HR is very involved in labour relations</li> </ul> <p><i>Financial services</i></p> <ul style="list-style-type: none"> <li>• The head of corporate services is the CFO for the city</li> <li>• Financial services is part of corporate services</li> <li>• Each division in the city has a controller, who reports directly to the director of the division and has a dotted line reporting relationship with Financial Services</li> <li>• The controllers work closely with financial services and work with the accountants in the departments, in this case EL&amp;P's utility accountant</li> <li>• The city made a conscious decision to separate division controllers from financial services</li> <li>• Financial services involves managing the chart of accounts, accounts payables, insurance, and procurement and contracts.</li> <li>• In terms of the utility, financial services is responsible for dividends, the MCAF, and corporate support allocations, and also has overall budget accountability</li> </ul>		

Business Sphere	Business Attribute	Interview Feedback	Documents	Analysis
		<ul style="list-style-type: none"> <li>• Financial services is not involved in the operations of the utility at all</li> <li>• EL&amp;P has a utility accountant, who carries out day-to-day accounting functions</li> <li>• The utility accountant reports directly to the utility's office manager and has a dotted line reporting relationship with the division controller</li> <li>• However, the utility accountant does not work directly with the office manager</li> <li>• This is a legacy from the previous manager who didn't have time to deal with the utility accountant and who was away a lot on regulatory matters so created the office manager position to supervise the accountant (even though there is no working relationship) and carry out other supervision of administrative duties</li> <li>• All accounting matters are handled between the utility accountant and the controller</li> <li>• Everyone agrees that it would make more sense for the utility accountant to report to the manager</li> <li>• Having the utility accountant report to the controller would not make sense as the division is too far removed from the utility</li> <li>• The controller is more of a good resource for the utility and the utility accountant</li> <li>• The utility accountant is the link between the utility and financial services</li> <li>• Financial services has been very helpful to the utility, but it does ask for a lot of things and is constantly changing and tweaking processes and policies</li> <li>• The utility may be able to draw more on the systems people in financial services</li> </ul>		

Business Sphere	Business Attribute	Interview Feedback	Documents	Analysis
		<p><i>Revenue and Assessment</i></p> <ul style="list-style-type: none"> <li>• Manages the accounts receivable and tax and assessment</li> </ul> <p><i>Emergency planning and business continuity</i></p> <ul style="list-style-type: none"> <li>• Corporate services also includes emergency planning and business continuity</li> </ul> <p><i>Records management</i></p> <ul style="list-style-type: none"> <li>• Corporate services also includes records management and archives, although the departments are responsible for carrying out records management</li> <li>• There is a city policy for records management and the city provides training</li> <li>• Some departments are focusing a lot on records management and some aren't focusing on it as much</li> <li>• For some in EL&amp;P records management is adequate and rarely are there issues records are lost or not available</li> <li>• For others, records management is an area that EL&amp;P really needs to improve</li> <li>• It appears the utility is not 100% complying with the city's record management standards, specifically over records classification, because of a lack of manpower, a lack of sense of urgency and a perceived lack of benefit in return for the effort required</li> <li>• The utility has a lot of information and records, i.e. drawings, that need to be archived</li> </ul>		
	2.3. Employee Management	<p><i>Staffing levels</i></p> <ul style="list-style-type: none"> <li>• The utility needs a better understanding of its capacity and</li> </ul>	<ul style="list-style-type: none"> <li>• EL&amp;P Job Descriptions</li> <li>• EL&amp;P Permanent</li> </ul>	<ul style="list-style-type: none"> <li>• Review documents</li> <li>• Determine existence of</li> </ul>

Business Sphere	Business Attribute	Interview Feedback	Documents	Analysis
		<p>workload</p> <ul style="list-style-type: none"> <li>• Some believe that EL&amp;P is understaffed and workloads have increased; i.e. Lethbridge is the same size as EL&amp;P but has less staff</li> <li>• Many see the system getting a lot bigger but staffing levels staying the same</li> <li>• Some believe the utility will be forced to hire more staff when growth picks up</li> <li>• Some believe it is a matter of doing a better job with the staff and resources that are already there</li> <li>• For some, EL&amp;P has been able to accommodate changes and increased workload only because of its exceptional people</li> <li>• The downturn has slowed things down and allowed some time to catch up but this could change</li> <li>• The two general foreman in particular have to work a lot of overtime just to keep their heads above water, according to everyone</li> <li>• This situation has been known for a while and it's probably time to do something about it</li> <li>• In addition to construction and other work, the general foreman are responsible for safety, which is very time consuming as it deals with a lot of regulation</li> <li>• In this year's budget a request has been made to hire a safety coordinator to take on this responsibility</li> <li>• EL&amp;P has 16 Linemen with one vacant position, 2 apprentice linemen, 3 Power System Electricians and 2 Utility Workers</li> <li>• According to many, there are not enough field staff to spend the capital budget and it is never spent every year</li> <li>• Records are kept of the number of employees who have been paid 'Standby Pay' and also the number of hours of premium 'On-Call' hours paid</li> </ul>	<p>Employees Age Plus Years of Service</p> <ul style="list-style-type: none"> <li>• EL&amp;P Hours and FTE's - 2002-2011</li> <li>• On-Call Hours, Stand-By Weeks and Stand-By Stats</li> <li>• Total Cost and Total Hours for Operating Activities 2000-2010</li> <li>• Total Cost and Total Hours for Capital Activities 2000-2010</li> <li>• Performance Reviews Submitted</li> <li>• EL&amp;P Training History – 2007-2011</li> </ul>	<p>measures/metrics and calculate if possible</p> <ul style="list-style-type: none"> <li>• Assess management practice based on interview feedback and documents</li> </ul>

Business Sphere	Business Attribute	Interview Feedback	Documents	Analysis
		<ul style="list-style-type: none"> <li>On-call hours are tracked through the time entry system in payroll, since these hours are paid at an on-call premium for IBEW union and for exempt staff monitoring the SCADA system</li> <li>For some, the answer may be to hire more contract staff for large projects but others indicated that then EL&amp;P will still need more people to manage them, as the existing two foremen would not be able to handle this</li> <li>Many believe the transmission group is also understaffed</li> <li>Transmission staff do not have enough time to spend in the field</li> </ul> <p><i>Staffing mix and roles</i></p> <ul style="list-style-type: none"> <li>There are job description for every position but they could use work</li> <li>A development ladder was recently implemented for the distribution section</li> <li>The average lengths of service for EL&amp;P employees is very long</li> <li>There has been and is very little turnover</li> <li>EL&amp;P has a lot of senior staff and very little back-up, and some junior staff but they are very junior</li> <li>The previous manager was very strong on the regulatory side and understanding the industry, which may have led to under utilization of staff in some areas so that proper delegation may not have occurred</li> <li>The previous manager kept a lot of financial tasks to himself so there was little role for the utility accountant outside of administrative accounting functions</li> <li>Everyone believes it would be much better for the utility</li> </ul>		

Business Sphere	Business Attribute	Interview Feedback	Documents	Analysis
		<p>accountant to take on a larger role and work more directly with the manager</p> <ul style="list-style-type: none"> <li>• For example, the utility accountant could coordinate the budgeting process, support implementation of the ate model and provide high level project tracking and cost analysis, as well as other tasks</li> <li>• Realigning this position would put it more in-line with how things are done in other departments</li> <li>• Having the utility accountant take on more will require some training and time, but the person in this role has good training in accounting (a CMA designation), is very competent and expresses a willingness and desire to do more</li> <li>• It may be appropriate for the manager of the office and regulatory section to focus less on office management and more on regulatory management</li> <li>• This person is very competent, experienced and has accounting training and qualifications</li> <li>• In this scenario, each section head would be responsible for supervising people in their section, while the utility manager would be responsible for managing the section heads, the utility accountant and any general administrative staff who do not serve only one section</li> <li>• Transmission planning requires a lot of engineering expertise, whereas distribution activities are a bit more standardized</li> <li>• The two engineering groups would benefit from a shared drafting person</li> <li>• Five people have SCADA alarms</li> </ul> <p><i>Relationship with the union</i></p> <ul style="list-style-type: none"> <li>• There was potential strike action a year ago but the</li> </ul>		



Business Sphere	Business Attribute	Interview Feedback	Documents	Analysis
		<p>relationship seems to be working pretty well</p> <ul style="list-style-type: none"> <li>• There is a positive atmosphere</li> <li>• Union workers were not paid well but are now in the middle of the pack</li> </ul> <p><i>Utility accountant</i></p> <ul style="list-style-type: none"> <li>• Currently, the utility accountant is responsible for all day-to-day financial and accounting activities that flow into the account: <ul style="list-style-type: none"> <li>○ AP</li> <li>○ AR</li> <li>○ Month end reporting for operating and capital</li> <li>○ Variance analysis</li> <li>○ Setting up construction jobs</li> <li>○ Filling out work orders</li> <li>○ Setting up budgets for job</li> <li>○ Creating PO's for invoices</li> <li>○ Tracking all third party work</li> <li>○ Creates bills for as required</li> <li>○ Internal reporting like trial balances for year-end</li> <li>○ Some external reporting line an annual capital report and statistical report for Stats Can)</li> <li>○ Entering payroll information</li> <li>○ Capital asset accounting</li> <li>○ Entering some budget information and doing some compilations and supporting schedules</li> </ul> </li> <li>• Currently, the utility accountant is not that involved in budgeting, but is expecting to do more under the new manager</li> </ul>		

Business Sphere	Business Attribute	Interview Feedback	Documents	Analysis
		<ul style="list-style-type: none"> <li>• The role is pretty autonomous</li> </ul> <p><i>Recruitment</i></p> <ul style="list-style-type: none"> <li>• Finding high quality technical staff is difficult</li> <li>• It is especially difficult to recruit linemen and TFO's are competing for the same technical people</li> <li>• Some vacant positions have been difficult to fill because of competition with industry</li> <li>• It is difficult for the city to match industry wages and benefits, particularly when the economy is strong</li> <li>• Some in the utility believe they receive little or no support from HR on recruitment, while acknowledging that the utility needs and wants to play a major role</li> <li>• A key to recruiting staff to the city is promoting the life style not the compensation, which means flex time, little travel, little after hours work and overtime</li> </ul> <p><i>Compensation</i></p> <ul style="list-style-type: none"> <li>• Many EL&amp;P staff feel that they and others in the utility are likely under-compensated, but that this has improved recently</li> <li>• A recent market study was done to try and address compensation issues</li> <li>• EL&amp;P managers are paid 10% to 15% more than other city managers, which helps, but still isn't enough according to some managers; need to address where you are losing people to</li> <li>• EL&amp;P staff tend to compare themselves to industry rather than to other city employees</li> <li>• EL&amp;P is tied to the city in terms of compensation, unlike some</li> </ul>		

Business Sphere	Business Attribute	Interview Feedback	Documents	Analysis
		<p>other utilities like Epcor and Enmax</p> <ul style="list-style-type: none"> <li>Salaries, benefits and job duties for unionized staff are negotiated with the union as part of collective bargaining and form part of the agreement</li> </ul> <p><i>Training</i></p> <ul style="list-style-type: none"> <li>Many in the utility believe they have enough money to do training</li> <li>The challenge is balancing training time with all the day-to-day things that have to be done</li> <li>The city and the utility need to have a vision for succession that embraces and involves a lot of training</li> <li>There appears to more of a focusing on training now as junior staff are hired</li> <li>Training hours are tracked in the City's SEMI system if the training is a City initiative (i.e. safe driving, Violence in the Workplace, FOIPP, Records Management, etc.)</li> <li>If training is department specific (i.e. used to attend a conference hosted by the Independent Power Producers of Alberta), it is not tracked</li> </ul> <p><i>Evaluation</i></p> <ul style="list-style-type: none"> <li>The previous manager made a concerted effort to have a work plan in place for all employees last year, so most employees, if not all inside employees, have one</li> <li>Annual evaluations are supposed to be completed</li> <li>They are done by the departments using on-line forms provided by HR</li> <li>However, they not be done consistently</li> </ul>		

Business Sphere	Business Attribute	Interview Feedback	Documents	Analysis
		<ul style="list-style-type: none"> <li>• It is up to the supervisors to make sure that evaluations are done</li> <li>• Evaluations are supposed to be filed with HR and put in the employee's file</li> <li>• The city has trial, probationary, work planning and review, and work expectation evaluations for its employees</li> <li>• If evaluations have been completed and submitted to HR then they are tracked in the HR system</li> <li>• Only three performance reviews in EL&amp;P have been completed and sent in to HR since January 2007</li> <li>• There is currently an initiative underway to improve the employee evaluation process</li> <li>• Promotions for union staff are largely based on time served</li> <li>• The accountant's performance evaluation is done by the office manager, but there is little to no working or supervisory relationship</li> <li>• However, the office manager does use feedback from the utility manager and the division controller to evaluate the utility accountant</li> </ul> <p><i>Succession planning</i></p> <ul style="list-style-type: none"> <li>• According to many, the city and the utility have not addressed succession planning</li> <li>• It is an issues that everyone recognizes as important and people pay lip service to it, but no plans are in place</li> <li>• Some believe that the only way to address succession is to hire young people and train them</li> <li>• The average age of EL&amp;P staff is too high and the number of positions is limited new and younger people can only really be hired people when current employees retire</li> </ul>		

Business Sphere	Business Attribute	Interview Feedback	Documents	Analysis
		<ul style="list-style-type: none"> <li>What needs to happen is for the utility to have the ability to hire young people before everyone retires so they can work with experienced staff and be ready to take over when the time comes</li> </ul>		
	2.4. Working Environment	<p><i>Culture</i></p> <ul style="list-style-type: none"> <li>Many staff are very competent and proud to work for the utility</li> <li>Most staff want to do a very good job and there is a corporate commitment to doing what is right</li> <li>Most people are focused on their job and want the utility and the city to support them in doing it to a high level of quality</li> <li>Most staff get along very well and there are effective working relationships</li> <li>The work environment is very busy and for some it is tense</li> <li>Some people indicated that the utility “manages by crisis” because of a lack of resources</li> <li>EL&amp;P staff tend to identify more with working for the utility than for the city</li> <li>Both within the utility and corporately, it is acknowledged that there is a bit of an “us vs them” mentality between the city (corporate) and its departments</li> <li>This may be more pronounced with the utilities because they are self-funding</li> <li>Corporately, there is some concern with EL&amp;P’s culture, i.e. fitting in within the larger city organization and safety, but it is hoped the culture will improve with the new manager</li> <li>In terms of turnover, there are record of all hires, rehires and terminations, which can be used to calculate turnover rates</li> </ul> <p><i>Safety</i></p>	<ul style="list-style-type: none"> <li>The City of Red Deer Employee Survey 2009</li> <li>Employee Turnover Analysis</li> <li>Health and Safety Management System and Related Documents</li> <li>Example – EL&amp;P Safety Meeting Minutes (December 21, 2011)</li> <li>Incident Assessment template</li> <li>City of Red Deer Safety Incidents by Department</li> <li>CEA 2008 Safety Incident Statistics – Executive Summary Report</li> </ul>	<ul style="list-style-type: none"> <li>Review documents</li> <li>Determine existence of measures/metrics and calculate if possible</li> <li>Assess management practice based on interview feedback and documents</li> </ul>

Business Sphere	Business Attribute	Interview Feedback	Documents	Analysis
		<ul style="list-style-type: none"> <li>• The city pays a lot of attention to safety and there has been tremendous growth in safety personnel</li> <li>• The three safety officers in the city report to HR</li> <li>• There still are issues on following up on safety, to see that areas of concern have been addressed</li> <li>• There is no progressive discipline when it comes to safety</li> <li>• Some believe that many departments want to keep safety issues to themselves</li> <li>• EL&amp;P is also very is focused on improving in this area and seems more diligent than some other departments</li> <li>• There are some concerns about accidents and safety procedures, largely driven by a serious accident with EL&amp;P staff a few years ago where safety procedures were not followed</li> <li>• According to many in EL&amp;P, there is a tension between safety and the pressure to work faster and get the backlog of work done</li> <li>• For them, this is more the issue than not wanting to adhere to safe work practices</li> <li>• A key issue, like with other types of training, is finding the time to focus on safety training</li> <li>• Have monthly safety meetings, which are a lot longer and more detailed than they used to be</li> <li>• EL&amp;P hired a consultant to do lineman training to supplement in-house training</li> <li>• The utility has asked that a safety coordinator be added to support the general foreman</li> <li>• There are concerns about managing PCB's and potentially not meeting regulation and facing fines</li> </ul>		
	2.5. Operations & Maintenance	<i>Planning</i>	<ul style="list-style-type: none"> <li>• EL&amp;P Customer Service Guidelines</li> </ul>	<ul style="list-style-type: none"> <li>• Review documents</li> <li>• Determine existence of</li> </ul>



Business Sphere	Business Attribute	Interview Feedback	Documents	Analysis
	Planning and Execution	<ul style="list-style-type: none"> <li>• There is little formal operations and maintenance planning, other than the capital plan</li> <li>• Capital projects are identified on a Gantt chart, identifying progress (dollars), and operating activities are tracked through a work order system and job tracking module in JDE</li> <li>• Supervisor meetings are held once a month that provide broad direction</li> <li>• The staff within the construction section and the distribution section work very closely together, almost on a daily basis</li> <li>• Identification of maintenance activities are based on accumulated knowledge through many years of experience</li> <li>• This is not documented by many indicate it works very well</li> <li>• Operating work often takes precedence over maintenance work, as there is a lot of pressure to get new projects done</li> <li>• Customer work is done first and work related to health and safety</li> <li>• The utility should probably be doing more maintenance</li> <li>• The smaller sub-stations are probably neglected in terms of maintenance in favour of focusing on the larger substations</li> <li>• About 60% of maintenance work is reactive and 40% is proactive (like replacing transformers in the downtown core)</li> <li>• Communication and coordination is poor between the utilities and with public works and outside engineering firms, when it comes to planning and being aware of work that is being done, although working relationships are great, i.e. putting streetlight on Gaetz Avenue</li> <li>• The general assumption is that system losses average 3.6%, which seems to be fairly accurate because the UFE (unaccounted for energy) tends to be around zero (i.e. within +/- 1%)</li> <li>• However, it has been some time since EL&amp;P did a load study</li> </ul>	<ul style="list-style-type: none"> <li>• Examples of Cyme studies</li> </ul>	<p>measures/metrics and calculate if possible</p> <ul style="list-style-type: none"> <li>• Assess management practice based on interview feedback and documents</li> </ul>

Business Sphere	Business Attribute	Interview Feedback	Documents	Analysis
		<p>to confirm that percentage</p> <ul style="list-style-type: none"> <li>• This is likely a meaningful metric because it indicates how much attention has been paid to minimize losses by taking corrective action (i.e. capacitor banks, etc.)</li> <li>• The department maintains a CYME system to track this, but there is inadequate manpower to maintain all the inputs to this system</li> <li>• EL&amp;P uses the suite of Cyme programs for planning studies and simulating the behavior of electrical distribution networks under different operating conditions and scenarios</li> <li>• It includes several built-in functions that are required for transmission and distribution network planning, operation and analysis to improve the networks technical and economical performance.</li> <li>• Cyme-Calculation-Report shows a load flow simulation run on the City's electrical system</li> <li>• TCC shows substation protective relays settings coordinated with feeder downstream fuses</li> <li>• CymCAP shows underground cable current flows and related cable temperatures</li> </ul> <p><i>Execution</i></p> <ul style="list-style-type: none"> <li>• The planning and design engineers work very well with the operations and maintenance crews, in terms of transitioning projects from planning to design, to building, to maintaining</li> <li>• The distribution/design section provides a work order package to the construction group, with n attached budget</li> <li>• Customer calls will trigger a work order and so can internal needs</li> <li>• Constant communication and strong working relationships</li> </ul>		

Business Sphere	Business Attribute	Interview Feedback	Documents	Analysis
		<p>ensure that things get done and that operational and maintenance issues are prioritized and taken care of as they arise</p> <ul style="list-style-type: none"> <li>• This is identified by many as a major strength of the utility</li> <li>• Even so, crews on the ground often have to modify the work orders from the engineers to make them work and to do so cost effectively</li> <li>• As a result of below optimal staffing levels and increased workload, some things have fallen to the wayside; i.e. GIS, renewing the joint use pole agreement with Telus</li> <li>• There is some ability to address short term pressures through hiring contractors for some work like digging, trenching, but all the linemen are employees</li> <li>• Time and materials are tracked on daily time sheets, which are checked for accuracy by the general foremen</li> <li>• Utilization of equipment is quite high and it is estimated that fleet utilization is 80%-90%</li> </ul> <p><i>Systems</i></p> <ul style="list-style-type: none"> <li>• EL&amp;P was very much behind other utilities in getting computers, large scale copiers, electronic drawings, maps, etc.</li> <li>• Until recently, a dated MSAccess database was used to track infrastructure</li> <li>• A GIS was just recently implemented and Hansen will improve things further by tracking where assets are located</li> <li>• A work order system is used to dispatch crews to jobs and to account for job costs</li> <li>• There is not a formal maintenance schedule but rather maintenance work is identified through on-going and frequent</li> </ul>		

Business Sphere	Business Attribute	Interview Feedback	Documents	Analysis
		<p>discussions between staff and managers</p> <ul style="list-style-type: none"> <li>• The new GIS is making this approach a little more sophisticated</li> <li>• EL&amp;P is planning on putting in place more formal operation and maintenance planning</li> <li>• This planning will become more data driven with GIS, the implementation of Hansen and laptops in the field, which will allow for real-time information to be accessed and entered in the field</li> <li>• EL&amp;P manually tracks all its jobs because JDE doesn't have the fields that are needed</li> <li>• Work crews report activities to a ledger number (there are no sub-ledgers now), but this process should improve soon</li> </ul> <p><i>Types and sizes of jobs</i></p> <ul style="list-style-type: none"> <li>• Some jobs are very small (i.e. installing a meter) and some are very large (i.e. new sub-divisions, sub-stations)</li> <li>• Most jobs and projects take weeks or months; only 5% to 10% take one or two days</li> <li>• Some jobs are annual, some are planned and some just come up</li> <li>• Sub-stations are inspected monthly</li> <li>• There is regular testing of poles</li> </ul> <p><i>Project management</i></p> <ul style="list-style-type: none"> <li>• The utility does not have formal project management processes or policies</li> <li>• The two general foremen handle all project management</li> <li>• A lot of the information is in their heads and based on their</li> </ul>		

Business Sphere	Business Attribute	Interview Feedback	Documents	Analysis
		<p>experience</p> <ul style="list-style-type: none"> <li>• The utility is a very small team so they talk a lot and do project management every day</li> <li>• Materials are ordered as required and priority projects and activities are identified</li> <li>• Projects should be reviewed better in terms of if they came in on budget and were done on time</li> <li>• Conversations are regularly held at the beginning and end of projects to determine if the project is on time, on budget and to a high quality</li> </ul>		
	2.6. Financial Management and Rate Model	<p><i>Overall approach</i></p> <ul style="list-style-type: none"> <li>• For many years EL&amp;P was managed very tightly and was seen by the city as bit of a cash cow</li> <li>• During this time, not much money was spent on maintenance, safety, tools, etc</li> <li>• Many believe that EL&amp;P is already a very lean operation that delivers a lot for the resources it has, so the focus of this review should not be not on costs but on how the utility can do things better to deliver all that is required to deliver</li> <li>• Overall financial management is handled by corporate services through its financial services section</li> <li>• The manager of the utility has a lot of financial responsibility in terms of budgeting and ensuring that the financial operations and financial reporting of the utility are being carried out effectively</li> <li>• The division has a controller who is responsible for overall accounting policies and provides the utility with financial and accounting guidance</li> <li>• The utility has an accountant who handles day-to-day accounting functions</li> </ul>	<ul style="list-style-type: none"> <li>• See <b>Revenue and Rate Approach</b> - Draft Recommendations for Utility Fiscal Policies (part of the Utility Rate Model Review) for financial policies</li> <li>• See <b>Organization and Staffing Structure</b> - Enmax Power Service Level Agreement (SLA) Reporting for approach to managing contract with Enmax</li> <li>• See <b>Budgeting and Capital Planning</b> - Preliminary Support Cost Allocations – 2012 Budget for financial policy re: accounting for shared services</li> </ul>	<ul style="list-style-type: none"> <li>• Review documents</li> <li>• Determine existence of measures/metrics and calculate if possible</li> <li>• Assess management practice based on interview feedback and documents</li> </ul>

Business Sphere	Business Attribute	Interview Feedback	Documents	Analysis
		<ul style="list-style-type: none"> <li>The utility also has another accountant who is the office manager and head of the regulatory section, which deals with the rate model, i.e. development of tariffs and tariff applications</li> </ul> <p><i>Distribution rates</i></p> <ul style="list-style-type: none"> <li>Distribution rates are developed annually using a cost of service model</li> <li>The amounts developed for the annual budget are put into the COAS model, although the rates are actually approved first, before the budget is finally approved, to align with the beginning of the year when new rates take effect</li> <li>Billing determinants like KW hours and KVA demand are forecasted</li> <li>Allocations between rate classes are developed</li> <li>Finally, the rates are calculated for each rate class</li> <li>The rate classes are: residential, small commercial, large commercial, and industrial</li> <li>A report is developed for council, as they are the electrical distribution regulator for EL&amp;P</li> <li>Financial services typically does not have much involvement with the rate model</li> <li>The rate model is managed by the manager and the office manager</li> <li>This may be changing as financial services is involved in the rate review study currently underway</li> </ul> <p><i>Transmission costs</i></p> <ul style="list-style-type: none"> <li>In Alberta, all customers are charged one rate for</li> </ul>	<ul style="list-style-type: none"> <li>Revision to Distribution Tariff Effective January 1, 2012</li> <li>AESO Transmission Cost 2011 Background</li> <li>Transmission Facility Operator (TFO) General Tariff Application (2009-2011)</li> <li>Example of Variance Reporting (Operating): Summary of EL&amp;P's Operating Budget for 2011 as at September 30, 2011 and Cost Centre Detail Monthly Operating Report by Obj and Sub – Operating Report Without Sub Ledger for the period ending September 30, 2011</li> <li>Summary of 2010 Residential Subdivision Projects</li> <li>Example of Project Tracking (Capital): Summary Gantt Chart and Jobs Detail</li> <li>Allowance for Doubtful Accounts –General</li> </ul>	



Business Sphere	Business Attribute	Interview Feedback	Documents	Analysis
		<p>transmission (a postage stamp rate)</p> <ul style="list-style-type: none"> <li>• Every year, TFO's like EL&amp;P submit their costs to the AUC for approval and then it is sent to the AESO</li> <li>• The AESO puts all of these submissions from across the province together and averages out the costs to determine the average transmission tariff, which is charged back to the utility, since TFO's are both producers and customer, since they have to pay to access the system as well</li> <li>• Transmission costs are recovered through the AESO, not through the distribution rate</li> <li>• This is done by submitting a transmission rate case to the AESO every three years, which justifies the costs for EL&amp;P's few transmission assets</li> <li>• This process also involves answering questions at a hearing</li> <li>• The process and systems for accessing the numbers that are required for the transmission filing are pretty good</li> <li>• Approved allocation factors are used because a lot of the work EL&amp;P does is distribution, but some of these costs are still recoverable through AESO</li> <li>• Only a few projects are 100% transmission</li> <li>• Financial services has very little involvement with the transmission filing</li> <li>• Transmission projects are estimated in JDE and unlike the distribution section, standard costs are not used since many of the projects are one-offs</li> </ul> <p><i>Cost management</i></p> <ul style="list-style-type: none"> <li>• Overall, many believe the utility is managed very efficiently in terms of costs</li> <li>• The various components of the business are divided into</li> </ul>	<p>Trade Receivables for the period ending December 31, 2011</p> <ul style="list-style-type: none"> <li>• Examples of Procurement Agreements – Three Phase Padmount Transformer Agreement with Cam Tran Co. and Electrical Cable Agreement with Nexans Canada</li> <li>• EL&amp;P 10 Year (2012-2012) Cash Flow and Reserve Balance Forecast – 2012 Budget</li> <li>• Red Deer Rates of Return for 2012 Budget</li> <li>• Debt to Equity Ratio</li> <li>• Cost of Service Analysis (COSA) Model (for rates effective January 1, 2012)</li> <li>• EL&amp;P 2012 COSA – Escalation Factors</li> <li>• Summary of Dividends Paid to the City (2006-2011)</li> <li>• Summary of Reserve Balances (2005-2011)</li> <li>• Summary of Year End</li> </ul>	

Business Sphere	Business Attribute	Interview Feedback	Documents	Analysis
		<p>business units and specific line items are assigned to each unit</p> <ul style="list-style-type: none"> <li>• There is a good understanding of the cost drivers for each, by the managers responsible</li> <li>• Procurement agreements are in place with between 10 and 20 key suppliers</li> <li>• The utility produces detailed variance reports monthly for management and quarterly and at year end for financial services</li> <li>• Some indicated that these are not very useful for managing</li> <li>• The AESO flow through costs are a major concern as they fluctuate and are one of the largest costs in the budget</li> <li>• For example, EL&amp;P had to go back to council in the middle of last year for a new distribution tariff</li> <li>• The utility is considering a rate rider to deal with this</li> </ul> <p><i>Development job costs</i></p> <ul style="list-style-type: none"> <li>• In 2010, the cost per lot was around \$2,500, with a low of \$2,000 and a high of \$3,000.</li> <li>• This is based on the estimate, which is what is charged to the developer</li> <li>• The actual amount is different because it does not include the 10% overhead and the per hectare charge.</li> <li>• A cost summary for 2011 has not yet been completed</li> <li>• Many of the 2011 jobs were done in frost conditions in December and January and so additional work will be required in the spring</li> <li>• These jobs will be billed based on actual costs because of the extra cost of winter construction</li> </ul>	Debt (2008-2011)	

Business Sphere	Business Attribute	Interview Feedback	Documents	Analysis
		<p><i>Job costing and billing</i></p> <ul style="list-style-type: none"> <li>• Revenue &amp; Assessment bills EL&amp;P jobs</li> <li>• The costs come out of general funds and the revenues go into general revenues;</li> <li>• Therefore, if EL&amp;P does a job efficiently and it comes in under estimated cost, this savings is lost to the utility</li> <li>• Outstanding customer accounts and invoices are tracked through the allowance for doubtful accounts – general trade receivables</li> </ul> <p><i>Systems</i></p> <ul style="list-style-type: none"> <li>• The utility accountant uses JDE and its various modules</li> <li>• This works well for day-to-day accounting although it is not very user friendly</li> <li>• The system would probably be more functional if there was training available</li> <li>• JDE will not support the city's version of JDE in a year; as the system has not been updated</li> <li>• The intent is to update and then all the systems will be re-examined</li> <li>• According to some, although the utility has a very good understanding of costs, there are not great systems for tracking costs</li> <li>• The utility needs information about how well activity and project costs and timeframes are being met, in order to actively manage for improvement</li> <li>• For example, EL&amp;P does contract work for developers and provide estimates for jobs</li> <li>• They then need to capture actual costs and compare to</li> </ul>		

Business Sphere	Business Attribute	Interview Feedback	Documents	Analysis
		<p>estimates and need to apply an administrative overhead charge, and this all need to flow into JDE</p> <ul style="list-style-type: none"> <li>• It can be frustrating to get required and useful information out of JDE</li> <li>• EL&amp;P was not involved in setting it up the system (by its own choice at the time), which has led to issues</li> <li>• Some tweaks and corrections have made it better and financial services has tried its best to help with this</li> </ul> <p><i>Accounting for capital projects and reserves</i></p> <ul style="list-style-type: none"> <li>• Financial services will be changing how the capital equity reserve is accounted for, in order to deal with an issue regarding the reserve interest allocation</li> <li>• Currently all capital projects are funded out of the reserve when they are approved at the beginning of the year, which draws down the reserve balance and overdraws it</li> <li>• When a capital project is completed any surpluses are moved back into the reserve</li> <li>• In the future, the intention is not to fund all projects at the beginning of the year, but to fund them when they actually go ahead, which means that money is left in the reserve and it is easier to calculate the interest allocation</li> <li>• However, couldn't this be done much simpler by just using a deemed equity calculation?</li> <li>• The new way creates a lot more work because each project has to be tracked separately and has to have a committed account within the reserve fund, which then needs to be reconciled</li> <li>• This is an example of how things are made much more complicated than they need to be</li> </ul>		

Business Sphere	Business Attribute	Interview Feedback	Documents	Analysis
		<ul style="list-style-type: none"> <li>• It also takes away the ability from the utility to shuffle dollars between projects, which is important because many projects are ad hoc and unplanned jobs</li> <li>• If council approves the overall capital dollar figure, and not individual projects, then the utility should have this flexibility</li> <li>• Feedback from Financial Services indicates that funding of the capital jobs occurs at the end of the year equal to the expenditures incurred - this maximizes the Capital reserve balance to have interest allocated to it - eliminates funds sitting idle in Capital jobs that have not started - the procedure has been simplified and it is no more onerous than it was when jobs were being funded at the beginning of the year</li> </ul> <p><i>Utility fiscal policies</i></p> <p><i>Overall approach</i></p> <ul style="list-style-type: none"> <li>• There needs to be the right balance between efficiency, maintaining and building infrastructure, and paying back to the owner</li> <li>• There is an overall concern that the city could be “draining” the utility through dividends and MCAF. However, the MCAF and regular dividends (as part of the return) are collected from the customer and passed through to the City. The utility is a “flow through” mechanism, and does not receive benefit of the MCAF or dividend.</li> <li>• There is only so much that a utility can do through rates to build up reserves and pay dividends, as although the city is the utility’s regulator, rates also have to follow a recognized methodology and be defensible to the AUC</li> <li>• EL&amp;P really only has two options when it needs to invest a lot</li> </ul>		

Business Sphere	Business Attribute	Interview Feedback	Documents	Analysis
		<p>of dollars in infrastructure (which it needs to now), if reserves are not enough: massively increase rates or take on debt</p> <ul style="list-style-type: none"> <li>• The first option is not very attractive (and council probably wouldn't buy in) and the second option is limited by the overall debt ceiling for the city</li> <li>• There is no option to ask for money from the owner (the city) or to raise equity through shares (like a private utility could)</li> <li>• Paying for infrastructure under these circumstances is a huge issue for the utility and the city</li> </ul> <p><i>Rate of return</i></p> <ul style="list-style-type: none"> <li>• The utility needs to gain a better understanding of council's and senior management's expectations for return on investment</li> <li>• It needs to be defined what ROI should encompass, just dollars or also sustainability returns based on things like the five pillars or triple bottom line</li> <li>• The utility uses the generic cost of capital determined by the AUC (8.75% for 2011, 2012 and 2013 per AUD decision 2011-474) to calculate return on equity</li> <li>• Contributed assets are excluded from the rate calculation</li> </ul> <p><i>Dividends</i></p> <ul style="list-style-type: none"> <li>• The city needs to determine what a reasonable dividend is and has to balance support for the city with having adequate reserves for capital replacement and growth</li> <li>• The dividend is a return to the owner and is part of the rate of return on equity</li> <li>• Some note that the city is both the owner and the regulator,</li> </ul>		



Business Sphere	Business Attribute	Interview Feedback	Documents	Analysis
		<p>which can present a conflict</p> <p><i>Reserves</i></p> <ul style="list-style-type: none"> <li>• The city has traditionally taken as much money as it wanted in dividends and reserves were only discussed when the topic of dividends and special dividends came up</li> <li>• It is unclear how well scrutinized this was in the past, in terms of how far off in the future were anticipated capital expenses were, if putting aside cash for capital needs was required, or considering debt to pay for future capital needs as an option</li> <li>• Reserves were capped at \$4 million and anything above that was provided to the city as a dividend</li> <li>• EL&amp;P was the only utility whose reserves were capped in this way</li> <li>• In retrospect, the utility likely should have been allowed to build up their reserves much higher to deal with looming capital costs</li> <li>• The utility has been trying to build up reserve funds over the past five years</li> <li>• The city needs help in determining what level of reserves are adequate</li> <li>• The utility is not presently considering any type of capital surcharge, although one could be justified in the rate model if depreciation does not cover the refurbishment or replacement of existing assets</li> </ul> <p><i>Debt</i></p> <ul style="list-style-type: none"> <li>• Debt is limited to 1.5 times revenue and the deemed debt-to-equity ratio is 65% equity and 35% debt</li> </ul>		

Business Sphere	Business Attribute	Interview Feedback	Documents	Analysis
		<ul style="list-style-type: none"> <li>The utility operated for many years without any debt and there seemed to be an aversion to taking on debt</li> <li>Some believe this was possible because the utility wasn't making adequate enough investments in infrastructure</li> <li>However, the utility has recently taken on debt as part of their ownership in the new Civic Yards</li> <li>Now that debt has become more of a concern for the city overall, the utility has been asked to use more equity</li> </ul> <p><i>Local access fee</i></p> <ul style="list-style-type: none"> <li>MCAF fee goes directly to the City</li> <li>It is calculated as percentage of the total revenue requirement</li> <li>The goal has been to charge the city utilities the same as is charged to other utilities</li> <li>In the past, the MCAF was about 12% but was 28% to 30% for industry</li> <li>The city has increased this percentage over the years and has almost caught up to what it charges to industry</li> <li>There is a desire to know if what Red Deer charges is similar to other communities</li> </ul> <p><i>Cost of service</i></p> <ul style="list-style-type: none"> <li>Cost of service studies are done annually</li> </ul>		
	2.7. Infrastructure and Asset Management	<p><i>Overall view of assets</i></p> <ul style="list-style-type: none"> <li>According to many, EL&amp;P's assets are in pretty good shape, as they date from the late 1970's)</li> <li>There are some older assets but there are plans to upgrade and replace them; i.e. the sub-stations were causing problems</li> </ul>	<ul style="list-style-type: none"> <li>Assets for EL&amp;P – Fixed Asset Total Cost by Asset Item as of December 31, 2011</li> <li>Summary of EL&amp;P Assets by Asset Code</li> </ul>	<ul style="list-style-type: none"> <li>Review documents</li> <li>Determine existence of measures/metrics and calculate if possible</li> <li>Assess management practice based on</li> </ul>

Business Sphere	Business Attribute	Interview Feedback	Documents	Analysis
		<p>but they are being addressed</p> <ul style="list-style-type: none"> <li>• Some sub-stations have been retrofitted with SMART grid equipment already and the SCADA system has been modernized</li> <li>• Others believe the assets are really being pushed to and past their useful lives, which is 30-40 years</li> <li>• For them, the issue is becoming critical and the utility is scrambling a bit to catch up</li> <li>• The aging infrastructure is starting to show in terms of decreased reliability but growth in the service area also putting pressure on the system</li> <li>• In terms of the percentage of critical assets that have been fully assessed, i.e. for integrity, status, remaining useful life, wood poles, streetlight poles, station equipment, and miscellaneous (i.e. network transformers) are physically inspected</li> <li>• The rest of the assets are assessed on age and it is generally know how old things are, with the exception of items that have been replaced on repair, which are usually only a few in a given area</li> <li>• In terms of percentage of critical assets that require immediate refurbishment or replacement, only inspected assets can be know to require immediate attention</li> <li>• There are \$50,000 worth of poles waiting to be replaced</li> <li>• There are substation (and Network transformers) that are close to the end of their life, and this equipment is being monitored more</li> <li>• In terms of the percentage of assets that are refurbished or replaced by asset class (annually), this is readily available from capital projects and operating accounts</li> <li>• In terms of total dollars set aside for asset replacement as a</li> </ul>	<ul style="list-style-type: none"> <li>• Summary of Transmission Infrastructure</li> <li>• Asset Management Plan – City of Red Deer – Asset Management Overview Report – Electrical Light and Power (Prior and Prior Associates)</li> <li>• Auditor's Report on Obsolete Inventory</li> </ul>	<p>interview feedback and documents</p>

Business Sphere	Business Attribute	Interview Feedback	Documents	Analysis
		<p>percentage of total asset value, this is in the budget</p> <ul style="list-style-type: none"> <li>• The utility is falling behind on starting and completing capital projects</li> <li>• However, there is not a huge deferred maintenance issue</li> </ul> <p><i>Overall approach to assets</i></p> <ul style="list-style-type: none"> <li>• For many years, there wasn't much of a need to fund electricity infrastructure through the capital budget because the infrastructure was pretty new</li> <li>• For some at the corporate level, a lot of city infrastructure appears to have been neglected over many years with little thought at putting money aside for future capital needs, because of capital pressure and because of high construction costs in AB, which eroded reserves</li> <li>• It appears now that the only option for addressing this is raising rates, as rates were kept low for many years by not putting enough money into maintenance and reserves</li> <li>• The need for major capital dollars has only appeared fairly recently, for sub-stations and to buy land for new sub-stations and a small amount of transmission lines</li> <li>• The last sub-station was built over ten years ago</li> <li>• A full review of the status of all the utility's assets was recently completed by Prior and Prior</li> <li>• According to some, there is not a full assessment of assets, but this might be worth the cost</li> </ul> <p><i>Type of assets</i></p> <ul style="list-style-type: none"> <li>• The utility owns and maintains a network of distribution wires and related components and equipment</li> </ul>		

Business Sphere	Business Attribute	Interview Feedback	Documents	Analysis
		<ul style="list-style-type: none"> <li>• It also has three major transmission sub-stations where the AltaLink line connects to the distribution system</li> <li>• These stations are owned by the city but jointly occupied with AltaLink, who owns some components</li> <li>• The utility also has 11 smaller sub-stations</li> <li>• These stations are classified as transmission assets (anything inside the fence) and utility pays for them and then gets money back through the AESO transmission access tariff</li> </ul> <p><i>Building and maintaining assets</i></p> <ul style="list-style-type: none"> <li>• At budget time reliability reports and load projections are examined and the utility foremen, supervisors and utility managers and staff talk together about how well the infrastructure is performing and what is needed</li> <li>• This type of dialogue also occurs constantly throughout the year</li> <li>• It is hoped the Hansen system will help with the process of determining capital needs, although it may not provide the required level of detail, but it should help</li> <li>• The utility wants to build two new substations and connecting lines, some of which will be funded through AESO</li> <li>• It also wants to build and own some small transmission lines (traditionally haven't owned these) so it can have more control over them and generate more revenue</li> <li>• A new sub-station is planned for 2012 that will cost approx. \$14M</li> <li>• The utility may have issues locating new transmission lines, as this should have been done way ahead development but wasn't</li> <li>• There are also plans in 2012 to carry out a transmission</li> </ul>		

Business Sphere	Business Attribute	Interview Feedback	Documents	Analysis
		<p>modernization project at a cost of approx. \$4.5M</p> <p><i>Asset management</i></p> <ul style="list-style-type: none"> <li>• Previously transmission assets were tracked by a consultant with their own program, as there has always been a requirement to track them for AESO</li> <li>• The utility had to manually go through all the bills to track these assets and provide the information to the consultant</li> <li>• More recently, EL&amp;P had to transpose all their assets into Riva for the city as part of meeting PSAB requirements</li> <li>• Previous to this, the city had not been tracking assets</li> <li>• EL&amp;P was keeping track of their assets in a MS Excel spreadsheet because it always had to track assets for regulatory requirements</li> <li>• When the GIS conversion was done, lot of duplicate were cleaned up, but now the reporting data is less than what it used to be</li> <li>• The dilemma is choosing between continuing to report the old numbers and staying with them until the new system catches up, or doing a major correction all at one time</li> <li>• When financial services inventoried and calculated the utility's assets to satisfy PSAB requirements, the numbers didn't match</li> <li>• They are in the process of trying to reconcile this and most of the assets now have accurate actual costs</li> <li>• The issue may have been that the utility hadn't disposed of any assets</li> <li>• The relatively new GIS system helped a lot with this process even though it isn't linked to the asset system</li> <li>• The city and the utility are still figuring out how to handle</li> </ul>		

Business Sphere	Business Attribute	Interview Feedback	Documents	Analysis
		<p>disposals; i.e. what are upgrades and what are disposals</p> <ul style="list-style-type: none"> <li>• This has improved so EL&amp;P knows a lot better the assets it can include in the rate model to develop a rate of return on assets</li> <li>• The utility has set up asset codes and is keeping track of all job costs and applying them to assets</li> <li>• Currently, the utility accountant does PSAB asset allocations (and has been for the past few years)</li> <li>• Staff in the field use more high level generic codes because the asset codes are too detailed for them</li> <li>• The accountant has to reallocate from the generic , high level codes to the more specific asset class</li> <li>• This is done every three months and is a work around</li> <li>• The accountant doesn't see or work with the overall asset ledger, but works exclusively in WIP</li> <li>• The job costing module doesn't flow directly into the asset ledger (although it does flow into the general ledger for capital)</li> <li>• The accountant zeroes the job out in the job costing module and then reallocates the assets</li> <li>• In the ideal situation, there would be a true sub- ledger for WIP and then the cost would be moved out of WIP into assets, but now there is a reconciliation process and nothing is actually moved out of job costing, which is means more work and potential errors</li> <li>• The accountant just makes sure that job costs are reasonable and assigned to the right asset codes, and then creates a summary for the asset accountant, who manually enter them into the asset ledge</li> <li>• Via an enterprise asset management project, the city is still deciding how they will track assets in the future, possibly</li> </ul>		



Business Sphere	Business Attribute	Interview Feedback	Documents	Analysis
		<p>through JDE's job costing module with another program to do some analysis</p> <ul style="list-style-type: none"> <li>• Hansen is supposed to feed all the maintenance activities into the asset tracking system</li> <li>• The hope is that JDE, Hansen and GIS will all integrate together to improve asset management</li> </ul> <p><i>Inventory management</i></p> <ul style="list-style-type: none"> <li>• Financial services monitors the inventory and does regular counts and reports on turnover</li> <li>• EL&amp;P has to work with financial services and fleet and equipment to manage inventory so it is only partly involved</li> <li>• There have been concerns about obsolete inventory being kept in the EL&amp;P inventory as spares</li> <li>• The financial services manager had given direction to the EL&amp;P Manager in 2010 that there was not an option to get old but obsolete items, free of charge, from stores as spare parts</li> <li>• If an item was deemed obsolete, it was to be removed from inventory and sold or scrapped</li> <li>• EL&amp;P prefers to keep things in inventory even if they may seem obsolete and which may never get used because they might be needed, especially for older parts of the system</li> <li>• Financial services and EL&amp;P have been working to correct this</li> <li>• Apparently the city has set aside a lot of money to write-off obsolete inventory so EL&amp;P is starting to do this</li> <li>• EL&amp;P has done some analysis re: what is absolutely needed in inventory and what can be disposed</li> <li>• There do not appear to be any formal policies for inventory management</li> </ul>		

Business Sphere	Business Attribute	Interview Feedback	Documents	Analysis
		<ul style="list-style-type: none"> <li>• In 2010, the auditor made a recommendation regarding obsolete inventory for the entire city</li> <li>• According to some, the utility could improve inventory management by having a better understanding of what and how much inventory to keep, i.e. should there be a back-up for every transformer?</li> <li>• It may be that some parts in inventory are obsolete because they have been stored too long</li> <li>• Some wonder if there could be a better approach to inventory, i.e. a risk based approach and/or reciprocal agreements with neighbouring municipalities</li> </ul>		
	2.8. Operating Risk and Business Continuity	<p><i>Overall approach</i></p> <ul style="list-style-type: none"> <li>• Corporate services has overall responsibility for emergency planning and business continuity</li> <li>• It needs to work with departments to ensure that business continuity plans are in place</li> <li>• There don't appear to be any plans in place now</li> <li>• For EL&amp;P, talking about risks is part of the budget discussion</li> <li>• The strategy is to replace infrastructure that has the potential to affect the most people</li> </ul> <p><i>Major risks</i></p> <ul style="list-style-type: none"> <li>• Losing qualified staff and not being able to replace them</li> <li>• Having a lot of system and project management knowledge in the heads of the general foreman, which is not documented or subject to process</li> <li>• Locating transmission lines</li> <li>• Aging infrastructure</li> <li>• Load (demand)</li> </ul>	<ul style="list-style-type: none"> <li>• ELA&amp;P Emergency Plan – Union Strike</li> <li>• EL&amp;P Pandemic Plan</li> <li>• Mutual Emergency Assistance Agreement between City of Red Deer Electric Utility and AltaLink</li> <li>• Security Reporting Templates: Substation Reads and Physical Sabotage Reporting, SCADA Sabotage and Intrusion Reporting, and AESO Information Document Sabotage Event Reporting</li> </ul>	<ul style="list-style-type: none"> <li>• Review documents</li> <li>• Determine existence of measures/metrics and calculate if possible</li> <li>• Assess management practice based on interview feedback and documents</li> </ul>

Business Sphere	Business Attribute	Interview Feedback	Documents	Analysis
		<ul style="list-style-type: none"> <li>Regulatory knowledge since the previous manager left, i.e. not understanding what is happening in the regulatory environment; EL&amp;P is relying a lot on a consultant now</li> </ul> <p><i>Emergency planning</i></p> <ul style="list-style-type: none"> <li>EL&amp;P has mutual assistance agreements with other utilities in the province to deal with emergencies</li> <li>There is an emergency plan that came out of preparation for a possible pandemic</li> <li>An important component is having a detailed understanding of reliability and outages</li> </ul> <p><i>Insurance</i></p> <ul style="list-style-type: none"> <li>Insurance has not been a central issue</li> <li>It comes up as it relates to transmission outage and is part of the transmission rate filing</li> <li>It may be beneficial to review our insurance coverage as this may not have been done recently</li> </ul> <p><i>Security</i></p> <ul style="list-style-type: none"> <li>The theft of copper and other materials from work sites is becoming an issue</li> <li>The utility is looking into surveillance systems and security guards</li> <li>There no other major security issues, in terms of physical or data security</li> <li>Obviously the SCADA system is always top of mind because it is where there is access to cutting off power</li> <li>There are documents to track security issues</li> </ul>		

Business Sphere	Business Attribute	Interview Feedback	Documents	Analysis
		<ul style="list-style-type: none"> <li>• One is for the substation sites and the other is for SCADA cyber sabotage event reporting</li> <li>• The general foreman and staff fill out the substation site sabotage forms and they are filed in the general foreman's office</li> <li>• For immediate sabotage reporting to the AESO and interconnected TFOs, the transmission supervisor and staff are the responsible for filling out the AESO sabotage event reporting forms and submitting them to the appropriate organization</li> <li>• A theft is not always classified as sabotage, i.e. copper theft, because it does not affect the real operation or protection systems</li> <li>• Graffiti is considered a break-in, not sabotage</li> </ul>		
3. Citizen, Customer and Stakeholder Engagement	3.1. Citizen Engagement	<ul style="list-style-type: none"> <li>• The utility is part of the city's Let's Talk initiative, which involves setting up a booth and talking with citizens at shopping malls</li> </ul>	<ul style="list-style-type: none"> <li>• EL&amp;P Brochures               <ul style="list-style-type: none"> <li>○ Keeping your lights on</li> <li>○ Energy conservation for your business</li> <li>○ Energy conservation in your home</li> <li>○ Is renewable energy in your home something you may be considering?</li> <li>○ Power Outages</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Review documents</li> <li>• Determine existence of measures/metrics and calculate if possible</li> <li>• Assess management practice based on interview feedback and documents</li> </ul>
	3.2. Customer Relationship Management	<p><i>Developers</i></p> <ul style="list-style-type: none"> <li>• The utility's direct customer is developers</li> <li>• The city is also the approving authority for development but this dual role has not caused any problems</li> </ul>	<ul style="list-style-type: none"> <li>• See <b>Organization and Staffing Structure</b> - Enmax Power Service Level Agreement (SLA) Reporting for customer</li> </ul>	<ul style="list-style-type: none"> <li>• Review documents</li> <li>• Determine existence of measures/metrics and calculate if possible</li> <li>• Assess management</li> </ul>

Business Sphere	Business Attribute	Interview Feedback	Documents	Analysis
		<ul style="list-style-type: none"> <li>• The utility works very well with developers and is responsive to their needs and requests are turned around well; they are responsive but not fast</li> <li>• When things were booming, EL&amp;P did get behind, which is a big issue for developers because they rely on EL&amp;P to provide service so they can turn lots over to builders</li> <li>• Most interaction is on the ground with EL&amp;P construction staff and general foremen</li> <li>• EL&amp;P operates very professionally</li> <li>• They turn designs around quickly and respond to design changes; their design people are of high quality</li> <li>• EL&amp;P is challenged as a municipal and unionized organization to act like private contractors in terms of working overtime hours and on weekends, especially to take advantage of weather and as the construction season ends</li> <li>• EL&amp;P has a bit of a challenge being innovative</li> <li>• Even though there is not a huge incentive to manage the costs of services provided to developers because they pay for it all, the utility has taken major steps to reduce costs and developers recognize this</li> <li>• A sign of customer satisfaction is that developers have the option to use private sector contractors but they always use EL&amp;P</li> <li>• Developers do note that the price never changes, no matter how the job goes, and they always have to pay 50% upfront</li> <li>• Developers indicate that they will continue working with EL&amp;P because processes are reasonable and the customer service and quality is good</li> </ul> <p><i>Electricity customers</i></p>	<p>measures</p> <ul style="list-style-type: none"> <li>• News Release (November 23, 2010) re: the Electricity Rush Hour Advertising Campaign</li> <li>• News Release (November 8, 2011) re: the Kill A Watt Program</li> <li>• Example of Trouble Call Log System reports</li> </ul>	<p>practice based on interview feedback and documents</p>

Business Sphere	Business Attribute	Interview Feedback	Documents	Analysis
		<ul style="list-style-type: none"> <li>• EL&amp;P is one step removed from electricity consumers as Enmax handles the RRO billing and other customers have private retailers</li> <li>• The customer management system is really the customer calls that come into the office, but customer calls should really be going to Enmax for the RRO and to retailers</li> <li>• Enmax indicates that there are no persistent or systematic customer issues</li> <li>• Measurement Canada regulations require that meters are verified to be accurate to a certain tolerance every certain number of years</li> <li>• For instance, a brand new meter may not require re-certification for 10 or 12 years, but meters that have been in service for some time may require testing at shorter intervals like 2, 3 or 4 years or more</li> <li>• The year that a meter is due to be tested is called its Seal Expiry Year</li> <li>• Every meter is not tested every year, but all meters currently installed have a seal year of 2012 or later and EL&amp;P has already begun removing the meters due to be tested this year</li> <li>• There have been a lot of outages in the past year, which can really affect big customers (i.e. milk producer) and the utility is trying to deal with this</li> <li>• In the past, efforts were made to meet with large customers to discuss their issues and concerns</li> <li>• Response times to customer inquiries or calls are not tracked</li> <li>• Every day requests, such as a request for a splice or a meter to be installed, are addressed either the same day or the next day, but this is not tracked in a call log</li> <li>• A proxy for responsiveness is the length of time of outages, which are generally very short in duration, which indicates</li> </ul>		

Business Sphere	Business Attribute	Interview Feedback	Documents	Analysis
		good responsiveness		
	3.3. Partnerships and Stakeholder Relations	<ul style="list-style-type: none"> <li>• EL&amp;P has been very heavily involved as a stakeholder of AESO, almost too much</li> <li>• Enmax reports having a very positive relationship with EL&amp;P</li> <li>• In particular, the energy clerk receives high praise from Enmax and so does the office manager and his staff, who are described as very strong</li> <li>• EL&amp;P is very responsive to requests</li> </ul>	<ul style="list-style-type: none"> <li>• Minutes of EL&amp;P and Water Treatment Plant Coordination Meetings (March 10 and 14, 2011)</li> </ul>	<ul style="list-style-type: none"> <li>• Review documents</li> <li>• Determine existence of measures/metrics and calculate if possible</li> <li>• Assess management practice based on interview feedback and documents</li> </ul>
	3.4. Regional and Other Integrated Planning	<ul style="list-style-type: none"> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>• EL&amp;P Service Territory Expansion Meeting PowerPoint (November 9, 2010) and resulting correspondence with Fortis Alberta</li> </ul>	<ul style="list-style-type: none"> <li>• Review documents</li> <li>• Determine existence of measures/metrics and calculate if possible</li> <li>• Assess management practice based on interview feedback and documents</li> </ul>
4. Monitoring, Measurement and Results	4.1. Performance Monitoring and Reporting	<p><i>Overall approach – current</i></p> <ul style="list-style-type: none"> <li>• The city and the utility do not have a performance measurement/management system or framework</li> <li>• Service plans do not include measures</li> <li>• There are no measures in place to track corporate services</li> <li>• The city tracks safety incidents</li> <li>• The utility has not subscribed to CEA the Safety Survey for a few years</li> <li>• The utility knows some basic statistics like km of distribution wire and amount of electricity put through the system</li> <li>• The utility consistently tracks and reports on its rates</li> </ul>	<ul style="list-style-type: none"> <li>• Comparison of Distribution Tariff for January 2012 – Residential, Small General Service, General Service and Large General Service/Industrial</li> <li>• Reliability Analysis (1992-2010)</li> <li>• Outages by Neighbourhood (2009-</li> </ul>	<ul style="list-style-type: none"> <li>• Review documents</li> <li>• Determine existence of measures/metrics and calculate if possible</li> <li>• Assess management practice based on interview feedback and documents</li> </ul>



Business Sphere	Business Attribute	Interview Feedback	Documents	Analysis
		<p>compared to five other municipalities in Alberta (and compares very well)</p> <ul style="list-style-type: none"> <li>• The utility tracks reliability as part of Canadian Electric Association benchmarking <ul style="list-style-type: none"> <li>○ In terms of outages (total customer hours out), EL&amp;P compares very well to others, but sometimes receive a lower rating on responding to outages in off peak hours because we don't have 24 hour staff</li> <li>○ The reliability statistics are at so high a level as to be almost meaningless</li> <li>○ EL&amp;P looks very good but the measures don't identify some critical issues like particular infrastructure going down that affects a whole chunk of customers</li> </ul> </li> <li>• The utility sometimes calculates things like cost per lot services or the average cost for various construction activities</li> <li>• No financial measures are consistently calculated or used, other than monthly variance reports</li> <li>• The city does not really a performance culture, but the city is growing and needs to get more sophisticated in this</li> <li>• The utility believes it is operating very efficiently and effectively but can't prove it</li> <li>• The regulator has never really asked for performance measures</li> <li>• The city seemed comfortable that the utility was operating well (i.e. was paying a good dividend)</li> <li>• The city is currently in the beginning stages of developing a performance approach and framework</li> <li>• HR is currently working on a project to articulate what each department does for the dollars invested but this won't have much meaning without knowing what a good result is</li> <li>• As a municipality, we haven't done a good job of</li> </ul>	<p>2011)</p> <ul style="list-style-type: none"> <li>• 2010 Annual Service Continuity Report on Distribution System Performance in Electrical Utilities – Canadian Electricity Association</li> </ul>	

Business Sphere	Business Attribute	Interview Feedback	Documents	Analysis
		<p>benchmarking ourselves against other municipalities</p> <p><i>Overall approach - potential</i></p> <ul style="list-style-type: none"> <li>• The goal is for all service plans to have measures within the next two years, as it is difficult to make decisions without performance measures</li> <li>• For some, the city and utility need to pick a few metrics that are meaningful to them and start there</li> <li>• For a start, the city needs to at least establish some baseline measures</li> <li>• For some, how performance data is presented is critical</li> <li>• They would like to see a dashboard type approach that presents managers with red, amber and green scenarios, as they have little time to read long reports and a need to focus on problem areas</li> <li>• There should be the ability to drill down into areas as required</li> <li>• The measures need to be ratios so the numbers are normalized and comparable</li> <li>• Better measures are definitely needed so comparisons can be made to other utilities</li> <li>• Council is almost always interested in how the utilities compare to other utilities in terms of efficiency</li> <li>• There needs to be a measurement framework so success and value for money can be demonstrated, to answer challenges about what value departments and utilities are providing</li> <li>• All the system upgrades, i.e. GIS, Hansen, will help to generate better data and information so that performance measures can be generated</li> </ul>		

Business Sphere	Business Attribute	Interview Feedback	Documents	Analysis
		<p><i>Potential metrics</i></p> <ul style="list-style-type: none"> <li>• Labour costs as a percentage of overall costs</li> <li>• Safety performance</li> <li>• Utilization (hrs) of equipment</li> <li>• Cost per residential lot serviced</li> <li>• Average cost for different types of construction (this was calculated a few years ago, one time, for PSAB requirements)</li> <li>• Time to answer customer calls</li> <li>• FTE's per amount of electricity put through the system</li> <li>• How can the city be doing "value-for-money" audits of the utilities because this assumes that the city makes an investment in the utilities but it doesn't as the utilities are self funded</li> <li>• The value-for-money of EL&amp;P is probably very high, as the rates compare very well with other and cost management is reflected in the rates so if they are low or the same as others then the utility is doing well</li> </ul>		
	4.2. Regulatory Compliance and Reporting	<p><i>City council as regulator</i></p> <ul style="list-style-type: none"> <li>• The city is the utility's regulator, which means that councilors are the regulators</li> <li>• Councilors and even senior management may not have the best understanding of the utility and how it operates under the utility rate model</li> <li>• Elected officials may also have different priorities</li> </ul> <p><i>Transmission regulation</i></p> <ul style="list-style-type: none"> <li>• The AESO has to balance the entire provincial system by managing real time input every day, 24/7</li> </ul>	<ul style="list-style-type: none"> <li>• AESO Alberta Reliability Standards – Compliance Monitoring Audit Report – The City of Red Deer (March 31, 2011)</li> <li>• Executive Summary Report and Confirmation of Monitoring Results for EL&amp;P's Quality Management Plan (QMP)</li> </ul>	<ul style="list-style-type: none"> <li>• Review documents</li> <li>• Determine existence of measures/metrics and calculate if possible</li> <li>• Assess management practice based on interview feedback and documents</li> </ul>

Business Sphere	Business Attribute	Interview Feedback	Documents	Analysis
		<ul style="list-style-type: none"> <li>• Every TFO has to follow provincial AESO standards for transmission planning and technical requirements</li> <li>• The AUC is the regulator for transmission construction costs, by evaluating reasonableness in terms of how much of the infrastructure will be classified as transmission at base and how much will be distribution rate base</li> <li>• The utility does self monitoring and compliance and has to demonstrate to the AESO every three years its reliability compliance, in terms of following all the specifications</li> <li>• An audit is done and submitted every three years and for the two years in between self audits are done</li> <li>• EL&amp;P is in compliance</li> <li>• AESO is currently developing new guidelines, which may be a big challenge</li> <li>• EL&amp;P is a very small TFO and has a very good relationship with the AESO</li> <li>• They have good technical expertise, strong infrastructure and are in an important load centre between Edmonton and Calgary</li> </ul> <p><i>Regulatory knowledge</i></p> <ul style="list-style-type: none"> <li>• The previous manager had a lot of regulatory knowledge and did a lot of work in this area</li> <li>• There is some knowledge remaining amongst staff but probably not as much as there could be</li> <li>• There is a lot good knowledge and experience to be tapped, but right now it is a gap that is being managed with the help of a consultant</li> </ul>		

Business Sphere	Business Attribute	Interview Feedback	Documents	Analysis
		<p><i>PCB's</i></p> <p>There is an emerging issue of non-compliance with the management of PCB's; it's a huge task to meet new regulations in this area</p>		
	4.3. Financial Reporting	<ul style="list-style-type: none"> <li>• EL&amp;P feeds into a year-end city report</li> <li>• All departments/utilities produce a short "rep letter", which is a check-list that documents what happened in the past year and discusses things like potential law suits, fraud and if accounting has been done properly</li> <li>• As far as routine financial reports go, they are distributed 5 times per year (variance reports)</li> <li>• Close is generally 10 working days after month end</li> <li>• JDE documents are the last ones to be posted</li> <li>• There is analysis on this from 2011</li> <li>• Year end (soft) close for December is late in January after the AP accruals are complete</li> <li>• The rest of the year end processes take another month or so</li> <li>• The auditors are in for 3-4 weeks in March and the audit committee is scheduled for the first or second week in April</li> <li>• Council approves the statements before April 30, as they must be in to the provincial government</li> </ul>	<ul style="list-style-type: none"> <li>• The City of Red Deer 2010 Annual Financial Report</li> <li>• Departmental Representation Letter for EL&amp;P (2010) and draft Departmental Representation Letter for EL&amp;P (2011)</li> <li>• Financial Reporting Cycle Times</li> </ul>	<ul style="list-style-type: none"> <li>• Review documents</li> <li>• Determine existence of measures/metrics and calculate if possible</li> <li>• Assess management practice based on interview feedback and documents</li> </ul>



## **Appendix J**

### **Benchmarking Participants**

**Appendix J - Benchmarking Participants**

<b>Jurisdiction</b>	<b>Organization</b>	<b>Contact Name</b>
Alberta	Lethbridge Electric Utility	Otto Lenz  Utility Manager
	Medicine Hat Electric Utility	Kendall Woodacre  General Manager
	Edmonton (Epcor)	
	Calgary (Enmax)	
British Columbia	Kelowna Electric Utility	Cindy McNeely  Electrical Manager
Ontario	Waterloo North Hydro Inc.	Albert Singh  VP Finance and CFO
	Oakville Hydro Corporation.	
United States	Sacramento Municipal Utility District	Paul Lau  Assistant General Manager, Customer, Distribution and Technology





## **Appendix K**

### **Benchmarking Questionnaire**

**Appendix K - Benchmarking Questionnaire**

# Value for Money Review Benchmarking Questionnaire

**Prepared by Grant Thornton on behalf of the City of Red Deer, Electric Light and Power Utility**

**Name of Utility:****Background**

The Electric Light and Power utility within the City of Red Deer is currently undertaking a value for money / operational review. The goal of this review is to identify performance improvement recommendations and metrics to help the organization not only achieve its desired goals and objectives, but also position it for long-term sustainability.

The City of Red Deer's Electric Light and Power department is a regulated wires service provider, and is responsible for planning, building, operating and maintaining Red Deer's electric transmission and distribution facilities to reliably deliver power to every customer in the City's service area. The department does not generate electricity. The utility handles residential, commercial, and industrial service applications and provides a range of customer services, including:

- new service constructions and connections,
- meter installation,
- testing and maintenance,
- load settlement,
- electricity usage analysis,
- power quality monitoring and analysis,
- underground cable locating,
- street light and traffic light installation and maintenance, and
- trimming trees.

We would like to ask for and greatly appreciate your participation in this peer review. Included in this document are questions for your consideration. Please be assured that all information exchanged would be confidential and would not be shared with other organizations. Further, in return for your participation you will be provided with summary level output responses (e.g. averages).

# Utility Profile

What are the main characteristics of your utility?

**1.1 Services** – services provided by your utility (i.e. distribution, transmission, retail, billing, others)

--

**1.2 Service area** – total population and land area serviced by your utility

--

**1.3 Infrastructure** - total length of system managed (distribution, transmission) and related infrastructure (i.e. substations); replacement value; average age of the infrastructure; proportion of underground vs. overground wire

--

**1.4 Customers** – total number of customers and number of customers by customer class (residential, commercial, industrial, others?); total power consumed by customer class; customer satisfaction surveys and results (if available)

--

**1.5 Employees** – total number of employees and breakdown of employees by function (please provide an org chart); employee satisfaction surveys and results (if available); average years of service; turnover ratio; professional development expenditures ratio

--

**1.6 Rates** – rate structure (rates by customer class and rate components, i.e. fixed vs. variable, tariffs, fees and charges, etc.)

--

**1.7 Finances** – most recent operating and capital budgets and fiscal policies/directives related to rates of return, reserves, dividends, franchise fees, debt, etc.

--

**1.8 Performance metrics** – financial, efficiency/productivity, service delivery and other metrics tracked by your utility, and the most recent results; this could involve a Performance Dashboard or KPI's

- For example, we are looking for metrics such as: total cost per kwh, total cost per customer, O&M cost per km of distribution wire, O&M cost per customer, customer care and billing cost per customer, cost per kwh for electricity.

## Further Questions by Function

### **Strategic Design and Alignment**

#### *Strategic, Business and Risk Planning*

1. How does your utility carry out strategic and/or business planning? How is this integrated into the overall planning of the municipality? Does your utility follow a formal risk planning approach that identifies risks and mitigation strategies? Is it linked with an overall risk management approach for the municipality?

#### *Sustainability Planning*

2. Has your utility integrated other priorities (i.e. environmental, social) into planning through things like the Triple Bottom Line, Five Pillars, or an Environmental Master Plan? What is your utility's approach to environmental sustainability?

#### *Revenue and Rate Approach*

3. Do you have an overall philosophy that guides rate design? What is it and how have you designed your rate approach to achieve financial sustainability?

#### *Budgeting and Capital Planning*

4. How does your utility carry out operating budgeting? Capital budgeting? How are capital priorities determined?

### **Management and Execution**

#### *Service Lines and Programs*

5. Does your utility have formalized service delivery priorities and standards? If so, what are they and how are they tracked and monitored? What innovative services, programs, practices or approaches has your utility employed?

#### *Organizational and Staffing Structure*

6. Please generally describe how your utility is organized. What is most effective about this structure and what is least effective? How many people do you employ?
7. How are corporate functions like IT, HR, procurement, etc. provided, i.e. by the utility, by the municipality in a shared services model, by a third party? If provided by the municipality or by a third

party, are formal service level agreements in place? What are the shared services cost allocations and how are they calculated?

8. Are any significant portions of your utility's service delivery or other functions contracted out or outsourced? If so, what are they and how much is contracted out?

#### *Operations and Maintenance Planning and Execution*

9. How does your utility carry out operations and maintenance planning? How much of your maintenance activities are proactive vs. reactive?

#### *Financial Management*

10. Does your utility have a formal fiscal policy? If so, what are its main characteristics (i.e. debt policy, dividends, franchise fees, reserves, rates of return)? If not, how are financial decisions made? How does your utility report its financial results?

#### *Employee Management and Working Environment*

11. What formal employee engagement activities does your utility engage in? Does your utility track employee satisfaction? How does your utility manage safety, i.e. safety plan, safety meetings, safety manager, etc?

#### *Infrastructure and Asset Management*

12. How does your utility manage its assets? Do you have a formal asset management system in place? How does this link to planning and maintenance activities?

#### *Operating Risk and Business Continuity*

13. Does your utility engage in formal emergency planning and/or business continuity planning?

### **Customer, Citizen and Stakeholder Engagement**

#### *Citizen Engagement Customer Relations Management*

14. What activities does your utility undertake to engage with citizens? How is citizen feedback gathered and used? How does your utility gather feedback from customers and measure customer satisfaction?

#### *Partnerships and Stakeholder Relations*

15. How does your utility manage important partner and stakeholder relationships? Is your utility engaged in regional planning? If so, how do you manage these important relationships?

### **Monitoring, Measurement and Results**

#### *Performance Monitoring and Reporting*

16. Does your utility have a formal performance management system in place, i.e. KPI's, performance dashboard? If so, how is it managed and how does it link to budgeting and financial reporting?



## **Appendix L**

### **Benchmarking Results Summary**

## **Appendix L - Benchmarking Results Summary**

### ***City of Kelowna / FortisBC***

#### **Description**

The City of Kelowna contracts out its electricity service to FortisBC and has one City employee dedicated to this overseeing this function. FortisBC provides distribution service to 14,000 customers, including the City which receives preferred rates for its facilities.

Kelowna owns approximately one-third of the distribution assets, all of which are located in the downtown area, and FortisBC prepares and provides the City with a long term capital plan. Kelowna's objective is to ensure efficient, sustainable and context sensitive implementation of utilities.

#### **Financial Management and Policies**

Key components of Kelowna's fiscal policy include:

- Payment of an annual dividend in the amount of \$2.1 million into a general fund, which reflects a return on ownership in the City's distribution assets and has remained at the same level for the last ten years.
- No franchise or access fee charged.
- The Electrical Utility Reserves / Surplus in 2011 was \$7.5 million. Contribution to reserves is not built into the budget but is allocated based on excess revenues.
- Capital costs are funded from utility revenues.

Kelowna's electricity operating budget for 2011 was \$24.9 million for operations, administration and bulk purchase costs, and \$3.0 million for capital expenditures. Total revenue is targeted at bulk electricity purchases plus 48%. Residential rates use FortisBC rates to remain equitable while commercial rates are slightly higher than FortisBC rates, and the City uses an old cost of service study (with increases) to evaluate against FortisBC increases as well as an in-house ten-year forecast.

#### **Performance Management**

FortisBC sends monthly performance reports on maintenance, planned outages, power quality issues, site visits, meter compliance testing, and distribution switching.

### ***Lethbridge Electric Utility***

#### **Description**

Prior to 2006, Lethbridge's electric utility was similar to Red Deer's structure but the City has since brought both the distribution and transmission functions entirely in-house. Services including load settlement, contract billing and data management continue to be provided by external contractors.

Lethbridge's infrastructure includes five substations, 40km of transmission wire, 183km of primary overhead distribution wire, 613km of primary underground distribution wire, and 70km of fibre optic cable. An external consultant report estimated the value of the system at \$110 million.

The electric utility has 81 employees operating the transmission and distribution services, 30% of whom are eligible to retire within five years. Lethbridge provides service to approximately 36,000 customers.



**Financial Management and Policies**

Key components of Lethbridge's fiscal policy include:

- The weighted average cost of capital (WACC) on the rate base uses the AUC's deemed capital structure for the utility of 65% debt and 35% equity. This results in a WACC of 5.25% for debt and 8.75% for equity.
- The franchise fee paid to the City of Lethbridge is 27.3% of the distribution tariff, and is separated under "Rider A".
- In 2000, the utility stopped contributing to a separate capital reserve fund and all reserves were consolidated into the Municipal Revenue Stabilization Reserve (MRSR), which includes depreciation and returns. All residual operating surpluses / deficits are applied to / from the MRSR and all capital projects are funded from this pool.
- As all revenue generated by the electric utility flows into the MRSR, no separate dividend payments are transferred from the utility to the City.

In 2011, Lethbridge's electrical utility had a capital and operating budget of \$62 million (including transmission and distribution). The utility develops revenue requirements and capital plans on a three-year basis (these plans are staggered). Customer classes are based on a usage system that considers kWh and kVa, and customer fees include a charge from Utility Services (the City department of which the electric utility is a part) for billing and bad debt expenses. A cost of service study is completed every five years, and includes a review of fixed and variable rates as well as the rate classes.

The City allocates shared services charges to the utility based on various drivers. This allocation amounts to approximately \$2.5 million per year.

**Performance Management**

Rates are considered to be the main performance measure, but Lethbridge also tracks reliability measures as well as financial and operating measures.

***Medicine Hat Electric Utility*****Description**

The City of Medicine Hat is a vertically integrated electricity provider, engaged in generation, transmission, distribution, and retail services, and is the only electricity provider in the City (i.e. there are no other retailers permitted to operate within Medicine Hat's franchise area). With 35 miles of distribution wire, four major substations and a network station, the City provides service to 30,900 customers.

The City's emphasis is on keeping rates very low. This is closely followed by a focus on green power which is supported by a contract held with Vision Quest to provide 13,050 MWh per year of green power as well as the Solar Thermal Energy project.

**Financial Management and Policies**

Key components of the Medicine Hat electric utility fiscal policy include:

- The targeted rate of return on City assets is 9%, with a targeted return of 8.75% for 2012.
- The electric utility contributes 6.25% of its closing equity (asset base) to the City in the form of a dividend payment.
- Medicine Hat does not charge franchise or access fees and is not subject to AUC oversight.

- The capital budget is funded entirely by debt, and the utility does not hold reserves, nor does it have a policy, for its distribution assets. All new distribution assets are considered to be “contributed assets”
- Capital structure is 29% debt and 71% equity, with a targeted structure of 60% debt and 40% equity.

The City’s objective is to keep electricity prices low. Residential and small commercial customers are charged the RRO (benchmarked against an average of ten nearby RRO providers) while large commercial and industrial customers get a pool price. The City uses a cost of service study to help establish rates and has targeted an 8.75% return for 2012.

Corporate services are allocated based on a shared service model and service levels are agreed to.

### **Performance Management**

Medicine Hat bases performance management on five pillars: safety, environmental, reliability, financial, and customer care. The City demonstrates the value-add to citizens through the cost reduction against comparable utilities (\$234 per customer per year).

### ***Epcor (Edmonton)***

#### **Description**

Epcor provides the RRO to residential, farm, irrigation, and small commercial business customers in the FortisAlberta territory communities across central and southern Alberta as well as those within the City of Edmonton. With 5,548km of primary distribution wire, 203km of transmission wire, 28 substations and 281 distribution feeders, Epcor serviced 522,544 residential electricity accounts and 1,446 commercial and industrial accounts in 2010.

#### **Financial Management and Policies**

Key components of Epcor and the City of Edmonton’s fiscal policies include:

- Currently three common shares of Epcor outstanding, all owned by the City of Edmonton.
- The annual dividend is set in the fall for the following year at the greater of:
  - The current year’s dividend adjusted for the forecast change in the consumer price index, or
  - 60% of the following year’s forecast earnings available to the common shareholder.
- The dividend policy is subject to amendment in the event of a significant change in Epcor’s business or financial condition.
- In accordance with the policy, the annual dividends were as follows:
  - 2008: \$130 million,
  - 2009: \$134 million,
  - 2010: \$136 million, and
  - 2011: \$138 million.
- Franchise fees and property taxes paid by Epcor (Distribution, Transmission, Commercial and other electric) to the City of Edmonton in 2011 totalled \$61 million (2010: \$51 million).
- The City of Edmonton’s electrical franchise agreement with Epcor gives the City discretion to determine the level of related franchise fees. Electricity franchise fees are billed based on kWh consumed. The rate for 2011 was \$0.0066/kWh, with proposed increases to \$0.0069/kWh in 2012 and \$0.0072/kWh in 2013.

Epcor's rates under the RRO are based on a rate setting plan approved by the AUC that requires the RRO rate to be composed of month ahead energy products purchased on the Alberta wholesale energy market.

### **Performance Management**

Epcor tracks a number of environmental, social and economic performance metrics under the Global Reporting Initiative (GRI) framework. The utility is also required to conduct overall and transactional customer satisfaction surveys under AUC Rules 002 and 003.

### ***Enmax (Calgary)***

#### **Description**

Enmax provides generation, transmission, distribution and retail electricity services to customers in Calgary and the surrounding area. Enmax has 299km of high voltage wires, 37 substations, and 7,600km of distribution wire, and provides service to approximately 700,000 customers.

#### **Financial Management and Policies**

Key components of Enmax and the City of Calgary's fiscal policies include:

- Enmax pays the City of Calgary annual dividends equal to the greater of \$30 million or 30% of the prior year's net earnings. Dividends are paid quarterly in arrears.
- Special, one-time dividends are also paid when declared.
- The LAF is charged in lieu of property taxes and other fees or charges payable to the City of Calgary by Enmax. The LAF as of April 1, 2012 is:
  - LAF Wires Component: 11.11% of the total revenue from Distribution Tariff rate charges in the billing period, plus
  - LAF Energy Component: 11.11% of the monthly RRO Energy Charge per kWh of Energy Delivered
    - April 2012 RRO Energy Charge = \$0.071760/kWh x 11.11% = \$0.007973/kWh

Enmax's 2010 operating budget was \$2,057.6 million. RRO rates include both an energy charge (\$ / kWh) as well as an administration charge (\$ / day), and the energy charge is either set by Enmax or by the municipality with which Enmax has a contract to provide the RRO (as in Red Deer's case).

### **Performance Management**

Enmax applies the GRI framework and participates in CEA's reliability benchmarking report. The utility has measureable performance objectives around customers, emissions, ethics and compliance, safety, stakeholders, supply chain, sustainable value creation, and talent management.

### ***Oakville Hydro Corporation***

#### **Description**

Oakville Hydro is a freestanding corporation with city officials and experts on the board. The utility is involved in electricity generation, distribution, retail and billing, and provides service to approximately 63,000 customers. The original cost of the utility's assets was \$226 million. Assets are currently 8.3 years old (on average), and the estimated useful life of distribution and transmission assets range from 15 to 35 years.

Oakville Hydro is also engaged in water heater rentals, billing services, street lighting services, retro-fitting of multi-residential buildings to individually metered units, and utility related construction. The utility has explored smart grid, microgeneration, conservation incentive programs and its spinoff company - Sandpiper Energy Solutions Inc - provides water heating solutions. Green energy programs and services include the

Green Light Solar Program, the Landfill Gas Project (methane gas recovery), and the New Oakville Community Integrated Energy System.

#### **Financial Management and Policies**

Rates are based on a time-of-use concept and vary according to on-peak (\$0.108 per kWh), mid-peak (\$0.092 per kWh), and off-peak (\$0.062 per kWh) times. The utility also offers a regulated price plan at \$0.083 per kWh.

The corporation has a capital structure of 60% and 40% equity, with a return on debt of 5.62% and return on equity of 9.85%. In 2011, Oakville Hydro's capital budget forecast was \$5 million (\$5.2 million in 2012). Contract service expenses in 2010 were \$2.8 million.

#### **Performance Management**

Evaluative metrics used by Oakville Hydro include energy savings GWh and peak demand savings MW.

### ***Waterloo North Hydro Corporation***

#### **Description**

Waterloo North Hydro provides distribution, retail and billing services to more than 50,000 customers. The utility has three timing rates [on- (\$0.108 / kWh), mid- (\$0.092 / kWh), and off-peak (\$0.062 / kWh), rates] in addition to a flat fee (\$15.75 per month) and a per-kWh usage charge (\$0.0185 / kWh). Infrastructure consists of 3,236 poles.

Waterloo North Hydro is co-owned by the city of Waterloo as well as the townships of Woolwich and Wellesley, all of whom have representatives on the board of directors. The utility employees approximately 100 staff.

The utility has engaged in several innovative practices, including home energy use evaluation and a heat bank program for local heating assistance.

#### **Financial Management and Policies**

The corporation's most recent capital budget was \$34.9 million, with approximately one-third supported by cash from operations and two-thirds from borrowing. This was primarily comprised of system expansion (\$7.1 million), plant replacement and upgrades (\$8.5 million), and service centre (\$14.0 million). The operating budget for the same period was \$16.1 million, not including power purchases of \$90.8 million.

Waterloo North Hydro has accumulated debt of \$80 million and the utility is not permitted to have a debt ratio in excess of 50%.

Dividends of \$639,000 were paid to the City in 2010 and approximately \$270,000 is spent each year on community relations.

#### **Performance Management**

Budgets are designed to meet specific KPI's around effective and efficient resource use.

### ***Sacramento Municipal Utility District (SMUD)***

#### **Description**

SMUD is a public utility engaged in the generation, transmission and distribution of electric power for just under 600,000 customers. The whole system uses smart meters and rates are therefore based on time of use,

with residential rates ranging from \$0.07 to \$0.24 per kWh and general services ranging from \$0.08 to \$0.12 per kWh.

The utility employs 2,084 staff, and places a strong emphasis on environmental responsibility. The utility has a goal of using 33% renewable energy by 2020, and an integrated resource plan has been created focusing on biogas and wind power in the near term and increasing use of solar power over the longer term.

**Financial Management and Policies**

The utility does not pay dividends or franchise fees and is tax exempt. The 2012 capital and operating budget is \$1.33 billion and the debt/asset ratio is 0.63 (with \$3.15 billion in existing debt).

**Performance Management**

SMUD uses an ERM approach and provides the board with leading risk indicators. Staff are currently monitoring the progress of new risk-mitigation measures intended to aid decision-making and improve results in key business areas.

Detailed Benchmarking Results

1 City of Kelowna / FortisBC ..... i

2 Lethbridge Electric Utility ..... iv

3 Medicine Hat Electric Utility ..... x

4 Epcor (Edmonton)..... xiv

5 Enmax (Calgary)..... xviii

6 Oakville Hydro Corporation..... xxii

7 Waterloo North Hydro Corporation..... xxiv

8 Sacramento Municipal Utility District (SMUD) ..... xxvi

## **1 City of Kelowna / FortisBC**

### **1.1 Services**

- The delivery of reliable and safe electricity within the City is managed by the Utility Services Branch. FortisBC supplies power to the electric utility, and through a partnership contract with the City of Kelowna, FortisBC also provides all network operations for the electrical distribution system including operations and maintenance, capital project planning, management and construction, all electric meter installations and all street light maintenance throughout the city.
- Kelowna owns one-third of distribution assets, primarily downtown, but Fortis maintains these assets. The City's Electrical Utility, as well as the utility billing function for water, wastewater and electrical, are managed under third-party contracts with Corix utilities services.

### **1.2 Service Area**

- The City of Kelowna's electrical utility extends roughly from Okanagan Lake north to Poplar Point Drive and Glenmeadows Road, east to Golfview Road and south along Highway 97 to Gordon Drive and KLO Road.
- Population of 120,000

### **1.3 Infrastructure**

- One-third of distribution assets in city, located downtown. Majority of wire is underground.

### **1.4 Customers**

- 14,000 customers
- City of Kelowna customers are directed to contact FortisBC directly to report power issues including street light repairs, power outages or electrical emergencies.

### **1.5 Employees**

- One employee, Electrical Administration Manager

### **1.6 Rates**

- Residential – Match FortisBC rates so that all residents pay similar rates. Recently Fortis rebalanced rates between classes and this is causing rate setting problems for Kelowna. (\$15/month, \$0.0959/kWh)
- Commercial – Rates are higher than FortisBC's as majority of wire is underground downtown, rates are adjusted to keep total costs covered. Consumption charge: first 100kWh at \$0.31339, next 900 kWh at \$0.12628/kWh, next 9000 kWh at \$0.09787, after \$0.08126. Demand charge: (KVA-40)\*\$8.87. Minimum charge: greater of \$28.23 or KVA\*\$8.87. KVA=75% of peak KVA in past 11 months or current month KVA.
- Preferred electricity rates given to city owned infrastructure, based upon traditional rates which were initially below cost recovery.
- Not governed by BC electrical commission. No franchise or MCAF fees charged.

### **1.7 Finances**

- Total revenue is targeted at bulk electricity purchases plus 48%. This is used for O&M, capital budgets and a yearly \$2.1 M dividend. Dividend reflects a return on ownership in the City's distribution assets.
- As capital costs are paid for with revenue and budgeted accordingly no debt is used to finance capital costs. Amortization and depreciation are not budgeted.
- Electric utility pays for 50% of street light capital costs. This amounts to \$60,000-\$100,000/yr.



- No new debt has been issued. There is old debt of \$3.0 million.
- Emergency requirement reserve that has \$1.5 to 2.0 million. Deferred cost accounts are used for long term projects.
- FortisBC makes money on increased rates. For the city, FortisBC charges a percent fee for services rendered.

### **1.8 Performance**

- FortisBC sends performance reports to the city on a monthly basis. These reports provide information on maintenance and metrics on trouble identified, planned outages, new services, power quality issues, locate requests, distribution switching, inspection OH/UG, site visits, street light maintenance, meter compliance testing, corrective repairs, and general service inquiries on a monthly basis.
- FortisBC reported system losses were 9.23% in 2009 and 8.42% in 2010. Forecasted system losses for 2011, 2012 and 2013 are 8.82%.

### **1.9 Strategic, Business and Risk Planning**

- City Objective 7.19: Ensure efficient, sustainable and context sensitive implementation of utilities (focus on economic and environmental sustainability)
- Policy (1) District Energy System: Where a district energy system is in place or is planned, implement a Service Area Bylaw to ensure new buildings in the service area are ready for connection to the district energy system.
- Policy (4) Utility Corridors: Allow new arterial right-of-ways to be expanded to provide for utility corridors parallel to the road. Multi-utility line assignments and land economies are encouraged.

### **1.10 Sustainability Planning**

- Policy (2) Energy Reduction Priorities: In working to reduce greenhouse gas emissions, place a primary focus on reducing demand, then prioritize further efforts in the following sequence: re-using waste heat, using renewable heat, and then finally on using renewable energy.
- Policy (3) Renewable Energy: Reduce reliance upon fossil fuels by promoting and supporting renewable energy infrastructure, such as solar power and geothermal, and by purchasing energy supplied from renewable sources. Renewable energy systems should be pursued in collaboration with Provincial, Federal and private sector programs.
- In another policy the city plans to reduce GHG by 33% below 2007 levels by 2020.

### **1.11 Revenue and Rate Approach**

- A ten year model of anticipated rate changes, operating costs, and capital program costs is done to see the resulting impact on surplus and deficit and to make sure the utility remains self sufficient. Rates are examined with this information in mind.
- City council approves rates, as Kelowna is not governed by BC Utility Commission.

### **1.12 Budgeting and Capital Planning**

- As above, the utility examines a ten year model of anticipated rate changes, operating costs, and capital program costs.

### **1.13 Service Lines and Programs**

- FortisBC is responsible for and handles all service delivery. KPI's are sent to Kelowna on a monthly basis.

**1.14 Organizational and Staffing Structure**

- Division of the city of Kelowna.
- Operational, planning, and maintenance work is contacted out to Fortis
- Only one city employee working for electric utility.

**1.15 Operations and Maintenance Planning and Execution**

- Done by FortisBC

**1.16 Financial Management**

- In 2010 the Utility provided a direct financial contribution to the general tax demand of \$2.1 million.

**1.17 Operating Risk and Business Continuity**

- Done by Fortis. To improve flexibility, feeders are being upgraded to allow substation backups in the event of failures.

**1.18 Partnerships and Stakeholder Relations**

- The utility is part of, and reports to, the city of Kelowna

## 2 Lethbridge Electric Utility

### 2.1 Services

- Distribution, transmission, inspection, maintenance, asset management, rate structuring, creating financial statements.

### 2.2 Service Area

- Population of 87,882
- Service area of 125 square km.

### 2.3 Infrastructure

- 5 substations
- 40 km of transmission line
- 613 km primary underground line
- 1,357 km of secondary underground line
- 183 km of primary overhead line
- 306 km of secondary overhead line
- 4,008 transformers
- 70 km of fibre
- The transmission system itself consists of all 138,000 volt electric facilities owned by the City and is a part of the Alberta Interconnected Electric System (AIES).
- Consultant placed the selling value of the electric system at \$110 million.
- Asset system tracks the age of assets.
- Lethbridge takes ownership of electricity at 25,000 volts. Compared to Red Deer this means switch gear equipment, bigger yards, 34 km of high voltage line to tie into AIES system.

### 2.4 Customers

	Customers	Description
Standard distribution	32,968	227,974,724 kWh (<3,000 kWh, <5kVA, single meter)
General distribution	2,217	146,141,612 kWh (<150kVA, 200 amp service)
Dedicated distribution	115	50,965,333 kWh (<300kVA, three phase)
Large dedicated distribution	81	212,838,805 kWh (<2MVA, three phase)
Primary distribution	12	103,995,176 kWh (<5MVA, three phase)
Public Lighting distribution	24	9,738,050 kWh
Unmetered distribution	381	1,268,070 kWh
<b>Total</b>	<b>35,798</b>	

### 2.5 Employees

- 81 employees
- 30% of employees are eligible for retirement in five years, this is a very big issue.
- In last two years, three employees have left for reasons other than retirement and four have retired.
- For senior IBEW staff (senior foremen ~ four individuals), an average of \$6,000/year is set aside for training but they typically use less than \$4,000
- For professional staff (group leaders, P. Eng.'s, CMA's, CGA's, etc.), the same amount is provided and on average they use about 90% of the training allowance
- Typically we will fund between 50% and 100% of significant development courses (MEng, MBA, etc.)

## 2.6 Rates

- Standard (991): \$.0095/kWh, \$.5709/day
- General (994): \$.0007/kWh, \$.3949/day, \$.1246/kVA per day
- Dedicated (995): \$.0006/kWh, \$.4210/day, \$.1610/kVA per day
- Large Dedicated (996): \$.0006/kWh, \$.94626/day, \$.1261/kVA per day
- Primary (997): \$.0006/kWh, \$.95637/day, \$.0659/KVA per day
- Public lighting (998): \$.1593/kW
- Unmetered (999): \$.1028/kWh (<3,000 kWh, <5KvA)
- Customer care is charged directly to the customer and not to the utility. This fee covers bad debt expense.

## 2.7 Finances

- 2011 operating budget was \$62 million, capital budget was \$11.3 million.
- Electric typically groups budget and revenue into more typical profit/loss format statements and then the Finance department populates the overall budget based on an aggregation of our accounts.
- Each capital initiative is sent to the city and included in the city's budget.
- Electric rate of return = Rate Base  $\times$  Weighted Average Cost of Capital (WACC) utilizing deemed capital structure for the utility of 65% debt and 35% equity. (effectively the Rate of return = ROI = Dividend)
- ROI is calculated based on transmission filing and what AUC determines is appropriate for transmission. This ROI is applied to distribution, but they currently are considering some smaller changes that could result in a change of several percent.
- Reserve accounts were stopped in 2000
- All accounting accounts go into the Municipal Revenue Stabilization Reserve (MRSR) including depreciation. Then from the MRSR the utility is funded
- WACC ROE is 8.75%, for debt 5.25%. The debt portion was calculated as if borrowed from AB finance.
- Franchise fee, 27.3% of distribution tariff, is labelled 'Rider A'.

## 2.8 Performance

- Believe that the electricity rates themselves provide the best 'comparison' to other utilities.
- Last year a local business development group used a KPMG (annual) study to report that Lethbridge had the highest electricity rates in the world. Lethbridge then hired a consultant to "compare our rates to others in the province. The results were as anticipated.
- SAIFI and CAIFI used to determine average frequency and duration of interruptions. All interruptions are included for distribution even if problem is from transmission.
- LEU's dependability and reliability continue to meet or exceed industry standards.
- The utility attracts and retains the employees required to maintain and operate the system.
- The utility continues to meet regulatory demands.
- The utility provides the information and support to the board (city council) so the board retains confidence in providing excellent service at a comparable rate.
- The ROI continues to grow in relationship to the financial value of the asset itself.
- Anomalies for comparison are: profit vs. non-profit utilities, urban vs. rural, regulated by AUC vs. not. "This comparison is done at least once and usually twice per year – and reported to Council."
- Performance metrics are reported to Council on a quarterly basis
- Reliability and efficiency – outages, customer impacts, work orders, system tests, costs to service customers

- System balance – load switching, system planning, design standards, risk management
- Regulatory compliance – information management, data integrity, billing, tariffs, wire owner impacts
- Equitable cost recovery – system design standards, tariffs
- Customer satisfaction – outages, power quality, customer impacts, billing accuracy, tariffs, information

## **2.9 Strategic, Business and Risk Planning**

- City council provides strategic direction and the utility report to council
- Priorities have not realistically changed in 35 years. The first priority is reliable access to the grid, next is to provide services at 'reasonable' cost.
- Strategic and/or Business Planning are significantly different in the regulated utility world as regulation limits what services can be provided.
- Risk planning for distribution design or operations business units involves risks around resources (e.g. employees).
- For other units (Regulated Rates), risk is much more prevalent and predominately short term and financial. Strategies such as insurance, commodity hedging, volume/price risk premiums, etc. are used to mitigate these risks.
- Regulatory risk is recognized and planned for to a limited degree, but the City relies on political lobbying to offset impacts in the short term.

## **2.10 Sustainability Planning**

- If the council inquires or identifies environmental and social aspects these directives are included in the utilities business plan. This is rare.
- Environmental or social concerns/issues that are part of a regulatory framework are always identified and included in the planning process.
- Financial sustainability is thought to be the product of the revenue requirement being accurate, and the cost recovery mechanism being properly designed. However, weather and external influences affect load and load shapes and, as a result, budgets (especially three-year budgets) tend to change over time. The MRSR operates as a reserve fund to smooth these variations.

## **2.11 Revenue and Rate Approach**

- User pay is the fundamental philosophy
- Customers classes are only based on use of system by kWh and kVA, unlike most utilities
- Lethbridge follows a standard utility practice. The process is started with a revenue requirement or budget. Once that is approved, a rate structure is created to recover the revenue requirement. In Lethbridge a three to five year cost-of-service model is typically used. This model is currently being reviewed.
- Fixed rate portion is much higher than typical utilities.
- There is a reluctance on the part of regulators to approve large 'fixed' portions because of the impact to low-use customers, but Lethbridge believes that from a pure cause/effect perspective (their cost of service model), that's the way a utility works.
- Comparing Lethbridge's rates to different jurisdictions typically finds that (a) small customers pay more, and (b) commercial/industrial customers pay considerably less.

## **2.12 Budgeting and Capital Planning**

- The Electric department prepares quarterly profit/loss statements – both on an individual sub-dept basis (Support, Distribution, RRO, and Transmission) as well as in aggregate. These are widely used to make decisions, but are seen to have some flaws.

- Operating and capital budgets are carried out in three year blocks (offset by one year so that they can accommodate the processes from a resource perspective).
- Capital projects are paid for out of MRSR (General fund). A formal operating and capital budget starts from the city's allocation.
- The effects of the budgets on an average residential bill are shown.
- A detailed list of proposed and approved initiatives including cost, timeline, objectives, background, implementation strategy, and performance measurement and reporting is produced.

### **2.13 Service Lines and Programs**

- Outage data relates to reliability standards (SAIFI etc.) and attempting to collect, report, and compare these on the distribution side. On the transmission side the utility collects and reports reliability data and AESO does the comparison.
- Goal of connecting a new customer within five working days of being contacted to provide services.
- Call center tracks metrics with respect to customer contact, the utility works with them to improve the situation as warranted.
- All contracts have KPI's and associated records contained within. For the Electric Utility, this involves meter reading, meter data management, load settlement, and wholesale billing. These KPI's have become redundant as the province has moved to standardization and the KPI's have become embedded in rules/regulations/codes.
- De-regulation currently prevents some innovative programs and Lethbridge has reduced some of its programs. Certain aspects can be done at the retail level but there is no retail level within the utility.
- AM/FM system and work order management system have been tied into the SCADA system. All systems rely on the same data, and all of it works in real time. This allows meters with to gather live data from the system and allows for proactive problem detection and resolution. Live data also allows strategic decision making.

### **2.14 Organizational and Staffing Structure**

- The utility reports directly to city council.
- Transmission is organized as a separate entity, which is seen to simplify regulatory applications and cost allocations.
- Cross functional team building is considered simple and efficient and makes the utility more flexible, but has led to problems with people ignoring the official reporting structure and instead reporting to their "preferred" manager. Communication has also suffered. Cross training is currently being evaluated.
- The Electric Utility pays a 'share' of all corporate costs that are not related to a revenue stream.
- No formal service level agreements with other City Departments are in place
- Standard 'provision of service' contracts exist for most of the transmission design and construction. For example, an RFP is issued for a three year period for all transmission design issues. Included in this RFP is a dollar limit on the projects that fall under this qualification. The same applies to transmission maintenance and commissioning services.
- Similar contracts exist for distribution replacement. A specific program through contracting exists to replace all underground cables over a seven year period. All new services are installed via contract, which is a four-party agreement. Load settlement, wholesale billing, meter reading, meter data management, and billing are all contracted to third parties.

### **2.15 Operations and Maintenance Planning and Execution**

- The utility previously separately tracked preventative versus reactive maintenance. When the target of 80% preventative maintenance was reached the tracking stopped. Preventive maintenance requires

more resources, and the utility currently has two full time individuals working solely on system patrols and gathering data for next year's work.

## **2.16 Financial Management**

- Surplus and deficits flows in/out and all projects are funded from the MRSR, even when borrowing.
- In 2011, for the first time in about 28 years, borrowing was used to accommodate Electric department requirements. Borrowing proceeds flow into the MRSR which are then paid for the specific project(s) identified in the borrowing bylaw. Investment returns on MRSR balances flow to the MRSR, not to the individual departments.
- A fixed annual amount which estimates the long term average of these revenues is transferred from the MRSR to the general fund. In this manner, the City of Lethbridge buffers the effect of fluctuations in these volatile revenue sources on the operating budget.
- Lethbridge has the second highest franchise fee in Alberta, after Calgary.

## **2.17 Employee Management and Working Environment**

- Lethbridge considers the following to be strengths of the utility: qualified staff, safety training, work processes are defined and documented, strong demographics with a cross section of senior linemen and tech staff and newer recruits being trained.
- Operations staff (linemen/foremen) have been moved into the Design department to foster a communication/cooperative/efficiency initiative.
- Due to an inability to hire qualified linemen, for a while the utility engaged in a 'train your own' initiative. This resulted in the number of apprentices increasing from 2-3 to 9-10.

## **2.18 Infrastructure and Asset Management**

- Asset management system typically tracks installed-less-depreciated values.
- The utility has an entire AM/FM system working within the Electric department that utilizes the City's database (asset management) as required.
- There is an asset management group within the City that manages assets.

## **2.19 Operating Risk and Business Continuity**

- Lethbridge relies on a Control Center to help manage emergencies.
- The utility believes that not much is required in the way of business continuity planning given the circumstances and nature of business. However, this is addressed in business planning from the perspective of challenges or "what's coming over the wall".
- The utility participates in the city's emergency preparedness plan and has both design and operational personnel designated to respond when the city declares an emergency.
- The utility has installed equipment that does automatic switching, but do not consider it a "smart grid".

## **2.20 Citizen Engagement Customer Relations Management**

- Customer satisfaction and public interface is handled by separate city entities, specifically the PR and Utility customer care entities.
- The utility feels that Electric never seems to factor into the discussions around customer satisfaction or feedback much. They are occasionally approached by specific customer groups who talk to Council about Electric policies and how they might be changed to suit the lobby group more.
- Two primary examples of lobby groups are land developers wishing to install their own electric distribution, and geothermal/electric vehicle lobbies who do disapprove of current rate structures.



**2.21 Partnerships and Stakeholder Relations**

- The utility participates in UDI (Urban Development) as well as internal Infrastructure Development processes (e.g. standardizing installation methods, and making sure that development proceeds in an orderly fashion).
- Some employees participate in standards committees, development Boards, etc.
- The utility does not actively manage any partnership or stakeholder relationships.

**2.22 Performance Monitoring and Reporting**

- Reliability and efficiency: outages, customer impacts, work orders, system tests, costs to service customers
- System balance: load switching, system planning, design standards, risk management
- Regulatory compliance: information management, data integrity, billing, tariffs, wire owner impacts
- Equitable cost recovery: system design standards, tariffs
- Customer satisfaction: outages, power quality, customer impacts, billing accuracy, tariffs, information

**2.23 Other information**

- Prior to 2006 Lethbridge was very similar to Red Deer.
- Lethbridge ended its contract with Enmax after a decision by the AUC (different name at the time) to not allow marginal pricing for utility upgrades. This resulted in Enmax giving a bill to Lethbridge for \$77,000. The city believed that Enmax was not managing the system properly and errors were occurring that the City then had to pay for and correct. When approached, Enmax said they would either do everything or do nothing, and after the \$77,000 bill that resulted in no change in service Lethbridge dropped Enmax.
- Lethbridge would prefer the Red Deer model but this is unlikely to fit Lethbridge as there is work involved in integrating with the AltaLink system through transmission lines.
- The RRO function that is done in house is not liked as it is seen to be high risk (regulatory) and requires a large amount of work.
- There are problems with Lethbridge being at a lower KV
- The utility believes that assigning higher variable and lower fixed fees for service increases risk and results in everyone having to pay more.

### 3 Medicine Hat Electric Utility

#### 3.1 Services

- The utility provides the following services: Generation, transmission, distribution, and retail services

#### 3.2 Service Area

- Medicine Hat had a population of 60,005 in 2011. The utility services Redcliff, Cypress County, and the surrounding rural area.

#### 3.3 Infrastructure

- 700 km of wire
- 4 substations
- Network station and little units

#### 3.4 Customers

- 30,900 customers
  - Residential – 26,700
  - Small commercial – 3,100
  - Industrial, large commercial – 25-29
  - Other: irrigation, billboard and highway lighting – 145

#### 3.5 Rates

- No access fee charged, not subject to AUC overview

Charges	Customer Class								
	Resident	Farm	Commercial	Medium Commercial	Large Commercial	Industrial	Unmetered	Rental Lighting	Street Lighting
Service	\$7.61	\$11.67	\$11.67	\$46.16	\$46.75	\$46.19	\$5.59	\$3.39	\$6.13 /month
Administration	\$0.01	\$0.01	\$0.01	\$0.00	\$0.00	\$0.00	\$0.01	\$0.01	\$0.01 /kWh
Demand	N/A	N/A	N/A	\$3.24	\$2.73	\$2.54	N/A	N/A	N/A /kVa
Energy	\$0.15	\$0.15	\$0.15	\$0.15	\$0.05	\$0.05	\$0.15	\$0.15	\$0.05 /kWh
Energy Conservation	\$0.01	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A /kWh
Facilities	\$0.01	\$0.01	\$0.01	N/A	N/A	N/A	\$0.01	\$0.01	\$0.01 /kWh
Capacity	\$0.01	\$0.01	\$0.01	\$0.01	\$0.01	\$0.01	\$0.01	\$0.01	\$0.01 /kWh
Going Green	\$0.00	\$0.00	\$0.00	\$0.00	N/A	N/A	N/A	N/A	N/A /kWh

#### 3.6 Finances

- The utility contributes 6.25% of the previous year's closing equity (assets base) to the city.
- Utility has a goal of 9% return, excluding other revenue sources such as third party billing, high load, and communication charges.
- There is no distribution reserve fund.
- The capital budget is entirely funded through debt.
- All distribution assets are contributed assets.
- The target capital structure is 60% debt and 40% equity. The current structure is 30% debt and 70% equity.

#### 3.7 Performance

- Safety: Uses the All-in Injury Frequency (AIF) measure. The 2011 target was 2.09, and the actual rate was 3.4.
- Reliability: index reliability, in terms of minutes per customer per year. Target is first quartile of AUC (37 minutes). The actual 2011 rate was 12 minutes (2010 was 61 minutes).

- Compliance/Environmental: One reportable ex oil release allowed. Target achieved at 0 per year in 2011. Maintain EMP system with things like non-reporting etc.
- Finance: value added through fee reduction compared to other providers (\$234 per customer per year benefit in 2011 for all in delivery rate). This is tracked and compared on a month by month basis.

### **3.8 Strategic, Business and Risk Planning**

- The strategic plan guides the individual business units in the organization to develop strategies, goals and measures of success that are consistent with the corporate direction. The strategic plan also helps the organization in the preparation of the annual budget. The strategic plan is monitored and updated on a yearly basis by Council and Senior Management. It is expected that business plans and department budgets will be updated every three years to form the basis for the City budget. Throughout the year, quarterly reports are produced that report on the progress of this planning cycle. In addition, the City produces an annual report which reports on the outcomes of the planning cycle.
- Treasury and Risk Management provide leadership and guidance to the Corporation in the management of the City's cash and investments, debt management, insurance services, and insurance claims administration.
- Medicine Hat Electric Utility is a standalone enterprise.

### **3.9 Sustainability Planning**

- There is no sustainability plan for distribution. Effort is being made to achieve ISO 14001.
- For generation, environmental sustainability is a priority and Medicine Hat is carrying out a solar thermal energy project that is expected to supply one mega watt of electricity to the city's power grid, thereby helping to create sustainable energy production and reduce GHG emissions.

### **3.10 Revenue and Rate Approach**

- Only electric utility provider available in Medicine Hat
- Residential and small commercial get RRO, large commercial and industrial get pool price. The RRO is currently set against average of ten nearby RRO providers, but the utility is moving towards cost basis model.
- Objective is to keep electric utility rates low and have only small rate increases. A 9% return is targeted, with 8.75% for 2012 so far. Cost allocations are fully defensible as they are based off of load forecast. A COSA system is used extensively, and the rate philosophy is affected by load forecast, dollar cost allocation, customer impact, service change, admin charges, and tariff charges. The COSA is also used to determine fixed and variable weighting for rates.

### **3.11 Budgeting and Capital Planning**

- The budgeting process starts with the 25-30 year load forecast. For the operating budget, historical values are used as the basis and then adjusted. The utility does not spend as much time on the analysis of operating budgets for distribution as distribution assets are considered small (relative to generation and transmission) and charges like locate services and tree trimming are based on past cost. The utility wants to use a work management system.
- Reserves are not carried in distribution and there is no reason given for this.
- There is no capital target as population growth has been significant and all new capital is provided through contributed capital. All capital upgrades in distribution are funded through debt.
- The utility has not done an asset study. There are plans regarding assets but a targeted annual number is not produced.

### **3.12 Service Lines and Programs**

- There are no utility service delivery priorities and standards.
- Medicine Hat is exempt from AUC monitoring so there are no AUC service delivery standards and policies, but they are in the process of adopting AUC process questions 2 and 3.
- Medicine Hat has contracted Vision Quest to provide 13,050 MWh/year. This contract was started in 2004 and is estimated to reduce greenhouse gasses by 13,000 tonnes or the equivalent annual emissions of 2,725 cars. In a city survey, 90% of respondents said they supported the City's involvement with a wind power program. The electric utility receives "Green Energy TM certificates" towards realizing the City's environmental sustainability objectives.
- The Solar Thermal Energy Project that will contribute one megawatt of electricity toward the City's current power grid, which would power approximately 175 homes. This project is the first of its kind in Canada and will convert the sun's rays into steam and then into electricity. Site construction is expected to begin at the end of 2011 or early into 2012.
- In Alberta, a commitment has been made to reduce greenhouse gas emissions that contribute to global climate change. In 2010, the power plant (Electric Generation) achieved a 10.25% reduction in carbon emissions intensity from baseline levels. This was achieved through efficiency (heat rate) improvements. These were attained by retiring an old unit and commissioning a new unit.
- The City provides incentive green programs to commercial and residential on power issues.

### **3.13 Organizational and Staffing Structure**

- Electric Distribution is responsible for the design, construction and maintenance of the transmission and distribution infrastructure to ensure the reliable supply of electrical load. Electric Distribution is mandated with improving efficiencies and with providing a Medicine Hat Advantage by charging distribution rates that are lower than those charged elsewhere in Alberta.
- Electric Generation is responsible for safely and efficiently operating the City's generation assets to ensure a reliable supply of power. Electric Generation is mandated with improving Plant sustainability and with providing an annual dividend to the City of Medicine Hat Municipal Services.
- Electric Retail is responsible for ensuring that costs of providing electricity are kept at a minimum and for recovering these costs through commodity rates that are the average of rates charged in similar Alberta cities.
- Shared service fees are determined by meeting with groups pre-budget and setting service levels according to expected percentage of total work.
  - HR – employee charge (electric utility employees/total employees) = % of HR costs
  - IT – by demand and licensing agreement
  - Finance – cost and benefits
- The city handles billing through its Customer service and collection department.

### **3.14 Operations and Maintenance Planning and Execution**

- More focus on proactive maintenance (e.g. tree trimming, locates service, annual inspection, annual thermal vision of underground, monthly load checks and station check). Tracking is not done very well. Do not face many challenges as weather is not much of a factor and assets last a long time in Medicine Hat. Poles are buried in sand and not rock or other material.
- The Electric Utility (Distribution) also completed the conversion of live front switchgears to "dead-front" to provide increased safety, reliability and system integrity. Dead-front switchgears are insulated and sealed to limit accessibility to energized parts which eliminates the possibility of rodents or snakes entering and causing damage or power interruptions.

**3.15 Financial Management**

- The Electric and Gas Utilities (Distribution) primary financial goals were to achieve cost plus return and the “Medicine Hat Advantage: through lower than market customer rates and services.
- The ROE target for gas and electric is 10%, dividend policy of 6.25%.

**3.16 Employee Management and Working Environment**

- Management and employees review progress on business plan goals, operational activities and promote an environment where all employees are focused on “how to get the job done”
- Two Power Linemen Apprentices successfully completed their apprenticeship training learning to construct, maintain and repair overhead and underground electrical power transmission and distribution systems. Also, the Electric Utility Safety Association (EUSA) provided hands-on, energized line training to all Distribution Operation employees to confirm skills competencies and to ensure continued employee and public safety.

**3.17 Infrastructure and Asset Management**

- No formal asset management system is in place. Transformers are replaced every 30 years and lighting rosters are on five year cycles. The City is starting a tangible asset account (TCA) register.

**3.18 Operating Risk and Business Continuity**

- Every three years Zigma Risk Management assesses risk areas and develops a mitigation plan for the electric utility.
- Emergency planning is done regionally through mutual aid agreement (AESO) and an EMS plan is in place.

**3.19 Citizen Engagement Customer Relations Management**

- The City represents citizens and engagement occurs through the bylaw process.
- Customer satisfaction measured through the number of complaints. Rate complaints are not measured due to perceived bias of customers not wanting to pay. The utility has two days to respond to a complaint and 14 days to fix issues.
- Conservation and education efforts are being made with residential customers.

**3.20 Partnerships and Stakeholder Relations**

- Large customers have an association for engagement and small customers’ interests are brought forward by the city and the bylaw process.

**3.21 Performance Monitoring and Reporting**

- Have a KPI dashboard with six pillars: safety, environment, customer care, reliability, finance, and employee culture.
- The utility is also part of the APPA benchmarking association.

## **4 Epcor (Edmonton)**

### **4.1 Services**

- Builds, owns, and operates transmission and distribution networks

### **4.2 Service Area**

- Epcor provides the RRO to residential, farm, irrigation, and small commercial business customers in the FortisAlberta territory communities across central and southern Alberta as well as those within the City of Edmonton.

### **4.3 Infrastructure**

- 28 substations
- 281 distribution feeders
- 5,548km primary distribution lines up to 60kV
- 203km transmission lines over 60kV
- System losses: 181.54GWh (2.49% of total load)

### **4.4 Customers**

- Within Edmonton: approximately 300,700 residential and 34,300 commercial customers
- In total: 522,544 residential electricity accounts and 1,446 commercial and industrial electricity accounts
- Residential, farm and small commercial customers within the City of Edmonton, several Rural Electrification Association service areas and the FortisAlberta service area who receive Regulated Rate Option electricity service. Default supply electricity services are provided to large customers in these areas.

### **4.5 Employees**

- More than 2,400 active employees, a large number of which are expected to retire over the next ten years.
  - Management employees eligible to retire in ten years: 23.2%
  - Out-of-scope employees eligible to retire in ten years: 7.5%
  - Professional employees eligible to retire in ten years: 9.1%
  - Union employees eligible to retire in ten years: 26.8%
- Turnover:
  - Voluntary: 93
  - Involuntary: 7
  - Turnover rate: Union – 5.7%; non-union – 11.4%
- Percentage of employees covered by collective bargaining agreements: 74.1%
- Percentage of employees receiving regular performance reviews: 45%

#### 4.6 Rates

(¢/kWh)	Oct 2011	Nov 2011	Dec 2011	Jan 2012	Feb 2012	Mar 2012
City of Edmonton Customers						
Residential	12.426	9.120	13.302	15.114	13.952	7.983
Commercial < 50 kVA	12.426	9.120	13.304	15.114	13.952	7.983
Commercial > 50 kVA	12.426	9.120	13.304	15.114	13.952	7.983
Security Lights	7.609	6.833	10.690	10.518	9.602	5.396
FortisAlberta Customers						
Residential	12.179	8.959	13.080	14.664	13.561	7.787
Small Commercial	12.351	9.084	13.267	14.874	13.755	7.897
Lighting	6.823	6.551	10.532	10.213	9.018	5.580
Farm	12.27	9.025	13.178	14.775	13.664	7.845
Irrigation	11.614	8.670	12.796	14.080	13.199	7.657
Oil and Gas	11.557	8.629	12.750	14.006	13.142	<u>7.636</u>
			Edmonton < 150 kW	Edmonton > 150 kW	Edmonton > 5,000 kW	
Charges:						
Forecast Pool Price (for flat load)			7.6	7.6	7.6	
Forecast Load Shape Impact			0.5	0.47	-	
Distribution Losses			0.32	0.32	0.23	
Pool Trading Charges			0.0361	0.0361	0.0361	
Retail Charge (Administration Charge)			1.39	1.39	0.66	
Total Estimated Energy Charge:			9.85	9.82	8.52	

#### 4.7 Finances

- Currently three common shares of Epcor outstanding, all owned by the City of Edmonton.
- The annual dividend is set in the fall for the following year at the greater of:
  - The current year's dividend adjusted for the forecast change in the consumer price index, or
  - 60% of the following year's forecast earnings available to the common shareholder.
- The dividend policy is subject to amendment in the event of a significant change in Epcor's business or financial condition.
- In accordance with the policy, the annual dividends were as follows:
  - 2008: \$130 million,
  - 2009: \$134 million,
  - 2010: \$136 million, and
  - 2011: \$138 million.
- Franchise fees and property taxes paid by Epcor (Distribution, Transmission, Commercial and other electric) to the City of Edmonton in 2011 totalled \$61 million (2010: \$51 million).
- The City of Edmonton's electrical franchise agreement with Epcor gives the City discretion to determine the level of related franchise fees. Electricity franchise fees are billed based on kWh



consumed. The rate for 2011 was \$0.0066/kWh, with proposed increases to \$0.0069/kWh in 2012 and \$0.0072/kWh in 2013.

- The utility fiscal policies are being reviewed in 2011.

#### 4.8 Performance

- Power distribution volumes in 2010 totalled 7.296 million megawatt hours (MWh), up from 7.202 million MWh the previous year. Line losses totalled 181,500 MWh compared with 181,000 MWh the previous year.
- The overall Customer Service Index for EPCOR was 90% in 2010 compared with 89% in 2009. This is based on a survey of customers who pay the regulated rate and contacted Distribution and Transmission over the year. The target is a minimum of 75%.
- Epcor's System Average Interruption Frequency Index (SAIFI) has increased from 2008 to 2010.

Average number of power outages per customer	
EPCOR customers 2010	1.31
EPCOR customers 2009	1.20
EPCOR customers 2008	1.18

- The Customer Average Interruption Duration Index (CAIDI) has fluctuated but was lower in 2010 than in either of the two preceding years.

Average length of power outages	Minutes
EPCOR customers 2010	38
EPCOR customers 2009	83
EPCOR customers 2008	48

#### 4.9 Strategic, Business and Risk Planning

- Epcor is wholly owned by the City of Edmonton and City Council appoints the utility's Board of Directors and Chairman. Headquartered in Edmonton, Epcor builds, owns and operates electrical transmission and distribution networks.
- Operational risk in Distribution and Transmission is managed through sound maintenance and safety practices.

#### 4.10 Revenue and Rate Approach

- Electricity rates under the RRO are based on monthly forward prices. This electricity pricing model results in price volatility for customers.
- The City charges franchise fees to Epcor, which are passed on to the customer.

#### 4.11 Budgeting and Capital Planning

- Epcor budgets on an annual basis using a "bottom up" approach to forecast expenditures based on the best available information with respect to expected work activity and cost levels.

#### 4.12 Service Lines and Programs

- Epcor provides the RRO electricity and customer service to residential, farm and small commercial business consumers.
- Epcor also provides billing services for electricity and water on behalf of the City of Edmonton Waste and Drainage divisions, Capital Power Corporation, and Alberta Energy Savings.

**4.13 Organizational and Staffing Structure**

- Wholly owned corporation with all corporate services provided in house.
- No major services outsourced.

**4.14 Employee Management and Working Environment**

- Average hours of training per year per employee by employee category for 2010 (includes only training programs provided by Epcor):
  - Management - Average of 51 hours/manager/year
  - In Scope (Union) – Average of 23 hours/union employee/year
  - Out of Scope - 24 hours employee/year
- Forty-five per cent of employees received regular performance reviews in 2010 compared with 42% in 2009.

**4.15 Citizen Engagement Customer Relations Management**

- Board is selected by city of Edmonton and citizens' interests are addressed from this action.

**4.16 Performance Monitoring and Reporting**

- Epcor applies the Global Reporting Initiative (GRI) framework to report on its environmental, economic and social performance. GRI is a network-based organization that developed the world's most widely used sustainability reporting framework. The reporting framework is developed through a consensus-seeking process with participants drawn globally from business, civil society, labour, and professional institutions.
- Each year, two surveys are carried out by a third-party firm and reported to the Alberta Utilities Commission: an overall survey based on a random sample of all of Epcor's regulated customers and a transactional survey, based on a random sample of customers who had recently contacted Epcor. Results for 2010 were:
  - Overall satisfaction: Epcor exceeded the Alberta Utilities Commission minimum performance standard (75% customers satisfied overall) with more than 92% of customers satisfied overall. This all-time high compares with 89% satisfied overall in 2009. Cost was the most frequently cited reason among those dissatisfied.
  - Transactional survey: Epcor exceeded the Alberta Utilities Commission minimum performance standard (75% customers satisfied overall) with 88% of customers satisfied. This compares with 89% satisfied in 2009. Service was the most frequently cited reason among those dissatisfied.

## 5 Enmax (Calgary)

### 5.1 Services

- Generation, transmission, distribution, retail

### 5.2 Service Area

- Calgary and surrounding area

### 5.3 Infrastructure

- \$3.9 billion in assets
- 299km of high voltage wires
- 37 substations
- 7,600km of distribution lines
- Enmax reported system losses of 3.09% for the majority its Calgary customer classes (with the exception of large commercial primary customers, with a loss value of 1.89%). System losses in the Red Deer area were 2.4% for primary and 3.9% for secondary, and ranged from 3.84% to 9.89% for other areas in Alberta.

### 5.4 Customers

- 700,000 customers

### 5.5 Employees

- More than 1,600 employees

### 5.6 Rates

	Residential			Commercial	
	RRO Energy Charge (\$/kWh)	Admin Charge (\$/day)		RRO Energy Charge (\$/kWh)	Admin Charge (\$/day)
2012					
April	\$0.07176	\$0.2337		\$0.07176	\$0.2338
March	\$0.08218	\$0.2337		\$0.08218	\$0.2338
February	\$0.13689	\$0.2337		\$0.13689	\$0.2338
January	\$0.15284	\$0.2337		\$0.15284	\$0.2338
2011					
December	\$0.13545	\$0.2373		\$0.13545	\$0.2316
November	\$0.09165	\$0.2373		\$0.09165	\$0.2316
October	\$0.12255	\$0.2373		\$0.12255	\$0.2316
September	\$0.08213	\$0.2373		\$0.08213	\$0.2316
August	\$0.12432	\$0.2373		\$0.12432	\$0.2316
July	\$0.09888	\$0.2373		\$0.09888	\$0.2316
June	\$0.07149	\$0.2373		\$0.07149	\$0.2316
May	\$0.06555	\$0.2373		\$0.06555	\$0.2316
April	\$0.11885	\$0.2373		\$0.11885	\$0.2316
March	\$0.07356	\$0.2373		\$0.07356	\$0.2316
February	\$0.09293	\$0.2373		\$0.09293	\$0.2316
January	\$0.07894	\$0.2373		\$0.07894	\$0.2316

## 5.7 Finances

- \$2,057.6 million in operating budget
- Enmax pays the City of Calgary annual dividends equal to the greater of \$30 million or 30% of the prior year's net earnings. Dividends are paid quarterly in arrears.
- Special, one-time dividends are also paid when declared.

## 5.8 Performance

- Enmax has measurable performance objectives around: customers, emissions, ethics and compliance, safety, stakeholders, supply chain, sustainable value creation, and talent management.
- System average interruption duration index (SAIDI), 2006-0.42 (CEA-4.37), 2007-0.54 (CEA-5.02), 2008-0.80 (CEA-4.61), 2009-0.41 (CEA-4.20).
- System average interruption frequency index (SAIFI), 2006-0.75 (CEA-2.15), 2007-0.86 (CEA-2.27), 2008-1.31 (CEA-2.18), 2009-0.69 (CEA-2.01).

### *Safety*

- Lost time injury severity rate (LTISR) (# of days lost to injury during a calendar year), 2007-3.46, 2008-16.08, 2009-1.38.
- Lost time injury frequency rate (LTIFR) (# of lost time injuries or illnesses that occur during a calendar year for every 200,000 hours worked), 2007-0.29, 2008-0.31, 2009-0.26
- Total recordable injury frequency rate (TRIFR) (total # of recordable injuries that occur during a calendar year for every 200,000 hrs worked), 2007-5.19, 2008-3.48, 2009-2.76

## 5.9 Sustainability Planning

- Public expectations: Calgarians expect the City to lead by example and actively inform citizens on the actions they can take to protect the environment.
- Environmental impact is a priority.
- Enmax applies the Global Reporting Initiative (GRI) framework to report on its environmental, economic and social performance. GRI is a network-based organization that developed the world's most widely used sustainability reporting framework. The reporting framework is developed through a consensus-seeking process with participants drawn globally from business, civil society, labour, and professional institutions.

## 5.10 Revenue and Rate Approach

- The City of Calgary charges a LAF to Enmax in lieu of property taxes and other fees or charges. The LAF as of April 1, 2012 is:
  - LAF Wires Component: 11.11% of the total revenue from Distribution Tariff rate charges in the billing period, plus
  - LAF Energy Component: 11.11% of the monthly RRO Energy Charge per kWh of Energy Delivered
    - April 2012 RRO Energy Charge = \$0.071760/kWh x 11.11% = \$0.007973/kWh

## 5.11 Service Lines and Programs

- When compared with other Canadian Electricity Association members, Enmax ranks in the first quartile when it comes to the lowest number and shortest duration of power system interruptions.

- Enmax has engaged in a pilot project with electric cars to evaluate the impact on the system and infrastructure needed. The effects of smart meters are also being examined.

### **5.12 Organizational and Staffing Structure**

- Wholly owned corporation with all corporate services provided in house.
- No major services outsourced.
- 1,646 employees.
- Four major divisions:
  - Energy - 198 employees.
    - Generation & wholesale energy
    - Retail energy services
    - Renewable energy
  - Power Corporation - 578 employees
    - Distribution
    - Transmission
    - Regulated rate services
  - Power Services Corporation - 150 employees
    - Engineering, procurement, construction, and maintenance
    - Light rail transit utility infrastructure
  - Encompass Inc - 321 employees
    - Customer service
    - Billing
  - Others include: Envision Inc, fibre optics, high-speed data, Internet services

### **5.13 Financial Management**

- Enmax has a debt to capital level of 43%
- The company produces complete annual reports like a public corporation with an attitude of transparency and pro-disclosure.

### **5.14 Employee Management and Working Environment**

- Average number of training and development hours per employee:
  - 2010 - 13.03
  - 2009 – 16.3
  - 2008 – 46.0
  - 2007 – 15.3
- 2010 Employees: 1,638
  - IBEW: 399
  - CUPE: 643
  - MP (non-union): 586
  - Directors: 10
- 2010 turnover ratio: 10.4% (includes voluntary turnover for retirement)
  - IBEW: 8.0%
  - CUPE: 8.2%
  - MP (non-union): 14.0%
  - Directors: 0.0%

### **5.15 Citizen Engagement Customer Relations Management**

- Enmax provides extensive information to the public through annual reports and other such documents. The board is appointed by the city and is expected to look after citizen concerns.

#### **5.16 Performance Monitoring and Reporting**

- Enmax applies GRI framework to report on performance.

#### **5.17 Other**

- In 2010, Enmax launched an electric vehicle pilot program for its employees and fleet to better understand the challenges and benefits of electric vehicles and identify the infrastructure required to support the introduction of electric vehicles. A variety of vehicles will be tested during this pilot.

## **6 Oakville Hydro Corporation**

### **6.1 Services**

- Generation, distribution, retail, and billing.

### **6.2 Service Area**

- 2011 census population is 182,520. Land area of city is 139 square kilometers.

### **6.3 Infrastructure**

- Original cost of assets in 2010 financial statements is \$226 million
- Average age is 8.3 years
- Estimated asset life for amortization for transmission and distribution assets is 15-35 years

### **6.4 Customers**

- 63,000 customers
- Residential – 56,419 customers
- General Services (<50kW) – 4,887 customers
- General Services (50-999kW) and General Services (1000+kW) – 873 customers

### **6.5 Rates**

- Time of use rates
  - On-peak: 10.8¢/kWh
  - Mid-peak: 9.2¢/kWh
  - Off-peak: 6.2¢/kWh
- Regulated Price Plan: 8.3¢/kWh

### **6.6 Finances**

- Capital budget 2011 forecast \$5 million, 2012 forecast \$5.2 million.
- No single customer will account for revenue in excess of 10% of total revenue.
- Return on debt 5.62%, and equity 9.85% is allowed based on OHEDI's capital structure of 60% and 40% equity.

### **6.7 Strategic, Business and Risk Planning**

- Yearly updated mandates for board of directors, finance and audit committee, governance and risk committee, human resources committee.
- Strategic imperatives:
  - Profit - Enhance Shareholder Value
  - Service – Best in the eyes of our customers, employees and stakeholders
  - People – Develop a distinct continuous business improvement-based culture
  - Community – Enhance the brand of Oakville Hydro to facilitate and achieve energy savings in the Oakville community

### **6.8 Sustainability Planning**

- Aim to design, construct and maintain an electrical system, generate renewable power and provide safe energy solutions to our customers in a manner that is safe and environmentally responsible.
- Evaluative metrics are energy savings GWh, and peak demand savings MW.



**6.9 Service Lines and Programs**

- Other activities include water heater rental, billing services, street lighting services, retro-fit multi-residential buildings to individually metered units and utility related construction.
- Innovative services: Smart grid, microgeneration, strong customer focus, plenty of conservation incentive programs for all types of customers, Spinoff Company Sandpiper Energy Solutions Inc provides water heating solutions.
- Green energy programs and services are the Green Light Solar Program, the Landfill Gas Project (methane gas recovery), and the New Oakville Community Integrated Energy System.

**6.10 Organizational and Staffing Structure**

- The Utility is a free standing corporation with board members made up of city officials and various experts. There is an annual 'Mandate for the board of director's' document.
- There are subsidiary companies for distribution, energy services, underground utility construction, and a corporate division. Oakville Hydro Electricity Distribution Inc.; Oakville Hydro Energy Services Inc.; and El-Con Construction Inc.
- In the 2010 annual report contract services expense was \$2,758,000 for 2010.

**6.11 Employee Management and Working Environment**

- Oakville Hydro Corporation has a management system with objectives and targets that are focused on continually improving the organization regarding the protection of both workers and the environment.

**6.12 Citizen Engagement Customer Relations Management**

- Received a 92% overall score for a customer survey in 2011.
- Support is given to non-profit community groups in support of children, families and seniors, youth at risk, sustainability and health and safety.

## **7 Waterloo North Hydro Corporation**

### **7.1 Services**

- Distribution, retail, billing

### **7.2 Service Area**

- Serves 50,000 customers in a population of 97,000, and service area covers 673 square kilometers.
- One of the largest distribution area's in Ontario.
- 20% of customer base is in rural areas.

### **7.3 Infrastructure**

- 3,236 poles

### **7.4 Customers**

- 2011: 52,500 customers used 373,685,721 kWh
- Residential: 46,238 customers used 393,848,054 kWh
- General services <50kW: 5,428 customers used 179,687,810 kWh
- General services 50-4,999 kW: 667 customers used 705,732,689 kWh
- Large user: 1 customer used 79,638,262 kWh
- Streetlights: 13,259 customers used 7,792,006 kWh
- Unmetered scattered load: 547 customers used 1,648,666 kWh
- Embedded Distributor: 1 customer used 28,618,000 kWh

### **7.5 Employees**

- Approximately 100 employees

### **7.6 Rates**

- Time of use rates
  - On-peak: 10.8¢/kWh
  - Mid-peak: 9.2¢/kWh
  - Off-peak: 6.2¢/kWh
- \$15.75 per month and distribution usage charge 1.85¢/kWh

### **7.7 Finances**

- Capital budget of \$34,912,000, funded from cash from operations (\$10 million), and borrowings (\$21.5 million)
- System expansion - \$7,086,000
- Plat replacement and upgrade – \$8,459,000
- Service center - \$14,027,000
- Operating budget of \$16,100,000 plus power purchase of \$90,750,000
- Accumulated debt of \$80 million
- Debt ratio is not to go over 50%
- Paid \$639,000 in dividends to the city in 2010
- Interest on Jr. debt: \$1,361

### **7.8 Strategic, Business and Risk Planning**

- Designates specific goals for each year from executive and presented to board, 2011 strategic tasks:
  - New Service Centre

- Smart Meter Program
- Rate Rebasing
- IFRS
- 2011 Capital Program
- 4 Year CDM Target
- Maintain debt at affordable levels
- Return to Shareholders
- Recommend Approval

#### **7.9 Budgeting and Capital Planning**

- Budgets are designed to meet specific KPI's around effective and efficient resource use.

#### **7.10 Service Lines and Programs**

- Innovative practices: home energy use evaluation, heat bank program for local heating assistance.

#### **7.11 Organizational and Staffing Structure**

- Waterloo North Hydro Corporation is wholly owned by a holding company that is owned by the city of Waterloo (73.2%), the townships of Woolwich (20.2%) and Wellesley (6.6%). These shareholders appoint Waterloo North Hydro Holding Corporation directors. The Holding Company Board appoints directors for Waterloo North Hydro Inc. Each corporation has 9 board members.
- The net assets and all employees of the former Hydro-Electric Commission of Waterloo, Wellesley & Woolwich were transferred to Waterloo North Hydro Inc. on incorporation March 1, 2000.

#### **7.12 Financial Management**

- Debt ratio not to pass 50%.

#### **7.13 Infrastructure and Asset Management**

- Capital budgets for next 5 years include plans for replacement of asset. 2011 budget. 2012 - \$17.5 million, 2013 - \$13.6 million, 2014 - \$14.3 million, 2015 - \$18.9 million.

#### **7.14 Citizen Engagement Customer Relations Management**

- Spends around \$270,000 per year on community relations.

#### **7.15 Partnerships and Stakeholder Relations**

- As the municipality appoints the board, this acts as a governance mechanism that keeps the citizens' interests in mind.

#### **7.16 Performance Monitoring and Reporting**

- There are KPIs to measure if resources are used efficiently and effectively.

## 8 Sacramento Municipal Utility District (SMUD)

### 8.1 Services

- Generation, transmission, and distribution of electric power

### 8.2 Service Area

- Population of 1,418,788. SMUD services just under 600,000 customers, over an area of 2,331 square kilometres.

### 8.3 Customers

- At the end of 2010, SMUD had 597,097 customers

	2010	2009	2008	2007	2006
Customers at year end	597,097	595,076	592,490	589,599	585,221
KWH Sales to customers (thousands)					
Residential	4,486,241	4,707,104	4,696,912	4,608,170	4,760,391
Commercial, industrial & other	5,798,569	5,984,803	6,219,838	6,209,689	6,038,839
Subtotal	10,284,810	10,691,907	10,916,750	10,817,859	10,799,230
Sales of surplus power	1,836,957	2,133,049	2,460,487	2,427,964	3,964,326
Total	12,121,767	12,824,956	13,377,237	13,245,823	14,763,556
Revenues from customers (thousands of dollars)					
Residential	526,860	514,320	540,546	493,910	515,025
Commercial, industrial & other	669,489	631,251	627,571	589,922	566,851
Subtotal	1,196,349	1,145,571	1,168,117	1,083,832	1,081,876
Sales of surplus power	59,493	58,626	170,640	134,002	191,931
Sales of surplus gas	59,998	61,331	139,275	78,292	112,719
Total (ii)	1,315,840	1,265,528	1,478,032	1,296,126	1,386,526
Average kWh sales per residential customer	8,497	8,955	8,982	8,841	9,202
Average revenue per residential kWh sold (cents)	11.91	11.07	11.11	10.49	10.6

### 8.4 Employees

- 2,084 employees planned for end of 2012.
  - 31 - smart grid team,
  - 416 - customer call centre,
  - 623 - distribution call centre,
  - 201 - technology call centre,
  - 269 - AGM energy supply,
  - 554 - executives, corporate divisions

### 8.5 Rates

- Only time of use (TOU) rates exist as the whole system is on smart meters.
- Residential \$0.07 to \$0.24 per kWh depending on the timing
- General services \$0.08 to \$0.12 per kWh depending on timing

### 8.6 Finances

- 2012 budget is \$1.33 billion for operating and capital.
- No dividends or franchise fee paid
- Existing debt \$3.15 billion, Debt/Assets ratio - 0.63
- Tax exempt

**8.7 Strategic, Business and Risk Planning**

- Uses an enterprise wide risk assessment and provides the board with leading risk indicators.
- The staff is monitoring the progress of new risk-mitigation measures intended to aid decision making and improve results in key business areas.

**8.8 Sustainability Planning**

- As a public utility that does not pay dividends to shareholders, SMUD views environmental sustainability as a premium it can provide to its residential and business customers.
- Environmental impact is a concern and the utility has a goal of using 33% renewable energy by 2020.
- An integrated resource plan has been create to focus on renewable development. The resources plan encourages mostly biogas and wind to meet near term needs and prepares SMUD to develop more local area solar as process fall

**8.9 Revenue and Rate Approach**

- The Board has autonomous authority to establish the rates charged for all SMUD services. Changes in such rates require formal action, after public hearing, by the Board.

**8.10 Budgeting and Capital Planning**

- SMUD plans out business projections / requirements then submits these to the board for approval.
- Environmental projects are a priority.
- Capital budget guidelines: cost exceeding \$1,000 and an estimated service life of at least two years.

**8.11 Service Lines and Programs**

- Innovative services: Smart grid, extensive environmentally friendly energy options and initiatives.

**8.12 Organizational and Staffing Structure**

- As a municipal utility, SMUD is governed by a seven-member Board of Directors selected by the voters to staggered four-year terms. The SMUD Board of Directors determines policy for the District and appoints the general manager, who is responsible for the District's operations.

**8.13 Financial Management**

- SMUD policy requires cash collateral of 102% of the market value of the loaned securities.

**8.14 Employee Management and Working Environment**

- Staff will develop a short and long-term benefits strategy as part of a Total Rewards approach to attracting and retaining qualified employees who reflect their community.

**8.15 Citizen Engagement Customer Relations Management**

- Many projects centre around green energy and engage citizens (e.g. renting power from solar mills, options for time of use smart grid rates).
- Engagement is around business planning and service offering.
- The elected board is the governance mechanism to keep citizens interests at hand.

**8.16 Partnerships and Stakeholder Relations**

- The elected board is the governance mechanism to keep citizens' interests at hand

**8.17 Other information**

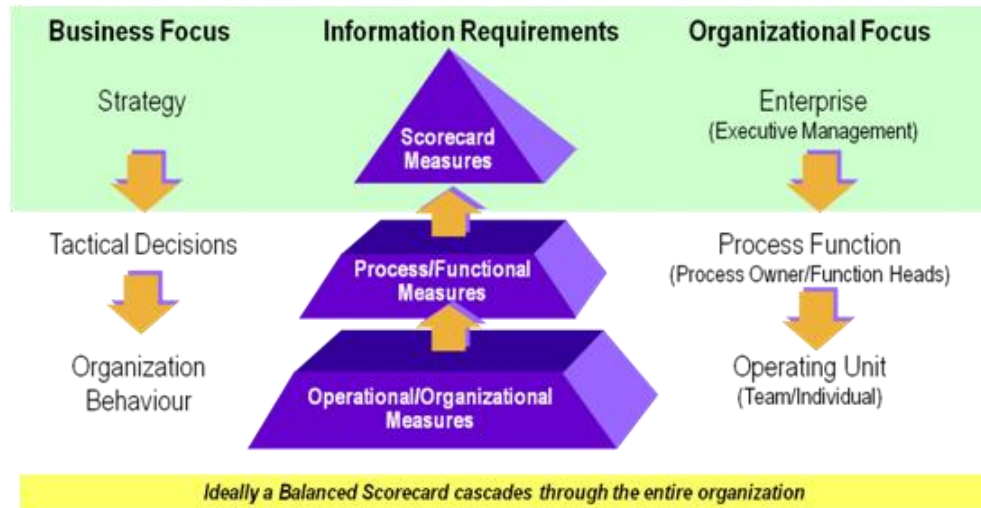
- As a public utility, SMUD is not subject to regulation by the California Public Utilities Commission.



## **Appendix M**

### **Best Practice Guide for Developing Measures and Metrics**

### Appendix M - Best Practice Guide for Developing Measures and Metrics



Metrics should abide by the following guidelines:

- Stakeholders agree upon the metric measurements.
- Metrics are linked to clear goals, assigned actions and defined consequences.
- The metrics measure the right thing and cause people to act in the organization's best interest (in contrast with simply "making their numbers").
- Metrics can be accurately, completely and efficiently collected.
- Metrics are not excessive and do not promote bureaucracy at the expense of innovation.
- Metrics are limited in quantity and meaningful (e.g. drive best-in-class performance, productivity and time, cost and quality improvement).
- Metrics are clearly visible by using management dashboards.
- The metrics' details can be benchmarked for comparative purposes.
- Individual, group, project and enterprise metrics are linked together to reflect the best interest of the organization as a whole.
- The cause and effect of the metrics are understood and a business-driven balance is achieved across the entire organization.
- Metrics are not overly complex or difficult to explain.
- Metrics measure *performance* (i.e. what is going on in a process) rather than attempt to *diagnose* (i.e. explain why a process performs the way it does).



## Approach

Phase	Step	Objectives
<b>Phase 1: Define Detailed Definitions</b>	1. Define Metrics program	<ul style="list-style-type: none"> <li>Define metrics program charter and work plan</li> <li>Define metrics program objectives to articulate how the organization benefits from these metrics</li> </ul>
	2. Define strategy and high-level objectives	<ul style="list-style-type: none"> <li>Link organizational strategy and high-level objectives to performance metrics</li> </ul>
	3. Define balanced performance metrics	<ul style="list-style-type: none"> <li>Measure the right metrics</li> </ul>
	4. Determine current process capabilities	<ul style="list-style-type: none"> <li>Assess current metrics and leverage where possible</li> </ul>
<b>Phase 2: Implementation</b>	5. Define decision-making structure	<ul style="list-style-type: none"> <li>Define who will review current performance and identify improvement opportunities</li> </ul>
	6. Establish data collection and reporting process	<ul style="list-style-type: none"> <li>Ensure timely, fact-based operational decisions</li> <li>Define tasks and responsibilities for data analysis and reporting (facilitates efficient metrics tracking)</li> </ul>
	7. Define metrics tracking systems	<ul style="list-style-type: none"> <li>Ensure appropriate tracking</li> </ul>
<b>Phase 3: Rollout</b>	8. Establish pilot metric process	<ul style="list-style-type: none"> <li>Identify first set of improvement targets and test new performance measurement process</li> <li>Identify improvement opportunities; take corrective actions</li> </ul>
	9. Conduct ongoing performance reviews	<ul style="list-style-type: none"> <li>Review and improve metrics and their measurement processes as necessary</li> </ul>
	10. Implement continuous improvement	<ul style="list-style-type: none"> <li>Track bottom-line impact of improvement program</li> </ul>

**Phase 1** identifies the metrics needed to evaluate current performance and establishes targets that will drive the organization. Successful organizations typically choose metrics that balance four key dimensions: quality, time, productivity and cost. These metrics should extend beyond traditional performance measurements and include key predictive measures.

**Phase 2** defines the program's data collection mechanisms and the management responsibilities that need to be in place to collect, support and track the program's metrics. During this phase, organizations decide:

- Who will collect their data and what systems will be used to facilitate this?
- Who will review the data and prepare the reports?
- Who will communicate the conclusions drawn after the data has been analyzed?

**Phase 3** identifies key opportunities for improvement and establishes new processes as required.

For the organization as a whole, it is important to find a balance between metrics that apply to different groups and understand how these metrics relate to and interact with each other.

## Criteria

Performance monitoring and reporting process is only as good as the measures and indicators that form its foundation. When choosing metrics, it is important to ensure that they adhere to the following criteria:

The Ten Criteria For Excellent Performance Measures	
<b>Relevant</b>	The measure should be linked to the core businesses, goals and strategies of the organization, and directly related to the outcomes it is measuring. The measure should also be relevant within the context of government legislative priorities and direction.
<b>Reliable</b>	The measure can be duplicated by others using the same information and methodology, and is complete and free from significant error.
<b>Responsive</b>	The measure should respond in a significant way to the interventions of the organization and should explain the degree to which the organization can influence outcomes, including an explanation of uncontrollable influences.
<b>Credible</b>	The source of the measures and data collection methods should have a reputation for accuracy and stability. Significant assumptions relating to the information should be explained and changes in methodology or presentation should be described.
<b>Unbiased</b>	The measure should be neutral and fair in the way the data is collected and reported.
<b>Useful</b>	The measure should be useful to management in making program and policy decisions. The measure should be clear in presentation, content and format, in a way that can be easily understood by users and sufficient to provide an understanding of the performance being assessed.
<b>Timely</b>	The measure should be reported in sufficient time to influence decisions.
<b>Comparable</b>	The measure should allow users to compare information from year to year and among similar organizations. At a minimum, prior and current years' actual results and current year targets should be included.
<b>Outcome Oriented</b>	The measure should focus on the immediate or longer term outcomes obtained through the interventions of the organization.
<b>Cost Effective</b>	The benefits of the measure should exceed the costs of producing the measure.

## Definitions

Based on our knowledge and experience in municipal government and utilities, the City and EL&P should consider the following performance measures for inclusion in their performance monitoring and reporting framework:

Suggested Performance Measures for Electric Light and Power	
<b>Sustainability</b>	Percentage of electricity that is sourced through renewable energy sources
<b>Budgeting and Capital Planning</b>	Reserve allocation as a percentage of total revenue Actual capital expenditures as a percentage of budgeted expenditures
<b>Service Lines and Programs</b>	Number of customers per kilometre or distribution wire
<b>Organization Structure</b>	Ratio of management to staff (overall and within specific operational

<b>and Staffing</b>	functions)
<b>Employee Management</b>	Number of staff (linemen, distribution engineers) per kilometre of distribution wire Overtime hours worked per employee and as a percentage of total hours worked Percentage of staff who receive an annual face-to-face employee evaluation Average days per FTE invested in development and training
<b>Working Environment</b>	Turnover ratio Average days per FTE lost to absence Number and type of safety incidents and lost time incidents
<b>Operations and Maintenance</b>	Cost of operations and maintenance as a percentage of overall costs and per kilometre of distribution wire System losses as a percentage of overall supply Ratio of proactive vs. reactive maintenance
<b>Financial Management and Rate Model</b>	All-in distribution rates as compared to rates for similar utilities LAF as a percentage of total revenues and as compared to similar utilities Dividends as a percentage of revenue Total cost per customer and per kilometre of distribution wire Percentage variance in key revenue and expenditures (quarterly and annually)
<b>Infrastructure and Asset Management</b>	Total asset value per FTE Percentage of critical assets that require immediate refurbishment or replacement Average age of inventory by asset class
<b>Customer Relationship Management</b>	Number of customer complaints (general and technical) per 1,000 customers Time required to resolve customer concerns
<b>Performance Monitoring and Reporting</b>	SAIFI, SAIDI, CAIDI and index of reliability measures Number of customer interruptions per kilometre of distribution wire

### Setting Targets

- *Align metrics with the organization's success criteria* – so that everyone from the Council to individual employees understand how their personal performance can affect the organization's overall performance.
- *Define a manageable set of metrics* – so that the organization can balance quality, productivity, time and cost in a manner that enables each metric to have a positive impact on the organization as a whole.
- *Create simple, explicit and understandable metric definitions* – so that everyone in the organization can easily communicate by using the same business language.
- *Define program objectives up front* – so that the organization can align these objectives with the needs of the organization and clearly identify what the program is trying to achieve.
- *Identify ongoing improvement opportunities using program metrics* – so that the organization can monitor the program's bottom-line impact, maintain the program's momentum and reestablish performance targets whenever necessary.

- *Increase visibility into the program's operational metrics* – so that the organization has a complete solution for improving its decision-making structure, organization structure, business processes, tracking mechanisms and reporting templates.
- *Benchmark regularly* – so that the organization can establish internal standards and predictably measure external success.
- *Review metric results regularly* – so that senior administration is able to review organizational performance and rapidly correct rising dysfunctions.



# **Value For Money Audit (VFM)**

Red Deer Water / Wastewater Utilities

*Final Report*

October 26, 2012

*Final Report*

October 26, 2012



# Table of Contents

Executive Summary ..... 1

Methodology..... 15

A Note on Benchmark Comparisons ..... 18

1 Strategic Design and Alignment..... 21

    1.1 Strategic and Business Planning..... 21

    1.2 Sustainability Planning..... 28

    1.3 Enterprise Risk Management ..... 33

    1.4 Revenue and Rate Approach..... 35

    1.5 Budgeting and Capital Planning..... 42

2 Management and Execution ..... 61

    2.1 Service Lines and Programs ..... 61

    2.2 Organization Structure and Staffing ..... 68

    2.3 Employee Management..... 80

    2.4 Working Environment ..... 93

    2.5 Operations and Maintenance Planning and Execution ..... 102

    2.6 Financial Management and Rate Model ..... 118

    2.7 Infrastructure and Asset Management ..... 134

    2.8 Operating Risk and Business Continuity..... 141

3 Customer, Citizen and Stakeholder Engagement..... 144

    3.1 Citizen Engagement..... 144

    3.2 Customer Relationship Management..... 145

    3.3 Partnerships and Stakeholder Relations ..... 151

    3.4 Regional and Other Integrated Planning..... 152



4 Monitoring, Measurement and Results .....156

4.1 Performance Monitoring and Reporting..... 156

4.2 Regulatory Compliance and Reporting.....157

4.3 Financial Reporting.....161

Summary of Recommendations ..... 164

Appendices.....178

- Appendix A - Evaluation Framework
- Appendix B - List of Documents Reviewed
- Appendix C - Interview Participants
- Appendix D - Interview Guide – City of Red Deer
- Appendix E - Interview Guide – External Stakeholders
- Appendix F - Summary of Interview Feedback and Documents Reviewed
- Appendix G - Benchmarking Participants
- Appendix H - Benchmarking Questionnaire
- Appendix I - Benchmarking Results Summary
- Appendix J - Measures and Metrics
- Appendix K - Best Practice Guide for Developing Measures and Metrics
- Appendix L – Sample Performance Dashboard Summary Page





# Executive Summary

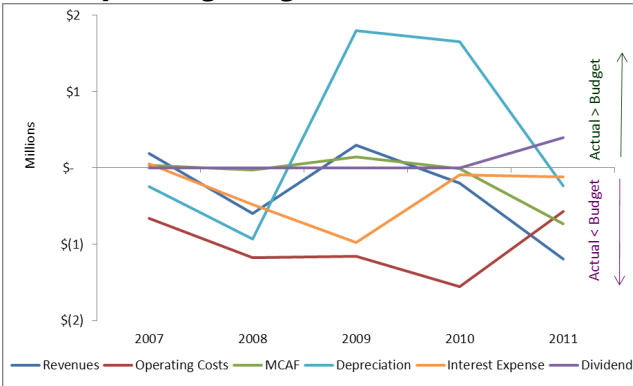
Overall the City is getting value for money for both the Water and the Wastewater utilities. The utilities employ sound strategic and financial management practices, maintain efficient operations, are experiencing success with current conservation programs (which has translated into a reduction in per-capita consumption), continue to meet all safety and regulatory requirements effectively and efficiently, and have consistently remained in compliance with all regulatory requirements, with customers paying water and wastewater rates that are comparable to peer utilities.

## Budgeting and Capital Planning

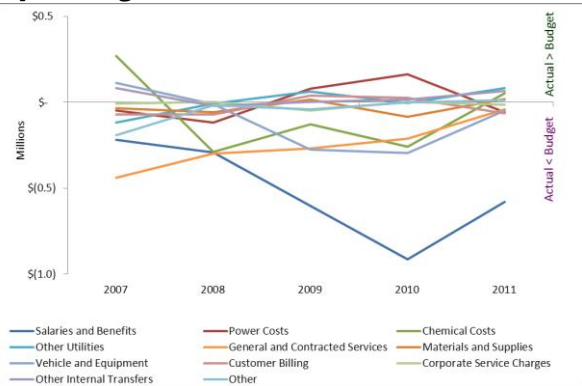
Budgeting in the utilities appears to be effective. Budget variances in operating costs are primarily the result of salaries and benefits consistently coming in under budgeted amounts due to vacancies and challenges in back-filling staff leaves.

### Water Utility

Total Operating Budget



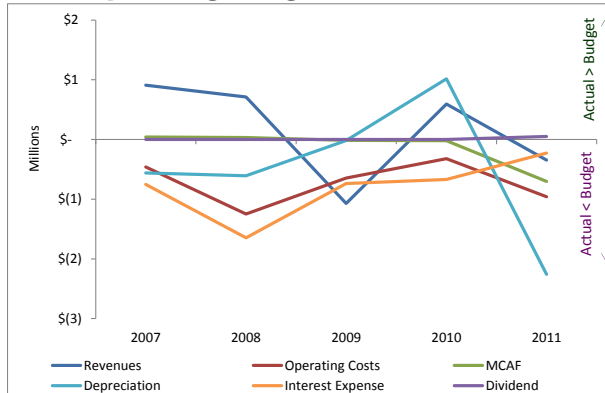
Operating Costs Breakout



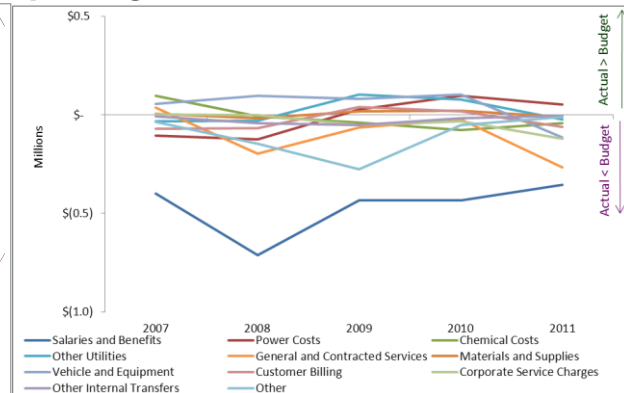


### Wastewater Utility

#### Total Operating Budget



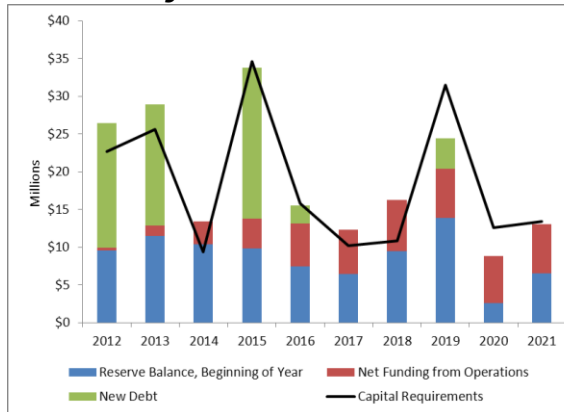
#### Operating Costs Breakout



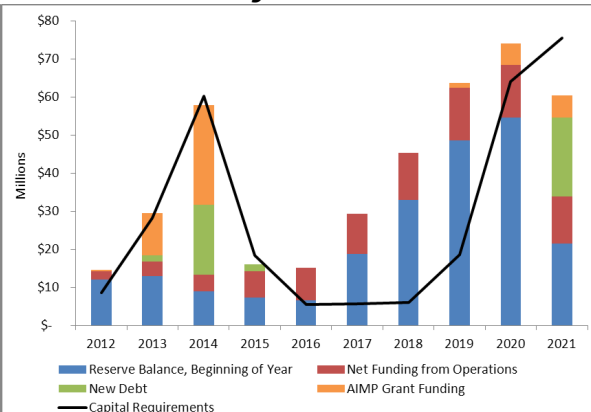
The long term capital planning process, although not always directly aligning actual construction and expenditures with budget, appears to be effective in ensuring that the utility has direction, a strong understanding of when large expenditures will be required, and a plan in place to align sources of funding with those expenditures.

### 2012 Capital Budget and Funding Projections

#### Water Utility



#### Wastewater Utility



Given that population and customer base increases appear to have been at least partially offset by decreases in per-capita consumption, and that the Water utility is expected to further reinforce conservation through a modified rate structure to incent decreased consumption, it is important that any future upgrades to the WTP intended solely to increase production capacity be carefully considered within the context of the impact these changes may have. The original capital plan for the WTP was prepared using certain assumptions that may no longer be wholly accurate given anticipated consumption trends, and future proposed upgrades should be subject to a rigorous business case analysis to determine whether they are truly necessary.



### Cost Management

Both utilities are effectively managing costs within their areas of control. The majority of large increases in operating costs are due to factors beyond the utilities' control, such as the cost of natural gas and internal charges from corporate services and other City departments.

For the Water utility, operating costs have increased 43% over the last five years which appears reasonable. The largest changes occurred between 2007 and 2009 and were primarily driven by increases in salaries, power and other utilities, customer billing, and Corporate Services costs. While water rates have increased meaningfully over the past five years, a significant driver of these increases has been non-discretionary expenditures outside of the utility's control.

#### Water Utility Operating Cost Trends

	2007	2008	2009	2010	2011	% Increase (2007 to 2011)	2012 (budget)
Salaries and Benefits	2,712,384	3,081,834	3,375,927	3,545,568	4,136,651	53%	4,996,589
Power Costs	835,085	787,582	1,219,510	1,232,650	1,188,076	42%	1,248,615
Chemical Costs	985,033	820,730	989,427	860,266	1,062,381	8%	1,002,623
Other Utilities	248,943	359,872	638,711	537,839	636,024	155%	546,988
General and Contracted Services	602,909	814,211	657,991	641,673	822,969	36%	875,939
Materials and Supplies	232,684	215,764	312,523	232,223	333,109	43%	327,428
Vehicle and Equipment	518,486	595,021	583,200	526,060	697,600	35%	697,367
Customer Billing	557,834	636,047	747,324	704,720	704,630	26%	830,109
Corporate Services & Other City Departments	736,543	904,388	1,037,489	1,143,851	1,111,670	51%	1,218,702
Other Internal Transfers	(309,729)	(338,002)	(324,060)	(415,131)	(439,181)	42%	(392,436)
Other	80,445	47,368	69,734	12,399	14,689	(82)%	1,511
Sub-total	7,200,617	7,924,815	9,307,776	9,022,118	10,268,618	43%	11,353,435

Wastewater utility operating costs have increased 53% over the last five years which appears reasonable. The largest changes occurred from 2007 to 2009 and were primarily the result of costs associated with salaries, power and other utilities, contracted services, vehicles, customer billing and Corporate Services. Relative to 2009, 2011 operating costs saw a modest increase of only 2%. As with the Water utility, rate increases have been significantly impacted by increases in non-discretionary expenditures beyond the utility's control, including both the MCAF and dividends to the City.

#### Wastewater Utility Operating Cost Trends

	2007	2008	2009	2010	2011	% Increase (2007 to 2011)	2012 (budget)
Salaries and Benefits	2,001,589	2,558,751	3,155,116	3,415,973	3,666,026	83%	4,237,503
Power Costs	567,000	553,709	855,265	904,116	929,802	64%	876,878
Chemical Costs	307,746	211,126	184,484	138,093	146,653	(52)%	144,582
Other Utilities	119,542	131,497	263,610	326,674	285,021	138%	307,490
General and Contracted Services	802,267	916,707	1,007,032	981,428	959,850	20%	1,277,318
Materials and Supplies	94,524	87,906	120,963	120,007	107,400	14%	122,699
Vehicle and Equipment	452,070	630,080	856,049	796,375	818,168	81%	982,501
Customer Billing	555,111	636,047	747,324	697,268	704,630	27%	830,109
Corporate Services & Other City Departments	828,645	1,014,443	1,258,064	1,404,351	1,392,142	68%	1,417,620
Other Internal Transfers	(49,979)	(57,628)	(67,280)	(124,444)	(128,786)	158%	(114,312)
Other	131,465	237,319	341,152	13,924	8,002	(94)%	14,569
Sub-total	5,809,980	6,919,957	8,721,779	8,673,765	8,888,908	53%	10,096,957



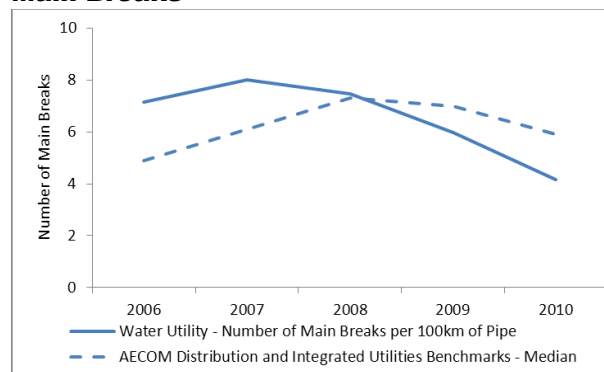
## Operations and Maintenance Planning and Execution

The Water and Wastewater utilities participate in the AECOM national water and wastewater benchmarking initiative, where they generally compare very well.<sup>1</sup>

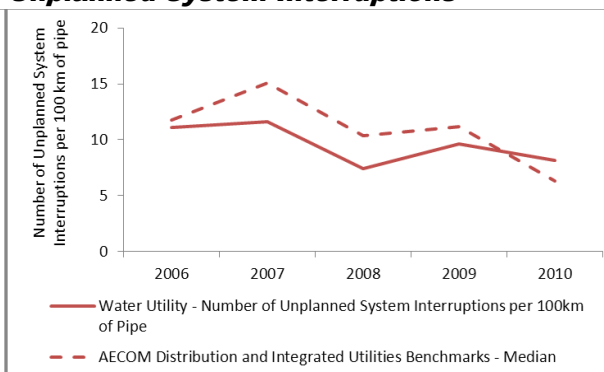
### Water Utility

For the Water utility, total operating costs appear reasonable based on an analysis of a variety of financial metrics. Typical operational metrics such as number of main breaks and system interruptions also appear reasonable.

#### Main Breaks



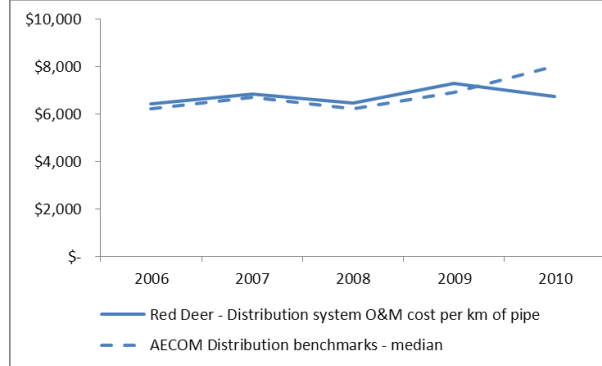
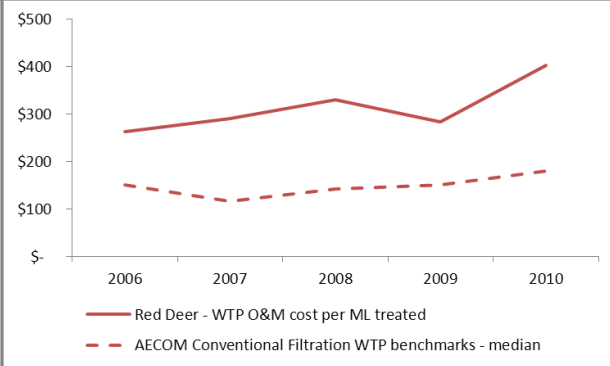
#### Unplanned System Interruptions



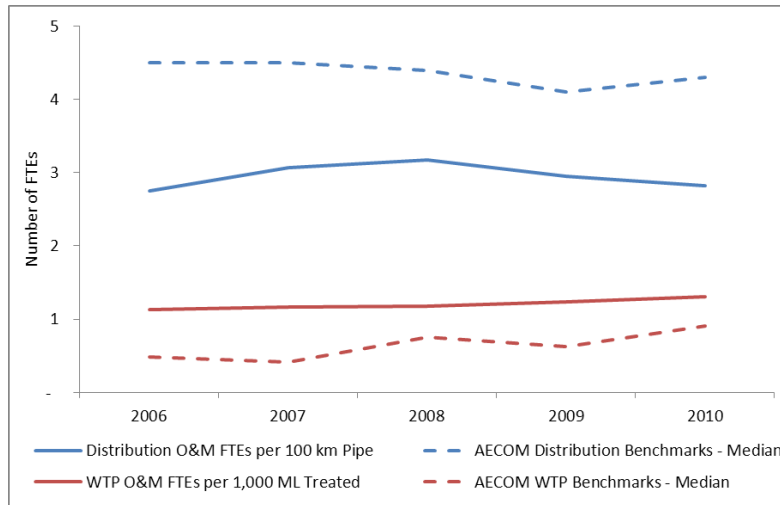
Distribution O&M costs per km of pipe have historically been consistent with AECOM benchmarks, but treatment plant O&M costs per ML of water treated have been significantly higher. Stringent provincial regulatory requirements that require Alberta plants to treat water to a higher level of quality than benchmark jurisdictions as well as significant population growth and capital expansion may be driving higher treatment plant O&M costs relative to benchmarks. A variety of environmental factors (such as proximity to mountainous regions driving higher relative turbidity in the spring, a relatively colder climate compared to BC and southern Ontario utilities resulting in higher power and gas consumption, etc.) may be influencing this also. Further, the manner in which administrative costs are allocated within the utility also impacts the calculated O&M cost per ML of water treated, as all of these costs are currently allocated to the treatment plant and not to the distribution side of operations. Recent capital upgrades have likely also impacted costs. As the utility tracks well relative to benchmarks in many other areas, it is important that this discrepancy is further explored and contributing factors understood and controlled where possible.

<sup>1</sup> Note: The AECOM study goes to great effort to group the utilities in such a way as to provide meaningful and relevant comparisons; however, benchmarking data cannot be considered absolute as many factors (e.g. economies of scale, level and type of treatment, geological factors, population density, climate, regulatory factors etc.) can have a significant impact on the operations of a given utility.

Efforts were made to provide timely, quantitative operational results that represent the utilities as they currently function. However, due to the complex nature of the calculations required for AECOM benchmarking, coupled with software challenges that prevented access to some information, it was not possible to acquire the necessary “denominator” information (e.g. actual FTEs, km of pipe, etc.) and therefore calculate certain 2011 comparative numbers. However, as these values would have been only one data point on a subset of charts and tables, it is our view that the findings and recommendations presented in this report would likely not have been impacted by their inclusion.

**Distribution O&M per Km of Pipe****WTP O&M per ML Water Treated**

As of 2011, utility personnel costs as a percent of total operating costs are in line with other utilities, suggesting that staffing costs are appropriate. However, staff complement in the treatment plant appears to be high relative to benchmark utilities, while staff in the distribution area appears to be low.

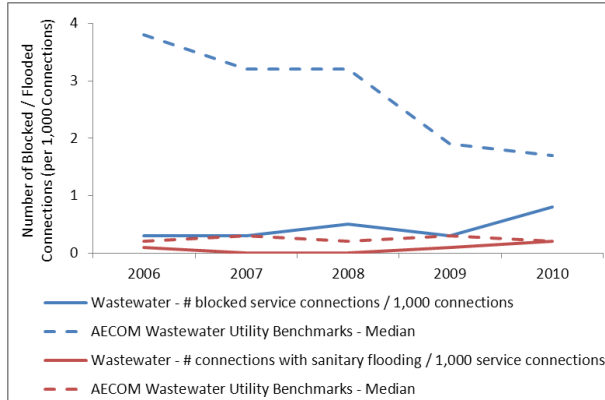
**Water Utility Distribution O&M FTEs per 100km Pipe and WTP O&M FTEs per 1,000 ML Water Treated**



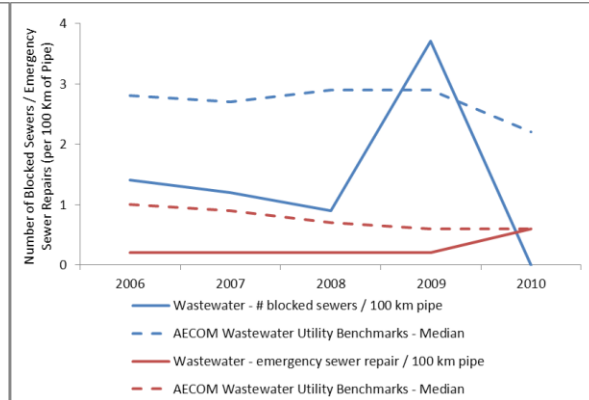
### Wastewater Utility

Wastewater utility total operating costs appear reasonable based on an analysis of a variety of financial metrics. Key operating metrics such as the number of blocked service connections, the number of connections with sanitary flooding and the number of blocked sewers generally compare favourably.

#### Service Connections - Blocked / Flooded

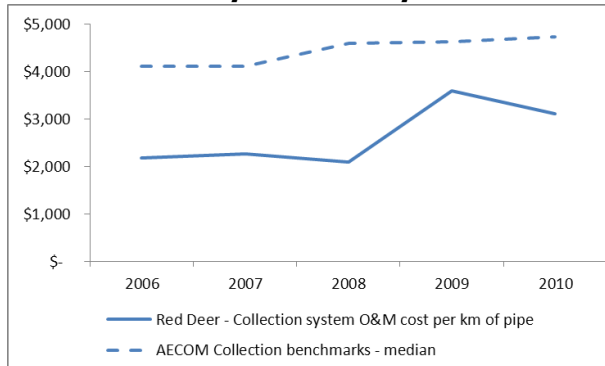


#### Sewers - Blocked / Emergency Repair

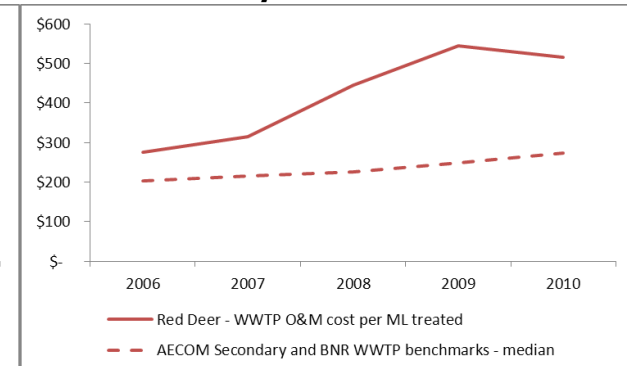


Collection O&M costs per km of pipe have historically been lower than AECOM benchmarks, but treatment plant O&M costs per ML of wastewater treated have been significantly higher. However, this may be impacted by a variety of factors such as stringent provincial regulatory standards that require Alberta plants to treat wastewater to a higher level of quality compared to benchmark jurisdictions, a relatively colder climate compared to BC and southern Ontario utilities resulting in higher power and gas consumption costs, as well as significant population growth and capital expansion. Further, the manner in which administrative costs are allocated within the utility also impacts the calculated O&M cost per ML of wastewater treated, as all of these costs are currently allocated to the treatment plant and not to the collection side of operations. A more even allocation of these costs would likely result in a reduction to treatment plant costs by \$25 to \$50 per ML. As the utilities track well relative to benchmarks in many other areas, it is important that this discrepancy is further explored and contributing factors understood and controlled where possible.

#### Collection O&M per Km of Pipe



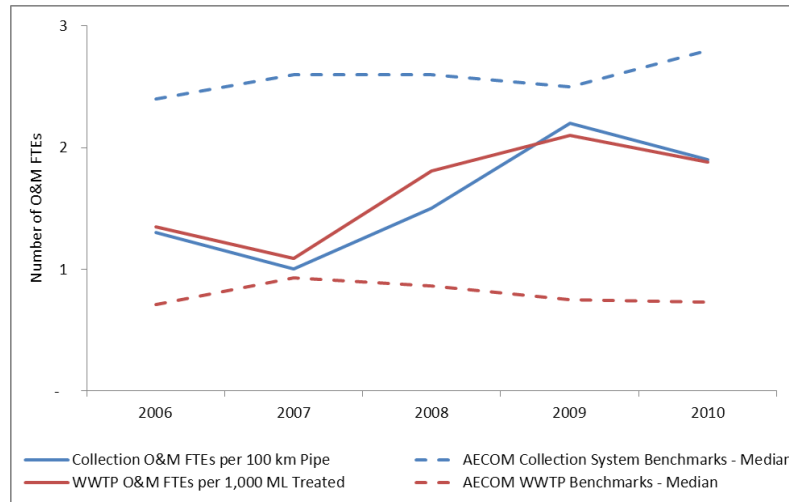
#### WWTP Plant O&M per ML Wastewater Treated





As of 2011, utility personnel costs as a percent of total operating costs are in line with other utilities, suggesting that staffing costs are appropriate. However, staff complement in the treatment plant appears to be high relative to benchmark utilities, while staff in the collection area appears to be low.

***Wastewater Utility Collection O&M FTEs per 100km Pipe and WWTP O&M FTEs per 1,000 ML Wastewater Treated***



It is important that the utilities strike an appropriate balance between treatment plant and distribution and collection system staff. Succession planning is also a critical issue for both utilities. The average age of operators and managers continues to approach retirement age, and this is particularly true for the Water utility where the average age of all staff (as of December 31, 2011) is 47.8 (42.3 for Wastewater) and the average age of managers is 54 (49.2 for Wastewater).

While both the Water and Wastewater utilities expend a great deal of time and effort into monitoring and tracking a wide variety of regulatory and benchmarking metrics, these are not consolidated or rolled up into a comprehensive performance dashboard. It would be of great benefit not only to the utilities themselves but also to City administration and Council to be able to easily view a selection of key performance indicators that clearly and effectively communicate operational achievements and areas for improvement.



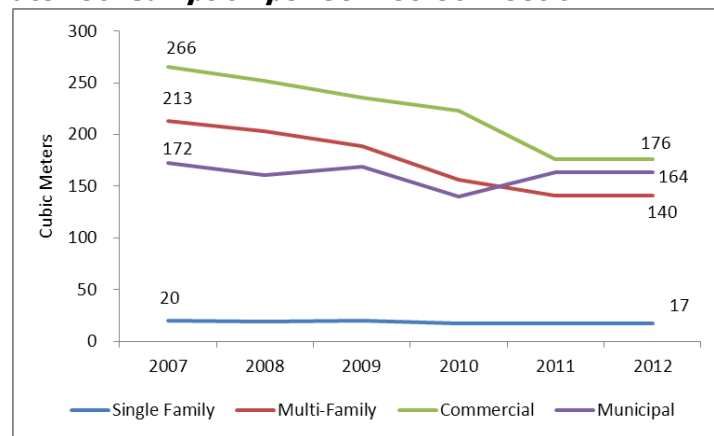


## Water Conservation

Average monthly water consumption per service connection trended downward across all customer classes between 2007 and 2011: single family, multi-family, commercial, and municipal. As illustrated in the figure below, the largest proportional decrease occurred among multi-family customers (34.2%), closely followed by commercial (34.2% decrease), single family (14.1% decrease), and municipal customers (4.9% decrease).

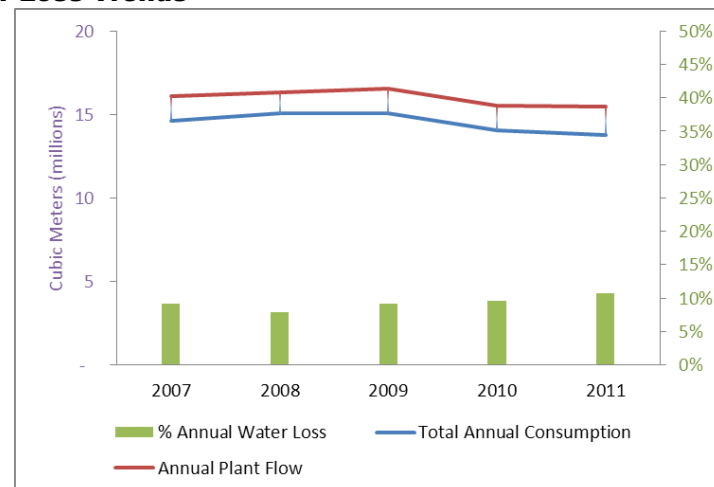
Water conservation efforts have outpaced the growth in population and service connections resulting in an overall reduction in total annual water consumption from 2007 to 2011.

### Average Monthly Water Consumption per Service Connection



While overall consumption has been trending down, the Water utility has experienced an increasing trend in the percent water loss from 2009 to 2011. Best practice suggests that unmetered water loss is typically in the 9% to 10% range, and that at this level effort should be undertaken to reduce this wherever possible. While water loss was 11% in 2011, this increase was primarily due to the occurrence of some significant leaks that have since been repaired, which is expected to have a positive impact on this metric on a go-forward basis.

### Water Utility Water Loss Trends





### Safe Workplace

The Water utility has a strong safety record, with the last lost-time injury on record occurring in 1997. The utility recorded three injuries in 2011, and the Water utility has performed better than the average for all City departments on all safety measures.

#### **Water Utility 2011 Reported Safety Incidents**

2011	Water Utility	City Average per Department
<b>Date of Last Lost Time Injury</b>	Aug 21, 1997	
<b>Injury Free Work Days</b>	5,245	
<b>Hours Worked</b>		115,722
<b>Injury Totals</b>	<b>3</b>	<b>5.53</b>
<i>Injury - Lost Time Injury</i>	-	1.58
<i>Injury - Medical Aid</i>	2	1.89
<i>Injury - First Aid</i>	1	0.84
<i>Injury - Incident</i>	-	1.21
<b>Frequency Rate*</b>	-	2.73
<b>Vehicle Accidents - YTD</b>	1	8.26
<b>Incident Class</b>		
<i>Class 1</i>	1	4.95
<i>Class 2</i>	-	0.58
<i>Class 3</i>	2	5.26
<i>Class 4</i>	-	0.05
<i>Class 5</i>	1	2.26
<i>Class 6</i>	-	0.53

\* Number of Lost Time incidents x 200,000 / total hours worked

The Wastewater utility last experienced a lost time injury incident in June of 2011, and had six injuries in total the same year. This is slightly higher than the City average per department, but in total the utility has experienced fewer safety incidents than City average.

#### **Wastewater Utility 2011 Reported Safety Incidents**

2011	Wastewater Utility	City Average per Department
<b>Date of Last Lost Time Injury</b>	Jun 28, 2011	
<b>Injury Free Work Days</b>	186	
<b>Hours Worked</b>	71,641	115,722
<b>Injury Totals</b>	<b>6</b>	<b>5.53</b>
<i>Injury - Lost Time Injury</i>	2	1.58
<i>Injury - Medical Aid</i>	1	1.89
<i>Injury - First Aid</i>	-	0.84
<i>Injury - Incident</i>	3	1.21
<b>Frequency Rate*</b>	6	2.73
<b>Vehicle Accidents - YTD</b>	4	8.26
<b>Incident Class</b>		
<i>Class 1</i>	2	4.95
<i>Class 2</i>	2	0.58
<i>Class 3</i>	3	5.26
<i>Class 4</i>	-	0.05
<i>Class 5</i>	2	2.26
<i>Class 6</i>	1	0.53

\* Number of Lost Time incidents x 200,000 / total hours worked



## Regulatory Compliance

Both the Water and Wastewater utilities compare well from a regulatory compliance perspective with peer group utilities and maintain strong relationships with and are well regarded by regulatory bodies. Due to the more stringent provincial regulatory requirements in Alberta compared to other Canadian jurisdictions, to remain compliant the Water and Wastewater utilities must treat their water to a higher level relative to utilities in other provinces. This higher treatment requirement has an impact on the O&M costs experienced by the Red Deer treatment plants as well as the number of staff required to support this activity.

## User Rates

The utilities are currently participating in a rate model review that is expected to result in changes to the current rate structure (i.e. proportion of fixed versus consumption fees) as well as utility rate policies that provide for increased alignment with the priorities of customers and supporting rate philosophy.

When considering Red Deer's rates in relation to those of similar or regional operations, it is important to take into consideration non-discretionary fees such as the MCAF and dividends that impact the rate paid by the customer. Policies vary significantly among municipalities and utilities. Other considerations include the type of regulatory requirements and constraints facing the utilities, the type of treatment and operations and whether or not the utilities are tax supported or follow a true utility funding model and are entirely self-funded. In addition, as Red Deer has been undergoing significant capital investment for both the Water and Wastewater treatment plants, it is to be expected that these costs would be reflected in customer rates.

Non-discretionary expenditures have seen significant increases from 2007 to 2011 for both utilities, particularly the MCAF and dividend payments to the City. These factors are included in the rates charged to customers.

### Water Utility Non-Discretionary Expenditures

Non-Discretionary Expenditures	2007 Actuals	% change	2008 Actuals	% change	2009 Actuals	% change	2010 Actuals	% change	2011 Actuals	2007 to 2011 % change	2012 Budget
Municipal Consent and Access Fee (MCAF)	602,397	65.1%	994,269	70.4%	1,694,445	12.9%	1,913,570	34.8%	2,578,580	328.1%	2,736,745
Dividend	724,255	61.2%	1,167,643	9.6%	1,279,583	(19.8%)	1,026,510	37.9%	1,415,865	95.5%	1,466,306
Corporate Cost Allocations	680,668	(5.5%)	643,144	4.8%	674,214	18.9%	801,380	(4.0%)	769,427	13.0%	843,212
Reserve Transfers	2,933,833	2.6%	3,009,936	65.1%	4,968,841	(2.6%)	4,838,838	(7.0%)	4,501,386	53.4%	5,393,545
<b>Total</b>	<b>\$ 4,941,153</b>	<b>17.7%</b>	<b>\$ 5,814,992</b>	<b>48.2%</b>	<b>\$ 8,617,083</b>	<b>(0.4%)</b>	<b>\$ 8,580,298</b>	<b>8.0%</b>	<b>\$ 9,265,258</b>	<b>87.5%</b>	<b>\$10,439,808</b>

### Wastewater Utility Non-Discretionary Expenditures

Non-Discretionary Expenditures	2007 Actuals	% change	2008 Actuals	% change	2009 Actuals	% change	2010 Actuals	% change	2011 Actuals	2007 to 2011 % change	2012 Budget
Municipal Consent and Access Fee (MCAF)	753,329	(14.5%)	643,858	73.2%	1,115,355	15.6%	1,288,812	61.2%	2,077,387	175.8%	2,172,937
Dividend*	-	N/A	1,252,827	7.9%	1,351,814	(8.6%)	1,235,591	(8.0%)	1,137,288	N/A	1,183,251
Corporate Cost Allocations	557,472	(6.1%)	523,261	19.3%	624,299	22.2%	763,165	1.5%	774,655	39.0%	819,334
Reserve Transfers	4,446,903	(16.2%)	3,726,221	10.0%	4,099,496	16.7%	4,782,683	2.7%	4,912,957	10.5%	6,832,667
<b>Total</b>	<b>\$ 5,757,704</b>	<b>6.7%</b>	<b>\$ 6,146,167</b>	<b>17.0%</b>	<b>\$ 7,190,964</b>	<b>12.2%</b>	<b>\$ 8,070,251</b>	<b>10.3%</b>	<b>\$ 8,902,287</b>	<b>54.6%</b>	<b>\$11,008,189</b>

\*\* % change in Dividend not calculated as 2007 Dividend payment was zero

However, the MCAF and dividend payments provide significant benefit to the City as additional sources of revenue, with the Water and Wastewater utilities providing approximately \$7.2 million (\$4.0 million from Water and \$3.2 million from Wastewater) in 2011, and this must be taken into consideration when deciding policy around these expenditures. Reserve transfers have also been increasing, and given that the utilities are



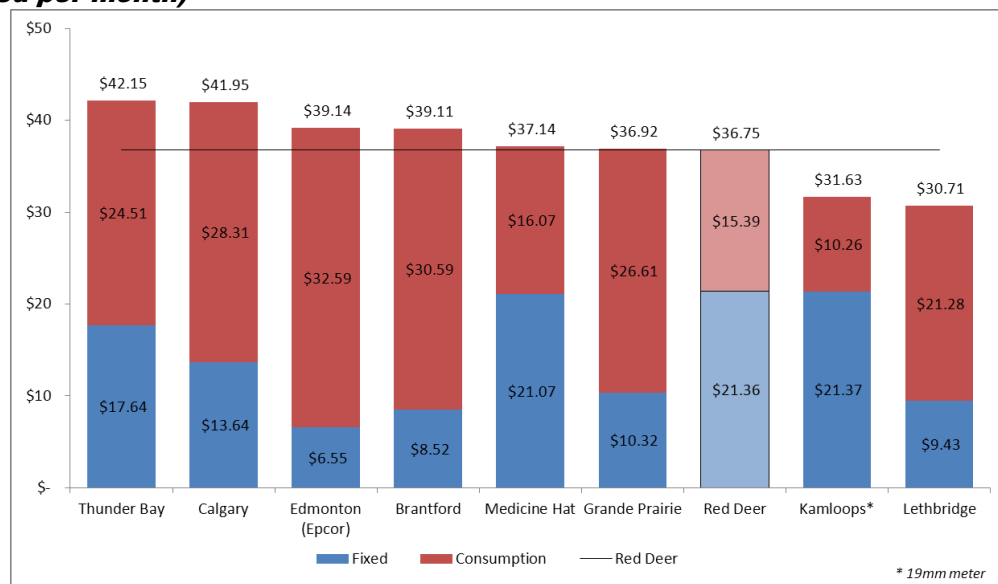
subject to regulated debt ratio constraints, the accumulation of reserves is necessary to support the planned capital expansion and improvement programs.

When reviewing the different water and wastewater rates it is important to take into consideration the difference in non-discretionary expenditures paid by the utilities to the City in which they operate. The Red Deer Water and Wastewater utilities each pay a Municipal Consent and Access Fee (MCAF), commonly referred to as an access fee or franchise fee, as well as an annual dividend to the City. Of the included benchmark utilities, Epcor, Aquatera and the Calgary Water and Wastewater utilities pay both dividends and franchise fees, the Lethbridge water utility transfers an amount set percent of water revenues to the City of Lethbridge's general fund for relief of taxation, and the other benchmark utilities pay neither franchise fees nor dividends. Like the Red Deer utilities, all benchmark utilities are fully costed.

### Water Utility

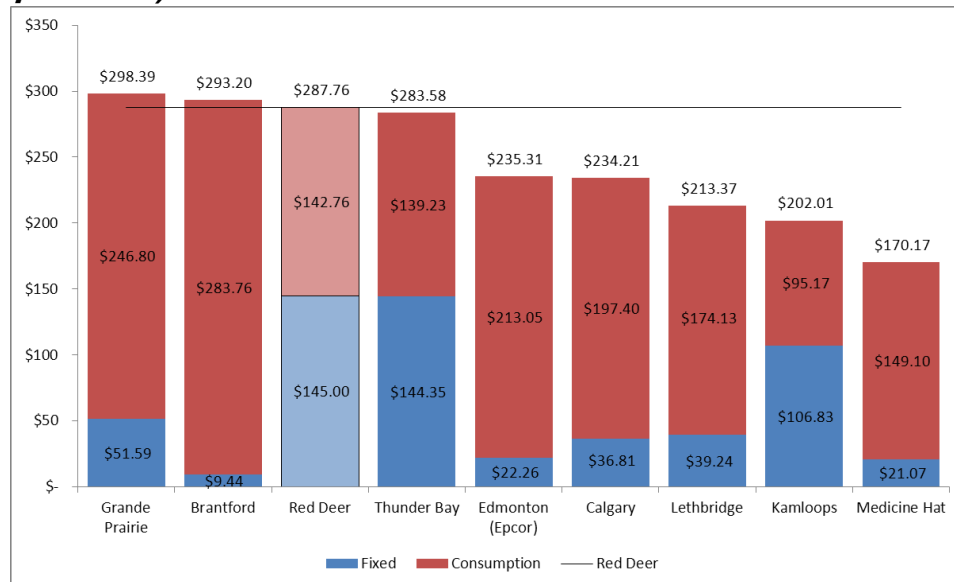
Under the current model, water customers pay a comparable rate relative to similar and regional utilities, with residential customers paying slightly less than average and commercial customers paying slightly more than average.

#### **Water Utility Typical Residential Water Bill (16mm meter; average of 19 M3 water consumed per month)**





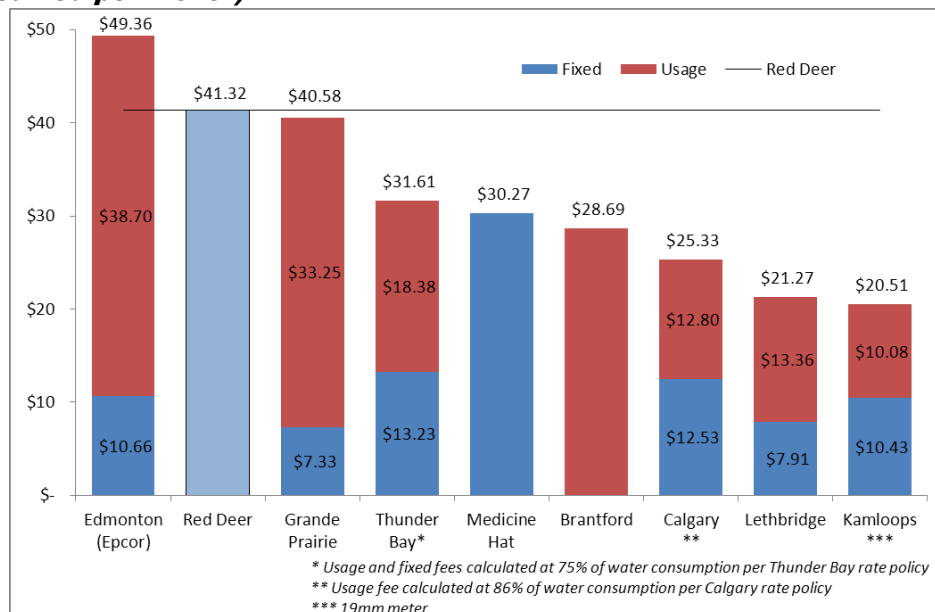
**Water Utility Typical Commercial Water Bill (40mm meter; average of 176 M3 water consumed per month)**



**Wastewater**

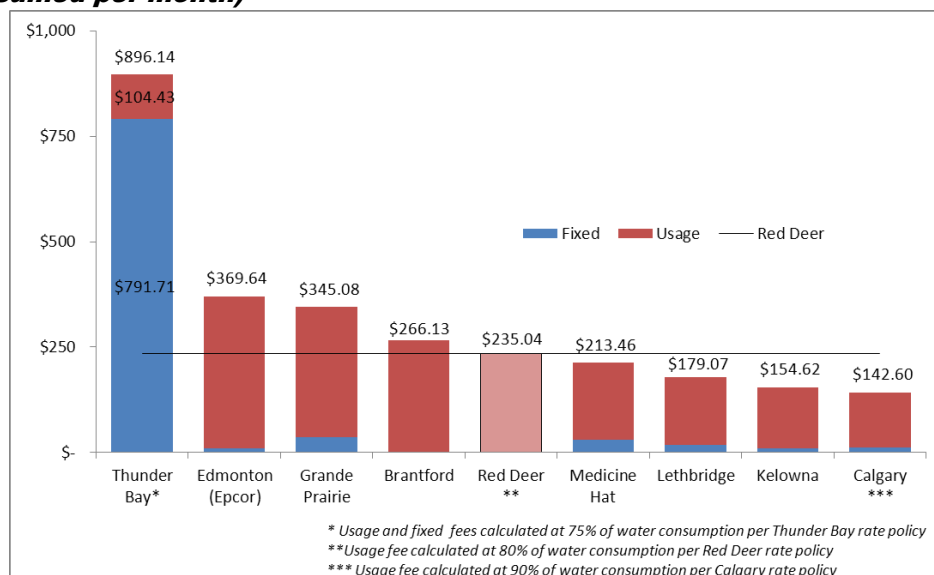
Residential wastewater customers pay a higher amount than most comparators and this fee is entirely fixed with no usage component. Wastewater charges for commercial and industrial customers are entirely usage-based and fall into the middle relative to similar and regional comparators.

**Wastewater Utility Typical Residential Wastewater Bill (16mm meter; average of 19 M3 water consumed per month)**





**Wastewater Utility Typical Commercial Wastewater Bill (40mm meter; average of 176 M3 water consumed per month)**





### **Key Recommendations**

The following are recommendations describing key opportunities for improvement. Refer to the Summary of Recommendations for a detailed list of all recommendations.

#### **Strategic Design and Alignment**

- As the City, region, and the utilities themselves continue to grow, the utilities should consider engaging in a formal cost of service analysis every three years to ensure a full understanding of all costs as they pertain to the different customer classes. In particular, as the regional commissions represent a growing customer base, it is imperative that the cost of providing services to these customers is well understood.
- Clear rate-setting philosophies should be identified and prioritized by Council. The prioritization of these philosophies should endeavour to reconcile the often conflicting objectives of utility revenue stability and conservation pricing. Current initiatives are underway to address this.
- While they are separate entities, the Water and Wastewater utilities should consider capital investment and rate increases holistically, as they appear to the customer as one function. Where there are options to defer capital investments between the two and smooth the impact on the customer the utilities should take advantage of this. This approach could help to mitigate rate shock by introducing a number of smaller increases over a longer period of time rather than requiring a few significant increases over a short period of time.

#### **Management and Execution**

- The utility has begun to explore some opportunities to achieve better control over the increasing unmetered water losses, including the installation of meters on water trucks used by other City departments such as Parks, Recreation and Culture, and should be supported in these endeavours.
- Develop a clear and specific succession plan that addresses upcoming retirements and potential knowledge gaps that may arise. This is particularly important for the Water utility, where issues of succession are more immediate.

#### **Citizen, Customer and Stakeholder Engagement**

- The utilities should take steps to begin the design of a program to facilitate the tracking and reporting of response times to emergencies, non-emergencies, return to service, customer inquiries and customer satisfaction.

#### **Monitoring, Measurement and Results**

- The utilities should develop Water and Wastewater specific scorecards, potentially building on the Balanced Scorecard template, to identify and track specific operational metrics that are key indicators of performance.
- Given the magnitude of effort that goes into preparing and submitting the AECOM benchmark data, a greater level of analysis should be undertaken once results are obtained to understand trends and differences and identify areas where improvements could be made.





# Methodology

This Value for Money (VFM) audit was designed to incorporate six main phases of activity:

1. Project planning and start-up;
2. Confirmation of the evaluative framework;
3. Data gathering;
4. Performance benchmarking;
5. Analysis and development of recommendations; and
6. Reporting.

## ***Project Planning and Start-Up***

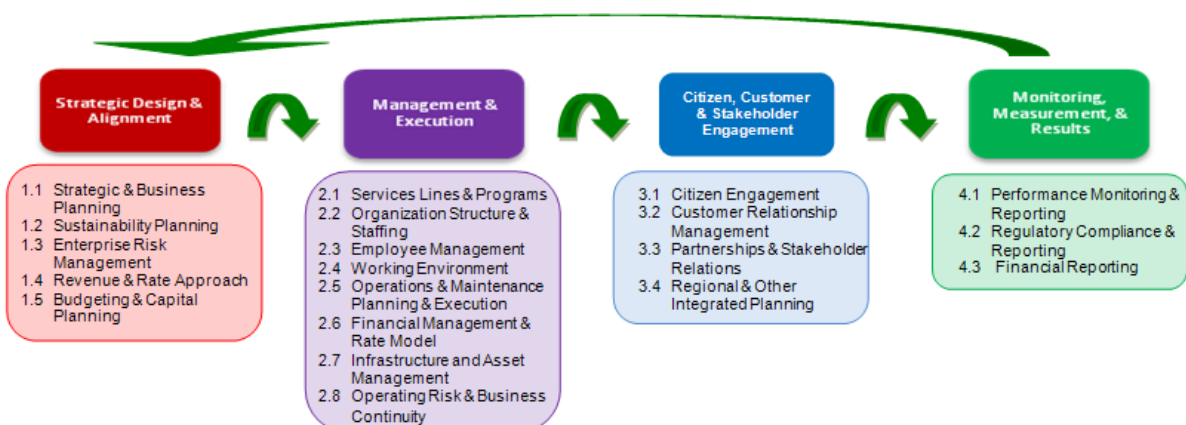
A kick-off meeting was held with the project Steering Committee in April 2012, following which a comprehensive project work plan was developed detailing the activities to be carried out during each component of the data gathering, benchmarking, analysis and reporting phases.

## ***Evaluative Framework***

As part of project planning, the customized evaluative framework developed for the VFM audit of the City of Red Deer's (the City) Electric utility - designed to be applicable not only to the utility, but to other City departments, utilities and functions as well- was tailored for the Water and Wastewater utilities, reviewed and confirmed (see **Appendix A** for the evaluative framework). This framework represents a best practice approach integrating analysis of management practice, documentation, and metrics through the application of specific diagnostic questions. The result was a structure that focuses on four main strategic areas:

1. Strategic design and alignment;
2. Management and execution;
3. Citizen, customer and stakeholder engagement; and
4. Monitoring, measurement and results.

Beneath each of these strategic areas are three to eight functional areas that guide the analysis and allow for specific focus on critical areas. While it is recognized that not all areas apply to all City departments or utilities (e.g. regulatory compliance and reporting), the application of a consistent model allows for better comparison and alignment between the various functions and a better understanding of the Value for Money provided by each.



Business Sphere	Business Attribute	Best Practice Assessment			Criteria (Diagnostic Questions)	
		Management Practice	Documents	Measures/Metrics	General	Department/Utility/Function Specific
Which business sphere is being evaluated?	Which business attribute is being evaluated?	What best practice management practices are typically seen when managing this business attribute?	What best practice documents are typically used when managing this business attribute?	What best practice measures/metrics are typically used to assess the effectiveness and efficiency (VFM) of this business attribute?	What questions relevant to overall management need to be answered about this business attribute in order to evaluate it?	What questions specific to this department/utility/function need to be answered about this business attribute in order to evaluate it?
i.e. Strategic Design and Alignment	i.e. Working Environment	<ul style="list-style-type: none"> <li>Assessed via interviews and documents</li> </ul>	<ul style="list-style-type: none"> <li>Assessed to provide evidence of management practice and measures/metrics</li> </ul>	<ul style="list-style-type: none"> <li>Assessed via documents and benchmarking</li> </ul>	<ul style="list-style-type: none"> <li>Developed based on management practice, documents, measures/metrics</li> </ul>	<ul style="list-style-type: none"> <li>Developed based on management practice, documents, measures/metrics</li> </ul>

### Data Gathering

Following the design and approval of the evaluative framework, data gathering was comprised of two primary components. The first was an extensive document review (see **Appendix B** for a list of documents reviewed) that included documents provided by City and utility staff and external stakeholders as well as information obtained from the City's web site. Secondly, 28 interviews were conducted with City and utility staff (25) and key external stakeholders (three). **Appendix C** contains a list of interview participants and **Appendices D** and **E** present the internal and external interview guides, respectively. These interviews were conducted in person or over the phone as logistics permitted, and were held May through July 2012. A summary of the feedback obtained during the interviews as well as the documents reviewed can be found in **Appendix F**.

### Performance Benchmarking

A benchmarking initiative was undertaken consisting of two components. Quantitative information was gathered from the National Water & Wastewater Benchmarking Initiative 2011 Confidential Report produced by AECOM. Building on this quantitative information, nine water and wastewater utilities were approached to provide supplemental information on items such as fiscal policies, organizational structure, strategic planning, etc. Potential organizations were contacted and asked to support the initiative by filling out a questionnaire and participating in a short telephone interview. Five municipalities / utilities participated in the interview process, including the City of Brantford, the City of Calgary, the City of Chilliwack, Epcor (Edmonton), and Aquatera (Grande Prairie). Rates and publically available information were collected for the organizations unable to participate in a detailed interview, including Kamloops, Lethbridge, Medicine Hat, and Thunder Bay. See **Appendix G** for a list of benchmark organizations and contacts and **Appendix H** for



the benchmarking questionnaire. Information obtained during the benchmarking process has been summarized and is provided in **Appendix I**.

### ***Analysis and Development of Recommendations***

Results from the data gathering and performance benchmarking phases were integrated into the evaluative framework and used to develop recommendations for each functional area. A preliminary draft summary of findings and recommendations was presented to the project Steering Committee in August 2012.

### ***Reporting and Presentations***

Feedback from the Steering Committee on the preliminary draft summary of findings and recommendations was gathered and integrated into the draft report where appropriate.

*Note: Efforts were made to provide timely, quantitative operational results that represent the utilities as they currently function. However, due to the complex nature of the calculations required for AECOM benchmarking, coupled with software challenges that prevented access to some information, it was not possible to acquire the necessary “denominator” information (e.g. actual FTEs, km of pipe, etc.) and therefore calculate certain 2011 comparative numbers. However, as these values would have been only one data point on a subset of charts and tables, it is our view that the findings and recommendations presented in this report would likely not have been impacted by their inclusion.*



## A Note on Benchmark Comparisons

The Water and Wastewater utilities track numerous metrics as part of regulatory requirements and participation in the AECOM national water and wastewater benchmarking initiative. The AECOM Canadian municipal benchmarking initiative is a comprehensive annual study that compares 34 water utilities and 39 wastewater utilities (and 16 stormwater management programs) on a wide variety of measures, including reliability, safety, staffing, cost, environmental impact, etc. The study emphasizes the comparability of the organizations included in the review, and breaks the utilities into smaller groups depending on their size and the nature of their operations to ensure that individual comparisons are appropriate and meaningful. Information is collected and presented for the overall utilities and also breaks out the distribution and collection aspect of operations from the treatment operations. In most cases, the City's utilities compare very well, and many of these benchmarking results have been presented throughout this report.

It is important to note that, although AECOM goes to great effort to make the utilities as comparable as possible and in many cases compares only subsets of the data to provide more meaningful and relevant comparisons, benchmarking data should not be relied upon in isolation as many factors (e.g. the size, particular operations, types of treatment, geological factors, population density, climate, regulatory factors etc.) can have a significant impact on the operations of a given utility, and it is simply not appropriate to make absolute comparisons between different utilities. Further, interpretation of information to be included in specific metrics can also vary between utilities, which can lead to significant differences in costs for various metrics. As a result, all benchmarking data should be considered from a relative perspective rather than an absolute perspective.



# Department and Utility Profiles

## **Environmental Services Department**

The Environmental Services (EVS) department houses several sections, including the Water and Wastewater (including Storm) utilities, Waste Management, Construction and Maintenance (C&M), and Environmental Initiatives. EVS also has a small administrative group that provides support to all of these sections.

The EVS mandate includes providing leadership in environmental protection and sustainable service for Red Deer and Regional Partner citizens through:

- The treatment and distribution of safe, reliable drinking water;
- The collection and treatment of wastewater from households and businesses;
- The collection and disposal of solid wastes, with emphasis on recycling and reuse where feasible;
- The collection of storm water runoff; and
- Engaging, educating and partnering with the community to enhance environmental initiatives.

As a whole, the EVS department is responsible for the Water Treatment Plant (WTP), the Wastewater Treatment Plant (WWTP) and the water distribution system and wastewater collection network, the stormwater collection network, the waste management facility and garbage and recycling collection, and City-wide environmental initiatives and programs including the City's Environmental Master Plan (EMP).

## **Water Utility**

The Water utility has three primary areas of responsibility: the WTP, the water distribution system, and the installation and maintenance of water meters.

Water from the Red Deer river enters the WTP where it undergoes treatment to remove pathogens and chemicals of concern. The water undergoes a multi-stage treatment process that includes rough screening, clarification (including coagulation, flocculation and sedimentation), filtration, chemical disinfection, Ultraviolet (UV) disinfection, fluoridation, stabilization, and chloramination. All of these steps and processes are carefully designed and monitored to ensure that the water output from the WTP meets Alberta Environment and Sustainable Resource Development (AESRD, formerly Alberta Environment) water quality standards specified in the City's water license.



Once treated, the water output from the WTP is transmitted to customers through the City's water distribution system. This system consists of more than 590 km of pipe, five storage reservoirs and one booster station. The storage reservoirs are used to store water for fighting fires and other emergencies as well as to help balance peak demand. The booster station, in conjunction with large vertical turbine pumps at the treatment plant, ensures adequate pressure is available to move the water through the system. In addition to the primary distribution infrastructure, the water distribution section also manages all hydrants, valves and meters, as well as the installation and disconnection of services.

### **Wastewater Utility**

The Wastewater utility is responsible for wastewater (sanitary sewer) systems collection, storm sewer systems collection (out-of-scope for this review), and the WWTP. Activities carried out with respect to the wastewater collection system include inspection and cleaning of the mains.

The WWTP treats all waste flowing from the residential, commercial and industrial wastewater collection system. Wastewater is fed into the WWTP through gravity force as well as lift stations. The wastewater (influent) undergoes an initial separation process involving large solids screening and testing, grit traps to remove small inert solids such as sand, and the primary clarification process that separates sludge from scum. At this point the sludge enters the liquids treatment process while the scum undergoes the solids treatment process.

During liquids processing, the sludge is transported to a Biological Nutrient Reactor (BNR) where it is mixed with living microorganisms to breakdown the waste into less harmful substances. Following the BNR process, the wastewater undergoes secondary clarification where any remaining solids are settled out and returned to the WWTP for additional treatment. At this point the resulting liquid undergoes an ultraviolet (UV) disinfection process to deactivate microorganisms such as *E. coli* before being released back into the Red Deer River.

The processing of wastewater solids begins with the scum entering the Dissolved Air Flotation Thickener (DAFT) process where suspended solids are separated from the remaining sludge. The sludge is returned to the liquids processing stream while the suspended solids are sent to the anaerobic digesters where they are broken down by anaerobic microorganisms into biosolids (fertilizer) and gas (methane). Some of the methane is used to heat digester influent and the remainder is burned in flare stacks. The biosolids are pumped into holding lagoons where gravity separates the remaining liquid from the solids. The liquid is returned to the WWTP and undergoes liquid processing, and the solids remain in the lagoon for one year before being applied to farmland as fertilizer.



# 1 Strategic Design and Alignment

## 1.1 Strategic and Business Planning

### City of Red Deer

Overall strategic direction for the City is set by Council through the priorities and goals identified in the Strategic Plan. This plan is prepared every three years following the municipal elections, with the most recent document approved in the summer of 2011, but the City and its departments engage in strategic planning activities on an ongoing basis. The City is in the process of transforming the way strategic planning is undertaken as it moves to a vision driven planning framework, which is a recognized strategic planning methodology.

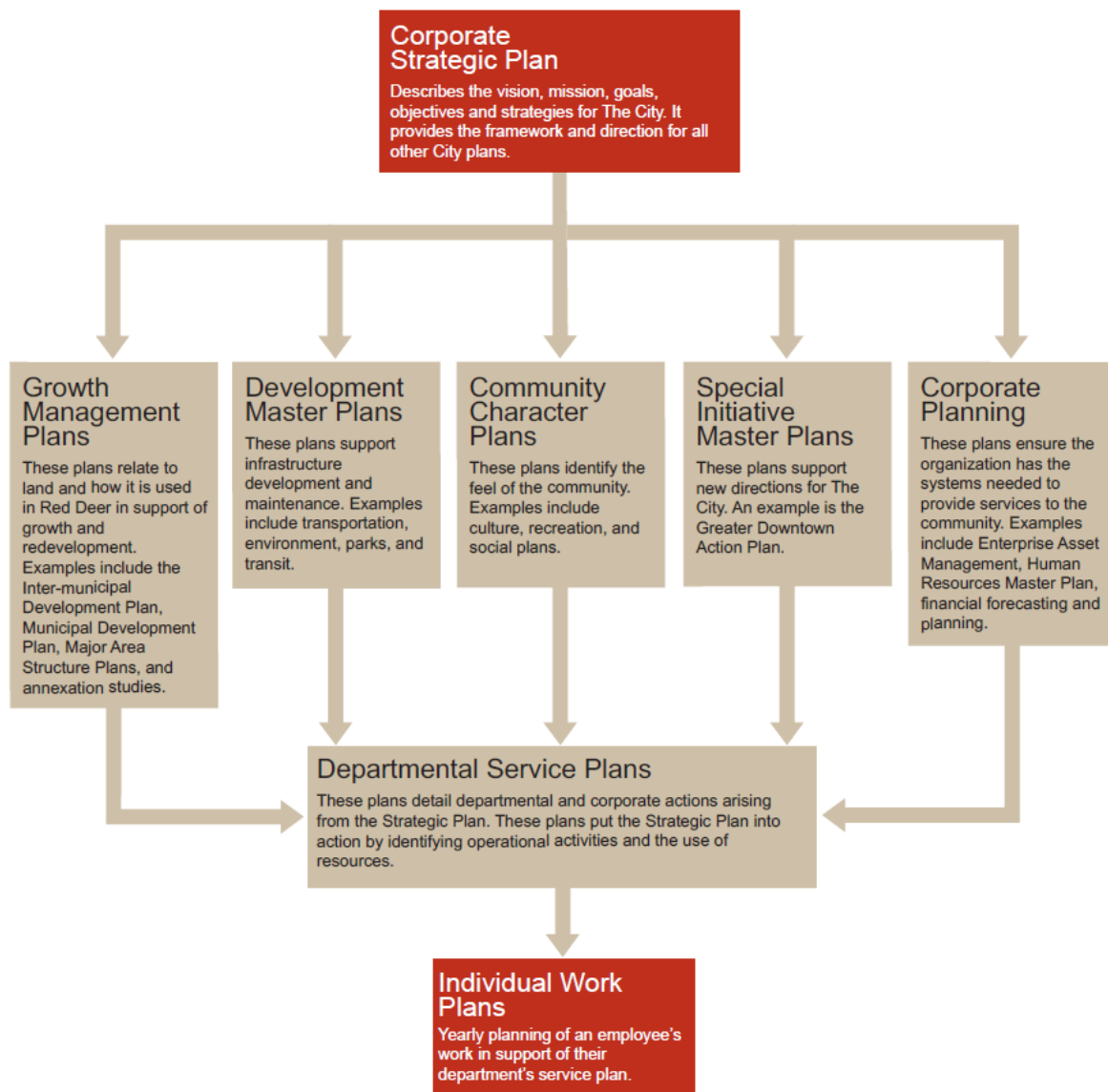
Driven by a three-pronged vision of innovative thinking, inspired results and vibrant community, and a mission of working together to provide leadership and sustainable municipal services for the community, the Strategic Plan outlines six themes for strategic direction: economy, design, movement, identity, safety, and dialogue. These themes are intended to support the City's Administration in implementing strategies that support a healthy, vibrant and sustainable community, and aim to unleash innovation, foster creativity and invite participation. Looking inward, the City has identified three internal charters to guide sustainable operations: effectiveness, people and governance. Sustainability is described as being comprised of five general elements: environmental, cultural, economic, social sustainability, and governance. The Strategic Plan is intended to direct long term vision and goals and as such does not detail specific implementation plans for achieving these.

Initiating the implementation plans for this strategic direction is the responsibility of City Administration, and is described at a high level in the City's Internal Effectiveness Charter. This document shows plans and initiatives for improving performance management, strategic planning, business planning and budgeting, and financial management and sustainability for the City. These high-level descriptions identify lead departments, timelines, desired outcomes, and organizational support and financial resources available to facilitate the achievement of these outcomes, and act as a solid framework for guiding more specific work which is described in further detail in individual department Service Plans.

Figure 1 illustrates the strategic planning linkages between the plans prepared by the City and its various departments and functions:



Figure 1: City of Red Deer Strategic Planning Linkages



2

The City's Strategic Plan is linked with numerous other City documents, including Growth Management Plans, Development Master Plans, Community Character Plans, Special Initiative Master Plans, and other Corporate Plans. These plans are linked to individual Departmental Service Plans, which are linked to the departments' project plans, policies and procedures, and individual Work Plans for employees.

All City departments prepare an annual, three-year Service Plan based on a standard format. These plans include the department mandate, historical and proposed FTE requirement, a summary of activities

<sup>2</sup> Source: Red Deer Environmental Master Plan



undertaken during the previous year, a SWOT analysis for the upcoming year, priority actions to be undertaken by the department during the three-year period covered in the Plan and their anticipated outcomes, links to the City's overall Strategic Plan, funding adjustment recommendations, future considerations, and a department organizational chart. While the departmental Service Plan includes comments summarizing activities undertaken during the previous year, it does not reference previous actions or goals and therefore does not indicate whether all intended initiatives have been successfully completed.

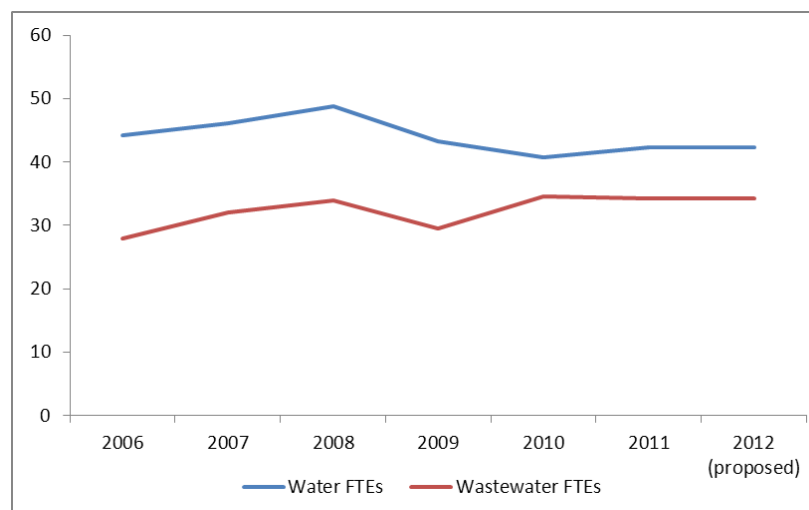
### **Environmental Services Department Service Plan**

The EVS department includes multiple sections in addition to the Water Treatment and Distribution and the Wastewater Collection and Treatment sections. These include: Storm Drainage, Waste Management, Construction and Maintenance, Environmental Initiatives, Environmental Planning, and Administration. As a result, the department's 2012-2014 proposed Service Plan includes mandates, actions, and other references to these sections which are beyond the scope of this review. The mandate items of the EVS department specifically relating to Water and Wastewater are:

- Treatment and distribution of safe, reliable water for household, business, fire protection, and other uses; and
- Collection and treatment of wastewater from households and businesses to protect the health of our citizens, the river habitat and downstream users.

Responsibility for carrying out these mandates fall to utility staff. Full-time equivalent employees (FTEs) for the Water utility increased from 2006 to 2008 before decreasing to a low point in 2010. The proposed FTE allotment for 2012 represents only a small increase over 2010 levels and no increase compared to 2011. Wastewater utility FTEs trended slightly upward from 2006 to 2008 and have remained fairly stable at this level since 2010. Changes in budgeted FTEs between 2006 and 2012 (proposed) are shown in Figure 2.

**Figure 2: Water and Wastewater Utility Budgeted FTEs**





The 2012-2014 Service Plan proposes no change to budgeted FTEs for the 2012 year. In 2012, the Water section comprised 40.6% of EVS' budgeted FTE allotment (42.3 out of 104.3 total FTEs in the department) and Wastewater comprised 32.8% (34.2 out of 104.3 total FTEs).

It should be noted that the FTE numbers presented in Figure 2 differ from those reported to AECOM for use in benchmark calculations. To support comparability across a variety of organizational structures, AECOM requests that participants calculate FTEs to include all actual time (including overtime hours) charged to each utility, regardless of whether the individual charging the time is considered to be an FTE within that utility. For example, in Red Deer's case AECOM FTE calculations would include hours of work performed by Engineering department staff in support of Water or Wastewater utility activities.

The 2012-2014 Service Plan describes innovative activities undertaken during the 2011 year, which included the modification of operator shifts at the WWTP (expected to result in a reduction of annual personnel costs of \$3,000 and an increase in productive staff time at an estimated value of \$15,000) and the creation of an Energy Task Force at the WTP to monitor and reduce power and gas consumption at the plant.

With these changes implemented, a Strengths-Weaknesses-Opportunities-Threats (SWOT) assessment conducted on the EVS department identified the following:

- Strengths: experienced and committed workforce, well maintained equipment and infrastructure, positive relationships with partners and customers, successful implementation of the Hansen work management system.
- Weaknesses: pressure to overextend resources, challenges in responding quickly to changing conditions, staff and equipment.
- Opportunities: regional service expansion, plant upgrades to enhance energy and operational efficiency, environmental improvements (in alignment with the Environmental Master Plan).
- Threats: retirement of key staff over the next five years, maintaining a competitive compensation structure in an improving economy, more stringent environmental regulation and resulting higher costs, continuing capital growth and refurbishment as well as compliance with regulatory requirements leading to an increased requirement for debt and higher rates for customers, volatility in the cost and availability of materials and equipment.

This SWOT analysis was then applied to shape the priority actions to be undertaken during the 2012-2014 timeframe of the Service Plan, which include:

- Upgrades to the WTP, including the replacement of the chlorine gas system with on-site generation, workspace expansions and system upgrades/renewal for chemical feed and containment, controls, security and HVAC.
- Upgrades to the WWTP, including capacity expansion, digester improvements, control upgrades, standby power, and cogeneration.
- Continued implementation, monitoring and reporting of actions identified in the Environmental Master Plan (EMP) pertaining to the Water and Wastewater utilities.



- Study on the Red Deer river and tributaries to evaluate the City's pollutant loading and the river's capacity to assimilate.

In EVS, prioritization of activities is first carried out through management meetings involving the department Manager and sectional Superintendents, Lead Operators, Plant Supervisors, as well as others who are involved in the activities or topics under discussion. The prioritization process also involves several meetings with the Division Director and City Manager. During this process the department must remain mindful of budget requirements, the approval of which is ultimately at the discretion of City Council, and as a result, the prioritization process considers not only operational but also financial needs. As described in the 2012-2014 Service Plan, changing operational and financial projections for both the Water and Wastewater utilities has resulted in the deferral of several projects to future years or indefinitely.

For sections within the EVS department, alignment with the City's Strategic Plan is primarily achieved through the actions identified in the EMP. While numerous initiatives are identified for completion in 2012 in the EVS Service Plan, the only initiative specific to the Water and Wastewater utilities is the development of water conservation standards for City-owned buildings. In addition to the initiatives outlined in the EMP, the City's Effectiveness Charter indicated that the Water and Wastewater utilities would participate in this VFM audit to support the development of a City-wide performance management strategy.

The EVS Service Plan also describes funding adjustment recommendations for the utilities within the department. Comments regarding the Water utility include:

- The ongoing need for the utility to acquire funding from service fees to support capital expenditures for regulatory compliance, growth, safety and reliability of the system.
- The deferral to future years of capital construction projects, including the Residuals Management Facility and filter upgrades, and the indefinite deferral of the Automatic Metering Infrastructure (AMI) installation.
- A proposed rate increase of 9% for 2012 to support capital projects (compared to the 12% increase anticipated in the 2011 rate model).
- Projected debt of nearly \$60 million over the next ten years (approximately 160% of revenues) with peak repayment costs of 20% of revenues.

Comments within the funding adjustment recommendations specific to the Wastewater utility include:

- The ongoing need for the utility to acquire funding from service fees to support capital expenditures for regulatory compliance, growth, safety and reliability of the system.
- The deferral to future years of capital construction projects.
- A proposed rate increase of 9% for 2012 to support capital projects (equal to the 9% increase anticipated in the 2011 rate model).
- Projected debt of nearly \$50 million over the next ten years (approximately 150% of revenues) with peak repayment costs of 16% of revenues.



Over the next three years, the Water and Wastewater utility rates are expected to increase by 9% each year. These increases are deemed necessary to support capital construction while avoiding excessive debt. However, this projection is based on the “old” rate model, which will be replaced by projections derived from the new model developed during the rate model review project (currently underway and nearing completion), and are therefore subject to change in future Service Plans.

The Service Plan also includes a department organizational chart and descriptions of each section (described in detail in section 2.2 *Organization Structure and Staffing* of this report).

### **Water Utility**

The Water Utility is in the process of developing “Operations Plans” for each area of its business. To support this initiative, the utility has developed a guide to ensure the plans follow a standard format and include specific components, including: a purpose or description of the section or program; high level objectives for the section or program; specific and attainable goals; a SWOT analysis; successes experienced; challenges faced; performance measures linked to the previously identified goals; a critical path including a timeline and critical tasks; methodology describing how the critical tasks will be accomplished; a communication plan including a timeline and stakeholders to be included; the resources (staff, tools, etc.) required to complete the tasks and achieve the goals; description of contracts/expenditures associated with the section or program; capital expenditures (if applicable); and any relevant appendices.

These plans are designed to support the planning and prioritization of activities, ensure activities undertaken by various areas of the utility are aligned, and enable the ongoing monitoring and evaluation of activities to ensure they are on track to achieve their intended outcomes. The utility is currently developing plans for the Water Distribution area, the WTP, and the Water Utility as a whole as shown in Table 1:

**Table 1: Water Utility Operations Plans (Planned)**

<b>Water Utility</b>	<b>Distribution</b>	<b>WTP</b>
Training	Hydrants	Process Operation (production) and Optimization
Safety / E-Response	Meters	Pressure and Flow Management
Personnel	Cross Connection / Backflow	Alarm Handling
Reporting	Valves	Lab
Asset Management	Unidirectional Flushing (UDF)	Project Integration / Coordination
Fiscal Management	Lead Services	Instrumentation / Maintenance
Water Conservation	Commissioning	Electrical Maintenance
Environmental Management (risk-based)	Customer Service (meter variance, CONP, complaints)	Mechanical Maintenance
Water Quality Management		Building Maintenance
Customer Care (outreach, education, engagement)		

The Water Distribution area has developed draft plans for hydrants, meters, valves and UDF, with the customer service plan next for development.



### **Wastewater Utility**

Beyond its inclusion in the EVS department's Service Plan, the only formal strategic planning engaged in by the Wastewater utility is its WWTP Master Plan, prepared by Stantec in 2009. This plan was intended to outline a path for ensuring adequate capacity over a fifty-year horizon, and included a review of existing liquids stream and biosolids management processes as well as overall plant data. The master plan recommended the immediate implementation of phase four plant upgrades, ongoing upgrading and the incremental addition of processing capacity, and a longer term project to gradually convert the biosolids management process to a thermal treatment process.

### **Link between the City and the Water and Wastewater Utilities**

While there is a clear relationship between the EVS Service Plan and the City's internal effectiveness charter, the Service Plan is not directly linked with the City's strategic direction as set by Council. In aligning with these high level strategic directions and priorities, the department's clearest link is through its mandate to treat and distribute safe, reliable water and to collect and treat wastewater to protect the health of both people and the environment.

It is understood that City Council and Administration want to see the utilities place more strategic attention on promoting water conservation through both the rate model and customer education. However, it is important that all parties recognize the importance of balancing increased conservation with the potential impact such a focus could have on the utility's ability to maintain sustainable, self-funded operations. As the utilities rely on the income generated by fees to maintain and expand infrastructure, it is critical that they are able to maintain rates that support these activities. Shifting the rate model to be more heavily weighted toward variable fees, particularly within the Water utility, has some potential to influence customer demand by encouraging conservation, but this would reduce guaranteed income through fixed fees while also potentially lowering income from variable fees (if customers take advantage of the conservation incentive as anticipated). This would negatively impact revenue to support current initiatives as well as constrain future capital spending. Given the large amount of capital expansion planned for the next ten years, this could present a significant risk for both utilities.

However, over the long term it is possible that conservation could reduce capital costs if lower usage results in reduced strain on the infrastructure, which could effectively increase the useful life of the assets. Decreased demand could also reduce or delay the need for the Water and Wastewater utilities to expand capacity and therefore reduce the need to take on additional capital debt. Ultimately, it is important for all parties to understand that conservation must be a priority when operating in the municipal context as customers and citizens simply expect that the City will conduct its operations in a socially responsible and environmentally sustainable fashion.

### **Conclusions**

Both the Water and Wastewater utilities participate in business planning in the form of the City-wide Service Plan process, and supplement this planning with long term capital planning for their respective treatment plants. The Water utility has also taken the additional step of beginning the process of preparing operations plans for all aspects of its business, including the management of linear assets and their various components.





Informed stakeholders are aware of the importance of striking a balance between encouraging conservation among customers and supporting utility fiscal sustainability, and continue to seek an appropriate approach to managing this strategic issue.

### **Recommendations**

- 1.1.1** In alignment with the City's efforts, EVS should strive to improve its annual Service Plan by including linkages to operating and capital budgets and performance measures, which will measure progress toward the achievement of goals. This would include linking actions to the individual budget requests of each section and utility within the department. However, as performance measures are driven by City Administration, EVS must ensure that any performance measures presented in its Service Plan are in line with the City's direction. Further, EVS is not permitted to change the content or presentation of its Service Plan to include any additional information at this time.
- 1.1.2** The Wastewater utility may benefit from the development of Operating Plans similar to those currently being developed for the Water utility. Collaboration between the two utilities to ensure a consistent approach and format would be desirable from a departmental standpoint.

### **1.2 Sustainability Planning**

As part of a Municipal Sustainability Framework, which identifies five pillars of sustainability (cultural, social, environmental, economic, and governance), the City has developed an Environmental Master Plan (EMP). The EMP identifies goals and priority actions for seven areas: water, ecology, transportation, built environment, air, energy and waste. The goals associated with the Water focus area are to improve the quality of water resources and increase water conservation. Priority actions have been identified to help achieve this goal, including reviewing water and wastewater rate structures to draw attention to the value of water, and developing environmental standards for City buildings including water conservation measures. The Water and Wastewater utilities are currently engaged in a rate review project that is expected to result in a revised rate structure for these areas going forward, and the development of environmental standards for City buildings has been identified as an initiative to be carried out by the Water Utility in 2012 in the EVS department 2012-2014 Service Plan. The EMP also describes the intent to replace water meters with Advanced Metering Infrastructure (AMI) technology; however, due to the cost and changing regulatory requirements this has been put on hold indefinitely.

The EMP identifies metrics by which successful achievement of the above-noted goal will be measured. For water consumption, the metric is potable water consumption provided through municipal water supply, per capita (L/cap/day). This will be measured and reported separately for residential and multi-family (residential) and industrial, commercial, and institutional (ICI) customers. As of 2009, overall consumption was 424 L/cap/day. Residential consumption was 242L, ICI was 135L, unmetered water use was 47L, and municipal consumption was 5L. Targeted reductions in consumption levels are 8% from baseline by 2015, 15% by 2020, and 25% by 2035 (see Figure 3).





**Figure 3: Environmental Master Plan Per Capita Consumption Targets**

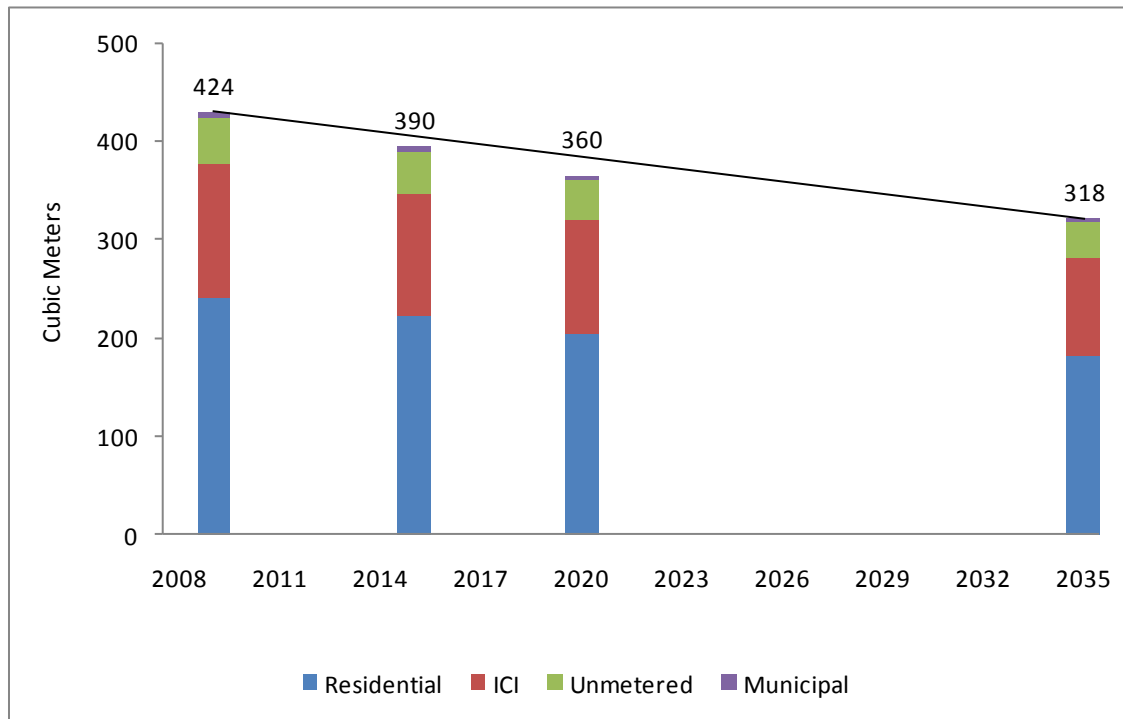


Table 2 shows the actual decrease in per-capita residential consumption to 211 L/day in 2011, a decrease of 12.9% compared to the 2009 baseline. This suggests that the utility is already achieving success beyond its anticipated reductions, and bodes well for future conservation initiatives.

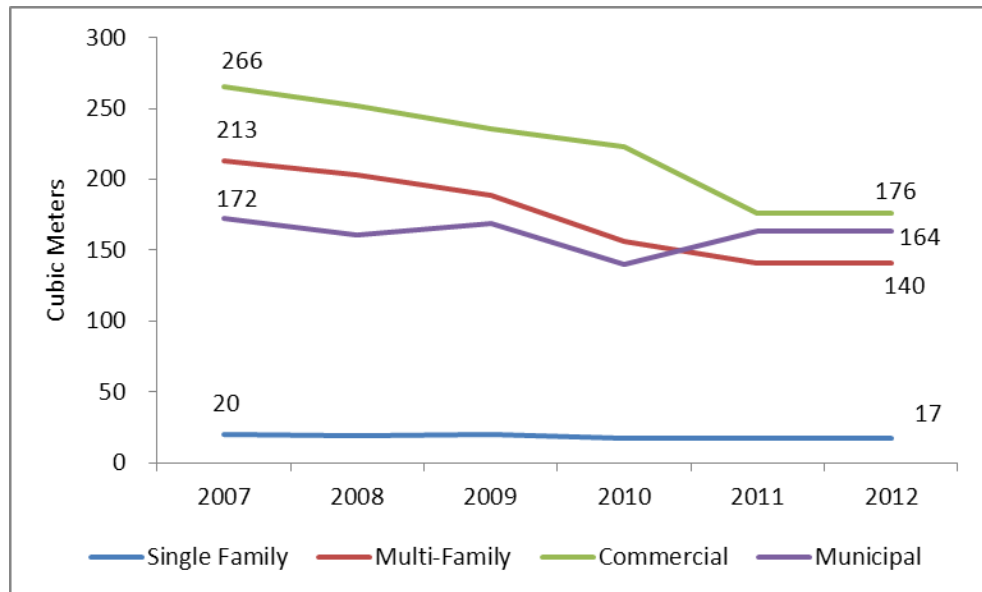
**Table 2: Residential Water Consumption Trends**

	2009	2010	2011
Red Deer Population	89,891	90,084	91,877
Total Residential Consumption (litres per day)	21,779,321	19,725,751	19,385,874
Residential Consumption (litres per Capita per day)	242	219	211
<b>% Change from Baseline (2009)</b>	<b>0.0%</b>	<b>(9.6)%</b>	<b>(12.9)%</b>

More generally, average monthly water consumption per service connection trended downward across all customer classes between 2007 and 2011: single family, multi-family, commercial, and municipal. As illustrated in Figure 4, the largest proportional decrease occurred among multi-family customers (34.2%), closely followed by commercial (34.2% decrease), single family (14.1% decrease), and municipal customers (4.9% decrease). While representing only a small proportion of overall consumption, there is an opportunity to further engage municipal customers in additional conservation efforts through activities such as the installation of low-flow toilets in all municipal buildings.



**Figure 4: Average Monthly Water Consumption per Service Connection**



Water conservation efforts have outpaced the growth in population and service connections resulting in an overall reduction in total annual water consumption. The following tables (Table 3, Table 4 and Table 5), show the percentage increase in service connections per customer class, the percentage change in total annual consumption per customer class, and the percentage decrease in average monthly consumption per customer class between 2007 and 2011:

**Table 3: Total Number of Water Service Connections**

Total Number of Water Customers (Service Connections)					
Year	Single Family	Multi Family	Commercial	Municipal	Total
2007	24,647	658	1,419	67	26,791
2008	25,702	679	1,492	70	27,943
2009	26,180	760	1,503	77	28,520
2010	26,629	866	1,514	81	29,090
2011	27,082	950	1,851	82	29,965
<b>2007 to 2011 % growth</b>	9.9%	44.4%	30.4%	22.4%	11.8%



Table 4: Total Annual Water Consumption

Year	Total Annual Water Consumption (cubic meters)					
	Regional	Single Family	Multi Family	Commercial	Municipal	Total
2007	2,480,962	5,803,238	1,685,743	4,523,749	138,380	14,632,072
2008	2,886,675	5,862,013	1,658,744	4,508,949	135,377	15,051,758
2009	2,687,333	6,225,775	1,723,677	4,253,235	155,839	15,045,859
2010	2,635,175	5,576,967	1,622,932	4,052,960	136,244	14,024,278
2011	2,638,833	5,474,699	1,601,145	3,914,778	161,089	13,790,544
<b>2007 to 2011 % growth</b>	6.4%	(5.7)%	(5.0)%	(13.5)%	16.4%	(5.8)%

Table 5: Average Monthly Water Consumption

Year	Average Monthly Water Consumption (cubic meters)			
	Single Family	Multi Family	Commercial	Municipal
2007	20	213	266	172
2008	19	204	252	161
2009	20	189	236	169
2010	17	156	223	140
2011	17	140	176	164
<b>2007 to 2011 % growth</b>	(14.1)%	(34.2)%	(33.7)%	(4.9)%

The metric identified for measuring and reporting on water quality has not yet been determined. The Wastewater Utility is currently undertaking a study that includes river monitoring to identify appropriate metrics and establish baselines and targets with the goal of having baselines established by the end of 2015. A preliminary target recommends the reduction in the number of water quality exceedences (per provincial and federal thresholds for water quality) to zero at the monitoring station downstream of the City, which is expected to be a challenge as the region expands.

For both utilities, the process of developing the EMP included input from management and supervisors within EVS as a whole as well as the Water and Wastewater Utilities specifically. As a result, the goals and metrics identified in the plan are seen to be reasonable, achievable, and measureable. Individual initiatives described in the EMP are rated according to priority and timeline. Those rated as high priority are considered those most likely to lead to successful achievement of the City's goals, while other items are included as potential short or medium term actions to be considered after high priority activities have been initiated.

### Water Utility

The 2007 Water Conservation Strategy uses a 2006 baseline consumption of 460L/cap/day (including residential consumption of 290L) when recommending a target reduction of 20% over five years (to total consumption of 368L/cap/day, including residential consumption of 232L/cap/day, by September 2012). While this target is different from that described in the EMP, the different baselines (2006 compared to



2009) account for the difference in desired residential conservation. At this time, the baseline residential consumption was lower than the Canadian average of 343L/cap/day but significantly higher than the European average of 150L/cap/day.

The Water Conservation Strategy describes several conservation programs targeted toward municipal (e.g. metering all municipal water usage, xeriscaping practices for City property, investigating alternative water sources, etc.) and public (e.g. public education campaign, rebates for low-flow toilets, rain barrel program, etc.) users. A projected annual budget is included as part of the strategy. Further, the Water Conservation Strategy also describes the potential impact of consumer water conservation on utility revenues, with the expectation that the reduced revenue could be offset by a reduced need for capital replacement and expansion resulting from a decrease in “wear and tear” on the existing system infrastructure and capacity.

While originally intended to undergo review in 2012, the primary goal identified in the Water Conservation Plan has effectively been superseded by that laid out in the EMP. However, many of the activities described in this document appear to have been effective in reducing consumption regardless of changes to the utility rate structure, and should therefore continue to be carried out or implemented as financial resources and staff capacity allow.

Many of the actions identified in the Water Conservation Strategy are communicated to customers through the Water utility website. In addition to providing water facts and general indoor and outdoor water conservation tips, the site describes how to improve the efficiency of irrigation systems and provides suggestions for water efficient fixtures and appliances. Other methods used by the City and the Water utility to expand awareness and increase conservation include hosting an event to celebrate World Water Day and the production of informational brochures describing the utility, its staff and the services they provide.

### **Wastewater Utility**

While it is challenging for the Wastewater utility to have a direct impact on water conservation, the utility does engage in efforts to educate the general public on more general wastewater management topics, including:

- Caring for hot tubs and swimming pools, including appropriate usage of the City’s storm water system;
- Protecting Red Deer’s water and describing the difference between the storm water system and the wastewater collection system (and ways citizens can reduce pollution in each system);
- A guide for food preparation facilities providing information on the proper filtration and disposal of fats, oil and grease (FOG);
- Flood protecting residential homes, including a description of backwater valve and cleanout maintenance and the importance of lot grading and drainage;
- Factors contributing to algae growth, the impact this can have on regional residents, and what the WWTP does to reduce the risk of algae blooms;
- Descriptions of the various services housed in the EVS department, including wastewater collection and treatment;



- Information on the WWTP, including a description of the main stages of the wastewater treatment process; and
- A description of water and wastewater operators, including the type of work they perform, certification required, and opportunities available in the City.

These are all important factors that impact the amount of wastewater treated by the utility and the amount and types of chemicals and other effluent flowing directly into the Red Deer river via the storm water system.

### **Conclusions**

The Water and Wastewater utilities operate under the mandate of an Environmental Master Plan. Clear metrics are in place for the Water utility and activities have been identified to help achieve these targets. The Wastewater utility is currently in the processes of establishing baselines and targets for inclusion in this plan.

While rate-setting to encourage water conservation is a key component under evaluation as part of the utility rate model review currently in progress, analysis of consumption trends over the past several years demonstrates that other conservation programs have already resulted in success in this area.

### **Recommendations**

- 1.2.1** While shifting to the conservation targets identified in the EMP, the Water utility should continue to pursue conservation initiatives and activities described in the Water Conservation Plan. This may also involve reviewing and revising this plan to align its goals with the EMP while updating and expanding potential conservation-supporting initiatives. Water conservation goals, which ultimately reduce consumption and revenue, need to be in balance with the requirement for financial stability and need to be managed accordingly.
- 1.2.2** Both the Water utility and the Wastewater utility should continue with efforts to educate citizens on appropriate water usage.
- 1.2.3** In conjunction with the EVS Storm Water section, the Wastewater utility should continue to study and identify metrics, baselines and targets for wastewater quality as per the EMP.

## **1.3 Enterprise Risk Management**

Approved in 2000 and revised in 2001, the City's Corporate Administrative Policy on Risk Management aims to establish and maintain programs to protect human life and corporate assets while managing the costs associated with these programs. Development of these programs requires the implementation of a systematic risk management process, including identification of risks, classification of risks according to frequency of occurrence and severity of impact, and development and implementation of mitigating activities where required. The document describes the responsibilities of City Administration and Management as well as other agencies or bodies that must also adhere to the policy.

While the Corporate Administrative policy describes the intent and high level responsibilities for the development and implementation of a City-wide Enterprise Risk Management (ERM) plan, this document does not constitute an ERM plan in and of itself. The City has begun the process of developing an ERM



framework, but attention has primarily been focused on supporting business continuity planning within each department and section. Responsibility for the ERM initiative falls under the Financial Services department within the Corporate Services Division.

A small number of high level financial risks are identified in the City's Annual Financial Report, but without a documented ERM plan or framework there is no clear, consistent methodology designated by the City and therefore no enterprise approach to which the Water and Wastewater utilities can link their risk planning. The City recognizes this gap and the need to improve in this area.

Even though there is no formal ERM approach or plan, the City appears to discuss enterprise risks, especially during the budget development process and on an ad hoc basis as issues arise. This results in the development of mitigation strategies and the execution of these strategies, but these do not appear to be assembled anywhere as part of an overall risk strategy document. For example, safety has been identified as a high priority risk area and strong emphasis has been placed on establishing a safety-focused culture across the entire organization.

The lack of a comprehensive ERM plan presents various challenges, chiefly among which is the difficulty in understanding which risks have been fully assessed and for which mitigation strategies have been developed. This also makes it more difficult to review previously assessed risks to determine whether they are still relevant, if they have become higher or lower priority relative to other risks, or if key factors have changed. An additional challenge associated with the lack of a formal ERM plan is that mitigation strategies are not linked to operating and capital budgets, and therefore have not been assigned resources to facilitate their implementation when needed.

### **Water Utility**

The province has enacted legislation requiring municipalities to prepare a Drinking Water Safety Plan by 2015, which includes an analysis of risks associated with source, treatment, distribution and customer service. AESRD has provided guidance documents and templates to each municipality that includes a comprehensive list of potential risks, and staff in the Water utility have established a weekly meeting in which they conduct a risk assessment for each individual item included in the template. As of May 2012, the Utility has completed the risk analysis for the "source" component and has started the analysis for the "treatment" component. The goal is to complete the risk assessment for all components by the end of 2012.

In addition to this government-mandated risk assessment, the Water utility, under the direction of the Performance Reporting Coordinator, is developing an environmental risk management plan wherein staff have been establishing a list of risks internally and then rating these according to frequency of occurrence, severity of impact, whether or not they fall under regulatory requirements, the level of controllability, and their likelihood of occurrence. The scores for each measure are multiplied to arrive at a total score and ranking for each risk.



### **Wastewater Utility**

The Wastewater utility is not subject to provincial regulation mandating risk planning. The utility has prepared a disaster plan that is currently awaiting formal approval but is being used in the interim to guide procedures.

### **Conclusions**

The City has recognized the need to design and implement a corporate-wide enterprise risk management plan, and preliminary steps have been taken to address this. The Water utility is in the process of preparing a mandatory risk management plan under provincial regulation to be enacted in 2015, and is supplementing this effort with an internally-driven environmental risk management plan. The Wastewater utility has not been subject to similar provincial regulation in terms of risk planning and although major risks appear to be well understood, the utility has not engaged in the development of a formalized risk management plan.

### **Recommendations**

- 1.3.1** The City should develop a best practice ERM framework. Once the framework has been established, City Administration should support departments in applying this framework to develop a risk plan and mitigation strategies, including linking the mitigation strategies back to operating and capital budgets when required.
- 1.3.2** The Water utility should continue with efforts to complete the Drinking Water Safety Plan risk assessment by the end of 2012. Mitigation strategies should be developed based on this assessment and the City should support their implementation where required.
- 1.3.3** The Water utility should continue to develop the environmental risk management plan currently in progress.
- 1.3.4** Leveraging the template created by the Water utility, the Wastewater utility should develop a similar risk management plan for its operations. Other tools, such as the Water Research Foundation Tool for Risk Management of Water Utility Assets<sup>3</sup>, are available for supporting utilities in developing risk frameworks around their assets.

## **1.4 Revenue and Rate Approach**

The City is in the final stages of its Rate Model Review project, which is being completed with the assistance of an external consultant. This project includes developing an overall rate approach, a rate model (including cost allocations), and formalizing and developing utility fiscal policies, which will eventually be approved by Council. The policies are currently in draft form, and include clarification around:

- Revenue obtained via specific charges for in-City customers and regional customers;
- Rate structure principles balancing conservation with utility revenue requirements, fairness and defensibility of rates, adherence of rates with regulatory and generally accepted standards, and approval of rates by Council;

---

<sup>3</sup> Available at: <http://www.waterrf.org/Pages/Projects.aspx?PID=4126>





- Debt policy, including compliance with regulatory requirements and City policy pertaining to debt acquisition and application (i.e. repayment period not to exceed the life of the asset it is funding, utility debt limit of 90% of 1.5-times utility revenue, utility debt servicing limit of 90% of 25% of utility revenue);
- Policy regarding the appropriate return on rate base, including equity (AUC generic cost of capital, currently 8.75% per decision 2011-474), deemed debt (15-year rolling average debt rate), actual debt (actual debt rate), and deemed debt/equity ratio (60/40);
- Management fees, expected to apply only to utility services where little or no capital investment or debt is required, of 2% of the cost of service;
- Municipal consent and access fees (MCAF) not to exceed 35% of total revenue, the municipal consent portion of which is applicable only to in-City customers;
- Regular dividends paid to the City on an annual basis as a return on investment;
- Special dividends paid to the City when the capital reserve has excess funds relative to the forecasted capital expenditures (as recommended by the utility and subject to Council approval);
- Capital reserves established for asset replacement, rehabilitation and acquisition, calculated at the return on rate base plus annual depreciation remaining after paying debt servicing costs and dividends. Should expected ten-year capital requirements exceed projected capital reserves plus capacity to acquire debt, a capital surcharge will be incorporated into rates; and
- Rate stabilization and operating reserves (RS&O) of 12.5% of annual cash operating expenses (45 days of operations), set aside at the beginning of the year, to mitigate the impact of fluctuations in revenue requirements on customer rates.

The draft policy also includes statements regarding reserve transfers and planning as well as transitional provisions for the implementation of the policies outlined in the document that may impact utility rates, and provides definitions for key terms used in the document. These draft policies are expected to be finalized in the summer of 2012.

Draft policies indicate that, while water conservation is a desired outcome, it is not necessarily the primary consideration when determining utility rates. According to the draft policies, there is no single priority in this regard and that conservation rates must be balanced with ensuring an appropriate level of predictable revenue to support utility operating and capital needs. It is expected that the new rates developed under the revised rate model will place greater emphasis on variable fees to support conservation priorities, while maintaining an appropriate level of fixed fees to ensure revenue stability.

Rate planning has become more complex as municipalities and utilities are faced with the disconnect between conservation pricing philosophies and infrastructure maintenance and growth pricing philosophies. The focus on ensuring utility fiscal well-being from the perspective of sustaining current and future infrastructure has led to an increase in the proportion of fixed rates which ensures the utility is able to support the maintenance and new construction necessary to provide safe and reliable service to its customers. However, high fixed fees do not provide an incentive for customers to reduce their water consumption.



Conversely, more heavily weighting fees toward consumption can lead to a situation of revenue instability, particularly if customers take full advantage of potential savings and dramatically reduce their consumption. While this scenario clearly supports the philosophy of conservation, it results in less revenue for the utility, which could be problematic if it decreases below the level required to maintain utility infrastructure. This could be partially offset by the decreased “wear and tear” on the infrastructure due to the lighter load, but could result in challenges if it does not enable the growth of reserves to support longer term replacement and growth needs. It is clear that a balance must be struck when determining the appropriate level and type of pricing that does not see rates shifting too heavily toward one extreme or the other, and it is expected that the revised rate model will take these factors into consideration when establishing the new rate structure.

Red Deer’s current rate model currently bases rates on projected revenue requirements and a 100% cost recovery shared across the rate base with no cross-subsidization between rate classes. There appears to be a good understanding of the various customer classes and cost drivers for each, and this understanding facilitates the appropriate allocation of costs among the various classes.

Rates are developed using an internally developed and maintained rate model and demonstrate a strong understanding of the relationship between utility costs and utility services provided. However, the utilities do not typically engage in formal cost of service studies, with the last formal study occurring in 2003. While the rate review project undertaken as part of the development of the new rate model is not a formal cost of service study, it includes a robust financial analysis similar to that carried out under a formal cost of service study. The development of the new rate model (which will be applied across all City utilities) will support a broader institutional understanding of the model’s inputs and considerations, which will mitigate the risk of knowledge attrition as long term staff become eligible for retirement.

Rate approach and fiscal policies for comparable jurisdictions were captured in the benchmarking exercise component of this review. This information, along with the detailed feedback on other areas described in the benchmarking questionnaire and interviews are included in **Appendix I**.

In recent years, the utility rate philosophy has been focused on supporting increased capacity through infrastructure growth. This has resulted in year-over-year double digit rate increases for both the Water (average increase of 11.8% per year between 2008 and 2012) and the Wastewater utilities (average increase of 11.7% per year between 2008 and 2012), and has raised some questions as to whether this level of rate increase is sustainable over the longer term given future plans for additional capital expansion.

When reviewing the different water and wastewater rates it is important to take into consideration the difference in non-discretionary expenditures paid by the utilities to the City in which they operate. The Red Deer Water and Wastewater utilities each pay a Municipal Consent and Access Fee (MCAF), commonly referred to as an access fee or franchise fee, as well as an annual dividend to the City. Benchmark utilities pay dividends and/or franchise fees as follows:



- City of Calgary:
  - Franchise fee is approximately \$40 million per year (this is a set fee with no clear mechanism for its calculation);
  - Dividend is 10% of the return on equity (capped at \$42.5 million).
- Epcor / City of Edmonton (Edmonton region):
  - Franchise fee paid to the City of Edmonton is 8% of qualifying water services revenues and Gold Bar wastewater treatment revenue for in-City customers (totalling \$15 million in 2011);
  - Dividend paid to the City of Edmonton is calculated as the greater of 60% of earnings or the previous year's dividend adjusted for the change in CPI, and is calculated based on Epcor's earnings as a whole (i.e. there is no set rate specific to Water or Wastewater).
- Aquatera (Grande Prairie Region):
  - Franchise fee paid to the City of Grande Prairie is 10% of utility revenue (i.e. each customer pays a fee equal to 10% of their total water and wastewater usage charges plus the fixed charges), and appears directly on the customer's bill;
  - Dividend paid to the City of Grande Prairie consists of a regular component, calculated at 5% of the value of assets transferred from the City to the utility, and a discretionary component, with the total not to exceed 35% of cash flow from operating activities (EBITA).
- City of Lethbridge: No franchise fees or dividends paid to the City. However, the water utility transfers an amount equal to 8% of water revenues to the general fund for relief of taxation.
- City of Brantford: No franchise fees or dividends paid to the City.
- City of Chilliwack: No franchise fees or dividends paid to the City.
- City of Medicine Hat: No franchise fees or dividends paid to the City.
- City of Thunder Bay: No franchise fees or dividends paid to the City.

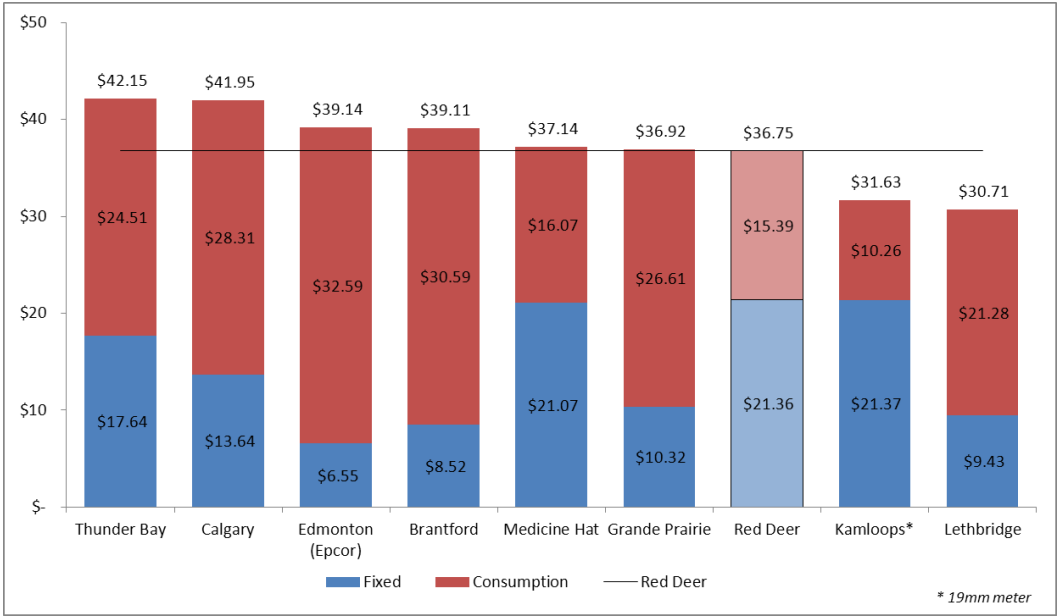
### **Water Utility**

As of March 1 2012, Red Deer's water customers pay a consumption charge of \$0.810 per cubic meter (ML) of water supplied in addition to a fixed monthly fee based on their meter size.

Rates for the typical residential water customer (with a 16mm meter and consuming an average of 22 cubic meters of water per month) are competitive when compared to similar organizations, with Red Deer customers paying slightly less than average (see Figure 5).

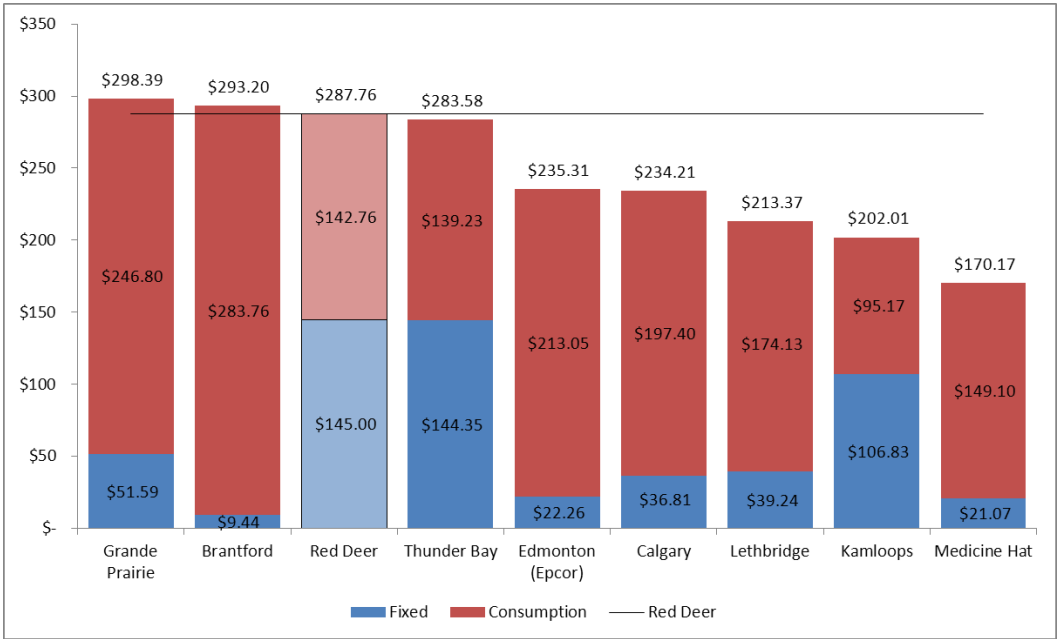


Figure 5: Typical Residential Water Customer Bill (16mm meter; average of 19 M3 water per month)



The City’s commercial customers (with a 40mm meter and consuming an average of 176 cubic meters of water per month) appear to pay costs similar to those in comparable jurisdictions. As shown in Figure 6, this is largely due to the high fixed fee the Red Deer Water utility has designated for this meter size.

Figure 6: Typical Commercial Water Customer Bill (40mm meter, 176 M3 average monthly consumption)





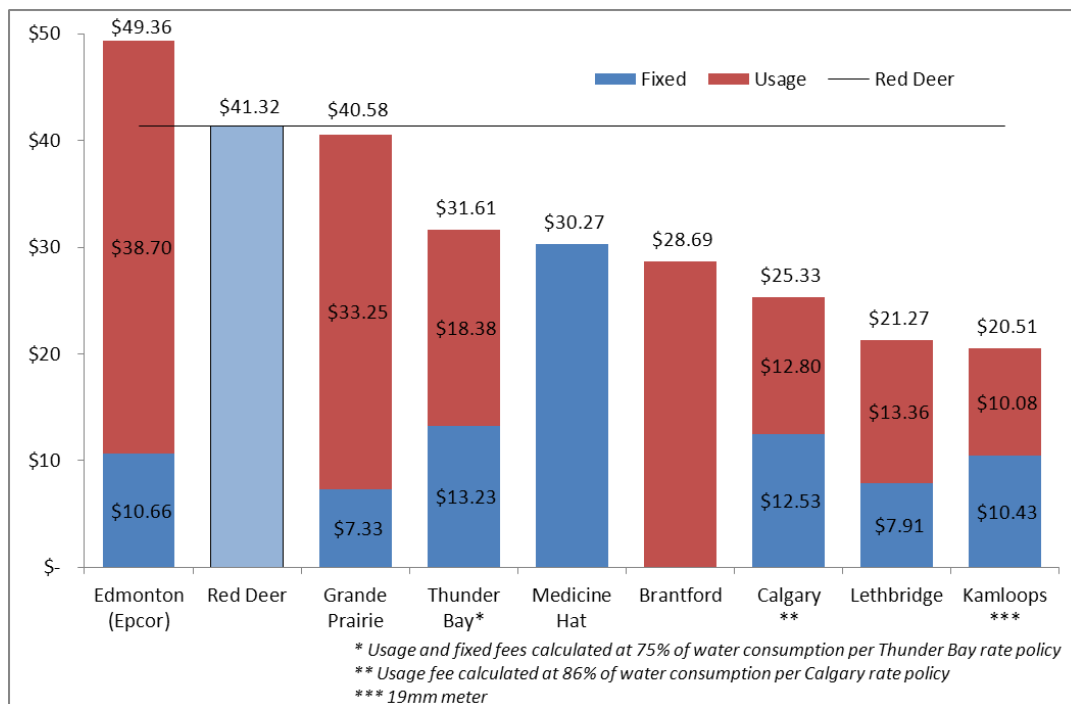
### Wastewater Utility

Red Deer's residential wastewater customers pay a fixed wastewater fee of \$41.32 per month with no volume charge. Conversely, commercial customers are charged entirely on a volume basis at \$1.67 per cubic meter (in addition to overstrength charges as necessary depending on the level of specific contaminants in the wastewater produced by these customers).

While many utilities charge wastewater usage fees based on total water consumption, others calculate wastewater usage as a discounted percentage of water consumption. Red Deer uses a usage fee discount rate of 80% of water consumption, Thunder Bay uses a discount rate of 75% for both usage and fixed fees, and Calgary uses a usage fee return factor of 0.86 for residential and 0.9 for commercial customers. Other utilities included in this rate benchmarking analysis calculate wastewater usage as equivalent to water consumption.

On average, Red Deer's residential wastewater customers pay more than comparable municipalities (producing an average volume of 19 cubic meters of wastewater per month) due to the use of a single fixed fee for residential customers (see Figure 7).

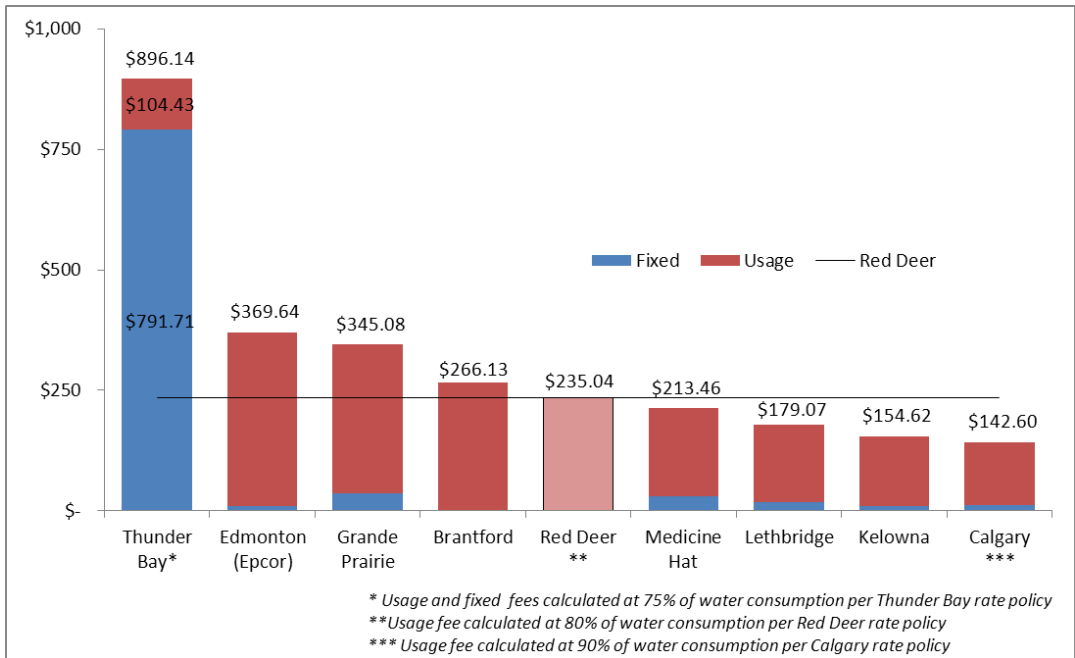
**Figure 7: Typical Residential Wastewater Customer Bill (16mm meter; average of 19 M3 wastewater per month)**





The typical commercial wastewater customer in Red Deer (producing an average volume of 141 cubic meters—80% of the average water consumption of 176 cubic meters—of wastewater per month) pays an average rate relative to comparable jurisdictions (see Figure 8).

**Figure 8: Typical Commercial Wastewater Customer Bill (40 mm meter; average of 176 M3 wastewater per month)**



**Conclusions**

The utility rate review project currently underway is expected to refine and clarify the utility rate model and policies. Given the emphasis Council has placed on encouraging conservation among customers, it is highly likely that the rate model will recommend a higher proportion of consumption fees relative to fixed fees, and a more balanced wastewater fee approach between residential and large (commercial and industrial) customers.

Under the current model, water customers pay a fairly average rate relative to the comparators presented in this report. Residential wastewater customers pay a relatively higher amount due to the 100% fixed charge and no usage fee, and wastewater charges for commercial and industrial customers are comparable.

When considering Red Deer’s rates in relation to those of similar or regional operations, it is important to take into consideration non-discretionary fees such as the MCAF and dividends that impact the rate paid by the customer. Other considerations include the type of operations and whether or not the utilities are tax supported or follow a true utility funding model and are entirely self-funded.



## **Recommendations**

- 1.4.1** All City utilities should continue to play an active role in the Rate Model Review and ultimately implement the resulting fiscal policies and rate model, providing a solid foundation for the financial management of the utility moving forward.
- 1.4.2** As the City, region, and the utilities themselves continue to grow, the utilities should consider engaging in a formal cost of service analysis every three years to ensure a full understanding of all costs as they pertain to the different customer classes. In particular, as the regional commissions represent a growing customer base, it is imperative that the cost of providing services to these customers is well understood.
- 1.4.3** Clear rate-setting philosophies should be identified and prioritized by Council. The prioritization of these philosophies should endeavour to reconcile the often conflicting objectives of utility revenue stability and conservation pricing. Current initiatives are underway to address this.

## **1.5 Budgeting and Capital Planning**

The overall City budget for 2012 is \$272 million; \$189 million of this is tax supported and the remaining \$83 million is self-supported (of which Water utility expenditure, debt payments and depreciation comprises \$14.9 million, and Wastewater utility expenditures, debt payments and depreciation comprises \$15.2 million). The City is focusing on improving the process for budgeting for outcomes and evaluating core businesses annually, which is considered to be a major undertaking.

The City prepares and releases a three-year operating budget and a ten-year capital plan, which compiles information from all City departments. The EVS department follows the same extensive, City-wide budget development process followed by all City departments, which ensures that multiple levels of both oversight and delegation of authority are present. The budget guidelines are prepared and distributed by the Financial Services department, and provide instruction regarding the responsibilities and activities to be carried out in the preparation of the City's annual budget. Each department is required to participate in this process and adhere to the provided budget development, submission and approval schedule. The EVS department has also prepared an internal budget preparation schedule highlighting key activities and responsibilities to ensure the process stays on track.

Budgets are typically based on the previous year's budgeted numbers rather than actual revenues and expenditures, and the systems used to develop and manage the budgets are considered to be accurate and user-friendly. While operating and capital budgets provide clear and appropriate direction to staff in the utilities, best practice recommends better integration between budgets and business (Service) Plans.

Some concern has been raised regarding the use of MS Excel for budget preparation as the template has resulted in errors due to various users working in the different versions of the template. It has been noted that it can be challenging to ensure that all staff have received and are using the most current version, and that this can create challenges when integrating and consolidating information for all sections within the department.





On the capital planning side, the City is currently rolling out a new asset management process, including the Hansen work management system, which will include the useful lives and replacement costs of all City assets and will feed into a decision-making tool (CityWide) to support the capital planning process. This system is relatively new and while it has been implemented in the Water and Wastewater utilities the output is still considered to be very preliminary and has not yet reached a point where staff have complete confidence in the information provided by the system.

### **Water Utility Operating Budget**

The Water utility's actual expenditures from 2007 to 2011 as well as budgeted expenditures for 2012 are presented in Table 6. Between 2007 and 2011, the Water utility's largest expense drivers fell into the operating costs category, which includes items such as salaries and benefits, vehicle and equipment expenses, corporate service charges, power and chemical expenses, etc. (see Table 7 for a breakdown of Water utility operating costs). The largest changes in operating costs occurred between 2007 and 2009 and were primarily driven by increases in salaries, power and other utilities, customer billing, and Corporate Services costs. Overall, the largest increases in operating costs were associated with non-electricity utility costs (primarily natural gas).

The percent change from 2007\* to 2011 actual expenditures varied among the expenditure categories, with the largest overall increase seen in the MCAF payment, which increased by 328% over the five-year period. This was followed by the depreciation category, where increases were largely due to the City's implementation of PSAB in 2009 and the subsequent need to restate asset values (and as a result adjust accumulated depreciation) in 2010. Depreciation was also impacted by large capital investments that occurred during the 2007 to 2011 timeframe. This also resulted in the creation of the Equity Transfer – Amortization account, which directly offsets the depreciation account. As of 2011 it is believed that all assets and their associated depreciation are correctly valued.

Other expense categories that experienced large increases during the five-year period from 2007 to 2011 included interest expenses (159% increase due to a larger amount of debt), and dividends (95% increase). While revenues increased by 60% over the period, expenditures experienced a greater increase, resulting in a decrease in return on equity over the five-year period.

*Note: A percentage change between 2007 and 2012 was not calculated given that 2012 actual results are not yet available and as aspects of the budget can differ significantly from actual expenditures results are not always directly comparable.*

**Table 6: Water Utility Revenues and Expenditures**

	2007	2008	2009	2010	2011	% Change (2007* to 2011)	2012 (budget)
Revenues	\$ 13,542,846	\$ 15,484,603	\$ 18,111,542	\$ 19,372,051	\$ 21,638,729	60%	\$ 24,100,289
Operating Costs	7,200,617	7,924,815	9,307,776	9,022,118	10,268,618	43%	11,353,435
MCAF	602,397	994,269	1,694,445	1,913,570	2,578,580	328%	2,736,745
Depreciation	1,709,311	1,824,170	4,669,379	4,116,613	4,681,541	174%	3,982,937
Interest Expense	372,435	563,770	860,901	898,567	966,170	159%	1,008,235
Return on Equity (Net Income)	3,658,086	4,177,579	1,579,041	3,421,183	3,143,820	(14)%	5,018,937
Dividend	724,255	1,167,643	1,279,583	1,026,510	1,415,865	95%	1,466,306
Reserve Transfers	2,933,833	3,009,936	4,968,841	4,838,838	4,501,386	53%	5,393,545
Debtenture Principal Payment	-	-	-	1,672,448	1,908,109	14%	2,142,023
Equity Transfer - Amortization	-	-	(4,669,379)	(4,116,613)	(4,681,542)	0%	(3,982,937)
Balance	(2)	-	(4)	-	2		-

\* Except Debtenture Principal Payment (calculated as the % change from 2010 to 2011) and Equity Transfer - Amortization (calculated as the % change from 2009 to 2011)

Water Consumption (M3)	15,239,628	15,660,012	15,663,785	14,593,733	14,348,130	(6)%	14,525,827
------------------------	------------	------------	------------	------------	------------	------	------------

The largest increases in operating costs were associated with non-electricity utility costs (primarily natural gas), which increased by 155% from 2007 to 2011 (see Table 7).

**Table 7: Water Utility Operating Costs**

	2007	2008	2009	2010	2011	% Increase (2007 to 2011)	2012 (budget)
Salaries and Benefits	2,712,384	3,081,834	3,375,927	3,545,568	4,136,651	53%	4,996,589
Power Costs	835,085	787,582	1,219,510	1,232,650	1,188,076	42%	1,248,615
Chemical Costs	985,033	820,730	989,427	860,266	1,062,381	8%	1,002,623
Other Utilities	248,943	359,872	638,711	537,839	636,024	155%	546,988
General and Contracted Services	602,909	814,211	657,991	641,673	822,969	36%	875,939
Materials and Supplies	232,684	215,764	312,523	232,223	333,109	43%	327,428
Vehicle and Equipment	518,486	595,021	583,200	526,060	697,600	35%	697,367
Customer Billing	557,834	636,047	747,324	704,720	704,630	26%	830,109
Corporate Services & Other City Departments	736,543	904,388	1,037,489	1,143,851	1,111,670	51%	1,218,702
Other Internal Transfers	(309,729)	(338,002)	(324,060)	(415,131)	(439,181)	42%	(392,436)
Other	80,445	47,368	69,734	12,399	14,689	(82)%	1,511
Sub-total	7,200,617	7,924,815	9,307,776	9,022,118	10,268,618	43%	11,353,435



Table 8 shows the 2011 Water utility operating costs as they are allocated to the WTP and the distribution system. On average, operating costs are approximately 78% applicable to the WTP and 22% applicable to the distribution system.

**Table 8: Water Utility Operating Costs by WTP and Distribution Functions**

	2011		
	WTP	Distribution	Total
Salaries and Benefits	2,864,694	1,271,957	<b>4,136,651</b>
Power Costs	1,185,789	2,287	<b>1,188,076</b>
Chemical Costs	1,062,381	-	<b>1,062,381</b>
Other Utilities	632,736	3,288	<b>636,024</b>
General and Contracted Services	655,113	167,856	<b>822,969</b>
Materials and Supplies	55,110	277,999	<b>333,109</b>
Vehicle and Equipment	308,313	389,287	<b>697,600</b>
Customer Billing	704,630	-	<b>704,630</b>
Corporate Services & Other City Departments	1,109,962	1,708	<b>1,111,670</b>
Other Internal Transfers	(481,803)	42,622	<b>(439,181)</b>
Other	14,552	137	<b>14,689</b>
Sub-total	8,111,477	2,157,141	<b>10,268,618</b>
Percentage	79.0%	21.0%	

Where the annual variance between actual expenditures differ from budgeted expenditures by  $\pm$ \$100,000, departments are required to provide an explanation of the variance. In practice, the EVS department also offers explanations for some smaller variances where the cause is specific and easily identifiable.

Analysis of the Water Utility's annual operating budget versus actual expenditures for the years 2007 through 2011 (see Figure 9) indicates that actual expenditures within the various categories tended to fluctuate around the budgeted amounts but typically remained within \$2.0 million on either side of the budget.

Budgeted depreciation consistently varies from actuals as a result of the exclusion of contributed capital from the budgeted value and the inclusion of this capital when calculating actual depreciation. This is appropriate due to the need to exclude contributed capital from the rate model as these assets cannot be used to generate a return, but must be included for depreciation once they become City assets. The temporary exceedence of actual depreciation over budgeted depreciation in 2009 and 2010 was primarily due to the City's shift to PSAB beginning in 2009.

Operating costs as a whole were consistently lower than budgeted amounts, as was interest expense (with the exception of 2007 when it was slightly higher). Actual revenues are generally fairly close to budget, but the variance appears to have widened somewhat with actuals being lower than budget by \$1.2 million in 2011.



**Figure 9: Water Utility Operating Budget-Actual Variances**

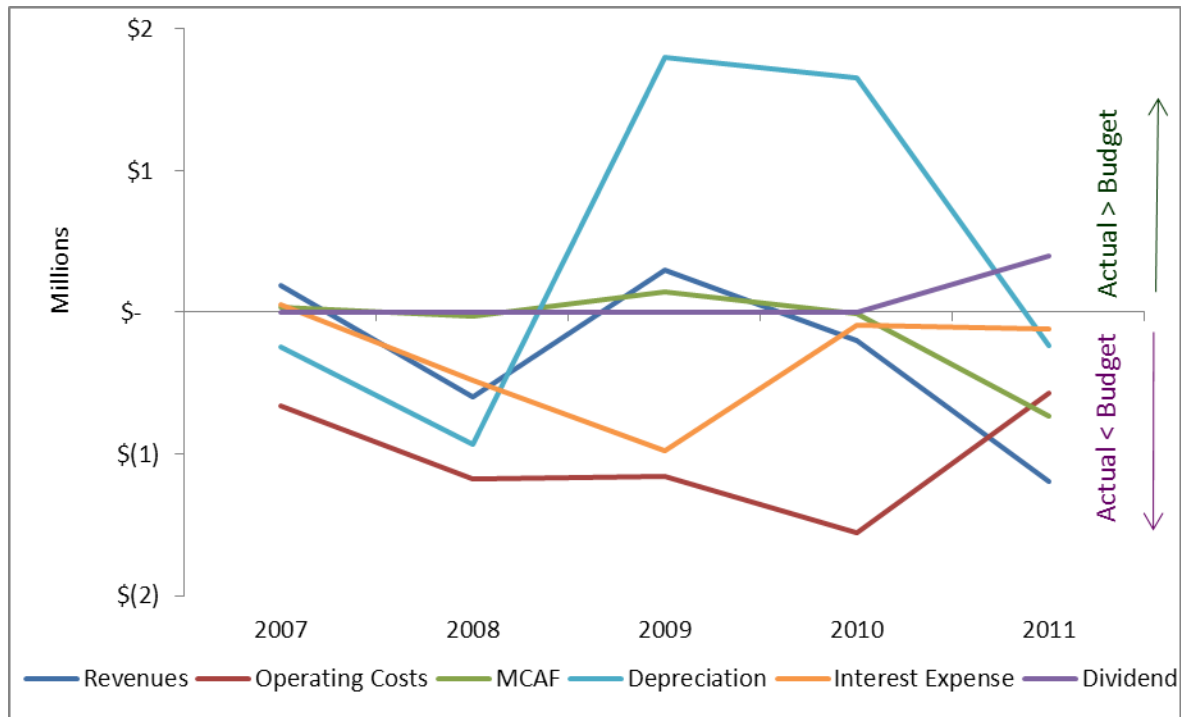
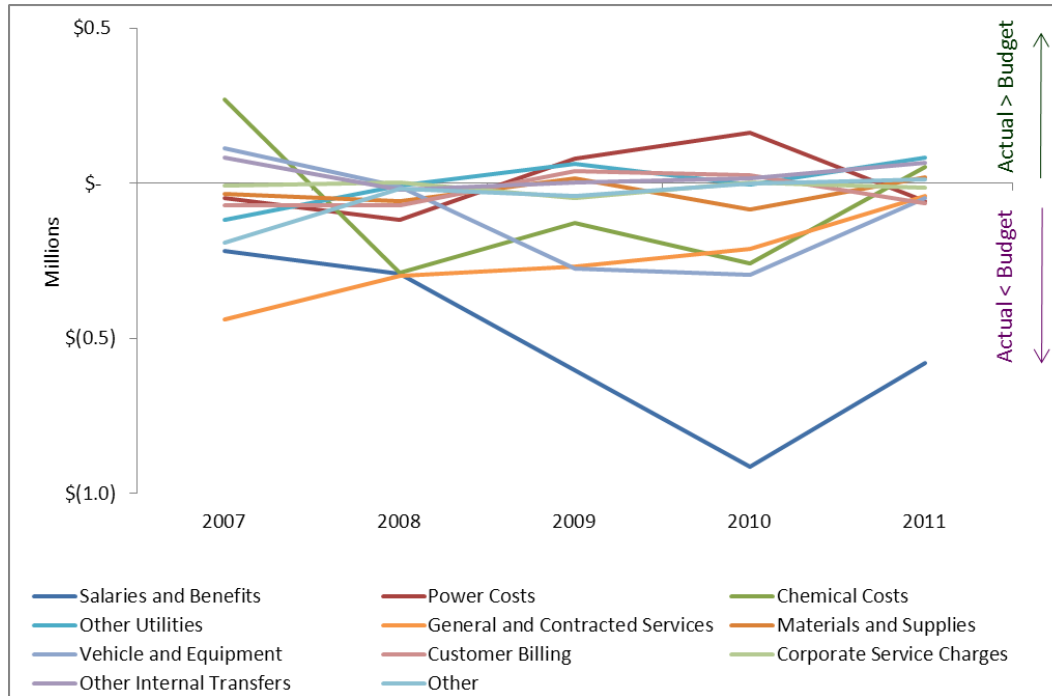


Figure 10 shows the variances between budgeted and actual operating cost expenditures. Within this category, all actual expenditures stayed within approximately \$1.0 million of the budgeted amount, with the majority staying very close to the budgeted amounts. Areas beyond the utility's control such as charges for corporate services and other departments, are budgeted and assigned to the utility, and actual costs for these also typically remain close to budget.

The one exception is the variance between budget and actuals for salaries and benefits. Despite showing an increasing dollar value trend during the period, actual salaries and benefits expenditures remained consistently below budget. This is due to two primary reasons. The first is vacancies resulting from unfilled budgeted FTEs. The second is outside employees, who are included in the budget at full FTEs. If these staff take vacation or sick time they are not paid, and as resources are not available to backfill all positions this results in ongoing vacancies throughout the year. This measure can be significantly impacted in situations where outside employees are on long-term (i.e. six months or longer) medical leave.



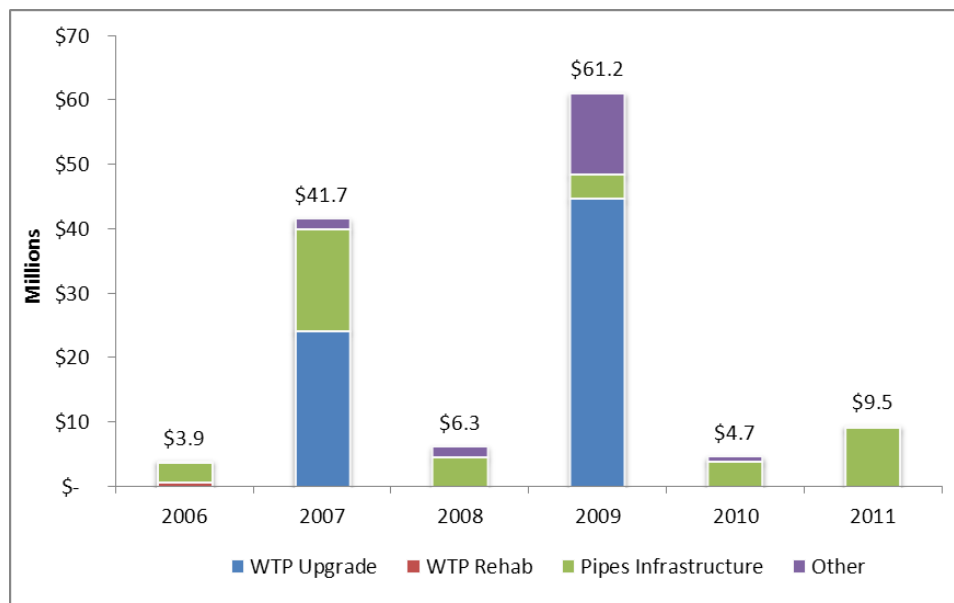
Figure 10: Water Utility Operating Cost Budget-Actual Variances



### Capital Budget

Capital projects budgeted for the Water utility are assigned to one of several categories, including WTP upgrades and rehabilitation, and pipes infrastructure. As shown in Figure 11, the majority of budgeted expenditures between 2006 and 2011 were for the WTP upgrades (peaking at 73.0% of the capital budget, or \$44.7 million, in 2009) and pipes infrastructure (averaging \$6.7 million per year between 2006 and 2011).

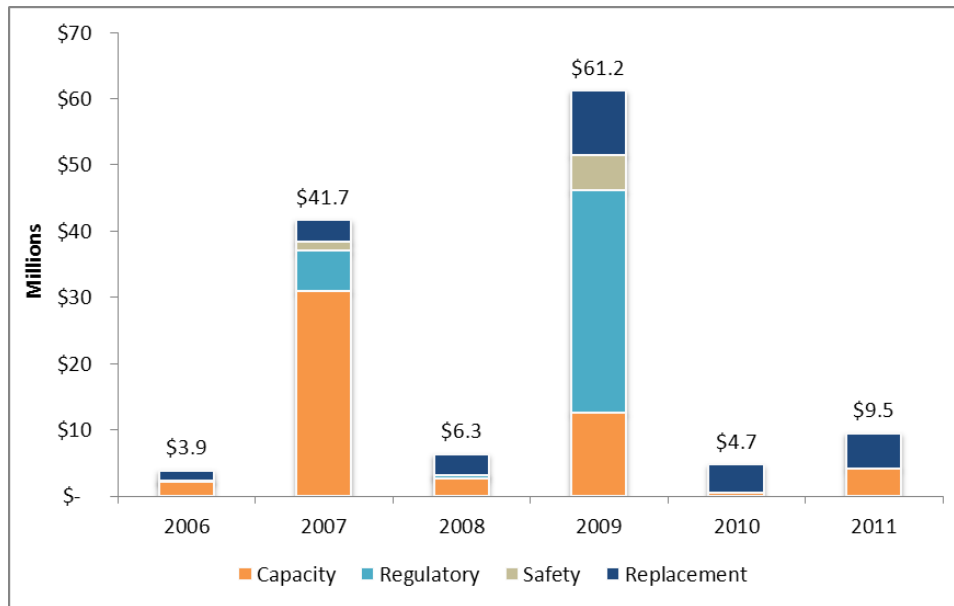
Figure 11: Water Utility Historical Budgeted Category of Capital Expenditures





Between 2006 and 2011, the majority of budgeted capital expenditures were generally associated with increasing capacity (averaging \$8.8 million per year, or 41.6% of the total capital budget, during the 2006 to 2011 period). This was followed by capital expenditures required to maintain adherence to regulatory requirements and replacement costs, which averaged 31.5% and 21.5%, respectively. Capital expenditures associated with safety averaged \$1.2 million per year during the same period (see Figure 12).

**Figure 12: Water Utility Historical Budgeted Type of Capital Expenditures**



Water utility actual capital expenditures varied significantly from budgeted expenditures between 2006 and 2011, with actual expenditure far below budget in 2007 and 2009 and above in 2008, 2010 and 2011 (see Figure 13). The average actual capital expenditure per year during this period was \$15.5 million, while the average budgeted capital expenditure per year was \$21.2 million. However, the discrepancies between budgeted and actual expenditures are primarily the result of the practice of approving the entirety of multi-year budgets in the first year of construction. This helps to ensure funding is available for the entire project (as opposed to submitting funding requests each year for the work expected to be completed only during that fiscal period) and reduces the risk of the project becoming un-funded in the second or subsequent years.



**Figure 13: Water Utility Annual Budgeted and Actual Capital Expenditures**

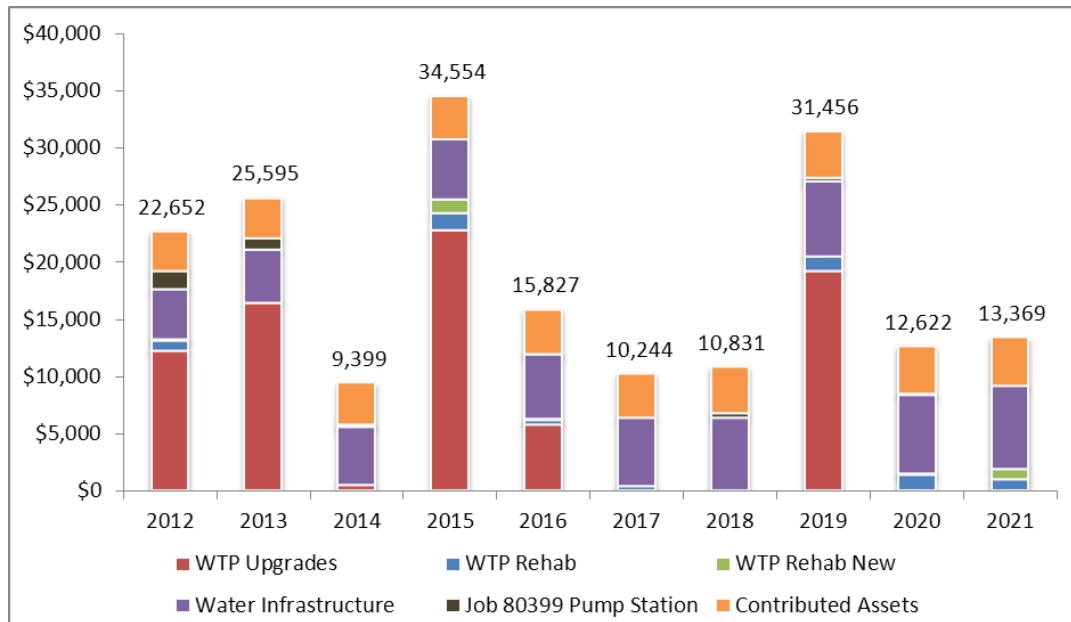


Figure 14 shows projected capital requirements for the Water utility for the next ten years. Capital requirements are expected to vary year-to-year, with the most significant requirements arising from costs associated with WTP upgrades in 2012, 2013, 2015, and 2019. Cost projections for infrastructure (meters, valves, hydrants, services and mains) are based on a 2% annual increase and are therefore expected to experience steady growth. A similar pattern is anticipated for contributed assets. Costs associated with WTP rehabilitation and the pump station are relatively low and distributed across the ten year time frame of the capital budget.



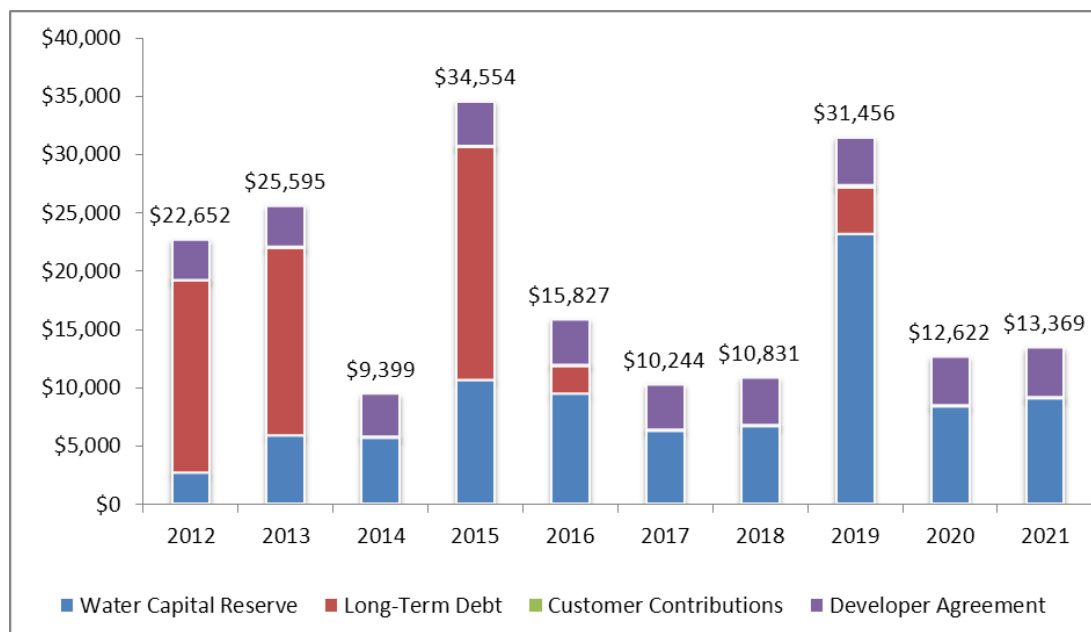


**Figure 14: Water Utility 2012 Capital Budget Ten-Year Projection**



Funding for these capital projects is primarily expected to arise from use of the water capital reserve (46.8% over the ten-year period), followed by long-term debt (31.6%). Contributed assets are funded by developers and therefore do not result in an initial capital outlay requirement for the utility, but these assets are included in the projection to ensure clarity around total capital growth and the value of the assets managed by the utility. The small remaining balance of the funding requirement (0.6%) is expected to be provided by customer contributions (see Figure 15).

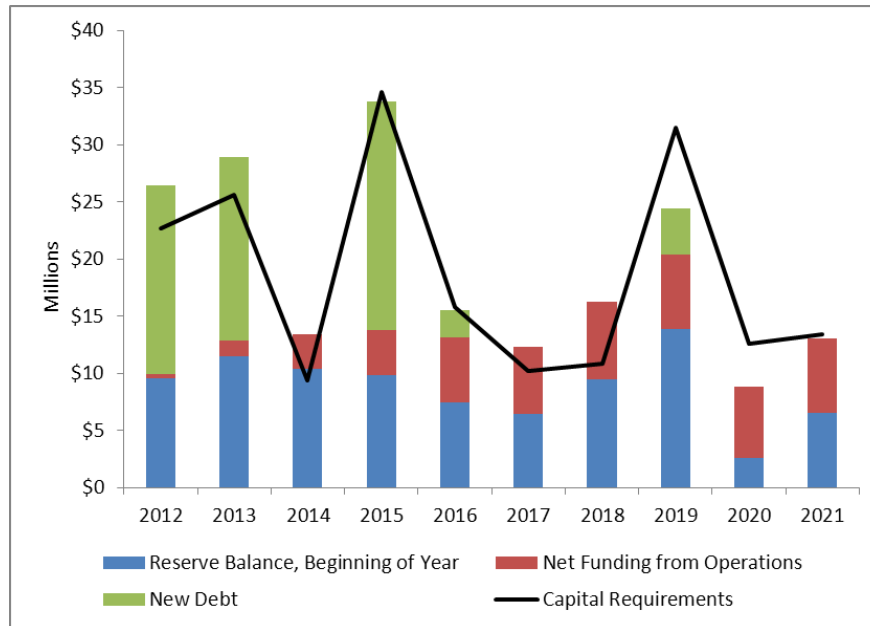
**Figure 15: Water Utility 2012 Capital Funding Ten-Year Projection**





Based on projections for end-of-year reserve balances, Figure 16 demonstrates that net funding from Water utility debt and operations appears to be sufficient to allow for reserve accumulation while supporting capital requirements over the next ten years. However, a funding gap may occur in 2019 due to large projected capital expenditures for that year, and this may also carry over into 2020. It is expected that the annual capital planning process utilized by the utility will continue to occur and that any funding deficiencies will be appropriately managed as they become more immediate.

**Figure 16: Water Utility Ten-Year Capital Reserve and Funding Projections**



This assessment is based on the “old” rate model and, as such, is based on certain assumptions used in that model that may no longer be applicable once the new model is implemented. Further, assumptions around specific rates such as the anticipated year-over-year rate increase percentage are subject to council review and approval, which could have a significant impact on the anticipated net funding from operations. The following input assumptions were included in the model used to develop this funding projection:

- The MCAF payment would remain at 33% of distribution revenue for the ten year period;
- The rate of return on equity would remain at 7.398%;
- Debt interest rate would be 4%;
- Residential consumption would grow by 2% per year;
- Commercial consumption would increase by 1% per year;
- Regional consumption would increase by 1% per year; and
- Yearly rate increases were expected to be 9.0% from 2012 to 2016, dropping to a 2% annual rate increase each year from 2017 onward.

Capital requirements are re-evaluated each year as part of the budgeting process.



### **Wastewater Utility Operating Budget**

From 2007 to 2011, the Wastewater utility's largest expense drivers were operating costs, including salaries and benefits, vehicle and equipment expenses, corporate service charges, power and chemical expenses, etc. (see Table 9 for overall revenues and expenses and Table 10 for a breakdown of Wastewater utility operating costs).

Increases in actual expenditures varied among the expenditure categories, with the largest five-year increases occurring in the interest expense (228% increase), depreciation (209% increase), and MCAF (176% increase) categories. The increase in interest payments is due to the acquisition of higher debt levels to fund capital investment and WWTP expansion to accommodate increased capacity requirements. The increase in depreciation is the result of several factors: the implementation of PSAB reporting requirements in 2009 and the need to restate asset values (and as a result adjust accumulated depreciation), as well as significant capital expansion during the period.

The largest changes in operating costs occurred from 2007 to 2009 and were primarily the result of costs associated with salaries, power and other utilities, contracted services, vehicles, customer billing and Corporate Services. Relative to 2009, 2011 operating costs saw a modest increase of only 2%.

While revenues increased 62% from 2007 to 2011, expenditures have increased at a greater rate, resulting in a decrease in return on equity over the five-year period.

*Note: A percentage change between 2007 and 2012 was not calculated given that 2012 actual results are not yet available and as aspects of the budget can differ significantly from actual expenditures results are not always directly comparable.*

**Table 9: Wastewater Utility Revenues and Expenditures**

	2007	2008	2009	2010	2011	% Change (2007* to 2011)	2012 (budget)
Revenues	12,831,333	15,209,652	17,064,426	19,687,717	20,736,659	62%	24,018,063
Operating Costs	5,809,980	6,919,957	8,721,779	8,673,765	8,888,908	53%	10,096,957
MCAF	753,329	643,858	1,115,355	1,288,812	2,077,387	176%	2,172,937
Depreciation	1,179,318	1,600,772	2,464,162	3,398,671	3,645,631	209%	4,649,296
Interest Expense	577,422	1,001,646	1,775,984	1,968,273	1,894,609	228%	1,824,749
Return on Equity (Net Income)	4,511,284	5,043,419	2,987,146	4,358,196	4,230,124	(6)%	5,274,124
Dividend**	-	1,252,827	1,351,814	1,235,591	1,137,288	N/A	1,183,251
Reserve Transfers	4,446,903	3,726,221	4,099,496	4,782,683	4,912,957	10%	6,832,667
Debenture Principal Payment	64,377	64,377	-	1,738,597	1,825,506	5%	1,907,502
Equity Transfer - Amortization	-	-	(2,464,161)	(3,398,671)	(3,645,631)	48%	(4,649,296)
Balance	4	(6)	(3)	(4)	4		-

\* Equity Transfer - Amortization calculated as % change from 2009 to 2011; Debenture Principal Payment calculated as % change from 2010 to 2011

\*\* % change in Dividend not calculated as 2007 Dividend payment was zero

Wastewater Treated (M3)	15,592,161	13,842,379	13,235,051	14,259,229	14,566,264	(7)%	14,805,908
-------------------------	------------	------------	------------	------------	------------	------	------------

Within the operating cost category, the largest increases were to other internal charges and utilities (largely natural gas), which increased by 158% and 138%, respectively, between 2007 and 2011 (see Table 10).

**Table 10: Wastewater Utility Operating Costs**

	2007	2008	2009	2010	2011	% Increase (2007 to 2011)	2012 (budget)
Salaries and Benefits	2,001,589	2,558,751	3,155,116	3,415,973	3,666,026	83%	4,237,503
Power Costs	567,000	553,709	855,265	904,116	929,802	64%	876,878
Chemical Costs	307,746	211,126	184,484	138,093	146,653	(52)%	144,582
Other Utilities	119,542	131,497	263,610	326,674	285,021	138%	307,490
General and Contracted Services	802,267	916,707	1,007,032	981,428	959,850	20%	1,277,318
Materials and Supplies	94,524	87,906	120,963	120,007	107,400	14%	122,699
Vehicle and Equipment	452,070	630,080	856,049	796,375	818,168	81%	982,501
Customer Billing	555,111	636,047	747,324	697,268	704,630	27%	830,109
Corporate Services & Other City Departments	828,645	1,014,443	1,258,064	1,404,351	1,392,142	68%	1,417,620
Other Internal Transfers	(49,979)	(57,628)	(67,280)	(124,444)	(128,786)	158%	(114,312)
Other	131,465	237,319	341,152	13,924	8,002	(94)%	14,569
Sub-total	5,809,980	6,919,957	8,721,779	8,673,765	8,888,908	53%	10,096,957

The 2011 breakout of operating costs between the WWTP and collection functions are shown in Table 11. On average, operating costs are approximately 88% applicable to the WWTP and 12% applicable to the collection system, though this varies across the different cost categories.

**Table 11: Wastewater Utility Operating Costs by WWTP and Collection**

	2011		
	WWTP	Collection	Total
Salaries and Benefits	3,081,775	584,251	<b>3,666,026</b>
Power Costs	919,361	10,441	<b>929,802</b>
Chemical Costs	146,653	-	<b>146,653</b>
Other Utilities	280,573	4,448	<b>285,021</b>
General and Contracted Services	890,136	69,714	<b>959,850</b>
Materials and Supplies	64,050	43,350	<b>107,400</b>
Vehicle and Equipment	428,548	389,620	<b>818,168</b>
Customer Billing	704,630	-	<b>704,630</b>
Corporate Services & Other City Departments	1,390,332	1,810	<b>1,392,142</b>
Other Internal Transfers	(169,033)	40,247	<b>(128,786)</b>
Other	7,744	258	<b>8,002</b>
Sub-total	7,744,769	1,144,139	<b>8,888,908</b>
Percentage	87.1%	12.9%	

Where the annual variance between actual expenditures differ from budgeted expenditures by  $\pm$ \$100,000, departments are required to provide an explanation of the variance. In practice, the EVS department also offers explanations for some smaller variances where the cause is specific and easily identifiable.

For the most part, actual operating expenditures tend to track fairly closely to budgeted expenditures, with fluctuations generally remaining within \$2.0 million on either side of the budget (see Figure 17).

Actual operating costs remained consistently below budget, as did interest expense. The actual MCAF and dividend payments were, for the most part, closely in line with the budgeted amounts.



Budgeted depreciation experienced some fluctuating variance from actual as a result of the exclusion of contributed capital from the budgeted value and the inclusion of this capital when calculating actual depreciation. This is appropriate due to the need to exclude contributed capital from the rate model as these assets cannot be used to generate a return, but must be included for depreciation once they become City assets. Depreciation was also impacted by the City's implementation of PSAB accounting in 2009.

**Figure 17: Wastewater Utility Operating Budget-Actual Variances**

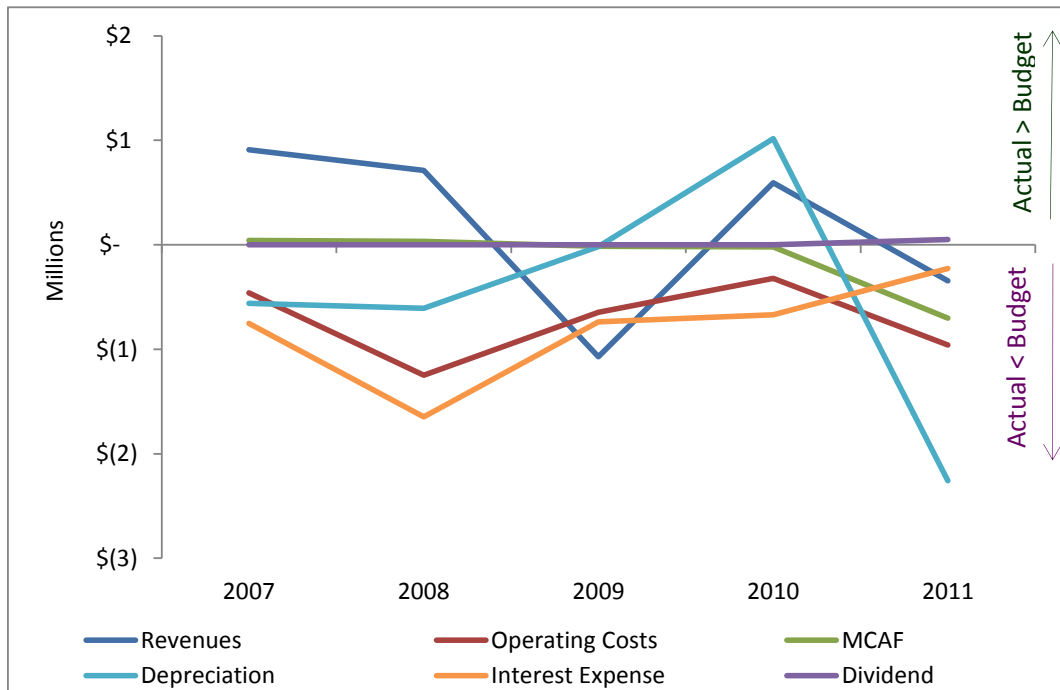
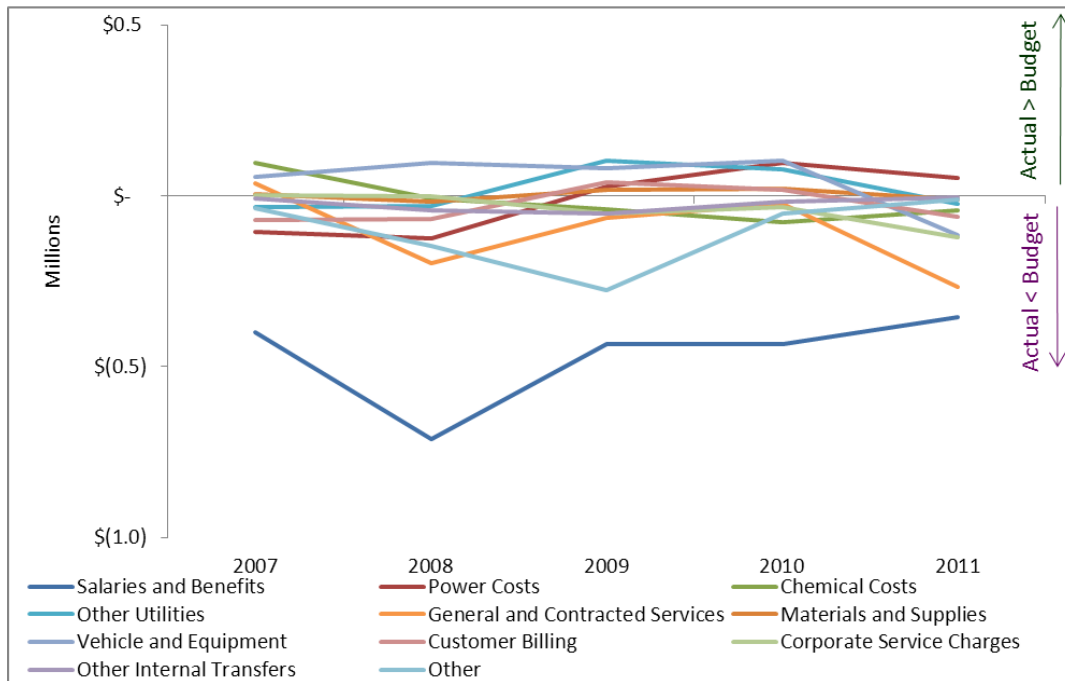


Figure 18 shows the variances between budgeted and actual operating cost expenditures. Within this category, all actual expenditures stayed within \$1.0 million of the budgeted amount. Areas beyond the utility's control such as charges for corporate services and other departments, are budgeted and assigned to the utility, and actual costs for these also typically remain close to budget.

The largest variances were seen in the salaries and benefits category. Despite demonstrating an increasing trend in dollars spent during the period, actual salaries and benefits expenditures remained consistently below budget. This is due to two primary reasons. The first is vacancies resulting from unfilled budgeted FTEs. The second is outside employees, who are included in the budget at full FTEs. If these staff take vacation or sick time they are not paid, and as resources are not available to backfill all positions this results in ongoing vacancies throughout the year. This measure can be significantly impacted in situations where outside employees are on long-term (i.e. six months or longer) medical leave.



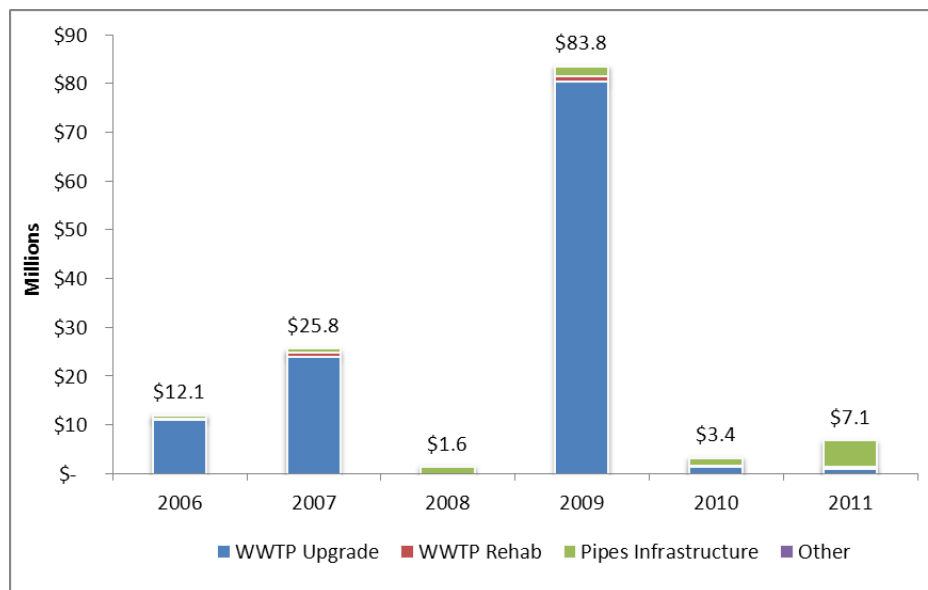
Figure 18: Wastewater Utility Operating Cost Budget-Actual Variances



### Capital Budget

Capital projects budgeted for the Wastewater utility are assigned to one of several categories, including WWTP upgrades and rehabilitation and pipes infrastructure. As shown in Figure 19, the majority of budgeted expenditures between 2006 and 2011 were for the WWTP improvements (peaking at 96.1% of the capital budget, or \$80.1 million, in 2009).

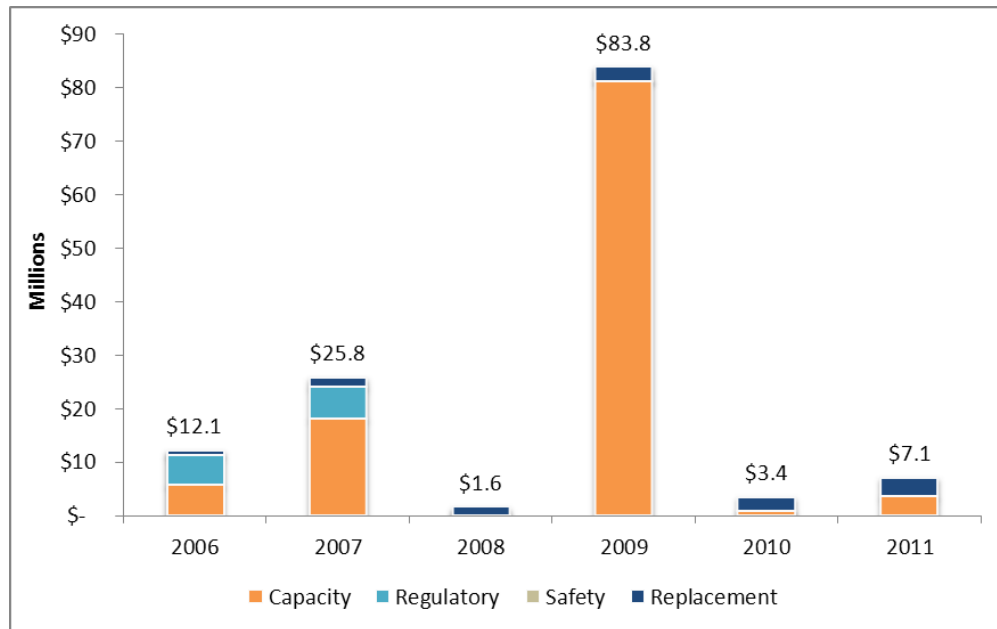
Figure 19: Wastewater Utility Historical Budgeted Category of Capital Expenditures





Budgeted capital expenditures associated with increasing capacity of the WWTP comprised 81.8% of total budgeted capital expenditures between 2006 and 2011, primarily due to the projects associated with phase four of the WWTP upgrade approved in 2009. Replacement and regulatory expenditures averaged 9.5% and 8.8%, respectively, while capital expenditures associated with safety averaged \$6,500 per year (see Figure 20).

**Figure 20: Wastewater Utility Historical Budgeted Type of Capital Expenditures**

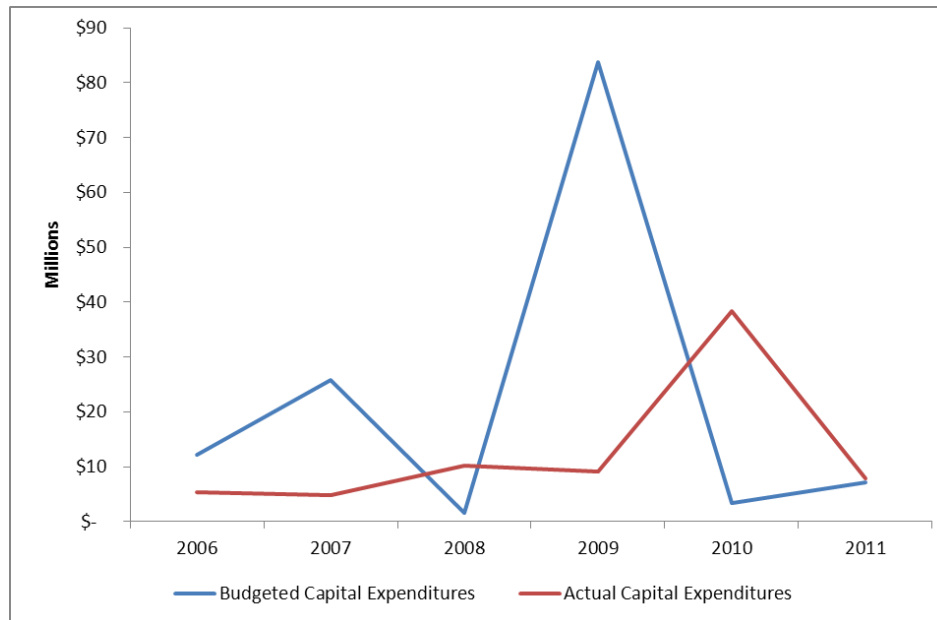


Budgeted capital expenditures exceeded actual expenditures in 2007 and 2009 while for the years 2008, 2010 and 2011 the reverse was true (see Figure 21). The average actual capital expenditure per year during this period was \$12.6 million, while the average budgeted capital expenditure per year was \$22.3 million. However, the discrepancies between budgeted and actual expenditures are primarily the result of the practice of approving the entirety of multi-year budgets in the first year of construction. This helps to ensure funding is available for the entire project (as opposed to submitting funding requests each year for the work expected to be completed only during that fiscal period) and reduces the risk of the project becoming un-funded in the second or subsequent years.



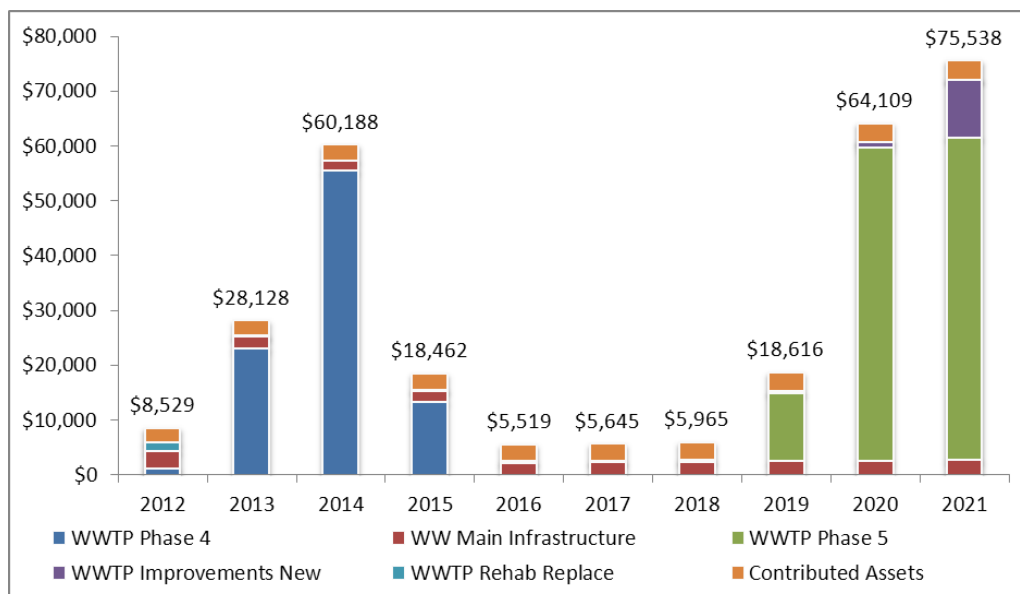


**Figure 21: Wastewater Utility Annual Budgeted Versus Actual Capital Expenditures**



Projected capital requirements for the Wastewater utility for the next ten years are shown in Figure 22. Capital requirements are expected to trend in cycles, with the most significant requirements arising from costs associated with phase four of the WWTP upgrades occurring in 2013, 2014 and 2015, and phase five of the upgrades in 2019, 2020 and 2021. Cost projections for contributed assets are based on a 2% annual increase and are therefore expected to experience steady growth. Costs associated with WWTP rehabilitation and improvements separate from the phased upgrades are relatively low and distributed across the ten year time frame of the capital budget.

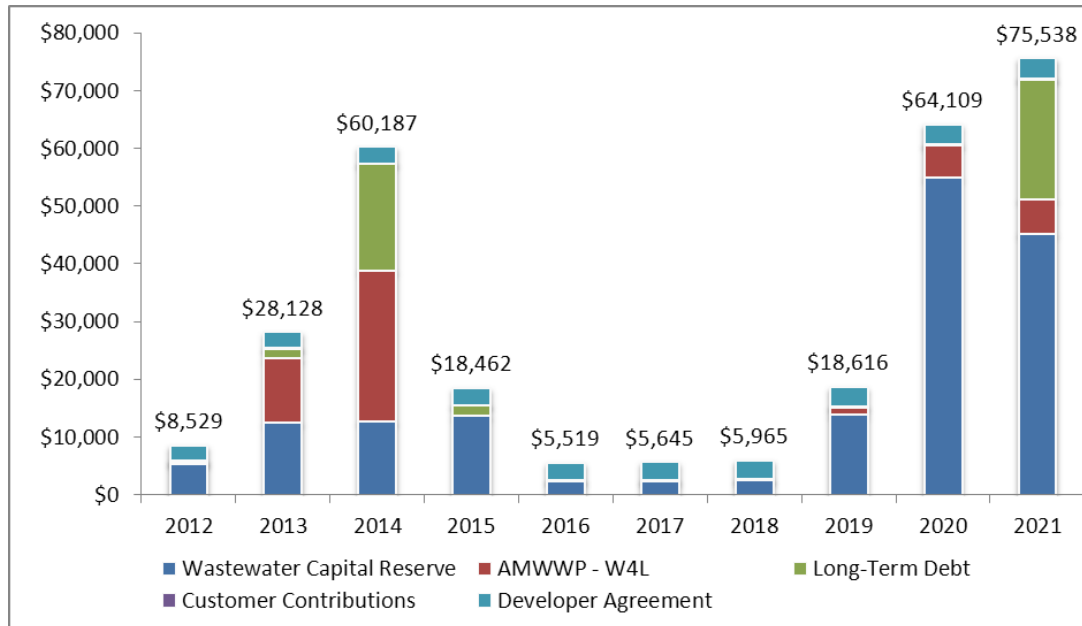
**Figure 22: Wastewater Utility 2012 Capital Budget Ten-Year Projection**





Funding for capital projects will come primarily from the Wastewater capital reserve (56.8% of total, inflation-adjusted costs over the ten year period). Other funding will be provided by the Alberta Municipal Water/Wastewater Partnership (AMWWP) Water for Life – Water Strategy Initiative (W4L) (17.4%) and long-term debt (14.7%), with a small proportion (0.4%) arising from customer contributions. Contributed assets supported by developer agreements are expected to comprise 10.7% of the capital investment over the next decade (see Figure 23).

**Figure 23: Wastewater Utility 2012 Capital Funding Ten-Year Projection**



Based on projected reserve balances, funding from operations, debt acquisition and grant funding from Alberta Transportation, Figure 24 indicates that the combined funding sources should be sufficient to support capital requirements over the next ten years.

This assessment is based on the rate model that is expected to be replaced once the rate model review project is completed and the new model finalized. As a result, these projections are based on certain assumptions used in that model that may not be applicable once the new model is put into place. Further, assumptions around specific rates such as the anticipated year-over-year rate increase percentage are subject to council review and approval, which could have a significant impact on the anticipated net funding from operations. The following input assumptions were included in the model used to develop this funding projection:

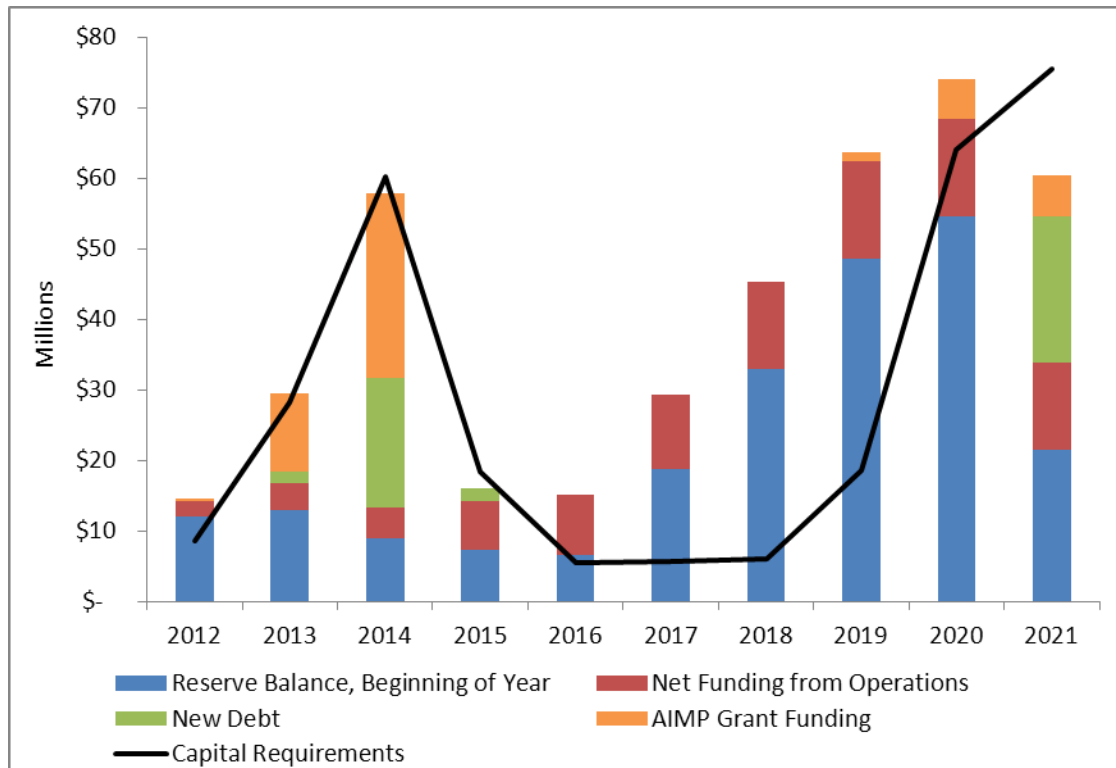
- The MCAF payment would remain at 33% of collection revenue for the ten year period;
- The rate of return on equity would remain at 7.398%;
- Debt interest rate would be 4%;
- Residential consumption would grow by 2% per year;
- Commercial consumption would increase by 1% per year; and



- Yearly rate increases were expected to be 9.0% from 2012 to 2015, dropping to a 5% annual increase for 2016 and 2017 and a 4% annual increase each year from 2017 onward.

Capital requirements are re-evaluated each year as part of the budgeting process.

**Figure 24: Wastewater Utility Ten-Year Capital Reserve and Funding Projections**



### Conclusions

Both utilities are appropriately managing costs within their areas of control. The long term capital planning process, although not always directly aligning with actual construction and expenditures, appears to be effective in ensuring that the utility has direction, a strong understanding of when large expenditures will be required, and a plan in place to align sources of funding with those expenditures.

Given that population and customer base increases appear to have been at least partially offset by decreases in per-capita consumption, and that the utility is expected to further reinforce conservation through a modified rate structure to incent decreased consumption, it is important that any future upgrades to the WTP intended solely to increase production capacity be carefully considered within the context of the impact these changes may have. The original capital plan for the WTP was prepared using certain assumptions that may no longer be wholly accurate given anticipated consumption trends, and future proposed upgrades should be subject to a rigorous business case analysis to determine whether they are truly necessary.

**Recommendations**

- 1.5.1** Financial Services should work with the Water and Wastewater utilities, as well as other City departments, to develop a system for capital and operational planning that ensures that all users are working in the most current version of the program, and which facilitates consolidation of information.
- 1.5.2** While they are separate entities, the Water and Wastewater utilities should consider capital investment and rate increases holistically, as they appear to the customer as one function. Where there are options to defer capital investments between the two and smooth the impact on the customer the utilities should take advantage of this. This approach could help to mitigate rate shock by introducing a number of smaller increases over a longer period of time rather than requiring a few significant increases over a short period of time.
- 1.5.3** Consideration should be given, when engaging in capital construction with multi-generational benefit, to matching the timing of the cost with the duration of the benefit of the asset. Recognizing that the City and utilities face constraints on the level of debt they can utilize for these projects, the utilities should endeavor to strike the right balance in the use of reserves funded by current customers to fund assets that will continue to benefit customers well into the future.



## 2 Management and Execution

### 2.1 Service Lines and Programs

The EVS department houses several sections, including Waste Management, the Water utility, the Wastewater utility (which includes storm), Construction and Maintenance, and Environmental Initiatives. The department also has a small administration group that provides support to all of these sections. Staff have a good understanding of the service lines and programs carried out within the EVS department and these are described within the Service Plan and operational plans (existing or under-development). The core service delivery priorities are aligned with the utility mandates to treat and distribute safe and reliable water for household, business, fire protection and other uses, and to collect and treat wastewater from households and businesses to protect the health of the City's citizens, the river habitat and downstream users. These goals and priorities appear to be well understood by both management and staff.

The City considers conservation in all areas, including water usage, to be a high priority. Programs such as the low-flow toilet rebate program and informational brochures have been developed to enhance awareness and the rate model review project currently underway is exploring the impact rates could have on encouraging water use conservation (through the possibility of shifting rates more heavily toward consumption rather than fixed fees). All services and programs operated by the Water and Wastewater utilities are closely aligned with the goals and objectives of the organization, and the utilities engage in very little activity outside their core business.

With the exception of regional coordination and expansion, the utilities do not appear to actively engage in the evaluation of new service lines or programs. As the current programs are core services, there is no consideration given to discontinuing or significantly changing or evolving them.

The City is engaged with regional partners and commissions to provide water and wastewater services to regional customers. This is supported by the Alberta Municipal Infrastructure Program (AIMP), which provides grant funding to help municipalities develop capital infrastructure, and the Alberta Municipal Water/Wastewater Partnership (AMWWP), which provides financial assistance to small cities, towns, regional commissions, etc. for municipal water and wastewater treatment, supply and disposal projects.

The City previously had plans in place to install Automatic Metering Infrastructure (AMI) for both the electric and water utilities. This plan was aligned with anticipated changes to provincial regulations, which



were never enacted. In the absence of regulatory pressures, it was determined that the cost of the AMI program exceeded the benefits and the project has been put on hold indefinitely until it is determined to be more cost effective or if the regulatory environment changes to require it.

The engineering design of the treatment plans is contracted out to third party engineering groups (Associated Engineering for the WTP and Stantec Engineering for the WWTP) while the network planning is managed by the City's Engineering department within the Development Services division. The EVS department houses a planning group that is separate from the Water and the Wastewater utilities but works closely with both on capital planning and budgeting matters, which are primarily based on the ten year utility Master Plans. In-sourcing these services is not considered to be appropriate or economically feasible at this time, and as the relationships are currently effective this is not seen to be an issue.

The services and programs operated by the Water and Wastewater utilities are heavily monitored and regulated by the provincial and federal governments. There have been few contraventions with the requirements of the City's water license, and no significant contraventions that might put the approval of the license at jeopardy. Regulatory and benchmark reporting has identified many metrics that support the measurement and evaluation of reliability and safety in water and wastewater utility operations. As the City participates in these activities, there is ample current and historical information to this effect.

Under the jurisdiction of the City, the utilities are governed by Bylaw No. 3464/2011, or "the Utility Bylaw", which directs the supply and use of the Water, Wastewater, Storm Water and Solid Waste utilities of the City of Red Deer. The bylaw covers general items such as management and responsibilities; service installation and connection, billing and payment, enforcement, and termination; inspection, sampling and monitoring, offenses and penalties; and utility specific information on each of these as well as the basis of specific utility rates and fees.

As shown in Table 12, the Water and Wastewater utility infrastructure service area has increased from 76.2 square km in 2007 to 117.39 square km in 2011, for a total increase of approximately 54% over the five-year period.

**Table 12: Water and Wastewater Utility Service Area**

Year	Service Area (square km)	% Increase
2007	76.20	7%
2008	75.85	0%
2009	107.12	41%
2010	107.12	0%
2011	117.39	10%

### **Water Utility**

As shown in Table 13, distribution pipe infrastructure managed by the utility increased by approximately 12% between 2007 and 2011. While initially appearing to conflict with the data for the size of the area serviced by



the utility, newly annexed service area does not necessarily have existing distribution pipe infrastructure in place, so the length of pipe managed by the utility does not directly correspond with the size of the area served.

**Table 13: Water Utility Km of Distribution Pipe**

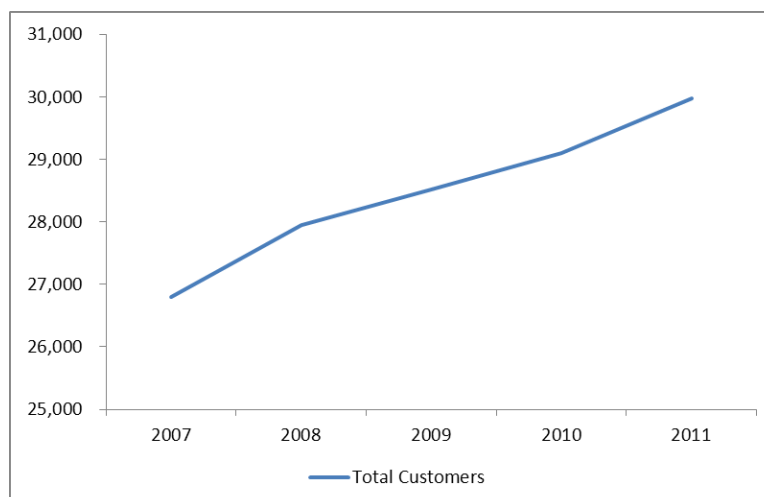
Year	Pipe (km)	% Change
2007	524.04	-3%
2008	563.48	8%
2009	570.05	1%
2010	575.40	1%
2011	589.10	2%

All of Red Deer's water service connections are metered. Customer (service connection) growth averaged 3.2% per year between 2007 and 2011, with most significant percentage-growth in the 76 mm meter size. However, the 16 mm meter size (primarily single family residential) remains the largest single meter size, increasing from approximately 25,000 service connections in 2007 to more than 28,000 in 2011.

**Table 14: Water Utility Customer Growth by Meter Size**

Total Customers (Service Connections)											
		Meter Size (mm)									
Year	Regional	16	19	25	38	51	76	102	152	203	Total
2007	2	24,997	433	431	514	320	66	21	8	-	26,792
2008	2	26,079	446	451	529	336	73	21	7	-	27,944
2009	2	26,614	459	463	534	343	77	21	7	-	28,520
2010	2	27,160	472	470	534	344	82	21	7	-	29,092
2011	2	28,033	479	467	528	346	83	22	7	-	29,967
<b>2007 to 2011 % change</b>	0.0%	12.1%	10.6%	8.4%	2.7%	8.1%	25.8%	4.8%	(12.5)%	0.0%	11.9%

**Figure 25: Water Utility Total Customer (Service Connection) Growth**







Customer density (service connections per km of pipe, see Table 15) trended slightly upward between 2006 and 2010, but has generally remained fairly consistent at approximately fifty service connections per kilometer. This average is similar to other Canadian Water utilities.

**Table 15: Water Utility Customers per Km of Distribution Pipe**

Year	Pipe (km)	Total Customers	Customers per km of pipe
2007	524.04	26,792	51.13
2008	563.48	27,944	49.59
2009	570.05	28,520	50.03
2010	575.40	29,092	50.56
2011	589.10	29,967	50.87

As shown in Table 16, after increasing from 2007 to 2008, total annual water consumption has demonstrated a decreasing trend, averaging a 5.8% decrease over the period between 2007 and 2011. The biggest percentage-wise decreases occurred for customers using 152 mm meters (20.8% total decrease) and the 38 mm meter size (17.3%), which are both primarily composed of commercial customers followed by multi-family residential customers. This pattern is similar to that experienced by other utilities, who cite reasons for the decreases including increased rates, increased awareness around the need for conservation, weather patterns, etc.

**Table 16: Water Utility Annual Consumption (cubic meters)**

Annual Consumption (cubic meters)											
		Meter Size (mm)									
Year	Regional	16	19	25	38	51	76	102	152	203	Total
2007	2,480,962	6,243,266	232,791	423,288	1,144,261	1,407,856	433,481	1,107,390	1,158,778	-	14,632,073
2008	2,886,675	6,309,974	234,858	416,373	1,105,150	1,360,723	460,454	1,131,380	1,146,171	-	15,051,758
2009	2,687,333	6,630,579	227,479	406,253	1,053,390	1,397,013	488,104	1,135,227	1,020,481	-	15,045,859
2010	2,635,175	5,989,509	208,594	393,631	967,973	1,297,516	513,419	1,021,453	997,008	-	14,024,278
2011	2,638,833	5,952,469	201,905	365,011	946,849	1,261,758	490,197	1,015,371	918,151	-	13,790,544
<b>2007 to 2011 % change</b>	6.4%	(4.7)%	(13.3)%	(13.8)%	(17.3)%	(10.4)%	13.1%	(8.3)%	(20.8)%	0.0%	(5.8)%

While the percentage decrease in annual consumption for single family residential customers (the majority of the 16 mm meter size) was relatively small compared to some of the other classes, the 4.7% decrease represents a total consumption decrease of 290,797 cubic meters of water in 2011 compared to 2007. The 17.3% decrease in consumption of customers using a 38 mm meter size translates into a 2007 to 2011 annual decrease of 197,412 cubic meters. Altogether, the decrease in consumption from 2007 to 2011 was 841,538 cubic meters per year.



On a monthly, per-customer basis<sup>4</sup>, overall consumption has decreased by 17.9% (see Table 17). Customers with a 19 mm meter have demonstrated the largest per-customer decrease in consumption at 21.6%, closely followed by those with a 25 mm meter (20.4% decrease). In general, the larger the meter size the lower the decrease in consumption between 2007 and 2011, which is to be expected as individuals are more easily capable of engaging in conservation efforts compared to larger commercial operations which may require significant investment or redesign to reduce water usage in their processes.

**Table 17: Water Utility Monthly Consumption per Customer (cubic meters)**

Monthly Consumption per Customer (cubic meters)										
	Meter Size (mm)									
Year	16	19	25	38	51	76	102	152	203	Total
2007	21	45	82	186	367	547	4,394	12,071	-	38
2008	20	44	77	174	337	526	4,490	13,645	-	36
2009	21	41	73	164	339	528	4,505	12,149	-	36
2010	18	37	70	151	314	522	4,053	11,869	-	33
2011	18	35	65	149	304	492	3,846	10,930	-	31
<b>2007 to 2011 % change</b>	(15.0)%	(21.6)%	(20.4)%	(19.4)%	(17.1)%	(10.1)%	(12.5)%	(9.4)%	0.0%	(17.9)%

As a whole, monthly consumption per service connection decreased by 6.8 cubic meters when comparing 2007 consumption levels to 2011 levels. Customers with a 16 mm meter decreased consumption by an average of 3.1 cubic meters per month while those with a 38 mm meter decreased consumption by 36.1 cubic meters per month.

Table 18 and Figure 26 show total annual water loss for the Water utility as calculated by comparing the total amount of water treated by the WTP (cubic meters) against the total amount of water billed to customers. This calculation results in an average water loss of 9% from 2007 to 2011, and this proportion appears to be trending slowly upward. It is important to note that water “loss” is not solely the result of leakage, but encompasses all unmetered water usage such as that used by contractors, fire services and Parks and Recreation staff, and water main flushing. A portion of this discrepancy could also be the result of older meters that understate actual consumption. Staff indicated that there is a push to move toward obtaining a better understanding of unmetered water usage, such as installing meters on all Parks and Recreation vehicles used for watering public greenery, but this has not yet been implemented. In general the utility does not have many leaks as most of the distribution infrastructure is fairly new. Further, the particular geology of the soil (i.e. clay) means that any leakage that does occur is pushed to the surface where it can be easily seen and corrective action can take place in a timely manner.

<sup>4</sup> Excludes regional customers as information is available only for the number of service connections (two) which does not represent the actual users of the water but rather the City's customers who are responsible for reselling the water to their customers.

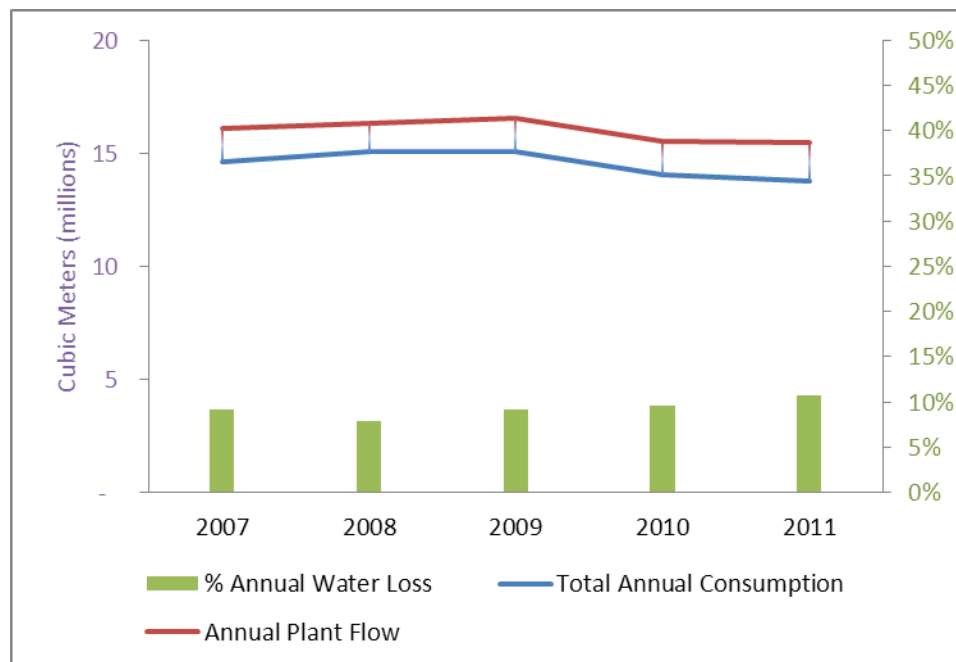


Table 18: Water Utility Total Annual Water Loss as a Percent of Total Plant Flow

Year	Annual Flow (cubic meters)			% Water Loss
	Total Consumption	Plant Flow	Water Loss	
2007	14,632,073	16,102,101	1,470,028	9%
2008	15,051,758	16,334,217	1,282,459	8%
2009	15,045,859	16,573,054	1,527,196	9%
2010	14,024,278	15,504,213	1,479,935	10%
2011	13,790,544	15,448,072	1,657,528	11%

Best practice suggests that unmetered water loss is typically in the 9% to 10% range with significant efforts undertaken to reduce this wherever possible. While water loss was 11% in 2011, this increase was primarily due to the occurrence of some significant leaks that have since been repaired, which is expected to have a positive impact on this metric on a go-forward basis. It is noted that the utility has initiated some programs to further reduce water loss, and should continue to move forward with these.

Figure 26: Water Utility Total Annual Water Loss as a Percent of Total Plant Flow





### Wastewater Utility

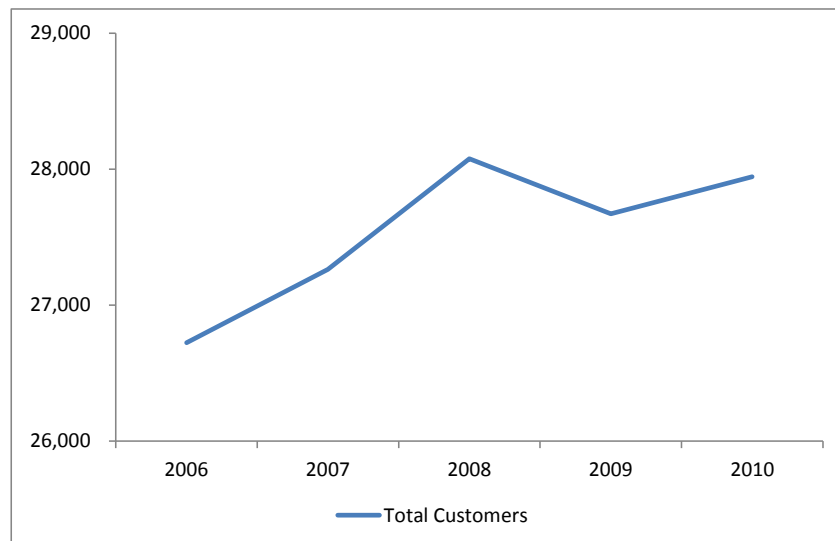
As shown in Table 19, the length of collection pipe infrastructure managed by the utility increased by approximately 17% from 2007 to 2011, which appears to conflict with the data for the size of the area serviced by the utility. However, newly annexed service area does not necessarily have existing collection pipe infrastructure in place, so the length of pipe managed by the utility does not directly correspond with the size of the area served.

**Table 19: Wastewater Utility Km of Distribution Pipe**

Year	Pipe (km)	% Change
2007	419.80	-5%
2008	453.18	8%
2009	456.88	1%
2010	463.13	1%
2011	491.74	6%

Wastewater customer (service connection) growth averaged 1.1% per year between 2006 and 2010, increasing from 26,723 in 2006 to 27,944 in 2010 for total five year growth of 4.6% (see Figure 27).

**Figure 27: Wastewater Utility Total Customer (Service Connection) Growth**



As shown in Table 20, customer density (service connections per km of pipe) has generally remained fairly consistent at approximately sixty service connections per kilometer. This is similar to the average of other wastewater utilities.



Table 20: Wastewater Utility Customers per Km of Collection Pipe

Year	Pipe (km)	Total Customers	Customers per km of pipe
2006	439.80	26,723	60.76
2007	419.80	27,263	64.94
2008	453.18	28,077	61.96
2009	456.88	27,671	60.57
2010	463.13	27,944	60.34

### Conclusions

The City has experienced growth in service connections, but this has been partially offset by a decrease in per-capita consumption, which is positive from a water treatment perspective and supports the efficacy of existing conservation programs in absence of rate impacts.

### Recommendations

- 2.1.1** Certain areas of the department's website (e.g. the department mandate, information regarding upgrades to the WWTP) appear to require updating to align with current documentation or processes. It is recommended that website content be reviewed and updated where required, and that this responsibility be assigned to a specific individual within each section represented on the site.
- 2.1.2** Given that the system is relatively new and that most replacements are with PVC pipe, the Water utility should engage in further investigation to understand water loss and unmetered water consumption and to move forward with opportunities to meter water where appropriate (e.g. install meters on water trucks used by Parks, Recreation and Culture).

## 2.2 Organization Structure and Staffing

The organizational chart for the City of Red Deer (see Figure 28) indicates that under the City Manager there are four main line divisions, each led by a director and also having a controller:

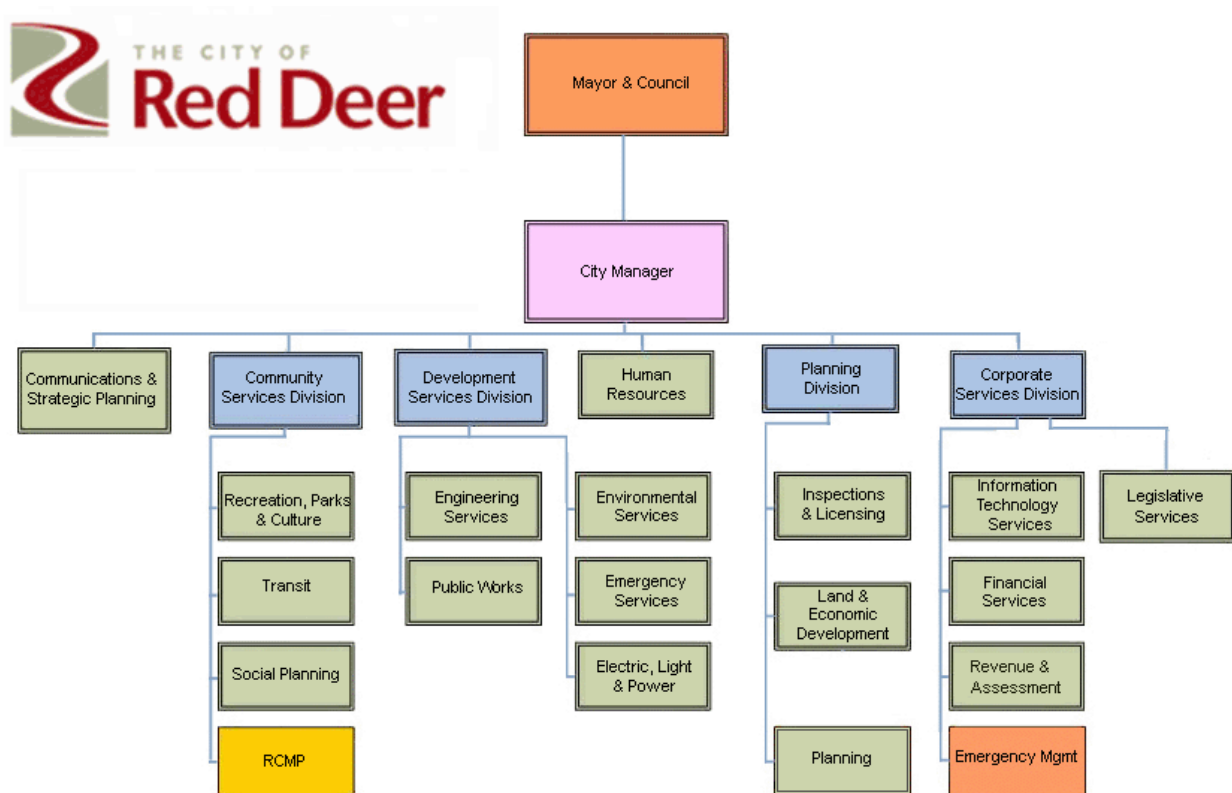
- Community Services, which includes Recreation, Parks and Culture, Transit, Social Planning and RCMP
- Development Services, which includes Engineering Services, Public Works, Environmental Services (water, wastewater, waste management), Emergency Services and Electric Light and Power
- Planning, which includes Inspections and Licensing, Land and Economic Development, and Planning
- Corporate Services, which includes Information Technology Services, Financial Services, Revenue and Assessment, and Emergency Management.

In addition, the functions of Communications and Strategic Planning, Legislative and Governance Services, and Human Resources report directly to the City Manager.



Environmental Services is under the Development Services division. The Division Controller for Development Services has a dotted line reporting relationship with the Corporate Services division and supports the financial and accounting activities carried out within Environmental Services.

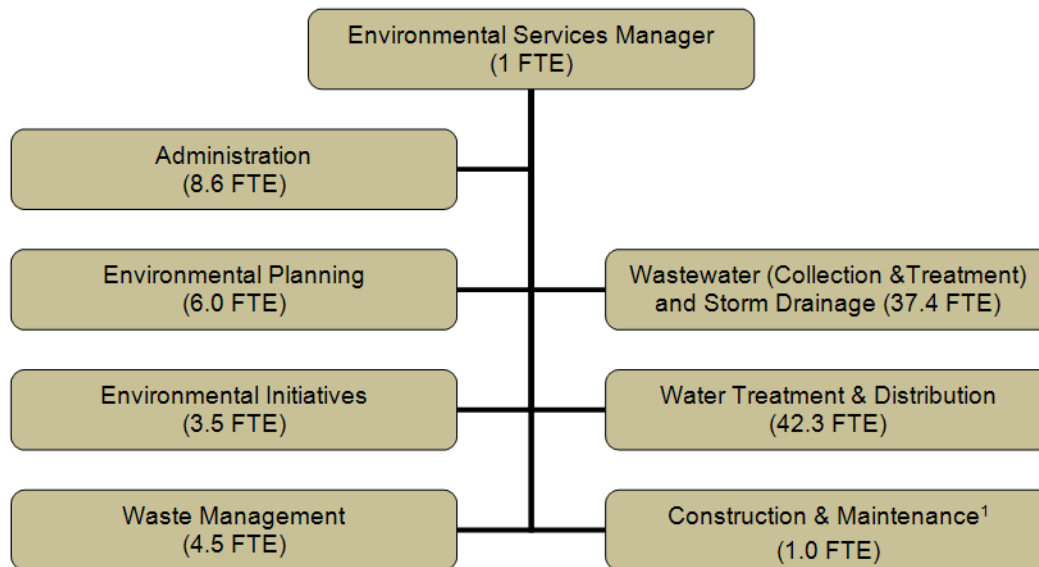
**Figure 28: City of Red Deer Organizational Chart**



Within the EVS department there is one department Manager responsible for overseeing more than 100 staff in three utilities (Water, Wastewater and Storm, and Waste Management), the Environmental Initiatives section, the Environmental Planning (Planning) group and the construction and maintenance (C&M) group, and an Administration group (see Figure 29). The utilities operate independently of one another, but all draw upon the resources of the Planning, C&M and Administration groups, and all are involved with the Environmental Initiatives section regarding the development, implementation and monitoring of the EMP and the initiatives identified within it.



**Figure 29: Environmental Services (EVS) Department Organizational Chart**



<sup>1</sup> The Construction & Maintenance Section has approximately 11 FTE's that are allocated to Capital construction projects and Third Party Work Orders.

The location of the C&M group outside the Water and Wastewater utilities appears to be an effective way to ensure that staff utilization is maximized and resources can be redirected in an efficient and timely manner when emergencies arise. However, some concern has been expressed regarding the way work is prioritized within the C&M group compared to the way the utilities feel the work should be prioritized. It has been suggested that an internal Service Level Agreement (SLA) could help to clarify priorities and establish reasonable expectations for all parties.

It has been suggested that more effort in unified planning between the utilities and C&M could have the benefit of providing better transparency in forecasting, budgeting and planning for all groups. Further, as a large proportion (approximately one-third) of the C&M section will be eligible for retirement within the next two years, and as this could have a significant impact on the quality and timeliness of service from this group it is becoming increasingly important to fully understand the role, capacity, priorities, etc. of this group as it relates to the utilities to ensure a smooth transition.

The location of the Planning group outside of the individual utilities but within the same department also appears to be effective. It is important that these staff have a good understanding of all of the work being carried out in each of the utilities and having one group providing similar services to all of the utilities facilitates this understanding. It is noted that a rotational program has been implemented to expose staff with less experience to the various departments to help them better understand the needs of each, and this appears to be working well.





The Water and Wastewater utilities' primary engagement with Environmental Initiatives is through the development and monitoring of the initiatives pertaining to these utilities within the City's EMP. The Environmental Initiatives section is also responsible for the Water Conservation Plan, but this has essentially been overtaken by the EMP. The utilities were heavily involved in the development of their portions of the EMP, including setting targets and coming up with actions to achieve and report on them.

The EVS Administration group provides support to all other sections within the department. This appears to work effectively as these staff provide similar services to each section and thus gain efficiencies by providing these services to all.

### ***Corporate Services***

While situated outside the EVS department, the services provided to the utilities by the Engineering department are appropriate and effective. Within Engineering, staff in the Development and Utilities section have the greatest level of interaction with projects undertaken in the EVS department, and there is one FTE in this section dedicated to the Water and Wastewater utilities. For the Water utility, Engineering staff are involved for all distribution projects that pertain to growth in capacity (including mains, reservoirs, booster stations, etc.), but are not involved in projects undertaken for the WTP (for which the utility contracts with a specialized third party engineering group). Within the Wastewater utility, Engineering staff support all projects involving growth of the wastewater collection system (including lift stations, network planning, support with operational challenges such as high discharge users, etc.) to increase capacity but are not involved in changes or upgrades to the WWTP as this is contracted out to a third party engineering group specializing in this area.

EVS has a good relationship with Public Works and the two departments work closely together to coordinate utility and road infrastructure work based on life expectancy schedules. This sometimes requires longer-term planning and negotiations to prepare a schedule that maximizes the lifecycle of all of the assets, and this schedule can be impacted by funding availability, but this process and the relationship between the departments is generally seen to work well.

The Revenue and Assessment (Utility Billing) department deals primarily with the Water utility and has little to no interaction with the Wastewater utility (only for large customers such as Olymel). As the R&A group is typically the primary contact for customers calling with complaints or concerns regarding their bills, Utility Billing works closely with staff in the distribution group to resolve issues and respond to questions. The groups have initiated quarterly meetings to facilitate communication and discuss upcoming issues or events. The current billing system, Diamond, meets the basic billing needs and allows Utility Billing to effectively provide information to the utility regarding service connection, disconnection and reconnection, but as the City grows this system will eventually no longer be sufficient. The relationships between the utilities and R&A are considered by staff to be effective and appropriate, and R&A receives responses to customer issues or questions from the utilities in a timely manner.

While there are no IT staff dedicated to supporting the Water or Wastewater utilities and no formal Service Level Agreements in place, the relationship between these groups is considered to be effective. The Water



and Wastewater utilities were among the first to implement the Hansen and new asset analytics (CityWide) systems, which required close interaction between IT and the utilities. As this project moves forward there will be one IT staff member dedicated to supporting these systems, but this individual will be responsible for supporting all utilities, sections and departments in which the systems are used and will not be available to support the Water and Wastewater utilities exclusively. There is one IT staff member located at the WWTP who also offers IT support for all staff at the Civic Yards. This individual was formerly a WWTP staff member who demonstrated an aptitude and interest in managing the SCADA system and other IT systems. The transitioning of this individual from the WWTP to the IT department and the resulting ability of ITS to provide more timely and responsive technical support to staff at the WWTP and Civic Yards is seen to be indicative of a successful “pilot” in terms of situating an IT staff member off-site.

Crossover between the Water and Wastewater utilities and the Recreation, Parks and Culture department occurs primarily through the management of landscaping following excavation work. It has been suggested that better coordination in terms of planning for new developments would be beneficial as PR&C prepares plans that do not always directly align with those prepared by the utilities. While there is an opportunity to review and provide feedback on the various plans, coordination meetings during the planning process could help ensure that these are aligned from the outset and minimize the requirement for revision. Apart from this the relationship between the two groups is described as positive and effective, and that the personal relationships between staff go a long way toward facilitating coordination.

HR is more involved with recruitment activities for the WTP compared to other areas of the Water or Wastewater utilities, and is involved primarily in interviews for permanent positions while responsibility for interviewing and filling temporary roles is typically left to the discretion of individual supervisors. The practice of promoting from within and a lack of training for new managers who previously carried out operational roles are seen to create some challenges in terms of employee relationships and evaluations. One area specifically identified is the practice of providing positive feedback to employees regardless of their actual performance, which creates challenges if it becomes necessary to terminate the employee (as there is no documented history of poor performance). The relationships and the level of service provided by the HR department are generally seen to be adequate to meet the needs of the utilities.



The relationship between the Water and Wastewater utilities and the Financial Services department appear to be effective. These groups are working closely together as part of the utility rate model review, and this appears to be working effectively as the review is progressing and nearing completion. Financial Services is responsible for providing budgeted cost allocations for all corporate support services provided by the City to its departments. All of the departments/utilities receiving corporate services are identified. The following cost drivers used to allocate various services where appropriate:

- Square footage of space
- Number of PC's
- IT service hours
- Active accounts
- Accounts receivable (A/R) percentage effort
- Accounts payable (A/P) transactions
- Inventory transactions
- Inventory items
- Purchasing – centralized
- Purchasing – decentralized
- Tax burden
- Number of pay cheques
- Budgeted salary
- Total budgeted expenditures

These cost drivers are then applied to calculate the department/utilities costs for the following corporate functions:

- City Hall
- Corporate Services Director
- Information technology services (ITS)
- Accounting
- Audit
- Accounts receivable (A/R)
- Accounts payable (A/P)
- Risk Management
- Purchasing
- Stores
- Assessment
- Tax
- Insurance (tax supported)
- Human resources (HR)
- Enterprise asset management
- Postage and banking
- Communications
- Mayor, City Manager, Legal, etc.
- LAS and Council
- Red Deer 300K
- Development Services Director
- Community Services Director



As shown in Table 21, the 2013 preliminary budget allocates \$26.0 million in corporate services costs across 27 City departments and sections, including the Water and Wastewater utilities which comprise 3.2% and 3.1% of total costs allocated. This appears to be a reasonable allocation.

**Table 21: Corporate Services Cost Allocation by Department / Section, 2012 Budget**

Department / Utility / Function	Allocated Corporate Service Cost	% of Allocated Corporate Service Costs
Rec Parks & Culture	4,746,996	18.2%
Emergency Services	3,089,863	11.9%
Public Works	1,717,625	6.6%
Police	1,692,522	6.5%
Transit	1,648,618	6.3%
Legal Services & Council	1,510,271	5.8%
EL&P	1,442,494	5.5%
Enviro Services	1,285,566	4.9%
Engineering Admin.	1,052,015	4.0%
Inspections & Licensing	912,894	3.5%
Garage	850,115	3.3%
Water Utility	843,212	3.2%
Wastewater Utility	819,334	3.1%
City Manager's Office	671,793	2.6%
Social Planning	589,339	2.3%
Communications	540,350	2.1%
Community Services	488,666	1.9%
Solid Waste Disposal	419,030	1.6%
Economic Development	301,301	1.2%
Planning Services	269,699	1.0%
Enterprise Asset Mgmt P&I	257,361	1.0%
Parking	247,312	1.0%
Subdivision Development	154,028	0.6%
Solid Waste Collection	145,422	0.6%
Street & Traffic Lights	131,298	0.5%
Utility Billing	112,792	0.4%
Recycling	86,010	0.3%
<b>Total</b>	<b>\$ 26,025,926</b>	<b>100.0%</b>

There are no formalized service level agreements between the various corporate services departments and the departments or sections to which they provide services. While these relationships appear to be functioning effectively, it is difficult to objectively assess their effectiveness without clear guidelines and service standards in place.

**Contracted Services**

The current process of outsourcing engineering and design functions related to the WTP and the WWTP are considered to be appropriate given the large scope of these projects and the requirement for specific expertise. The partnership with DataCo (via Enmax) for meter reading is seen to be effective and no issues have been raised regarding their performance. Other vendors providing chemicals or other services have annual contracts which are renewed as long as the vendors continue to provide good service at an appropriate price, and there have been no issues identified in this area. Neither the Water nor the Wastewater utility identified any areas currently delivered internally that could or should be more effectively delivered by an external party.

**Water Utility**

Within the EVS department, the Water utility has a Superintendent responsible for overseeing the operations of both the water distribution system as well as the WTP. Supporting the Superintendent is the Lead Operator, who is responsible for managing the distribution system, and the Supervisor at the WTP, who manages plant operations and staff (see Figure 30 for the Water utility organizational chart).

On the distribution side there are four main programs: the uni-directional flushing (UDF) program, the fire hydrant testing program, the water meter program, and the valve exercising program. The UDF program is responsible for removing sediment that builds up within the water mains as well as exercising the valves and hydrants linked to the mains. The fire hydrant testing program conducts semi-annual inspections and maintenance (as required) to ensure all fire hydrants are maintained in good operational condition. The water meter program installs, inspects, maintains and replaces water meters to ensure usage readings are accurate. The valve exercising program inspects and ensures that all valves are in good condition and operating effectively.

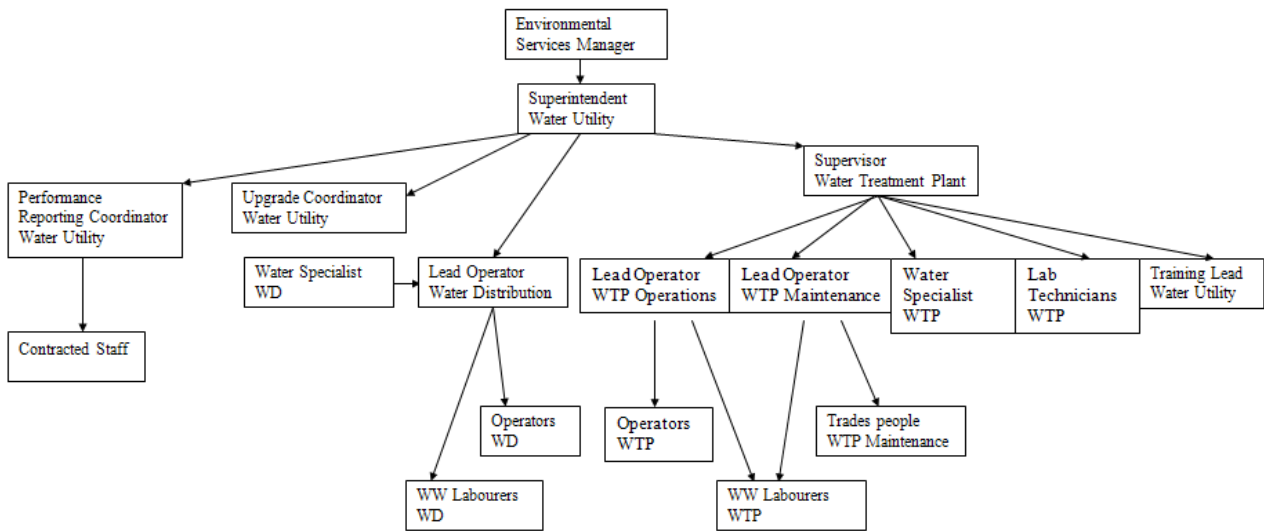
Within the WTP there are three main sections: training, maintenance, and operations. The Training function is responsible for coordinating training programs for staff within the Water utility and to assist in the development and maintenance of procedural documentation. The Maintenance group ensures that utility assets are maintained to support the production of high quality drinking water. The Operations group is directly involved in the production of drinking water for utility customers.

The Water utility also has a Performance Reporting Coordinator who works closely with the Superintendent to monitor and improve performance and compile regulatory and benchmarking report data. Performance monitoring also includes the Lead Service Monitoring Program, the Cross Connection and Backflow Prevention Program, and the Water Conservation Program. Water quality is monitored through the Lab Program.

In addition to working closely with other sections within EVS, the Water utility works closely with Communications and Strategic Planning, Corporate Services (ITS, Revenue and Assessment – Utility Billing, Financial Services), Planning (Inspections and Licensing), and Development Services (Engineering, Public Works).



Figure 30: Water Utility Organizational Chart



A human resources review was undertaken in 2007-2008 to assess the scope of service of the Water section and the human resource requirements for the section. This review closely followed the reorganization within the Development Services division wherein Public Works was split from EVS and the structure and organization of the water, wastewater, waste, and construction and maintenance functions were being refined.

As of December 31, 2011, the Water utility had superintendent overseeing thirty staff, and an average of one supervisor for every twenty staff. The management-to-staff ratio for the distribution system area was one-to-four, while the ratio within the WTP was one-to-23, and these ratios appear to be appropriate given the differing nature of the operations in each section.

Table 22: Water Utility Management-Staff Ratios

	Manager	Staff
Utility Superintendent to all employees	1	30
All Supervisors to all employees	1	20
Distribution Lead Operator to all distribution employees	1	4
WTP Supervisor to all WTP employees	1	23

**Corporate Services**

For the 2013 preliminary budget, the Water utility has been allocated 3.2% of total corporate services costs (see Table 23). The largest percentage allocations are for enterprise asset management (13.7%), the Development Services Director (11.8%) and purchasing (9.2%). From an overall perspective, the Water utility is twelfth out of 27 in terms of the total dollar value of corporate costs allocated (see Table 21).



Table 23: Water Utility Corporate Services Cost Allocation, 2012 Budget

Corporate Service	Water Corporate Service Cost	Net Allocated Corporate Service Costs	Water % of Allocated Corporate Service Costs
Enterprise Asset Mgmt P&I	55,287	403,533	13.7%
Development Services Director	70,894	602,595	11.8%
Stores	48,783	532,347	9.2%
Postage, Banking etc.	(6,943)	(76,796)	9.0%
Purchasing	59,235	932,486	6.4%
Financial Services	118,608	2,114,051	5.6%
Accounts Payable	37,011	660,686	5.6%
Legal Services & Council	135,490	3,008,946	4.5%
City Manager's Office	59,744	1,332,626	4.5%
Communications	47,841	1,069,528	4.5%
Human Resources	130,065	3,201,545	4.1%
ITS	87,197	5,619,332	1.6%
Accounts Receivable	-	651,167	0%
City Hall	-	884,333	0%
Assessment	-	2,060,316	0%
Tax Billing	-	768,714	0%
Insurance - Tax Supported	-	714,970	0%
Planning Director	-	330,007	0%
Communication Services Director	-	1,215,540	0%
Corporate Services Director	-	-	N/A
Red Deer 300K	-	-	N/A
Audit	-	-	N/A
<b>Total</b>	<b>\$ 843,212</b>	<b>\$ 26,025,926</b>	<b>3.2%</b>

Beyond services provided by other City departments, the Water utility works with approximately thirty vendors to provide a variety of products and services, including treatment and testing chemicals, lab supplies and services, architectural and engineering planning and design services, etc. No issues have been identified with the quality or level of service provided by these vendors.

### Wastewater Utility

The Wastewater utility, under the supervision of the Superintendent, houses four main areas related to wastewater collection and treatment. These are the WWTP, the wastewater laboratory, the wastewater collection system, and the Source Control program (see Figure 31 for the Wastewater utility organizational chart).

The WWTP is responsible for the safe treatment of all wastewater entering the plant to ensure that the quality of the water returned to the Red Deer River meets the requirements of the City's AE&W Approval and other applicable regulations, and that solid fertilizer by-products are safe for farmland application. The laboratory provides testing services for the WWTP and other City departments as well as for external customers (i.e.





overstrength testing). The collection area is responsible for maintaining the wastewater system, which includes cleaning, flushing, inspecting and performing minor repairs on sanitary sewers, clearing blockages on City property, and repairing or adjusting manholes. The Source Control program is an industrial monitoring program responsible for overseeing the FOG and dumping stations, the spill response program and the industrial surcharge program as well as protecting the safety and integrity of all Wastewater infrastructure and staff, monitoring industrial and commercial customer compliance with the utility bylaw, and acting as a liaison between the City and residential, commercial, industrial, and governmental bodies.

Staff in the Wastewater utility actively engage with multiple other City departments and sections, including but not limited to Communications and Strategic Planning, Corporate Services (ITS, Revenue and Assessment – Utility Billing, Financial Services), Planning (Inspections and Licensing), and Development Services (Engineering, Public Works).

**Figure 31: Wastewater Utility Organizational Chart**

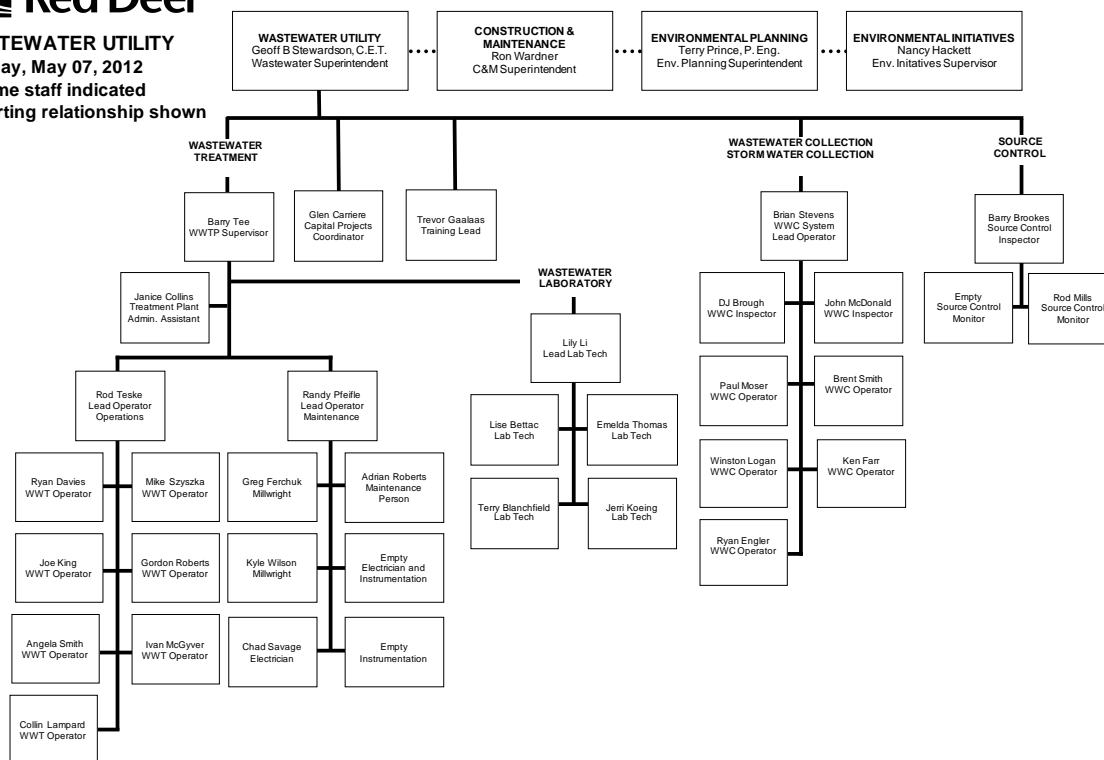


#### WASTEWATER UTILITY

Monday, May 07, 2012

Fulltime staff indicated

Reporting relationship shown



The Wastewater utility has an overall utility management to staff ratio of 1-to-36, but the general supervisor to staff ratio is much lower at 1-to-6.4. The highest ratio within a distinct organizational sub-section occurs within the WWTP (ratio of 1 manager to 18 employees) and the lowest is within the Source Control program (1 Source Control Inspector to 2 Source Control Monitors). Based on experience with similar utilities, the ratio of Wastewater utility supervisors to staff appears to be appropriate.



Table 24: Wastewater Utility Management-Staff Ratios

	Manager	Staff
Utility Superintendent to all employees	1	36
All Supervisors to all employees	1	6.4
Collection Lead Operator to all collection employees	1	7
Lead laboratory technician to all lab employees	1	4
Source control inspector to all source control employees	1	2
WWTP Supervisor to all WWTP employees	1	18

### Corporate Services

The Wastewater utility has been assigned 3.1% of total corporate services costs in the 2012 cost allocation. The most significant costs (as a percent of total) allocated to the utility are for enterprise asset management (16.6%), the Development Services Director (11.8%), and purchasing (7.2%). Out of the 27 departments and sections to which corporate services costs are allocated, the Wastewater utility ranks thirteenth out of 27 in terms of the dollar value of costs allocated.

Table 25: Wastewater Utility Corporate Services Cost Allocation, 2012 Budget

Corporate Service	WW Corporate Service Cost	Net Allocated Corporate Service Costs	WW % of Allocated Corporate Service Costs
Enterprise Asset Mgmt P&I	67,070	403,533	16.6%
Development Services Director	70,894	602,595	11.8%
Postage, Banking etc.	(5,673)	(76,796)	7.4%
Purchasing	67,221	932,486	7.2%
Financial Services	106,317	2,114,051	5.0%
Accounts Payable	28,202	660,686	4.3%
Human Resources	126,091	3,201,545	3.9%
Legal Services & Council	110,702	3,008,946	3.7%
City Manager's Office	48,813	1,332,626	3.7%
Communications	39,088	1,069,528	3.7%
ITS	152,596	5,619,332	2.7%
Stores	8,013	532,347	1.5%
Accounts Receivable	-	651,167	0%
City Hall	-	884,333	0%
Assessment	-	2,060,316	0%
Tax Billing	-	768,714	0%
Insurance - Tax Supported	-	714,970	0%
Planning Director	-	330,007	0%
Communication Services Director	-	1,215,540	0%
Corporate Services Director	-	-	N/A
Red Deer 300K	-	-	N/A
Audit	-	-	N/A
<b>Total</b>	<b>\$ 819,334</b>	<b>\$ 26,025,926</b>	<b>3.1%</b>

In addition to working with other City departments and sections, the four areas within the Wastewater utility deal with numerous external vendors. While there is some crossover (e.g. equipment rentals), most vendors



offer unique services to each aspect of the wastewater business. Altogether, the Wastewater utility partners with approximately thirty different vendors and these relationships generally appear to be effective and are expected to continue for the foreseeable future.

### **Conclusions**

The organizational structure between the Water and Wastewater utilities are relatively consistent, which is positive as it helps to foster a sense of comparability and similarity. Management-to-staff ratios appear to support an appropriate level of oversight without being top-heavy.

The City has a disaggregated model for utility operations, but this appears to work due to the strong communication and individual initiative of staff members. Further, the model by which the City operates and provides corporate services to the various departments appears to be working relatively effectively. Some challenges have been identified in the prioritization of activities between the utilities and the C&M group, and while these are generally managed through personal communication it would be beneficial to all involved to engage in enhanced joint planning to ensure a clear understanding of the resource requirements of each group.

### **Recommendations**

**2.2.1** The Wastewater utility should continue with the process of formalizing the Performance Reporting Coordinator position to support the utility Superintendent in the development and analysis of performance monitoring and reporting processes. This position should be modeled on the current skills and attributes demonstrated by its counterpart in the Water utility.

**2.2.2** The utilities should work with Corporate services and other City departments and sections to determine the need for internal Service Level Agreements for specific functions and services, and to develop and agree upon reasonable service level expectations.

### **2.3 Employee Management**

There are job descriptions for all of the positions in the Water and Wastewater utilities, although many were last reviewed in 2009 or earlier and would therefore benefit from review and updating. Regardless, staff indicate that they have a good understanding of the expectations of their positions and the roles they play as part of the broader team. Corporately, the City is in the process of establishing a human resources design ladder which will provide a more transparent and standardized approach for employee advancement. The transition to this approach is considered a positive step.

EVS does not track vacancy metrics such as the length of time a position remains open before it is filled, and it does not appear that finding qualified staff has been a challenge for the department. The EVS department has a general policy of promoting from within which leads to almost all management positions being filled internally. This preference has resulted in some cases where highly competent operational staff have been promoted to management positions. When promoting internally, care must be taken to ensure effective training and mentorship to ensure new managers are able to successfully carry out the requirements of their



new roles. There is no indication that these individuals are not fully capable of carrying out these duties, but additional support and access to management training and tools could have a significant impact on ensuring that staff have the necessary skills to successfully transition from an operational to a management role. Technical skills and training appear to be appropriate and in some cases exceed the regulatory requirements in terms of the number of staff with certain certification levels required to be present in the treatment plants.

It was noted that the WTP has faced challenges in hiring a Water Utility Specialist, but apart from this position Red Deer has not experienced significant difficulties in finding qualified staff. Recruiting data for Alberta employers, as collected and compiled by the Government of Alberta and shown in Table 26, for utility managers and water and waste plant operators suggests a similar pattern for other utilities in the province. One-quarter (25%) of Alberta employers seeking water and waste plant operators indicated they faced difficulty in hiring these staff, while just 8% had hiring difficulties when seeking utility managers. For the most part, these positions were not likely to remain unfilled for more than four months. Compensation appears to be comparable to similar organizations in the region.

**Table 26: Alberta Employer Recruiting Data for Water and Wastewater Utilities in 2011**

	<i>Utility Managers</i>	<i>Water and Waste Plant Operators</i>
% employers that recruited in the last 2 years	57%	60%
% recruiting employers that experienced hiring difficulties	8%	25%
% employers with unfilled vacancies of over 4 months	0%	6%
2011 vacancy rate	0%	3%

EVS tracks when each employee's next performance review should occur, but does not indicate the date of the last performance review or provide any details regarding how frequently the reviews occur. During interviews it was noted that reviews are currently held on an annual basis but the intention is to increase this to a semi-annual occurrence. EVS uses a standard City Work Expectations and Review Worksheet when conducting employee performance reviews. This worksheet identifies expectations such as supporting the City's cornerstone values, working safely or refusing to work unsafely, as well as work activities specific to the employee's role. The worksheet also provides space for the employee to identify goals (if desired) and provide general comments. Once this document is completed by the employee, it is submitted to the supervisor for review and comments. After both sections are complete, the employee and the supervisor sign the document and submit it to the department head for review and sign-off. The signed document is then reviewed for completeness and filed in the Human Resources department.

It appears that the department has sufficient staff within the utilities and the C&M section to manage critical operations and maintenance functions. When emergencies arise, the sections are able to draw upon resources from other areas to ensure the issue is resolved quickly.

### **Water Utility**

As of December 31, 2011, the Water utility employed 31 staff, including one currently on a leave of absence (Waterworks Labourer), one temporary part-time (Waterworks Treatment Plant Operator), one permanent part-time (Laboratory Tech – Water Section), and 28 permanent full-time employees. Within the Water

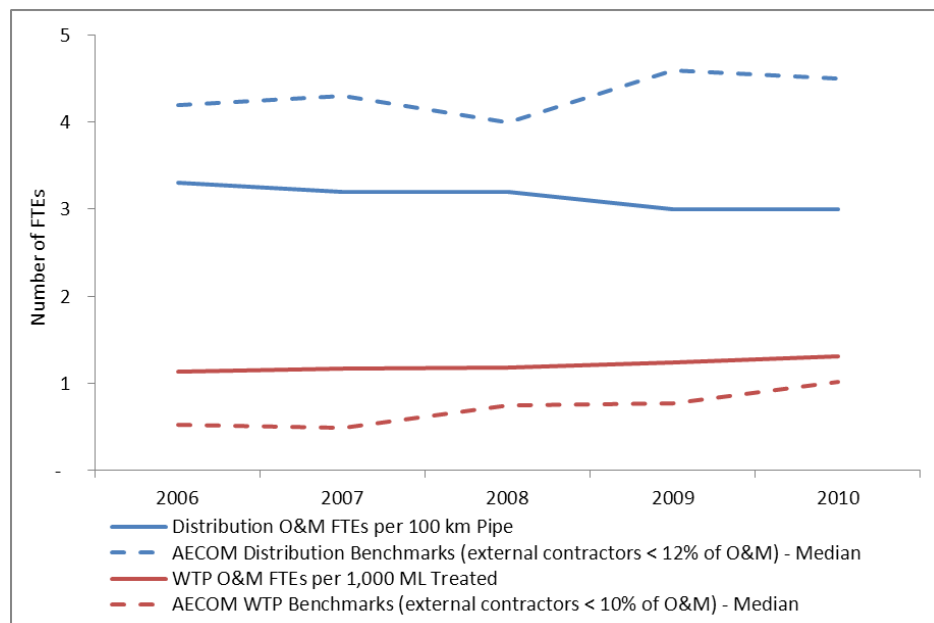


section but not specifically assigned to the distribution or WTP areas are the Water utility Superintendent and the Performance Reporting Coordinator. The distribution area staff are all permanent full-time, and consist of the distribution Lead Operator, three Operators, and one Specialist for a total of five full-time staff. The WTP currently houses 24 staff (including the LOA, TPT and PPT employees noted above) in a variety of roles including the WTP Supervisor, Lead Operators for maintenance and plant operations, ten full-time Operators, two Instrument Techs, two Maintenance Trades Persons, an Electrician, a Training Lead, a Capital Projects Coordinator, and an Administrative Assistant.

As shown in Figure 32, the Water utility had an average of 3.0 O&M distribution field staff per 100 km of pipe between 2006 and 2010, and has historically operated with fewer O&M FTEs per 100 km of pipe compared to benchmark distribution systems.

The Water utility averaged 1.2 O&M WTP field FTEs per 1,000 cubic meters of water treated in the plant between 2006 and 2010, and this number has remained fairly consistent over this time frame. This ratio is higher than the median of comparable WTPs, which averaged 0.6 field FTEs per 1,000 cubic meters of water treated over the same period. However, due to the way actual FTEs are calculated this metric may have been impacted by a number of factors, including: the amount of overtime hours worked by WTP staff, provincial regulation requiring water to be treated to a higher level of quality relative to other Canadian jurisdictions, proportionally higher use of external contractors versus internal staff by other utilities, and the inclusion in Red Deer's numbers of FTEs that could potentially be considered supervisory or administrative support staff (which would be excluded from the O&M FTE count). It is noted that the WTP will be undertaking a pilot project to examine the impact of shift changes in the plant. This is expected not only to reduce the amount of overtime required but also to free up resources to carry out additional work that have fallen to the side and support other staff.

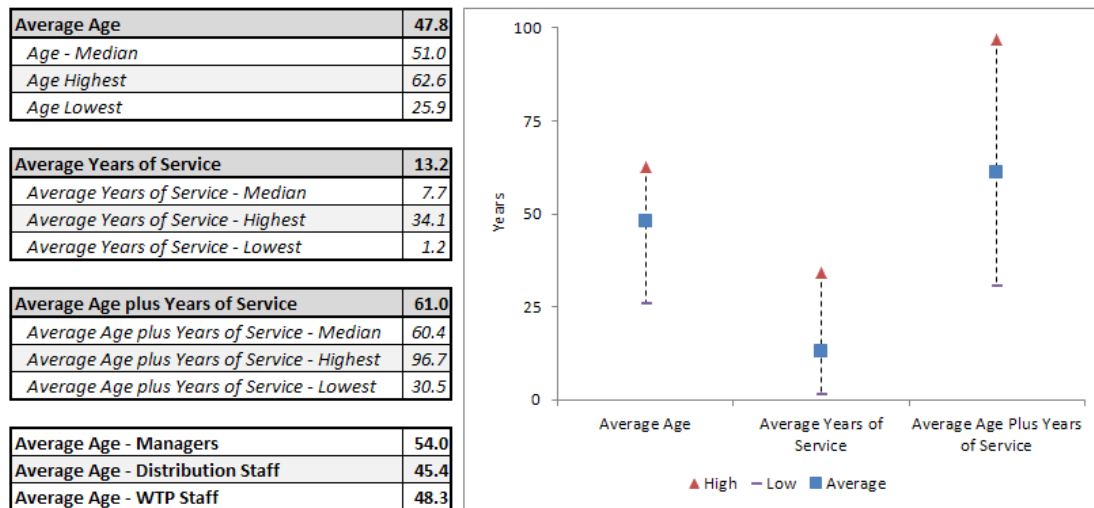
**Figure 32: Water Utility O&M FTEs per 100 km of Pipe / 1,000 Megalitres Treated**





As of December 31, 2011, the average age of Water utility staff was 47.8 years (ranging from a low of 25.9 to a high of 62.6), the average years of service was 13.2 (low of 1.2 years, high of 34.1 years), and the average age plus years of service was 61.0 (low of 30.5 years, high of 96.7 years). On average, staff in the distribution area were 45.4 years old while those in the WTP were an average of 48.3 years old. The average age of Managers and Supervisors was 54.0 years, which has been identified as an area of concern given that staff are eligible for full retirement at 55 and there is currently a lack of groomed successors for management positions. Just over half (54.8%) of all staff in the Water utility were over age 50.

**Figure 33: Water Utility Staff Age and Years of Service**



Within the Water utility, personnel costs as a percent of total operating costs generally trended upward between 2007 and 2011 (with some year-to-year fluctuation) and averaged of 37.3% over the five-year period. Current year ratios are comparable to other utilities. It should be noted that a portion (approximately \$300,000) of the increase experienced between 2007 and 2008 was the result of an accounting policy that changed the manner in which administrative costs were assigned. Prior to 2008, administrative costs were accounted for as a transfer, but for 2008 onward these costs were accounted for directly in Personnel Costs.

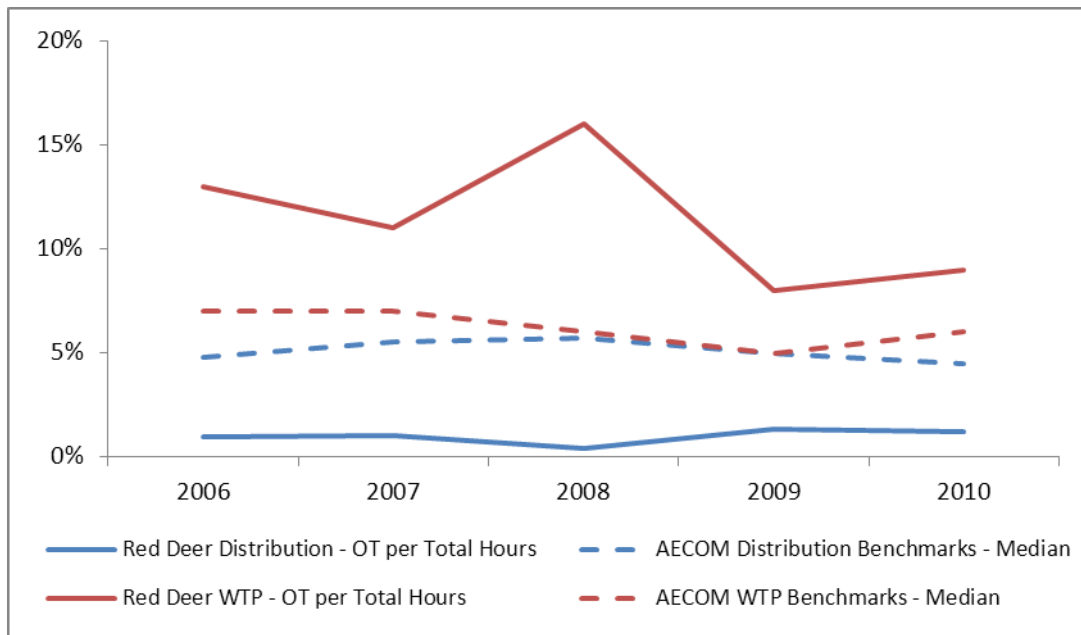
**Table 27: Water Utility Personnel Costs as a Percentage of Total Operating Costs**

Year	Operating Costs	Personnel Costs	Personnel Costs as % of Operating Costs
2007	\$ 7,200,617	\$ 2,351,034	32.7%
2008	7,924,815	3,062,849	38.6%
2009	9,307,776	3,355,684	36.1%
2010	9,022,118	3,524,258	39.1%
2011	10,268,618	4,136,651	40.3%
2012 (budget)	11,353,435	4,996,589	44.0%



As shown in Figure 34, overtime worked by distribution staff remained fairly steady around the 1.0% mark between 2006 and 2010, which is lower than the ratio for comparable distribution systems (approximately 5.1% over the same period). The ratio of overtime to total hours worked at the WTP fluctuated between 2006 and 2010, reaching a high of 16.0% in 2008 and a low of 8.0% in 2009, but remained consistently higher than the median value demonstrated by comparable treatment plants (average of 6.2%). The utility has recognized the overtime trend experienced by WTP staff, and will be piloting a revised work schedule in the fall of 2012. This is expected to significantly reduce the amount of overtime required to be worked by plant staff and also result in cost savings to the utility.

**Figure 34: Water Utility Overtime Hours for Distribution and WTP Staff**



The number of customers served per Water utility budgeted FTE remained fairly consistent between 2006 and 2010, averaging 2,505 (see Table 28) while the amount of water treated for distribution to customers increased slightly over this same period from 364 cubic meters per utility FTE in 2006 to 381 cubic meters per FTE in 2010 (see Table 29).



Table 28: Water Utility Population Served per FTE<sup>5</sup>

Year	Total Population Served	Water FTEs	Population per FTE
2006	106,093	44.2	2,400
2007	109,486	46.2	2,370
2008	111,597	48.8	2,289
2009	114,610	43.3	2,647
2010	114,803	40.7	2,821

Table 29: Water Utility Treated Water (Megalitres) per FTE

Year	Total Treated (ML / year)	Water FTEs	Treated Water (ML) per FTE
2006	16,108	44.2	364
2007	16,102	46.2	349
2008	16,334	48.8	335
2009	16,573	43.3	383
2010	15,503	40.7	381

In general, staffing levels and breakdowns by level and function appear to be appropriate for achieving the organization's goals and objectives in an effective and efficient manner. However, some staff expressed concern regarding the expanding distribution network and increasing demand placed upon the WTP and the lack of corresponding increases in budgeted FTE allotment to facilitate the effective management of this infrastructure. This was seen to be a particular issue in the Water distribution area, where staff indicate that this is already having a negative impact on morale and performance. Analysis of overtime worked by Red Deer and benchmark distribution staff, coupled with a lack of significant change in the number of customers per Water utility FTE and a declining trend in the volume of water treated per FTE suggests that the number of staff in this area is appropriate given the current infrastructure and customer levels.

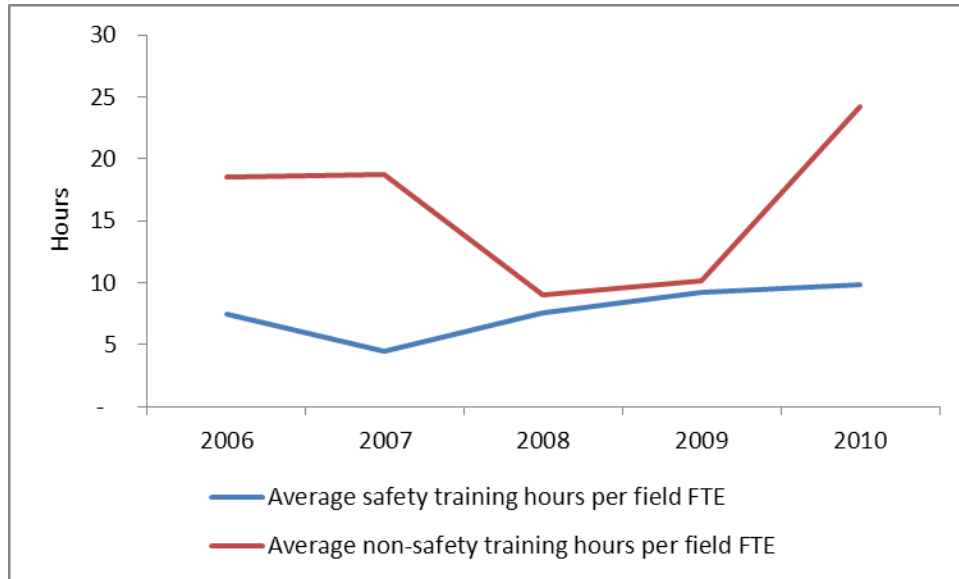
After experiencing a decrease in per-field-FTE safety training in 2007, the amount of time Water utility field staff spend in safety training each year has been trending upward (low of 4.5 hours per field FTE in 2007 to 9.8 hours per field FTE in 2010). For other types of training (excluding safety training), the number of hours spent by field FTEs decreased from 18.7 hours per field FTE in 2007 to 9.0 and 10.2 hours in 2008 and 2009, respectively, before increasing to 24.2 hours per field FTE in 2010.

---

<sup>5</sup> Includes regional customers served

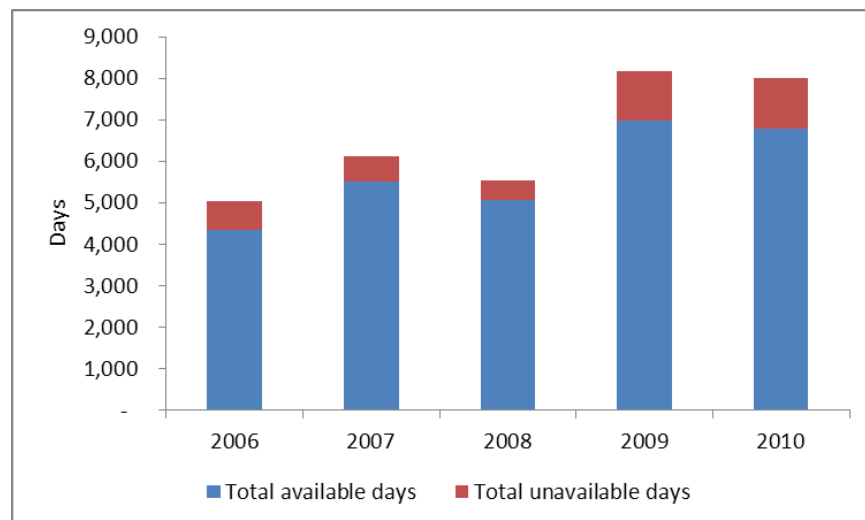


**Figure 35: Water Utility Annual Safety and Other Training Hours per Field FTE**



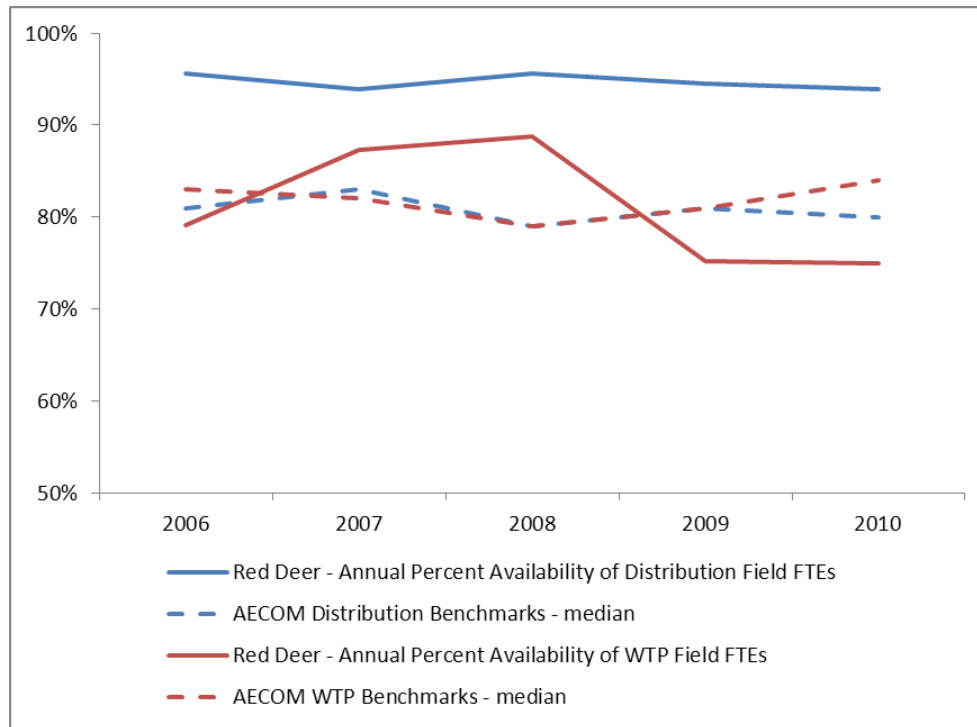
While the total annual number of available field FTE days increased from 4,351 in 2006 to 6,795 in 2010 (see Figure 36) the percent availability of both distribution and WTP field FTEs experienced an overall decline. As shown in Figure 37, the average availability of distribution staff consistently exceeded median availability at other utilities, with Red Deer distribution staff averaging 95% availability compared to 81% for benchmark organizations. While fluctuating year-to-year, the five-year average availability of staff at the WTP was consistent with benchmark organizations (81% and 82% availability, respectively).

**Figure 36: Water Utility Annual Field FTE Availability**





**Figure 37: Water Utility Distribution and WTP Field FTE Annual Percent Availability**



### **Wastewater Utility**

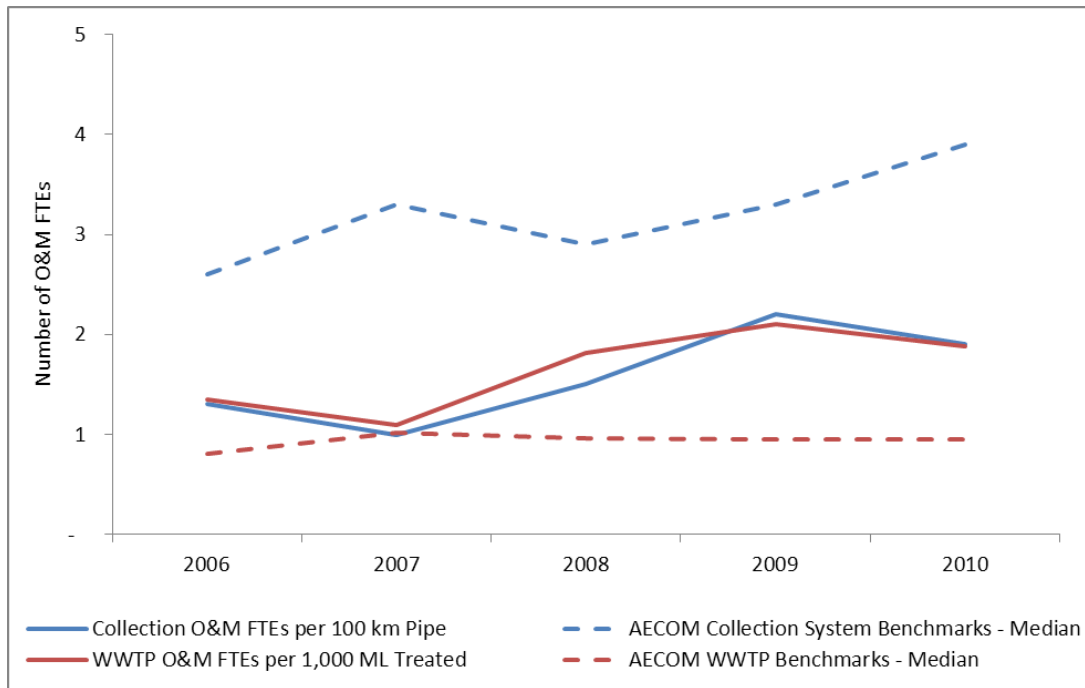
As of December 31, 2011, the Wastewater utility housed 37 staff. Of these, one is classified as temporary part-time (Utility Person), one is temporary full-time (Utility Person) and one is permanent part-time (Laboratory Technician), and the remaining 34 are permanent full-time employees. Overseeing all areas of the Wastewater section are the Wastewater Superintendent and one Training Lead. Within the collections area there are eight staff, all permanent full-time, consisting of the collection system Lead Operator, five Labourers, one Television Inspection Operator, and one Equipment Operator. The Laboratory area houses one Lead Laboratory Technician, three permanent full-time Laboratory Technicians, and one permanent part-time Laboratory Technician. Source Control is comprised of one Source Control Inspector and two Source Control Monitors for a total of three permanent full-time staff. The WWTP has 19 staff, including the temporary part-time and full-time Utility Persons noted above. Other staff in this area include the plant Supervisor, two Lead Operators, seven Operators, two Maintenance Millwrights and one Maintenance Person, one Electrician and one Instrument Tech / Electrician, one Capital Projects Coordinator and one Administrative Assistant.

From 2006 to 2010, the Wastewater utility averaged 1.6 O&M collection field FTEs per 100 km of wastewater collection pipe, consistently under the average of 2.6 for benchmark organizations. For the WWTP, the ratio of O&M treatment field FTEs averaged 1.6 per 1,000 cubic meters of treated wastewater over the same period, which was above the median of 0.8 reported by comparable WWTPs (see Figure 38). However, due to the way actual FTEs are calculated, this metric may have been impacted by a number of factors, including: the amount of overtime hours worked by WTP staff, provincial regulation requiring



wastewater to be treated to a higher level of quality relative to other Canadian jurisdictions, proportionally higher use of external contractors versus internal staff by other utilities, and the inclusion in Red Deer's numbers of 3.5 FTEs that could potentially be considered supervisory or administrative support staff (which would be excluded from the O&M FTE count).

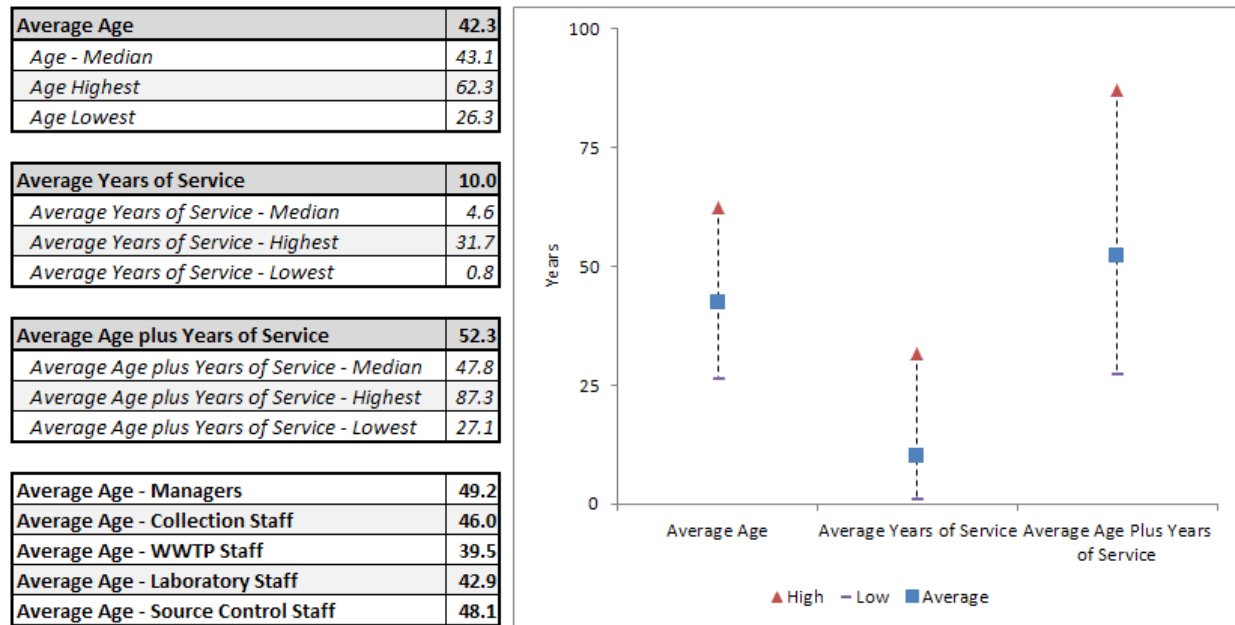
**Figure 38: Wastewater Utility O&M FTEs per 100 km of Pipe / 1,000 Megalitres Treated**



On December 31, 2011, the average age of Wastewater utility staff was 42.3 years (ranging from a low of 26.3 to a high of 62.3), the average years of service was 10.0 (low of 0.8 years, high of 31.7 years), and the average age plus years of service was 52.3 (low of 27.1 years, high of 87.3 years). On average, staff in the collection area were 46.0 years old, those in the WWTP were an average of 39.5 years old, and staff in the laboratory and source control were an average of 42.9 and 48.1 years, respectively. The average age of Managers and Supervisors was 49.2 years, and nearly one-third (32.4%) of overall staff in the Wastewater utility were over the age of 50 (see Figure 39). As the age at which Wastewater utility staff become eligible for retirement is 55 years, it will become increasingly important to focus on succession planning over the next few years to ensure a smooth transition should these employees choose to retire as soon as they are eligible. Nearly one-third (32.4%) of staff in the Wastewater utility were over the age of 50.



Figure 39: Wastewater Utility Staff Age and Years of Service



As shown in Table 30, personnel costs as a percent of total Wastewater utility operating costs averaged 36.2% between 2007 and 2011. This ratio trended upward from 27.9% in 2007 to 41.2% in 2011, and the 2011 ratio is comparable to other utilities. It should be noted that a portion (approximately \$300,000) of the increase experienced between 2007 and 2008 was the result of an accounting policy that changed the manner in which administrative costs were assigned. Prior to 2008, administrative costs were accounted for as a transfer, but for 2008 onward these costs were accounted for directly in Personnel Costs.

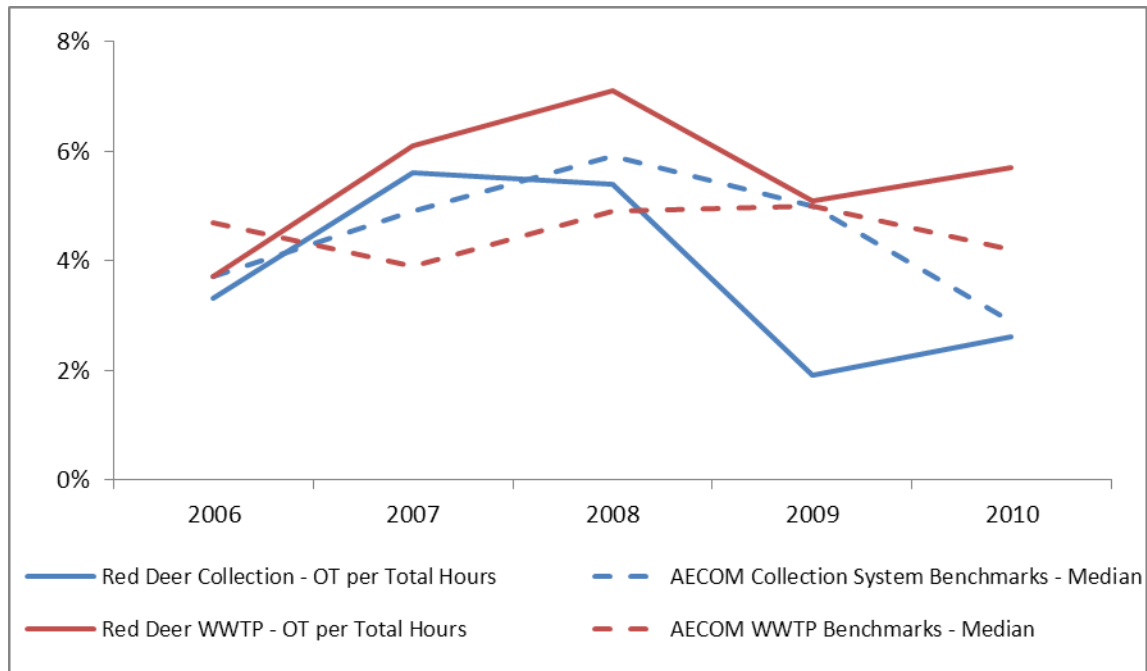
Table 30: Wastewater Utility Personnel Costs as a Percentage of Total Operating Costs

Year	Total Utility Operating Costs	Personnel Costs	Personnel Costs as % of Operating Costs
2007	\$ 5,809,980	\$ 1,619,783	27.9%
2008	6,919,957	2,539,765	36.7%
2009	8,721,779	3,134,873	35.9%
2010	8,673,765	3,394,664	39.1%
2011	8,888,908	3,666,026	41.2%
2012 (budget)	10,096,957	4,237,503	42.0%

Overtime as a percentage of total hours paid for all employees in the Wastewater utility peaked at 6.7% in 2008 and averaged 5.0% between 2006 and 2010. Within the collection area, this ratio was highest in 2007 and 2008 (5.6% and 5.4%, respectively) but decreased to 2.6% in 2010. The median ratio for collection staff in benchmark organizations was slightly higher than the Red Deer average over the 2006 to 2010 period (4.5% vs. 3.8% for Red Deer). Within the WWTP, overtime as a percentage of total hours peaked in 2008 at 7.1% and averaged 5.5% over the 2006 to 2010 period. This is somewhat higher than the ratio for comparable treatment plants, which averaged 4.5% over the same timeframe (see Figure 40).



Figure 40: Wastewater Utility Overtime Hours for Collection and WWTP Staff



Population served per Wastewater utility budgeted FTE fluctuated somewhat between 2006 and 2010, peaking at 3,119 customers per employee in 2009 following a low of 2,645 per FTE in 2008 (see Table 31). The volume of wastewater treated per FTE, while also experiencing some fluctuation, generally trended downward from a high of 534 ML per FTE in 2006 to 412 ML per FTE in 2010 (see Table 32).

Table 31: Wastewater Utility Population Served per FTE

Year	Total Population Served	Wastewater FTEs	Population per FTE
2006	84,721	28.0	3,026
2007	87,666	32.0	2,740
2008	89,930	34.0	2,645
2009	92,005	29.5	3,119
2010	92,406	34.6	2,671

Table 32: Wastewater Utility Treated Wastewater (Megalitre) per FTE

Year	Total Treated (ML / year)	Wastewater FTEs	Treated Wastewater (ML) per FTE
2006	14,943	28.0	534
2007	15,578	32.0	487
2008	13,797	34.0	406
2009	13,235	29.5	449
2010	14,242	34.6	412



Based on the above information, staffing levels and breakdowns by level and function appear to be appropriate for achieving the goals and objectives of the Wastewater utility in an effective and efficient manner.

While fluctuating from year-to-year, the average number of hours spent per year in safety training for each Wastewater utility field FTE has generally remained between the eight to twelve hours-per-year range. The exception was in 2007 when the number of hours spent in safety training dropped to just 2.7 hours per field FTE. The average number of hours spent per year in other (non-safety) training increased significantly from 2.4 hours in 2006 to 21.7 hours 2008 before declining again to 4.1 hours in 2010.

**Figure 41: Wastewater Utility Annual Safety and Other Training Hours per Field FTE**



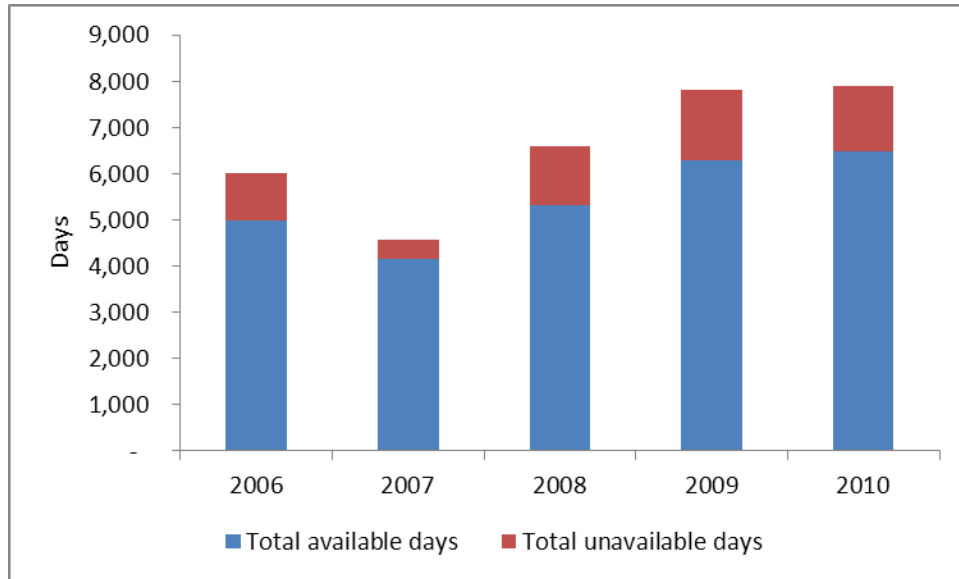
As shown in Figure 37, the average availability of distribution staff consistently exceeded median availability at other utilities, with Red Deer distribution staff averaging 95% availability compared to 81% for benchmark organizations. While fluctuating year-to-year, the five-year average availability of staff at the WTP was consistent with benchmark organizations (81% and 82% availability, respectively).

The total number of available field FTE days increased from 4,978 in 2006 to 6,479 in 2010 (see Figure 42). As shown in Figure 43, the average availability of collection staff consistently exceeded median availability at other utilities, with Red Deer distribution staff averaging 86% availability compared to 80% for benchmark organizations. The five-year average availability of staff at the WTP was, on average, consistent with benchmark organizations (83% and 82% availability, respectively).

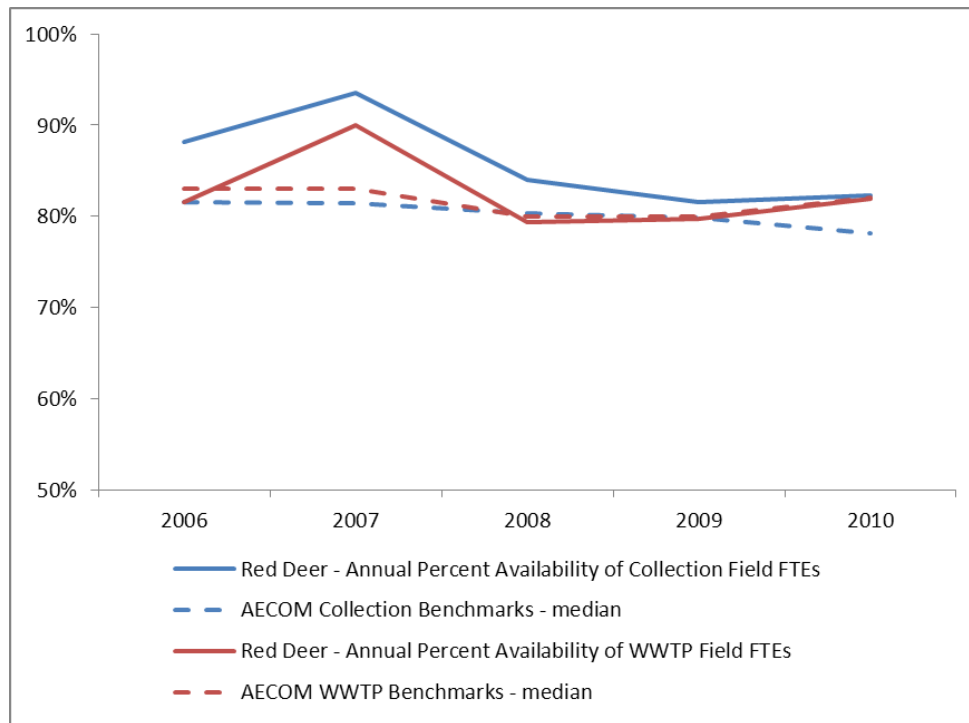




**Figure 42: Wastewater Utility Annual Field FTE Availability**



**Figure 43: Wastewater Utility Collection and WWTP Field FTE Annual Percent Availability**



## Conclusions

While staffing has increased for both utilities, this has likely been at least partially driven by capacity upgrades and additional regulatory requirements. Recent efforts have been focused on minimizing staff increases and these should be continued in areas where staff complements are adequate.



As of 2011, utility personnel costs as a percent of total operating costs are in line with other utilities, suggesting that staffing costs are appropriate. However, staff complement in the treatment plants appears to be high relative to benchmark utilities, while staff in the distribution and collection areas appears to be low. Overtime worked in the WTP appears to be somewhat high, but this issue has been identified and the utility has developed a clear plan to address this through revised shift schedules.

Succession planning is of utmost importance as the average age of operators and managers approaches retirement age. The practice of promoting from within, which is positive and encourages morale, must be supported by ensuring that new managers are provided with appropriate training, tools and resources.

### **Recommendations**

- 2.3.1** Engage in a review and update of all job descriptions that have not been prepared or evaluated within the past two years to ensure they accurately reflect the nature of the work expected to be carried out by individuals in each position, as well as to confirm educational and experience requirements for each position. This process should involve management and supervisors, union representatives (where required), as well as the individuals currently in the positions.
- 2.3.2** Develop a clear and specific succession plan that addresses upcoming retirements and potential knowledge gaps that may arise. This is particularly important for the Water utility, where issues of succession are more immediate.
- 2.3.3** Ensure that all staff, management and operational, have access to role-specific and appropriate training and tools to facilitate their successful performance of their position requirements.
- 2.3.4** The City should consider adding FTEs in the distribution and collection areas, as both benchmarking results and staff comments suggest that these areas have historically been and currently are understaffed.
- 2.3.5** In the Wastewater utility, trends in the ratios of population and ML of treated wastewater per FTE have been going down due to increases in utility FTEs, which could be at least partially due to increasing processing and regulatory requirements. The trend has reversed in 2010, but efforts should continue in looking for areas to improve efficiencies.
- 2.3.6** For the Wastewater utility, safety training hours should be maintained at a consistent level to ensure a safe work environment.

## **2.4 Working Environment**

From a structural perspective the last major change occurred with the separation of the Public Works department from the functions now housed in EVS and the ultimate separation of Water, Wastewater and C&M into unique sections. While these were major transitions for the utilities they appear to have been managed well and the resulting structure appears to facilitate the effective management of these operations.



Within EVS, the recent retirement of several long term staff members and upcoming retirement of additional employees as they approach retirement age has led to younger staff moving up through the organization. This transition will require ongoing training and support as some of these staff, while skilled in utility operations, have little to no experience in utility management responsibilities. The culture of the EVS department and the utilities appears to be focused on supporting employee satisfaction and safety, and it will become more and more important that this focus include management as well as operational staff. One successful program specifically noted by staff was the Respectful Workplace initiative, which was described as having a very positive impact on the workplace culture. Staff recognize and appreciate efforts by the organization to ensure they feel safe and respected at work, which translates into loyalty and engagement over the long term.

The City has established several corporate health and safety policies, including hazard assessment, workplace inspections, protective equipment, procedures when working alone, workplace violence, etc. These policies and procedures apply to all City staff. In addition, the City's Emergency Management Bylaw outlines procedures and responsibilities of specific parties in the event of a City-wide emergency. The bylaw establishes the composition and duties of an Emergency Management Committee and Emergency Management Agency who have the authority and responsibility to prepare, coordinate and implement emergency management plans and programs.

When day-to-day safety incidents occur, all City staff are required to report the incident using a template provided by the City. This template classifies the incident into one of six classes based on damage and/or injury and cause of the incident. This information is reported back to the City where it is compiled and compared with other City departments, utilities and functions.

It is important to note that the volume of safety incidents is only one indicator of a safe work environment, and the gravity or severity of each incident must also be taken into consideration. The incident classes are defined as follows:

- Class 1: An event that resulted in damage and/or lost time injury from a situation that was unforeseen or unavoidable and where the employee took every reasonable precaution to prevent the damage or injury from occurring.
- Class 2: An event that resulted in damage and/or any injury from a situation that occurred due to inadequate job procedure being in place.
- Class 3: An event that resulted in damage and/or lost time injury from a situation that occurred due to the non-adherence to safe work practices and where the employee did not do everything reasonable to prevent the situation from occurring.
- Class 4: An event that resulted in NO damage and/or NO injury from a situation that occurred due to inadequate job procedure being in place.
- Class 5: An event that resulted in NO damage and/or NO lost time injury from a situation that was unforeseen or unavoidable and where the employee took every reasonable precaution to prevent the damage or injury from occurring.

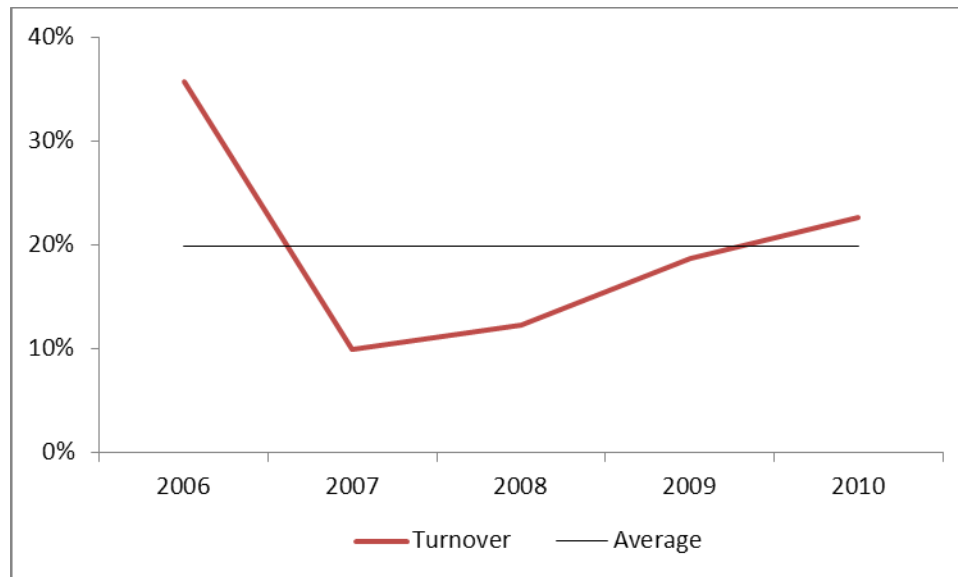


- Class 6: An event that resulted in NO damage and/or NO lost time injury from a situation that occurred due to the non-adherence to safe work practices and where the employee did not do everything reasonable to prevent the situation from occurring.

### Water Utility

Turnover of staff within the Water utility has generally been quite high. As shown in Figure 44, the lowest turnover occurred in 2010, with 10% of staff turning over, while the highest turnover, 35.71% occurred in 2006. The average rate of turnover between 2006 and 2010 was 20%, or one in every five employees. It is important to note that the utility employs a relatively high number of seasonal employees, and recent retirements also impact this measure. However, information received from the human resources system does not break out employee classification and it is therefore not possible to determine how much of the turnover is due to operational seasonality and how much is due to the turning of permanent staff.

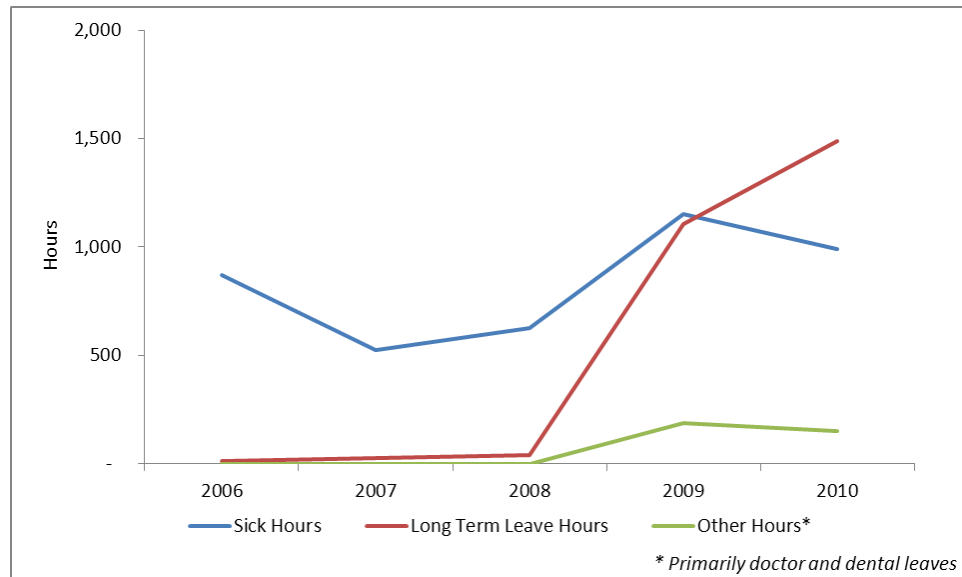
**Figure 44: Water Utility Staff Turnover**



The number of sick hours taken annually by staff in the Water utility increased to 1,152 in 2009 and 991 in 2010 compared to previous years (average of 674 between 2006 and 2008), and other absences (primarily doctor and dental leaves) increased somewhat in 2009 and 2010 relative to the previous three years. A larger increase is seen in the number of hours taken for long-term leave which increased sharply from less than 50 hours per year between 2006 and 2008 to 1,108 hours in 2009 and 1,489 hours in 2010 (see Figure 45). Total absences averaged 1,437 hours per year between 2006 and 2010.

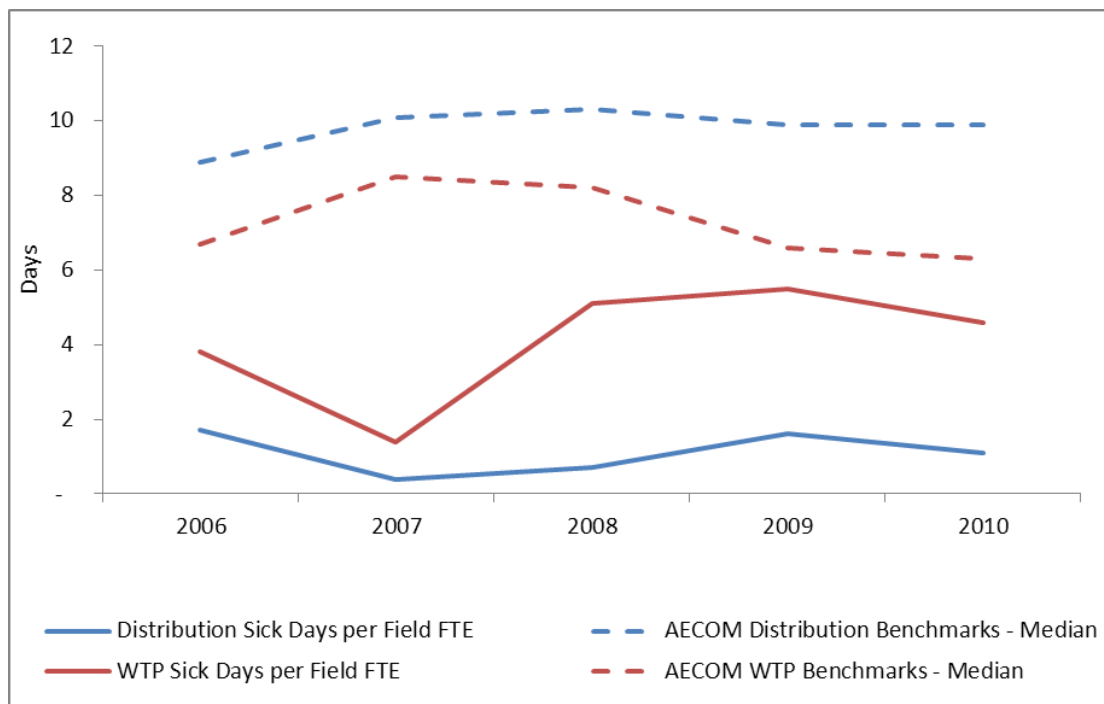


**Figure 45: Water Utility Annual Sick, Long-Term, and Other Leave Hours**



When considered relative to benchmark organizations, the average number of sick days per year per distribution field FTE for Red Deer between 2006 and 2010 was 0.9, which was significantly lower than the average median for comparators at 9.8. For the WTP, the City's average was 4.1 sick days per year per WTP field FTE, which was again favourable compared to the average of 7.3 days for other WTPs (see Figure 46).

**Figure 46: Water Utility Average Annual Sick Days per Distribution and WTP Field FTE**





The low number of absences and sick days suggest that employees are dedicated to fulfilling their responsibilities and are committed to the utility. However, metrics such as increasing long-term leaves could indicate staff burnout and therefore warrant serious attention and monitoring.

The Water utility has a strong safety record, with the last lost-time injury on record occurring in 1997. As shown in Table 33, the utility recorded three injuries in 2011, including two requiring medical aid and one requiring first aid, and four incidents including one class 1 (damage due to unforeseen or unavoidable circumstances), two class 3 (damage resulting from non-adherence to safe work practices), and one class 5 incident (an event resulting in no damage that was unforeseen or unavoidable). Compared to City averages, it appears that the Water utility has performed better than average on all safety measures.

**Table 33: Water Utility 2011 Reported Safety Incidents**

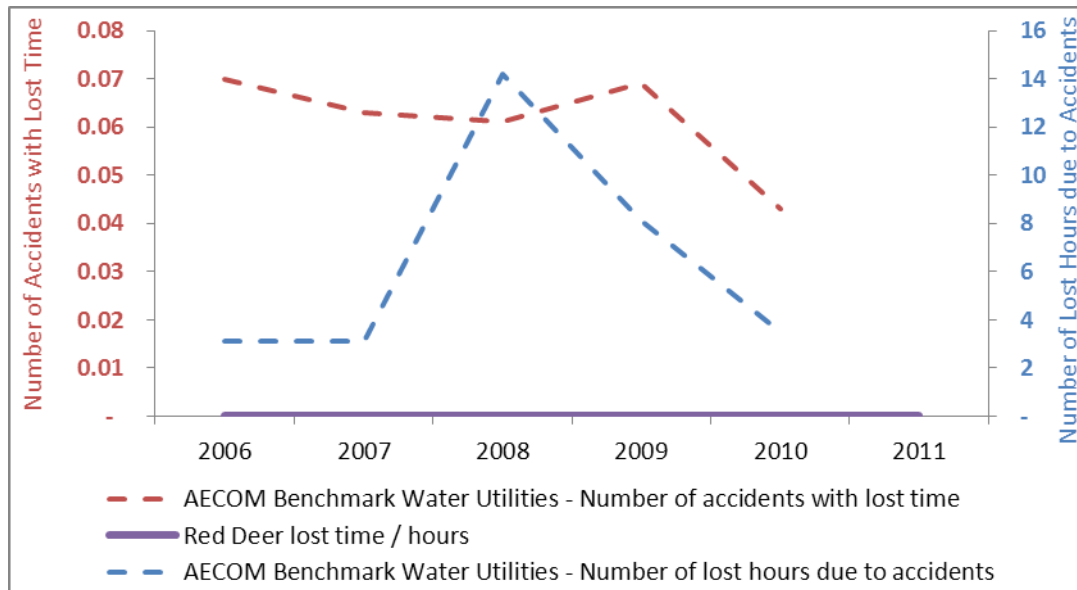
2011	Water Utility	City Average per Department
<b>Date of Last Lost Time Injury</b>	Aug 21, 1997	
<b>Injury Free Work Days</b>	5,245	
<b>Hours Worked</b>		115,722
<b>Injury Totals</b>	<b>3</b>	<b>5.53</b>
<i>Injury - Lost Time Injury</i>	-	1.58
<i>Injury - Medical Aid</i>	2	1.89
<i>Injury - First Aid</i>	1	0.84
<i>Injury - Incident</i>	-	1.21
<b>Frequency Rate*</b>	-	2.73
<b>Vehicle Accidents - YTD</b>	1	8.26
<b>Incident Class</b>		
<i>Class 1</i>	1	4.95
<i>Class 2</i>	-	0.58
<i>Class 3</i>	2	5.26
<i>Class 4</i>	-	0.05
<i>Class 5</i>	1	2.26
<i>Class 6</i>	-	0.53

*\* Number of Lost Time incidents x 200,000 / total hours worked*

Benchmarking with similar organizations reveals a similar picture. The Red Deer Water utility has not reported any accidents resulting in lost time since 1997 and therefore compares well against water utilities operating similar distribution systems and WTPs. For benchmark utilities, the highest number of lost hours due to accidents occurred in 2008 with a median of 14.2 hours, and these utilities averaged 6.4 lost hours per year between 2006 and 2010. For benchmark utilities, the number of accidents resulting in lost time over this same period averaged 0.06.



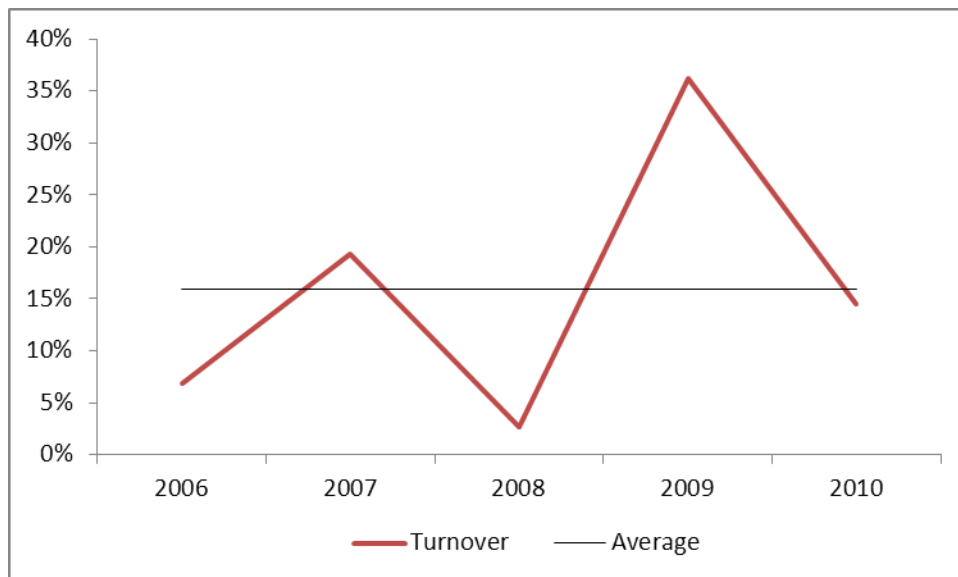
Figure 47: Water Utility Number of Accidents with Lost Time and Number of Lost Hours



### Wastewater Utility

Turnover in the Wastewater utility has demonstrated large fluctuations between 2006 and 2010, jumping from 6.9% in 2006 to 19.4% in 2007, back down to 2.7% in 2008 and then way up to 36.2% in 2009 before decreasing to 14.6% in 2010. The average over the whole period was 15.9% (see Figure 48). These fluctuations are thought to be driven mainly by seasonal staffing turnover and recent retirements. However, information received from the human resources system does not break out employee classification and it is therefore not possible to determine how much of the turnover is due to operational seasonality and how much is due to the turning of permanent staff.

Figure 48: Wastewater Utility Staff Turnover

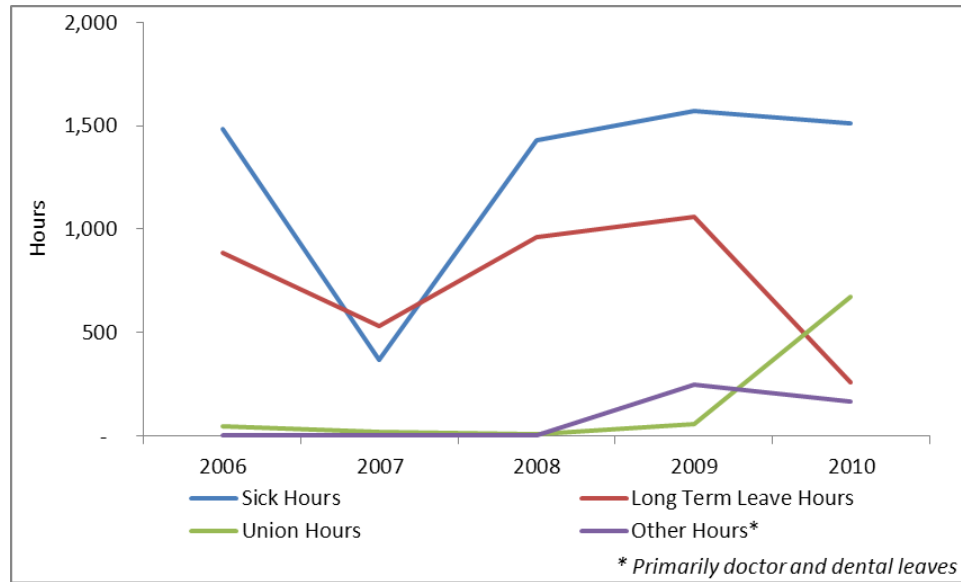






As shown in Figure 49, apart from the decrease in 2007 and corresponding increase in 2008, the number of sick hours taken annually by staff in the Wastewater utility has remained around the 1,500 per year mark. Long-term leave hours followed a similar pattern, but decreased from 1,058 in 2009 to 259 in 2010. Fewer than 60 Union leave-hours were taken each year between 2006 and 2009, but increased ten-fold in 2010 while other (primarily doctor and dental leaves) hours increased somewhat for 2009 and 2010 relative to the previous three years. The total annual number of absent hours averaged 2,254 between 2006 and 2010.

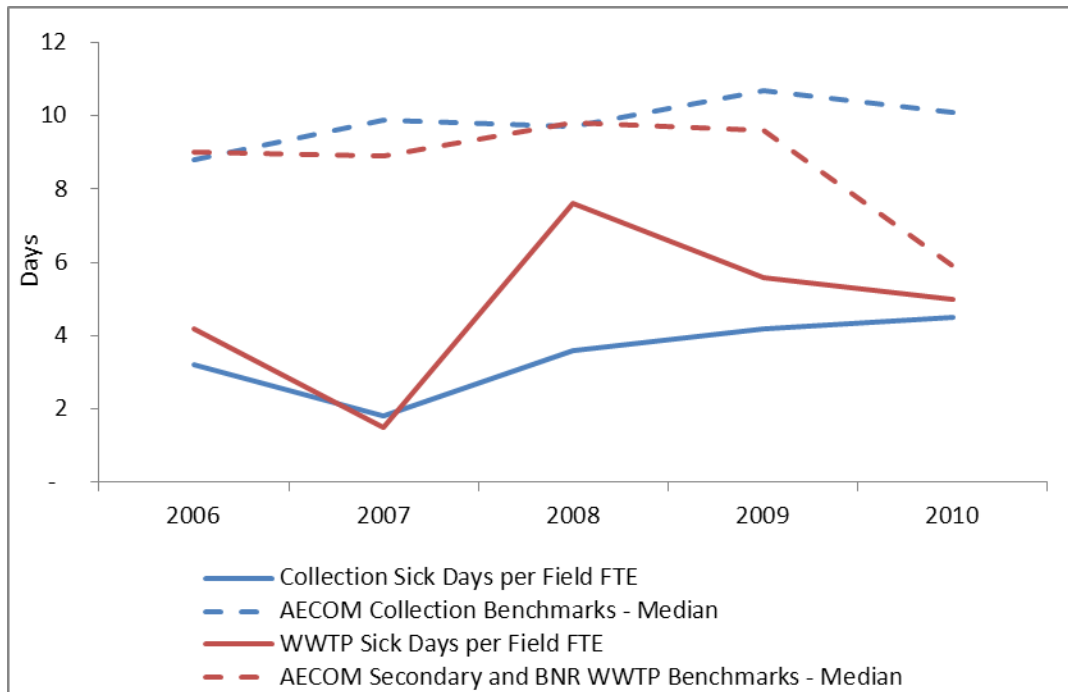
**Figure 49: Wastewater Utility Annual Sick, Long-Term, Union, and Other Leave Hours**



The number of sick days taken on an annual, overall basis was lowest in 2007 at approximately 1.5 days per WWTP field FTE and 1.8 per collection field FTE. Relative to similar utilities, collection field FTEs took fewer sick days with an average of 3.5 days per year compared to 9.8 for benchmark utilities. WWTP field FTE's took an average of 4.8 sick days per year, which was also favourable compared to the average of 8.6 days per field FTE for all Secondary and BNR WWTPs (see Figure 50).



**Figure 50: Wastewater Utility Average Annual Sick Days per Collection and WWTP Field FTE**



The low number of absences and sick days relative to benchmark utilities suggest that Red Deer Wastewater utility employees are dedicated to fulfilling their responsibilities and are committed to the utility. However, the utility should continue to monitor and track metrics such as long-term and other leaves as increases in these could indicate staff burnout or other morale concerns, and efforts should be made to intervene if they begin to demonstrate an increasing pattern.

The Wastewater utility last experienced a lost time injury incident in June of 2011, and had six injuries in total the same year, including two lost time injuries, one medical aid injury, and three incident injuries. This is slightly higher than the City average per department of 5.53. However, in total the utility has experienced fewer safety incidents than City average (10 compared to an average of 13.6 per City department), with two incidents in each of classifications 1, 2 and 5, three in class 3 and one in class 6 (see Table 34). Class 2 pertains to incidents where damage or lost time resulted from inadequate job procedures in place, which is significant but suggests that these incidents can be avoided in the future if appropriate procedures are developed. Of higher concern are incidents categorized as classes 3 and 6 that were the result of non-adherence to safe work procedures and should therefore have been avoidable. Together, incidents experienced by the Wastewater utility in these classes were lower than City averages (4 vs. 5.79) but this represents an area where improvements can be made.



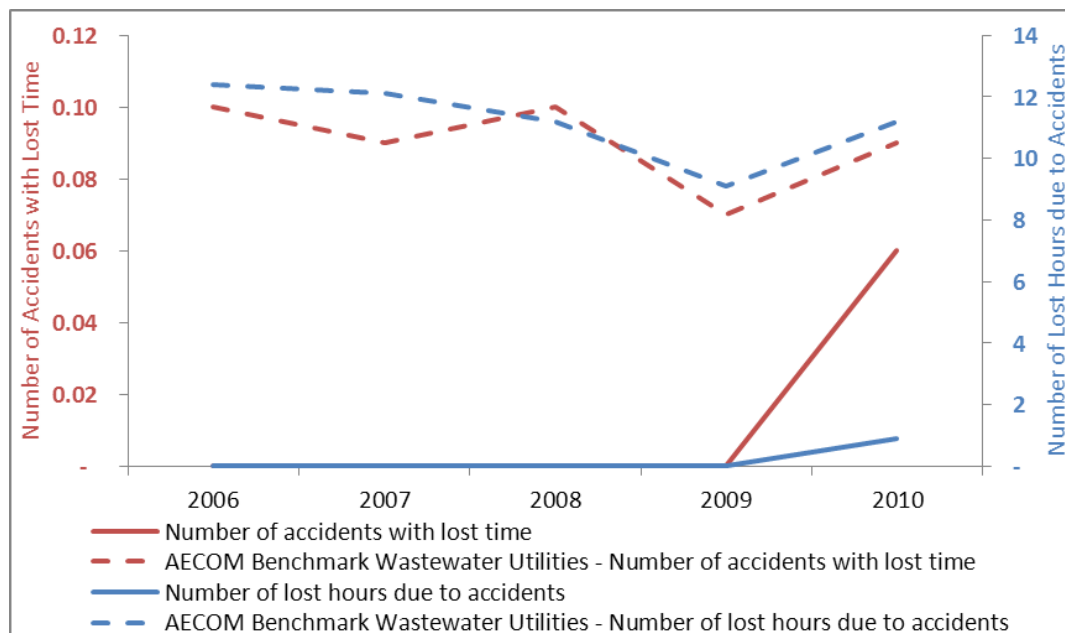
Table 34: Wastewater Utility 2011 Reported Safety Incidents

2011	Wastewater Utility	City Average per Department
Date of Last Lost Time Injury	Jun 28, 2011	
Injury Free Work Days	186	
Hours Worked	71,641	115,722
Injury Totals	6	5.53
Injury - Lost Time Injury	2	1.58
Injury - Medical Aid	1	1.89
Injury - First Aid	-	0.84
Injury - Incident	3	1.21
Frequency Rate*	6	2.73
Vehicle Accidents - YTD	4	8.26
Incident Class		
Class 1	2	4.95
Class 2	2	0.58
Class 3	3	5.26
Class 4	-	0.05
Class 5	2	2.26
Class 6	1	0.53

\* Number of Lost Time incidents x 200,000 / total hours worked

For the years 2006 through 2009 Red Deer's Wastewater utility had no lost time accidents, and despite experiencing lost hours due to incidents in 2010, continued to compare favourably with similar utilities. On average, the median number of lost hours experienced by comparable organizations between 2006 and 2010 was 11.2 hours per year, with 0.09 incidents resulting in lost hours per year.

Figure 51: Wastewater Utility Number of Accidents with Lost Time and Number of Lost Hours





### **Conclusions**

The Water and Wastewater utilities are effectively tracking and reporting on safety and other working environment measures, which is positive and supports the City's mandate to ensure a safe work environment. The utilities have strong comparative safety statistics relative to benchmark utilities as well as other City departments. However, while the commitment and dedication of staff is evidenced in the low number of sick days, the utilities should take note of the trend toward increasing leaves, which could be symptomatic of employee burn out or disengagement.

### **Recommendations**

- 2.4.1** Both utilities should continue to track and report on all safety incidents to support a culture of safety among all staff.
- 2.4.2** The utilities should work with IT and the Human Resources department to assess the ability to create a staffing turnover report that more accurately demonstrates turnover of permanent staff and eliminate turnover "noise" resulting from the coming and going of seasonal staff.

## **2.5 Operations and Maintenance Planning and Execution**

The EVS department uses the Hansen work management system to manage operational and maintenance (O&M) requirements for the department. This system has been in use for the distribution and collection systems for more than a year, and the WTP and WWTP began using it in January of 2012. The Hansen system is ultimately intended to replace the JD Edwards system previously used for this function. Hansen is seen to work fairly well in bridging various areas within the Development Services division (e.g. between C&M, Public Works, the Water and Wastewater utilities, etc.) regarding planned and unexpected maintenance work for individual assets, but to function effectively the system must be supported by personal communication and mutual decision-making. This is particularly the case in emergency situations, in which staff indicate a preference for face-to-face communication to ensure issues are clearly understood and addressed in an expedient manner. Due to the small size of the department, communication between groups and between management and staff appears to be generally effective; however, there is opportunity to enhance communication and understanding around the way specific tasks and requests are prioritized in each section that could benefit from clarification or the implementation of an internal Service Level Agreement.

There does not appear to be a documented project management process within the department. Staff have access to several tools (e.g. Hansen, general operational plans, etc.) that are used to plan and manage projects, and multiple parties are involved in the assessment and decision-making processes that inform project plans. Despite the absence of a formalized project management approach for operational and maintenance projects, there have been no significant issues identified in this area. All capital projects are contracted out to third party engineering groups that are also responsible for the project management component.

Staff appear to be aware of all relevant operations and maintenance policies, guidelines, standards and specifications. Compliance with safe work procedures is tracked by incidence and type of safety infractions and reported to the City where it is compiled and compared against other City departments and sections.



Compliance with other measures such as environmental standards, infrastructure specifications, response to emergencies, etc. are tracked either internally or as part of the AECOM performance benchmarking initiative.

The department has experienced some significant changes in structure and staffing over recent years but appears to be functioning well. There are always challenges associated with the reassignment of duties and responsibilities and reallocation of staff into different areas but the result of this process is several sections that appear to work fairly well together and have a good understanding of the other activities and operations carried out within EVS.

### **Water Utility**

The Water utility prepares a spreadsheet tracking hours for planned operations and maintenance as well as estimates for unplanned or emergency work. Staff also meet on a weekly basis to discuss upcoming operations and maintenance activities. The use of the Hansen work management system facilitates longer term O&M planning, and the practice of holding weekly meetings to schedule upcoming O&M activities is a recognized approach for managing work activities that frequently change. The Hansen system allows for the classification of issues on a one-to-four scale where one is “optimal condition” and four is “critical attention required.” This classification system helps to prioritize activities within the system, and these classifications are then reviewed by management in the C&M section to further prioritize and assign work to O&M staff.

In conjunction with the Hansen system, the Water utility prepares an annual maintenance plan that includes:

- Activity type (e.g. mains flushing, valve exercising and maintenance, private hydrant inspection, water service turn on/off, corrective meter maintenance, staff vacation or sick time, etc.);
- Activity definition (a brief description of the activity to be undertaken);
- Benefit to the City of performing the activity;
- Default priority (preventative maintenance, corrective – planned, corrective – emergency, capital, or standing work);
- Activity performance target (annual, semi-annual, monthly, weekly, on-going, respond as per request, or respond immediately);
- Planned and actual hours for the previous year (and the variance between the two);
- Planned hours for the current year;
- Method by which hours were calculated for the previous and current year (e.g. hours per activity / month / week / etc., number of FTEs needed, number and type of items to be replaced, etc.);
- Data source supporting the need for the work and hours calculated (e.g. work orders in Hansen or JD Edwards systems, automatically scheduled work, etc.); and
- Reportables.

This is a comprehensive plan listing the various types of activities requiring staff time. This document links back to work and asset management systems and facilitates the process of ensuring that maintenance activities are based on an appropriate schedule and are supplemented with ad hoc support as needed.

In 2011, it appears that just over two-thirds (69%) of the Water utility’s planned corrective and preventative maintenance hours were actually carried out, suggesting that improvement could be made in terms of



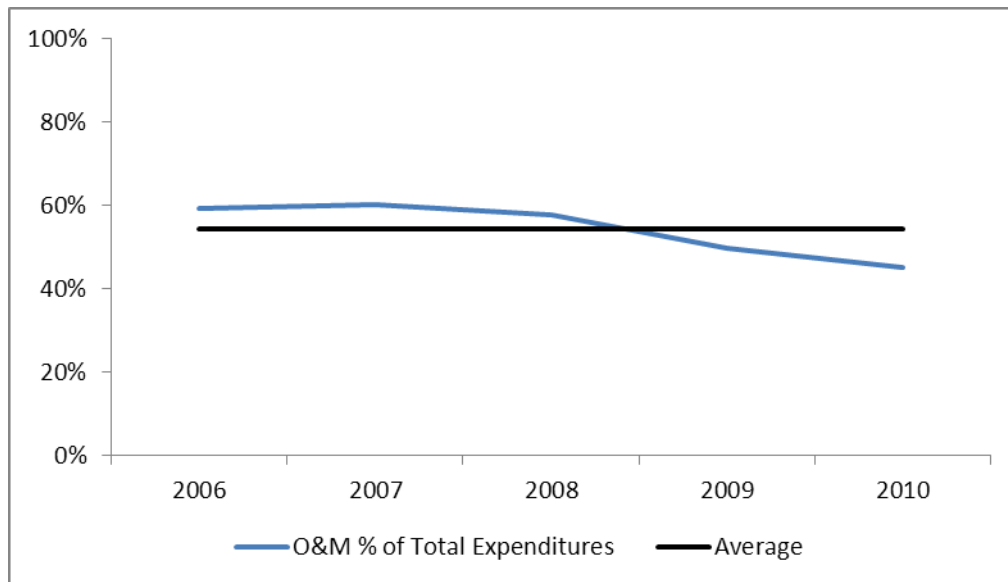
effectively planning and managing staff time in this area. However, given the nature of the business it is often the case that operations and maintenance staff are redirected from planned activities to respond to emergency situations.

The Water utility is subject to the strict regulatory terms and conditions of the City's water license and therefore is highly aware of the critical importance of adherence to these requirements. The City has also developed internal policies, guidelines, standards and specifications to support adherence to the license requirements as well as the general safety of staff and residents.

Staff are also currently in the process of developing operating plans for each area of the utility (e.g. hydrants, meters, valves, WTP lab operations, WTP mechanical maintenance, training, asset management, water quality management, etc.) that will support the operations and maintenance planning process. As these plans are not fully developed it is not yet clear how they will integrate with the planning of day-to-day operations and maintenance activities, but are expected to provide direction as they include information on goals and objectives, performance measures, methodology, resources, etc. At this point it is not clear how these plans will prioritize activities.

As shown in Figure 52, O&M expenditures as a percentage of overall Water utility expenditures averaged 59% between 2006 and 2008 before declining to 50 % in 2009 and 45% in 2010, which is in a similar range as other utilities.

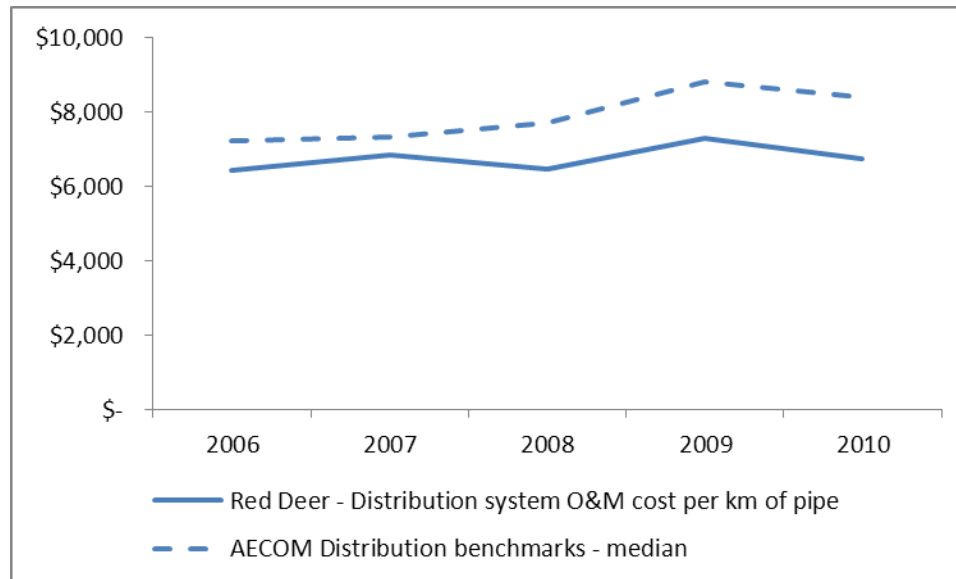
**Figure 52: Water Utility O&M Expenditures as a Percent of Total Utility Expenditures**



While fluctuating from year-to-year, the distribution system O&M cost per km of pipe trended generally upward from \$6,401.11 per km in 2006 to \$6,718.34 per km in 2010. Across the period, the average annual distribution system O&M expenditure was \$6,741.06 per km. During this period, Red Deer's distribution system O&M expenditures per km of pipe remained consistently lower compared to that of benchmark organizations (see Figure 53).



**Figure 53: Water Utility O&M Cost per Km of Distribution Pipe**



As a ratio of the volume of water treated, WTP O&M costs averaged \$313 per cubic meter between 2006 and 2010, trending upward from \$263 per cubic meter to \$402 per cubic meter. Compared to benchmark WTPs using conventional filtration, Red Deer's per-cubic meter WTP O&M costs have remained higher than benchmark median, which averaged \$148 per cubic meter over the same period (see Figure 54).

It is important to take into consideration a number of factors that could be driving the higher O&M costs experienced in Red Deer relative to benchmark utilities. One significant factor is the regulatory treatment standards in Alberta, which are more stringent compared to other Canadian provinces and require Alberta plants to treat water to a higher level of quality (i.e. Ultraviolet Light treatment as a tertiary disinfection process resulting in higher power consumption) relative to many of the benchmark utilities included in the AECOM study (also noted in section 4.2 *Regulatory Compliance and Reporting*). Higher O&M costs could also be driven by high turbidity in spring run-off water resulting from Red Deer's proximity to the Rocky Mountains, and a relatively colder climate compared to some BC and southern Ontario utilities resulting in higher power and gas consumption. The manner in which administrative costs are allocated within the utility also impacts the calculated O&M cost per ML of water treated, as all of these costs are currently allocated to the treatment plant and not to the distribution side of operations. A more even allocation of these costs would likely result in a reduction to treatment plant costs by \$25 to \$50 per ML. As the plant and processes have to be constructed to manage the highest level of turbidity in the source water, this may mean that the Red Deer WTP is "overbuilt" relative to benchmarks that are not exposed to the same level of turbidity, thus resulting in higher ongoing O&M costs. Recent capital upgrades have likely also impacted costs.





**Figure 54: Water Utility O&M Cost per Megalitre of Water Treated**

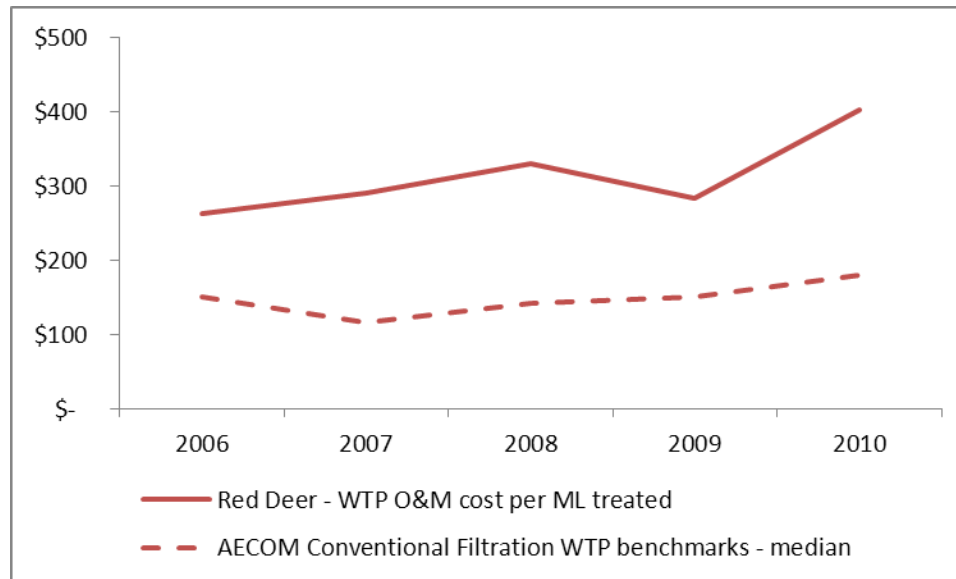


Table 35 shows selected other metrics relative to total (distribution system and WTP) O&M expenditures. Total Water utility O&M expenditures per FTE averaged \$249,823 per year between 2006 and 2010, with costs increasing from a low of \$230,200 per utility FTE in 2006 to \$268,487 per FTE in 2010. On a service area basis, the cost of O&M activities increased from \$105,077 per square km in 2006 to \$118,849 per square km in 2008 before declining to a five-year low of \$94,292 in 2010.

O&M cost per hydrant trended upward between 2006 (\$3,499 per hydrant) and 2009 (\$4,802 per hydrant) before declining slightly in 2010 (\$4,533 per hydrant). The average O&M cost per customer followed a similar pattern, increasing from \$291 per customer in 2006 to \$368 per customer in 2009 before declining to \$347 per customer in 2010.

**Table 35: Water Utility O&M Cost Metrics**

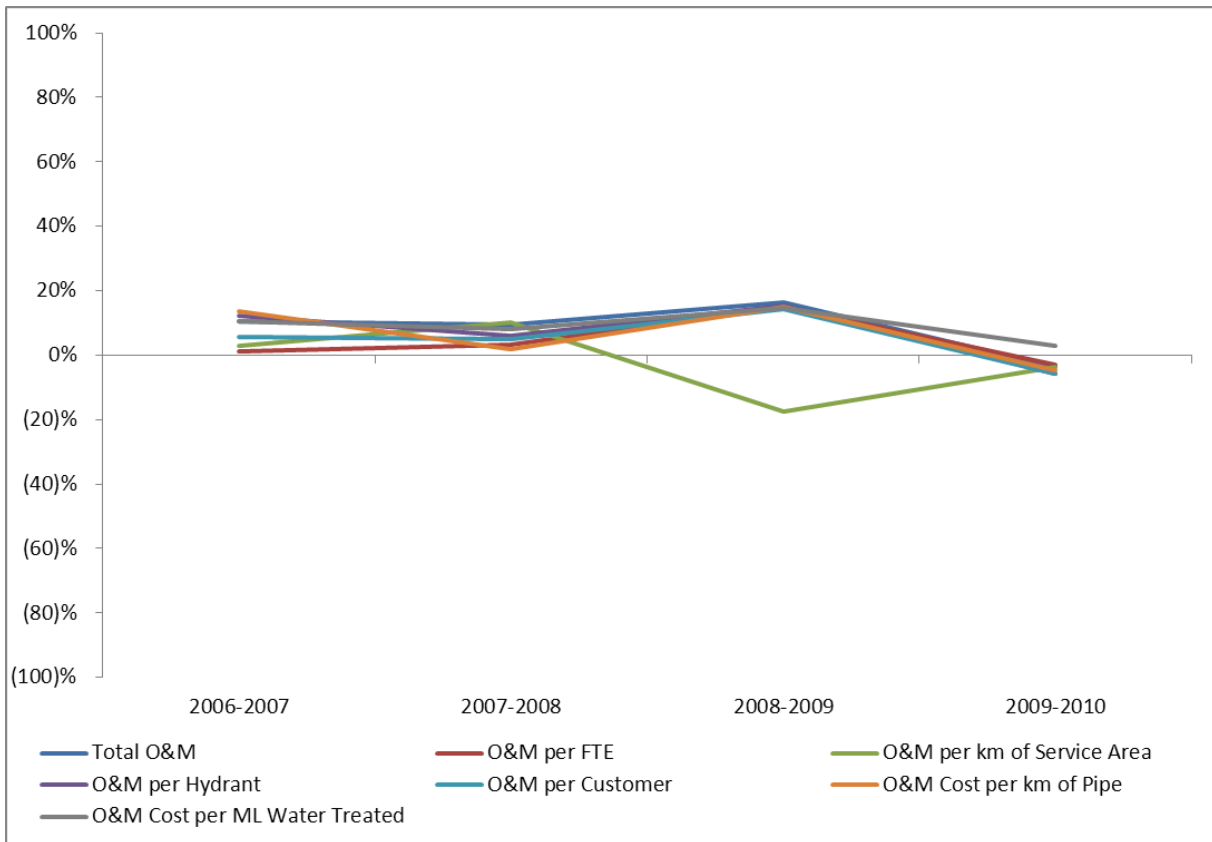
	2006	2007	2008	2009	2010	Average
Total O&M	\$ 7,460,470	\$ 8,233,630	\$ 9,014,715	\$ 10,502,275	\$ 10,100,593	\$ 9,062,337
Number of FTEs	32.4	35.3	37.4	37.9	37.6	36.1
O&M per FTE	\$ 230,200	\$ 233,077	\$ 240,964	\$ 276,889	\$ 268,487	\$ 249,923
Km of Service Area	71.0	76.2	75.9	107.1	107.1	87.5
O&M per km of Service Area	\$ 105,077	\$ 108,053	\$ 118,849	\$ 98,042	\$ 94,292	\$ 104,863
Number of Hydrants	2,132	2,098	2,168	2,187	2,228	2,163
O&M per Hydrant	\$ 3,499	\$ 3,925	\$ 4,158	\$ 4,802	\$ 4,533	\$ 4,183
Number of Customers	25,619	26,792	27,944	28,520	29,092	27,593
O&M per Customer	\$ 291	\$ 307	\$ 323	\$ 368	\$ 347	\$ 327

With the exception of O&M cost per km of service area served, which decreased significantly from 2008 to 2009 following a large service area annexation, the Water utility O&M metrics all increased from 2006 to 2009 on a percentage year-over-year basis. All O&M metrics decreased from 2009 to 2010 as a result of the



decrease in total O&M expenditures, with the exception of O&M cost per ML of water treated, which increased by 3% (see Figure 55).

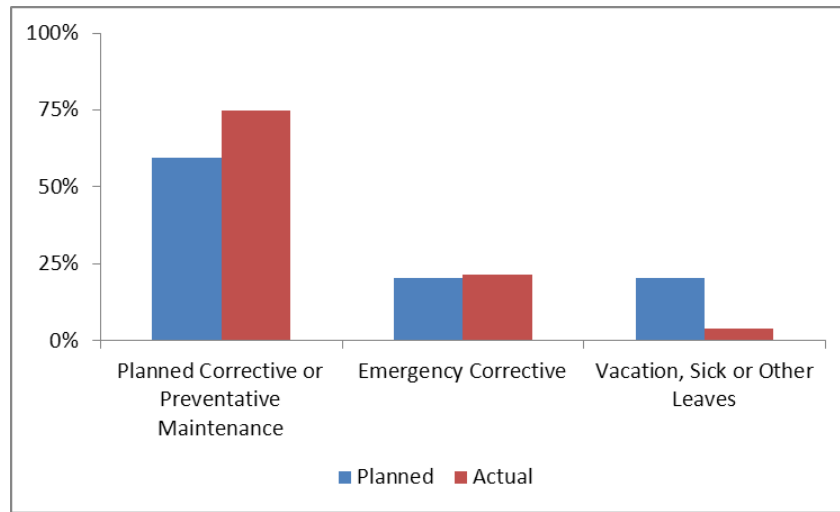
**Figure 55: Water Utility Year-Over-Year Percent Changes in O&M Cost Trends**



In 2011, 59.4% of maintenance plan hours were budgeted for planned corrective or preventative maintenance work, while 20.3% was budgeted for emergency corrective work (the remaining 20.3% was budgeted for staff sick time, vacation, and other leaves or absences). However, the actual distribution of hours worked was 74.7% planned corrective or preventative maintenance, 21.4% emergency corrective, and 3.8% sick, vacation, or other leaves (see Figure 56). The utility does not separate planned from unplanned (emergency) maintenance costs when recording the actual costs of these activities in its financial system.



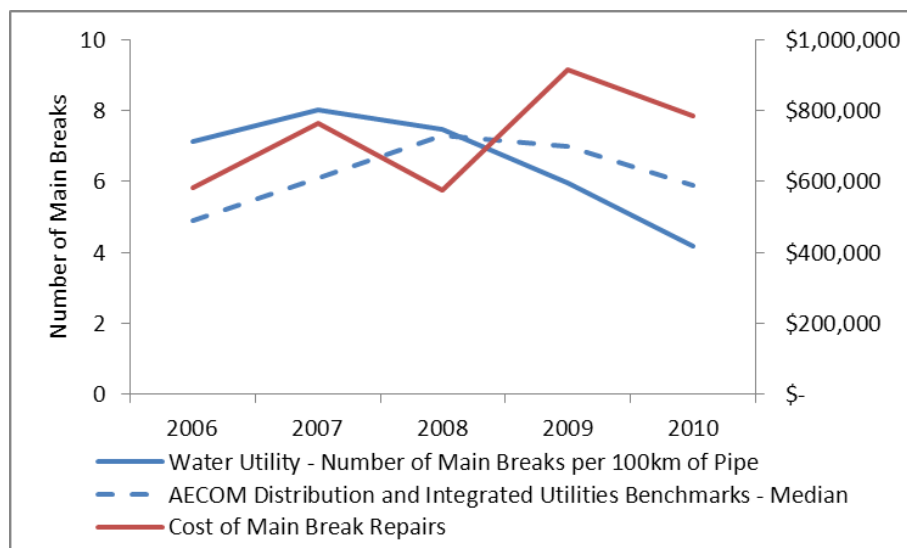
**Figure 56: Water Utility 2011 Planned and Actual Maintenance Hours**



The number of water main breaks per 100 km of pipe averaged 6.5 per year between 2006 and 2010, which was slightly higher than the average of 6.2 per 100 km for benchmark distribution and integrated utilities (see Figure 57). In 2006 and 2007, the Red Deer Water utility had a higher number of main breaks per 100 km compared to benchmark distribution and integrated utilities (7.1 vs. 4.9 per 100 km and 8.0 vs. 6.1 per 100 km, respectively). However, Red Deer demonstrated significant improvement in 2009 (6.0 vs. 7.0 per 100 km for benchmarks) and 2010 (4.2 vs. 5.9 per 100 km for benchmarks).

Between 2006 and 2010, the average annual cost of water main repairs was \$723,485. Costs fluctuated during the period and ranged from a low of \$574,308 in 2008 to a high of \$915,078 in 2009. This indicates that while the total number of main breaks per 100 km of Red Deer pipe decreased in 2009, the cost of each repair increased, suggesting that a higher proportion of the breaks were of a serious or significant nature.

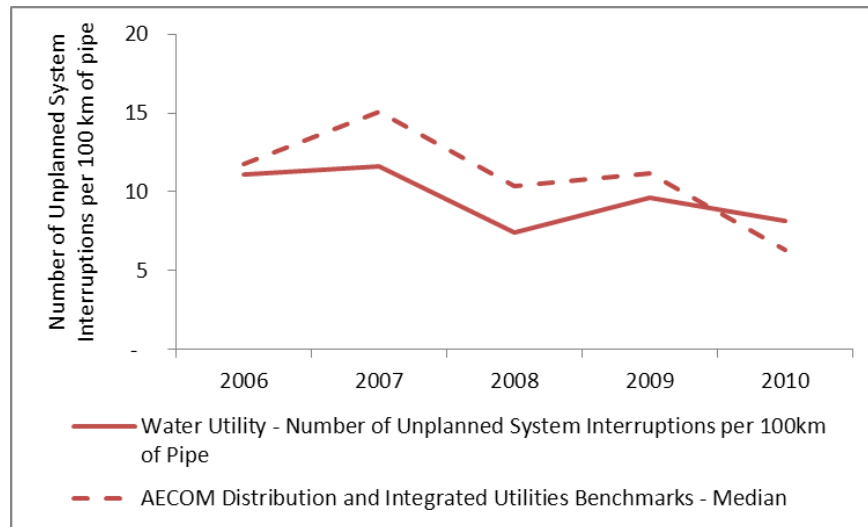
**Figure 57: Water Utility Number of Main Breaks per 100 Km of Pipe**





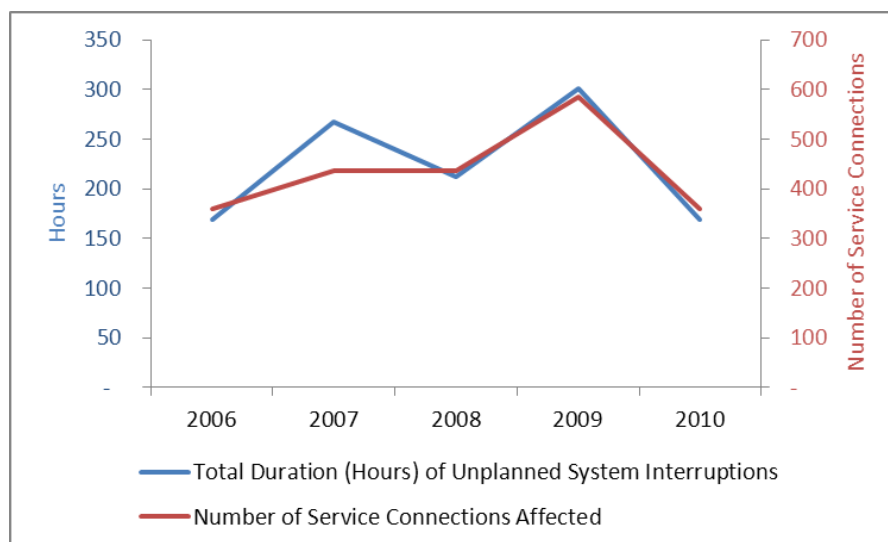
The number of unplanned service interruptions per 100 km of water main averaged 9.6 per year between 2006 and 2010 and demonstrated an overall downward trend from a high of 11.6 in 2007 to 8.2 in 2010 (see Figure 58). In general, the Red Deer Water utility performed better than comparable distribution and integrated utilities during this period, which averaged 11.0 unplanned service interruptions per 100 km of main per year.

**Figure 58: Water Utility Number of Unplanned System Interruptions per 100 Km of Pipe**



On average, service interruptions during this five-year period totalled 224 hours per year, starting and ending the five year period at a low of 169 hours in both 2006 and 2010 but reaching a high of 302 hours in 2009. The number of service connections affected by the outages followed a similar fluctuating pattern with lows of 359 services affected in both 2006 and 2010 and a high of 586 in 2009 (see Figure 59).

**Figure 59: Water Utility Duration (Hours) of Unplanned Service Interruptions and Number of Service Connections Affected by Unplanned Service Interruptions**



**Wastewater Utility**

The Wastewater utility uses PIPELOGIX software in its CCTV system to grade the quality of collections pipe as it is inspected. This program ties in with a newly implemented system (NASTech) that communicates directly with the Hansen system to allow information from the inspection cameras to be automatically uploaded into the work management system. This process supports reactive maintenance requirements as an issue identified during inspection is flagged in the Hansen system for follow-up work to be completed by the C&M section. On a weekly basis, the maintenance and operations leads for the Wastewater utility meet to plan work for the upcoming week. While not formally tracked, it is estimated that approximately 60% of the O&M work is reactive while 40% is proactive. The combination of systems and scheduled opportunities for communication are described as a successful method of managing both short and longer term O&M activities.

Data collected by Wastewater utility collections staff during CCTV inspections is imported into the Hansen system. Each asset that undergoes inspection is classified on a scale from one (optimal condition) to four (critical condition) and this information is available to management in the C&M section as the work orders are reviewed and prioritization is further refined based on staff availability and other critical work orders.

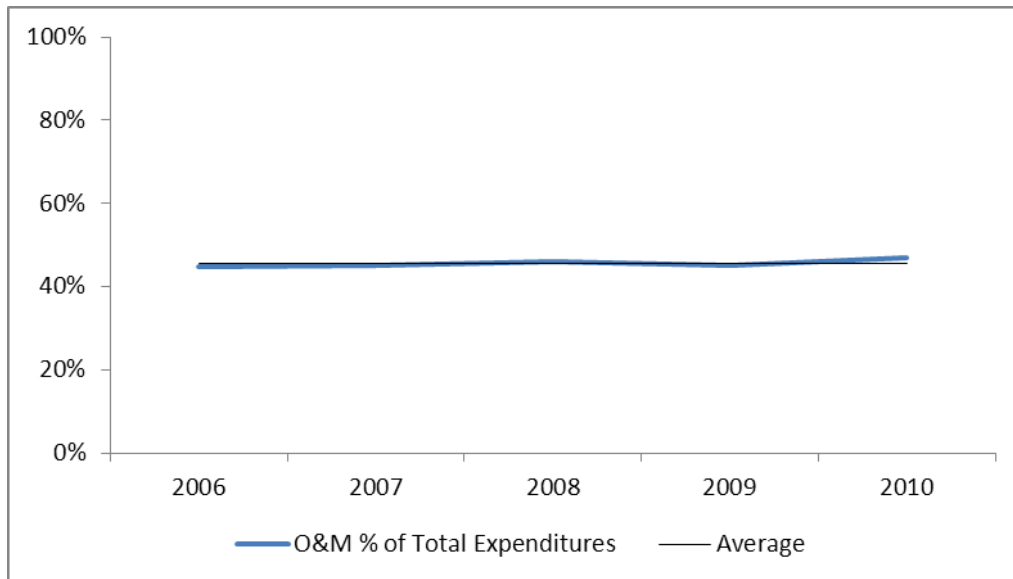
Requirements for safety, quality, etc. are specified under the conditions of the City's licence to operate the Wastewater utility. These are supported by City-developed documents that describe appropriate and safe work procedures, and compliance (in terms of safety incidents) is tracked and reported for all City departments.

The majority of Wastewater utility operations and maintenance work is carried out by utility staff or C&M staff, with the exception of the land spreading activity for the solid fertilizer output from the wastewater treatment process which is contracted out to a third party. As this activity is subject to regulatory approval under the Environmental Protection Act, the contractor must first obtain a letter of authorization specifying the legal land descriptions to which the sludge can be applied. The contractor then prepares an annual summary of activity that is submitted to both the utility and the regulator detailing the landowner, legal land description, cubic meters and dry tonnes of material applied, area of land to which the material was applied (in hectares), and the dry tonne to hectare application ratio. No issues were identified in this process or in the relationship between the parties involved.

O&M expenditures as a percentage of all Wastewater utility expenditures averaged 46% between 2006 and 2010. The proportion of O&M to total expenditures remained very consistent, experiencing only a slight increase from 45% in 2006 to 47% in 2010 (see Figure 60), which is in a similar range as other utilities.

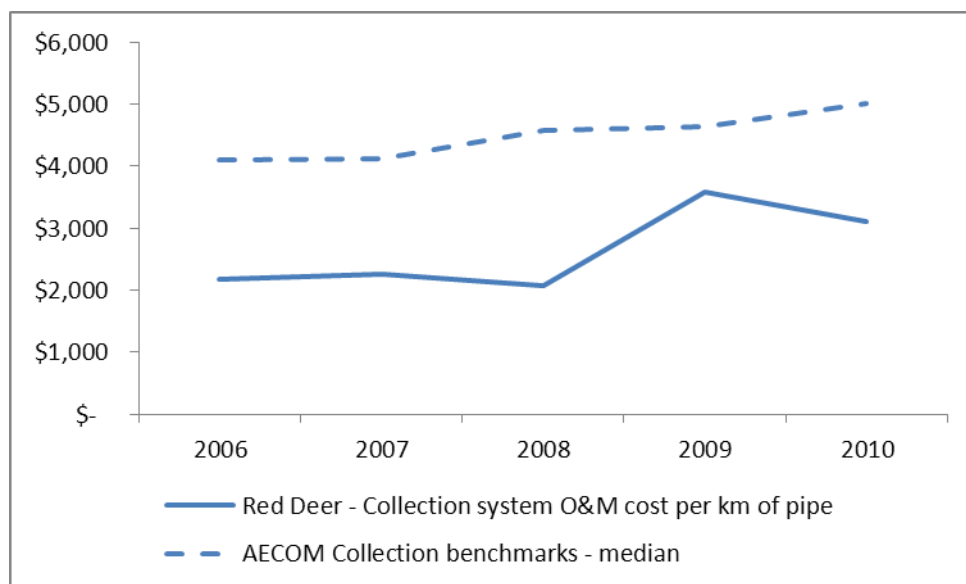


**Figure 60: Wastewater Utility O&M Expenditures as a Percent of Total Utility Expenditures**



As shown in Figure 61, collection system O&M expenditures per km of Wastewater utility sanitary sewer pipe remained relatively consistent at just over \$2,000 per 100 km from 2006 to 2008 before increasing to \$3,580 per 100 km in 2009 and decreasing somewhat to \$3,100 in 2010. Despite the fluctuations in 2009 and 2010, collection system O&M costs remained below benchmark medians, which averaged \$4,486 per 100 km over the five-year period.

**Figure 61: Wastewater Utility O&M Cost per Km of Collection Pipe**



WWTP O&M costs per cubic meter of wastewater treated at the WWTP averaged \$419 per cubic meter between 2006 and 2010, but increased from a low of \$276 in 2006 to a high of \$544 in 2009 before



decreasing slightly to \$516 per cubic meter in 2010. This increasing trend is notable as it is not mirrored in the benchmark secondary and BNR WWTPs, which demonstrated a more gradual increase and averaged \$233 per cubic meter over the same period (see Figure 62).

This may appear somewhat surprising given that the Red Deer WWTP appears to compare well on many of the other AECOM benchmark metrics, but this is likely strongly impacted by provincial regulatory standards in Alberta governing wastewater treatment. Alberta standards are very stringent and require Alberta plants to treat wastewater to a higher level of quality (i.e. Ultraviolet Light treatment as a tertiary disinfection process resulting in higher power consumption) relative to many of the benchmark utilities included in the AECOM study (also noted in section 4.2 *Regulatory Compliance and Reporting*), which has a direct impact on the costs associated with the activity. Higher O&M costs could also be driven by the relatively colder climate compared to some BC and southern Ontario utilities resulting in higher power and gas consumption. Further, the manner in which administrative costs are allocated within the utility also impacts the calculated O&M cost per ML of wastewater treated, as all of these costs are currently allocated to the treatment plant and not to the collection side of operations. A more even allocation of these costs would likely result in a reduction to treatment plant costs by \$25 to \$50 per ML. Treatment plan O&M costs per ML of wastewater treated have also likely been impacted by recent capital upgrades and expansion to the WWTP. While these upgrades and expansion may result in reduced costs over the longer term, there is always a learning curve and adjustment period associated with large projects such as these.

**Figure 62: Wastewater Utility O&M Cost per Megalitre of Wastewater Treated**

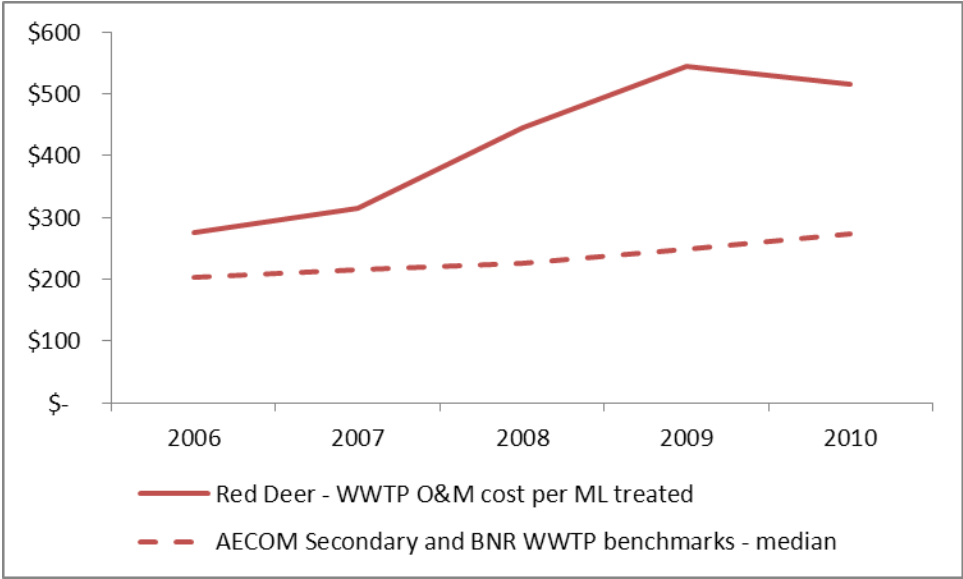


Table 36 shows selected other metrics relative to total (collection system and WWTP) O&M expenditures. On a per-FTE basis, O&M expenditures within the Wastewater utility have fluctuated between 2006 and 2008 but have since stabilized around an average of \$230,641 per FTE. O&M costs per km of service area averaged \$81,115 between 2006 and 2010, increasing from \$70,911 per km in 2006 to \$93,269 per km in 2008 before decreasing to the five-year average level for 2009 and 2010. On a per-customer basis, Wastewater





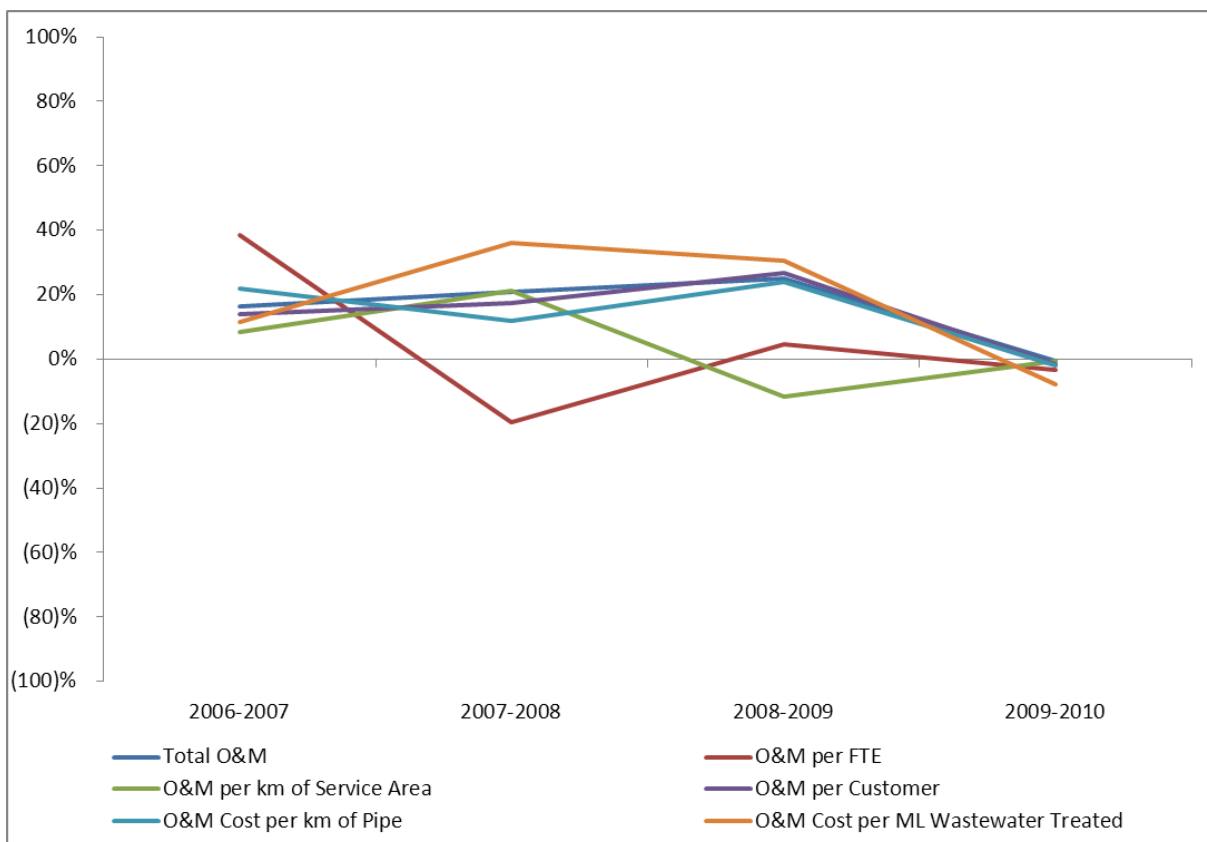
utility O&M costs demonstrated an increasing trend over the five-year period from a low of \$188 per customer in 2006 to \$314 per customer in 2010.

**Table 36: Wastewater Utility O&M Cost Metrics**

	2006	2007	2008	2009	2010	Average
Total O&M	\$ 5,034,672	\$ 5,856,277	\$ 7,074,446	\$ 8,841,196	\$ 8,784,272	\$ 7,118,172
Number of FTEs	25.3	21.3	31.9	38.1	39.1	31.1
O&M per FTE	\$ 198,901	\$ 275,460	\$ 221,769	\$ 232,296	\$ 224,777	\$ 230,641
Km of Service Area	71.0	76.2	75.9	107.1	107.1	87.5
O&M per km of Service Area	\$ 70,911	\$ 76,854	\$ 93,269	\$ 82,535	\$ 82,004	\$ 81,115
Number of Customers	26,723	27,263	28,077	27,671	27,944	27,536
O&M per Customer	\$ 188	\$ 215	\$ 252	\$ 320	\$ 314	\$ 258

Figure 63 shows the year-over-year changes in O&M cost metrics for the Wastewater utility. All O&M cost metrics increased from 2006 to 2007, but O&M costs per FTE decreased significantly from 2007 to 2008 due to the addition of a number of FTE positions in the utility while other metrics continued to increase. From 2008 to 2009, O&M costs per FTE experienced a small year-over-year increase, but O&M costs per km of service area decreased due to the additional service area annexed by the City. From 2009 to 2010, all O&M cost metrics decreased due to a decrease in total O&M expenditures.

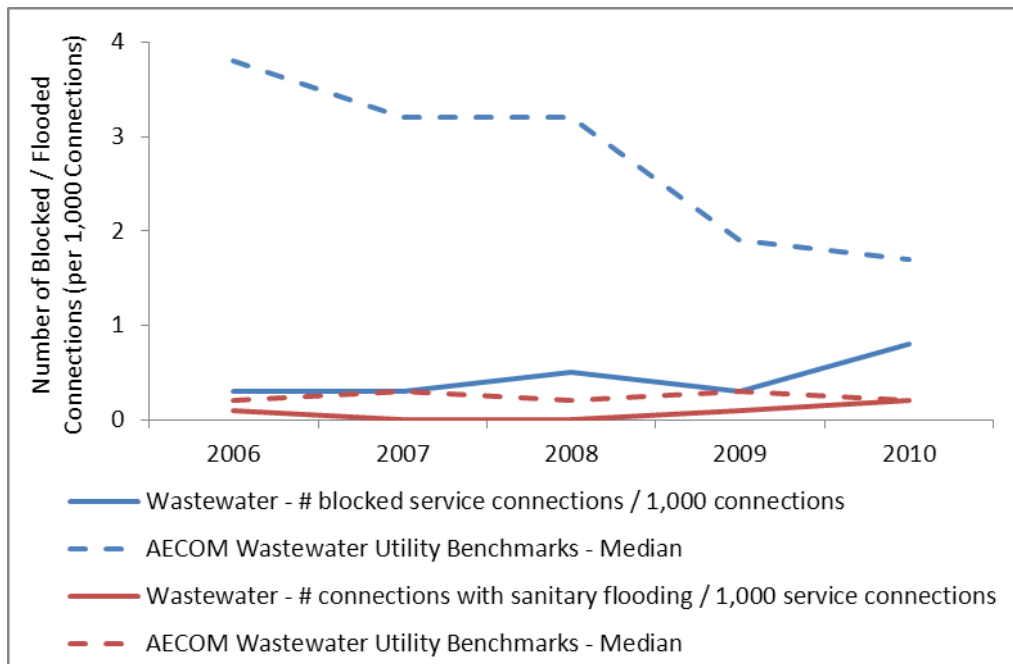
**Figure 63: Wastewater Utility Year-Over-Year Percent Changes in O&M Cost Trends**





On average, the Red Deer Wastewater utility experienced 0.4 blocked service connections per 1,000 service connections per year from 2006 to 2010, which was significantly lower than the average of 2.8 experienced by benchmark wastewater utilities. During this same period, the utility had an average of 0.08 service connections per 1,000 with sanitary flooding, again lower than the benchmark median of 0.24 (see Figure 64).

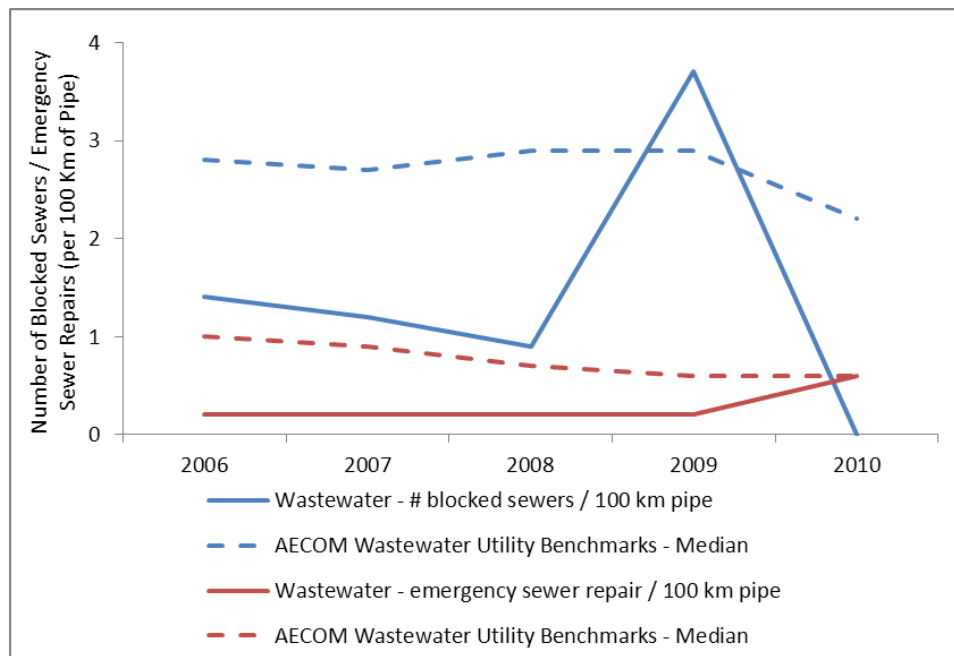
**Figure 64: Wastewater Utility Number of Blocked Service Connections and Number of Connections with Sanitary Flooding (per 1,000 Connections)**



As shown in Figure 65, the number of blocked sewers per 100 km of length demonstrated an overall downward trend between 2006 and 2010, but experienced a significant increase from 0.9 per 100 km in 2008 to 3.7 in 2009 before decreasing to zero in 2010. With the exception of 2009, Red Deer compared favourably with benchmark wastewater utilities which averaged 2.7 blocked sewers per 100 km of pipe during this timeframe. Emergency sewer repairs during the 2006 to 2010 period were fairly consistent with a slight upward trend and averaged 0.3 per 100 km of pipe per year. On average, the City's average performed favourably relative to the average median of comparable wastewater utilities (0.8 per 100 km per year).

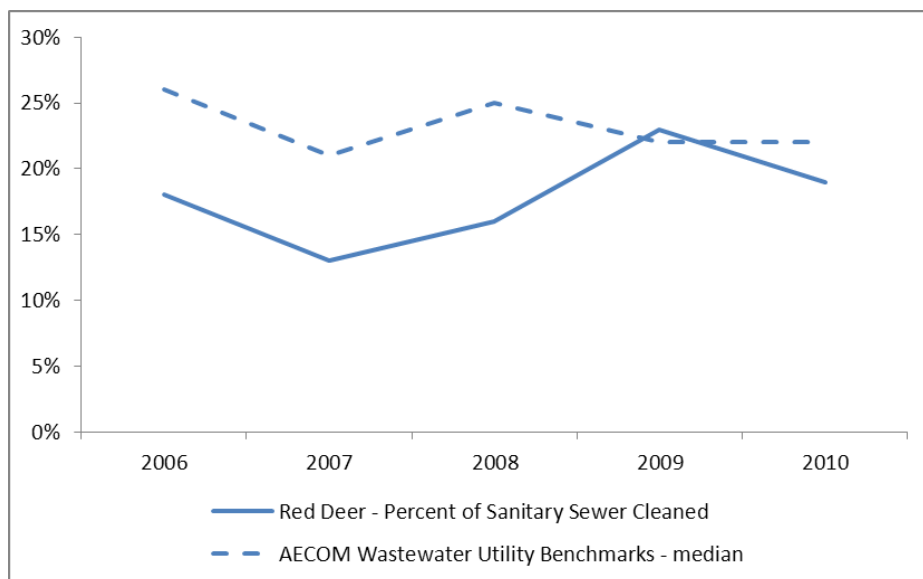


**Figure 65: Wastewater Utility Number of Blocked Sewers and Number of Emergency Sewer Repairs (per 100 Km of Pipe)**



Between 2006 and 2010 the Wastewater utility was relatively consistent in cleaning an average of 18% of the sanitary sewer system each year. Compared to benchmark organizations, which cleaned an average of 23% of their systems per year during the same period, Red Deer cleaned a lower percentage per year. The exception was in 2009, when Red Deer cleaned 23% of its sanitary sewer system compared to the median value of 22% cleaned by similar utilities (see Figure 66).

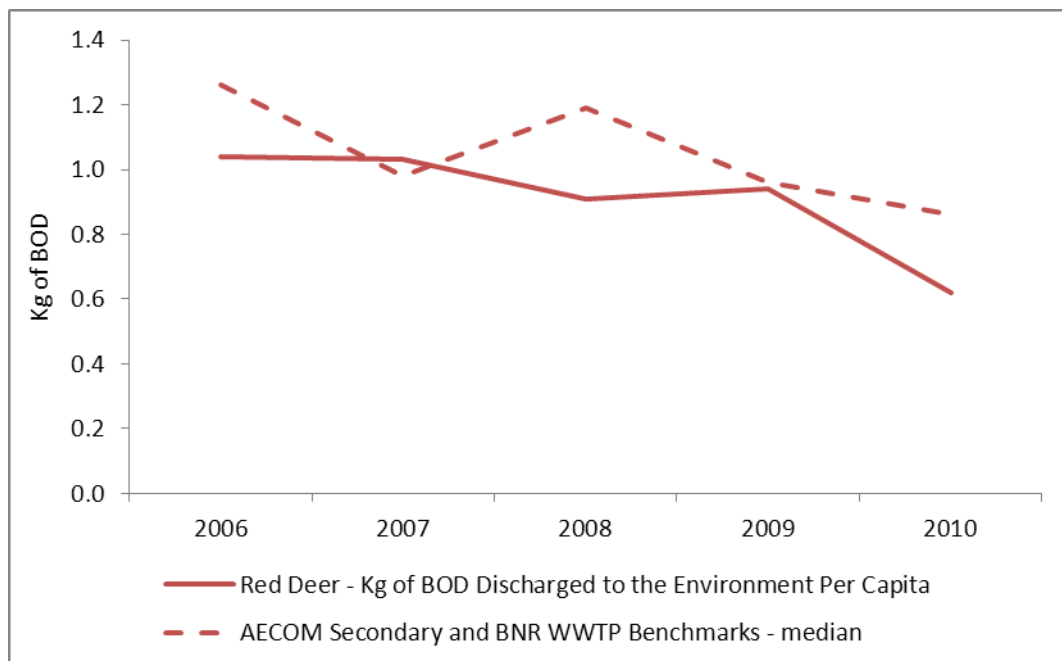
**Figure 66: Wastewater Utility Percent of Sanitary Sewer Cleaned**





Between 2006 and 2010 the Red Deer WWTP discharged an average of 0.91 kg of BOD per capita, trending downward from 1.04 kg per capita in 2006 to 0.62 kg per capita in 2010. This was favourable in comparison to benchmark secondary and BNR WWTPs which averaged 1.05 kg per capita over the same period (see Figure 67). However, higher treatment levels often result in higher costs (as evidenced in the higher WWTP O&M costs experienced by the Red Deer WWTP relative to AECOM benchmarks), and this should be taken into consideration in decisions regarding the level to which the utility treats its wastewater.

**Figure 67: Wastewater Utility Kg of BOD Discharged to the Environment per Capita**

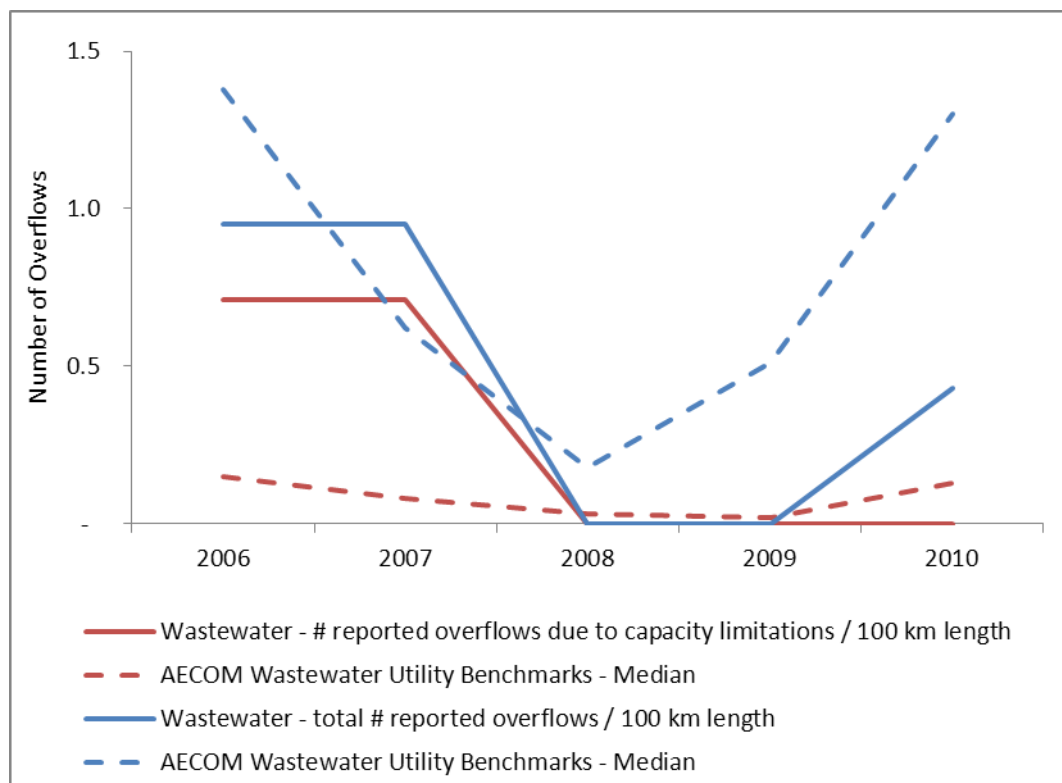


As shown in Figure 68, the number of reported overflows due to capacity limitations per 100 km of pipe was higher for Red Deer relative to benchmark utilities in 2006 and 2007 before dropping to zero for 2008, 2009 and 2010.

Total overflows (regardless of the reason) experienced by the Red Deer Wastewater utility fluctuated from a high of 1.0 overflow per 100 km of pipe in 2006 and 2007 to zero in 2008 and 2009, and then up to 0.4 per 100 km in 2010. Benchmark utilities also experienced fluctuation in this measure during the 2006-2010 period, dropping from a high of 1.4 in 2006 to a low of 0.2 in 2008 and trending back up to 1.3 overflows per 100 km of pipe in 2010. While Red Deer was higher than the benchmark median in 2007, it otherwise performed favourably relative to the comparators.



**Figure 68: Number of Reported Overflows due to Capacity Limitations and Number of Total Reported Overflows (per 100 Km of Pipe)**



## Conclusions

The utilities have successfully implemented a best practice maintenance and asset management system in Hansen, and have recently begun using this system to manage all assets in both utilities. The system is considered to be particularly beneficial in helping the utilities manage their linear assets, and the management of plant assets is expected to improve over time and with greater usage. The implementation of this system was supported by IT services and while there are still some areas where ongoing refinement and adjustment is required, the system appears to be working quite well.

For the Water utility, total operating costs appear reasonable. Operational metrics such as number of main breaks and system interruptions also appear reasonable. Similarly, for the Wastewater utility total operating costs appear reasonable. Key operating metrics such as the number of blocked service connections, the number of connections with sanitary flooding and the number of blocked sewers generally compare favourably.

Stringent provincial regulatory requirements as well as significant population growth and capital expansion may be driving higher treatment plant O&M costs per ML treated water, but the utilities should continue to monitor and control these costs as much as possible. A variety of environmental factors (such as proximity to mountainous regions driving higher relative turbidity in the spring) may be influencing this also.



## **Recommendations**

- 2.5.1** The Water and Wastewater utilities could consider engaging in weekly or bi-weekly, scheduled meetings with C&M staff to ensure longer term projects and C&M staff allocation are understood by all groups. This would in turn create mutual understanding of the way resources are allocated when critical situations arise.
- 2.5.2** Both utilities should investigate why WTP and WWTP O&M costs have been trending upward and compare unfavourably to peer groups.

## **2.6 Financial Management and Rate Model**

The EVS department appears to effectively manage its books of account, financial records and financial policies and procedures. The department is currently participating in of a rate model review that is expected to result in modification to several aspects of these, including utility fiscal policies, the relationship between costs and customer class (meter size), and the alignment between variable rates to support conservation goals and the requirement for a minimum proportion of fixed rates to support infrastructure growth, maintenance and replacement. The rate model review is in its final stages, with the final model expected summer 2012.

Although a review of the new rate model is outside the scope of this study, the rate model appears to follow best practices in utility rate making methodology and also follows a recognized approach in allocating cost of service to customer classes and activities.

When assessing the utility revenue requirement, the current rate model takes into consideration cash operating expenses (including corporate services cost allocations and transfers to reserves), non-cash expenses (i.e. depreciation and amortization of no-cost capital), return to the City and reserves, and the Municipal Consent and Access Fee (MCAF). Dividends are currently set at 50% of the budgeted return on equity, regardless of the actual return, and the balance of the actual return is assigned to reserve funds. This allocation is being assessed as part of the rate model review.

While somewhat complicated, the City has a consistent approach to calculating the MCAF for all utilities. This approach is challenging for the Water and Wastewater utilities as it is difficult to determine what proportion of the revenue earned by these utilities is attributable to distribution / collection. The current methodology is based on the assumption that revenue is earned proportionately with expenses (i.e. if the distribution / collection function incurs 50% of the utility's expenses then it is assumed that it earns 50% of the utility's revenues), so as of January 1, 2012 the Water and Wastewater utilities pay a 30% MCAF on 40% of total revenue. The rate model review is exploring approaches that could make the MCAF calculation more easily applicable to all utilities, such as looking at what proportion of total utility revenue would be appropriate.

Per AUC Decision 2011-474, the City's awarded equity ratio remains at 37%. Deemed debt-to-equity ratio is 60% debt and 40% equity. The department is proposing to use a generic cost of capital for equity and the latest AUC decision (currently 2011-474 which specifies 8.75%) and actual rates for debt. In general, the



utilities attempt to avoid taking on debt as much as possible while still managing the integrity and capacity of infrastructure. The long-term capital plan identifies times and amounts of debt to be taken on in future years.

There are numerous policies in place, such as the tangible capital asset policy, capital and operating budget policy, investment interest income allocation, corporate cash handling policy, utility fiscal policies (currently under review), etc. which appear to effectively support financial controls. The approach to accounting for assets and associated depreciation is driven by the Public Sector Accounting Board (PSAB) regulations around the way local governments must account for capital assets. No-cost capital (i.e. contributed capital) and utility funded capital are accounted for separately.

Operating reserves were introduced to the department effective January 1, 2012 and the appropriate amount to be held in these reserves is being evaluated as part of the rate model review. Capital reserves are determined and managed as part of the long-term capital planning process and are based on depreciation and the rate of return. Council is currently in the process of developing direction as to appropriate minimum and maximum balances for each reserve for the various City utilities. Operating reserves include 45 days of working capital (one-eighth or 12.5% of annual cash operating expenses) as well as a rate stabilization component. Draft utility policy indicates that the rate stabilization component will be calculated at 12.5% of annual operating revenues.

Reserve management appears to reflect realistic future operating and capital needs, and understanding of infrastructure integrity is supported by systems such as the JD Edwards capital asset system, the Hansen work management system, and the GIS system. There also appears to be a good understanding of internal and external costs; however, the recording of costs could benefit from further differentiation in the case of capital expenses incurred as a result of more stringent or changing regulatory requirements (e.g. requirement to treat water to a higher level of quality).

The department has contracts with several vendors that either have set contract terms (i.e. are project-based) or scheduled renewal / expiry dates at which point terms are revisited for negotiation and either reapproved or cancelled. While the contracts generally do not include formal service level measures to be monitored and reported back to the utilities, large contracts such as those for the WTP and WWTP upgrades include specific milestones and expectations, and meetings are held to provide updates on progress and address any issues that arise during the course of the projects. Third party contractors appear to be managed effectively to achieve time, cost and quality expectations.

### **Water Utility**

Between 2007 and 2011, total operating costs for the Water utility increased by 59.8% (see Table 37). The largest increase was in MCAF payments, which increased by 65.1% from 2007 to 2008 and 70.4% from 2008 to 2009. Increases in the depreciation account were primarily driven by the transition to PSAB reporting in 2009, which resulted in a year-over-year increase of 156% between 2008 and 2009, after which changes were moderate. Interest expense experienced a large increase between 2007 and 2009, with a year-over-year increase of 51.4% from 2007 to 2008 followed by an additional increase of 52.7% the following year. This was the result of the acquisition of debt to support capital WTP upgrading. The dividend paid to the City





grew significantly between 2007 and 2011, with the year-over-year changes fluctuating from large increases to moderate decreases.

**Table 37: Water Utility Historical and 2012 Budgeted Operating Results**

Revenue and Expenditures	2007 Actuals	% change	2008 Actuals	% change	2009 Actuals	% change	2010 Actuals	% change	2011 Actuals	2007 to 2011 % change	2012 Budget
Revenue Summary	13,542,846	14.3%	15,484,603	17.0%	18,111,542	7.0%	19,372,051	11.7%	21,638,729	59.8%	24,100,289
Expenditure Object Summary											
Operating Costs	7,200,617	10.1%	7,924,815	17.5%	9,307,776	(3.1%)	9,022,118	13.8%	10,268,618	42.6%	11,353,435
MCAF	602,397	65.1%	994,269	70.4%	1,694,445	12.9%	1,913,570	34.8%	2,578,580	328.1%	2,736,745
Depreciation	1,709,311	6.7%	1,824,170	156.0%	4,669,379	(11.8%)	4,116,613	13.7%	4,681,541	173.9%	3,982,937
Interest Expense	372,435	51.4%	563,770	52.7%	860,901	4.4%	898,567	7.5%	966,170	159.4%	1,008,235
Dividend	724,255	61.2%	1,167,643	9.6%	1,279,583	(19.8%)	1,026,510	37.9%	1,415,865	95.5%	1,466,306
Reserve Transfers	2,933,833	2.6%	3,009,936	65.1%	4,968,841	(2.6%)	4,838,838	(7.0%)	4,501,386	53.4%	5,393,545
Debtenture Principal Payment	-	N/A	-	N/A	-	N/A	1,672,448	14.1%	1,908,109	N/A	2,142,023
Equity Transfer - Amortization	-	N/A	-	N/A	(4,669,379)	(11.8%)	(4,116,613)	13.7%	(4,681,542)	N/A	(3,982,937)
<b>Total of Expenditure Objects</b>	<b>13,542,848</b>	<b>14.3%</b>	<b>15,484,603</b>	<b>17.0%</b>	<b>18,111,546</b>	<b>7.0%</b>	<b>19,372,051</b>	<b>11.7%</b>	<b>21,638,727</b>	<b>59.8%</b>	<b>24,100,289</b>
Net of Revenue and Expenditures	(2)		-		(4)		-		2		-
<b>Total Operating Costs</b>	<b>13,542,846</b>	<b>14.3%</b>	<b>15,484,603</b>	<b>17.0%</b>	<b>18,111,542</b>	<b>7.0%</b>	<b>19,372,051</b>	<b>11.7%</b>	<b>21,638,729</b>	<b>59.8%</b>	<b>24,100,289</b>

Overall expenditures can be broken down into discretionary expenses (or those that can be controlled, to some degree, by the utility) and non-discretionary expenses (see Table 38). The non-discretionary expenses are all City controlled and include the MCAF (328.1% increase from 2007 to 2011), the dividend (95.5% increase), corporate cost allocations (13.0% increase), and reserve transfers (53.4% increase). In 2011, the MCAF represented 11.9% of all Water utility operating expenses, the dividend represented 6.5%, corporate cost allocations were 3.6%, and reserve transfers were 20.8% of utility operating costs.

**Table 38: Water Utility Non-Discretionary Costs**

Non-Discretionary Expenditures	2007 Actuals	% change	2008 Actuals	% change	2009 Actuals	% change	2010 Actuals	% change	2011 Actuals	2007 to 2011 % change	2012 Budget
Municipal Consent and Access Fee (MCAF)	602,397	65.1%	994,269	70.4%	1,694,445	12.9%	1,913,570	34.8%	2,578,580	328.1%	2,736,745
Dividend	724,255	61.2%	1,167,643	9.6%	1,279,583	(19.8%)	1,026,510	37.9%	1,415,865	95.5%	1,466,306
Corporate Cost Allocations	680,668	(5.5%)	643,144	4.8%	674,214	18.9%	801,380	(4.0%)	769,427	13.0%	843,212
Reserve Transfers	2,933,833	2.6%	3,009,936	65.1%	4,968,841	(2.6%)	4,838,838	(7.0%)	4,501,386	53.4%	5,393,545
<b>Total</b>	<b>\$ 4,941,153</b>	<b>17.7%</b>	<b>\$ 5,814,992</b>	<b>48.2%</b>	<b>\$ 8,617,083</b>	<b>(0.4%)</b>	<b>\$ 8,580,298</b>	<b>8.0%</b>	<b>\$ 9,265,258</b>	<b>87.5%</b>	<b>\$ 10,439,808</b>

As shown in Table 39 and Figure 69, the overall increase is comprised of a 43.8% increase in discretionary expenses and an 87.5% increase in non-discretionary expenses. In 2011, discretionary expenses represented 57.2% of total operating expenses and the remaining 42.8% was non-discretionary expenses.

**Table 39: Water Utility Discretionary and Non-Discretionary Costs**

Discretionary Expenditures	2007 Actuals	% change	2008 Actuals	% change	2009 Actuals	% change	2010 Actuals	% change	2011 Actuals	2007 to 2011 % change	2012 Budget
Total Operating Costs	\$13,542,846	14.3%	\$15,484,603	17.0%	\$18,111,542	7.0%	\$19,372,051	11.7%	\$21,638,729	59.8%	\$24,100,289
Non-Discretionary Expenses	4,941,153	17.7%	5,814,992	48.2%	8,617,083	(0.4%)	8,580,298	8.0%	9,265,258	87.5%	10,439,808
<b>Total Discretionary Expenses</b>	<b>\$ 8,601,693</b>	<b>12.4%</b>	<b>\$ 9,669,611</b>	<b>(1.8%)</b>	<b>\$ 9,494,459</b>	<b>13.7%</b>	<b>\$ 10,791,753</b>	<b>14.7%</b>	<b>\$ 12,373,471</b>	<b>43.8%</b>	<b>\$ 13,660,481</b>

Water utility discretionary expenses increased at a relatively consistent pace from 2007 to 2011, with a plateau between 2008 and 2009, with an average year-over-year increase of 9.7%. Non-discretionary expenses have been somewhat more sporadic, with large increases from 2007 to 2009 followed by a plateau and then more moderate year-over-year increases, averaging an 18.4% year-over-year increase.



Figure 69: Water Utility Discretionary and Non-Discretionary Cost Trends

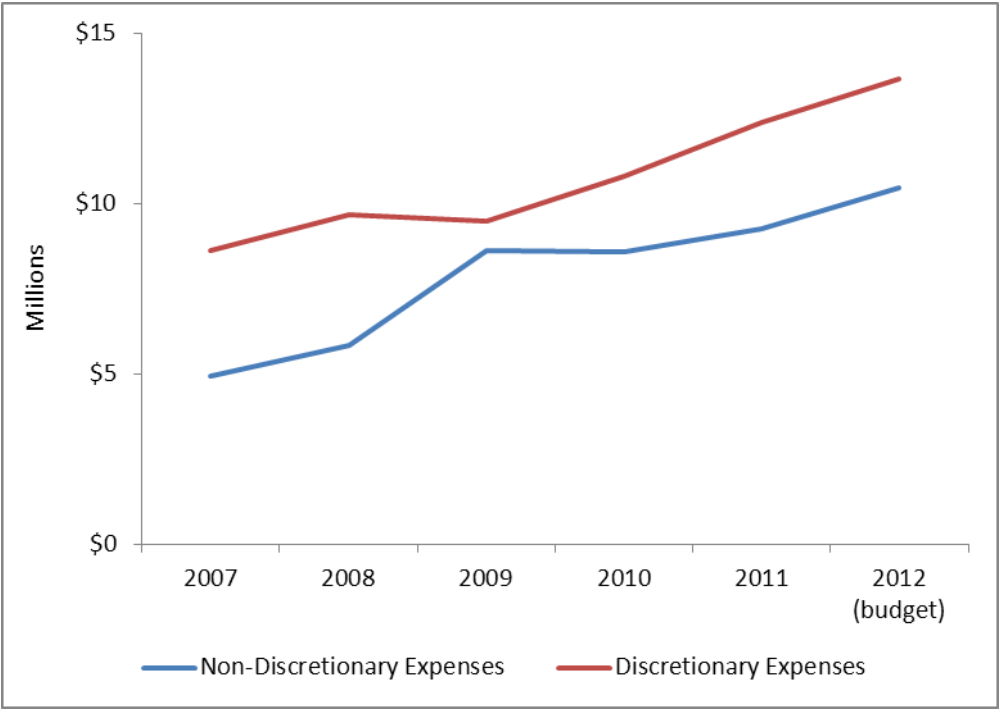


Figure 70 visualizes the break-down between 2011 discretionary and non-discretionary expenses, further breaking the non-discretionary expenses into its components as described above.

Figure 70: Water Utility Discretionary and Non-Discretionary Costs

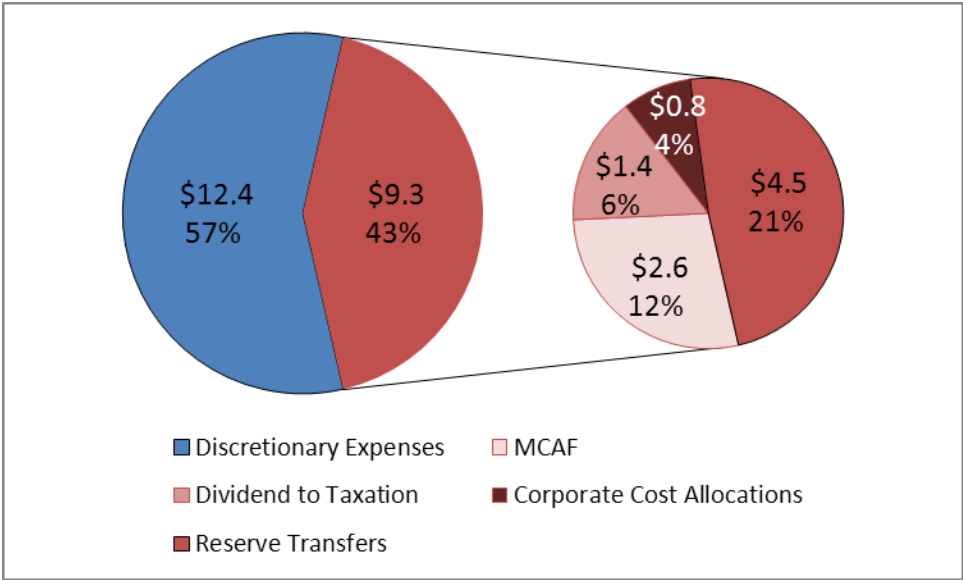


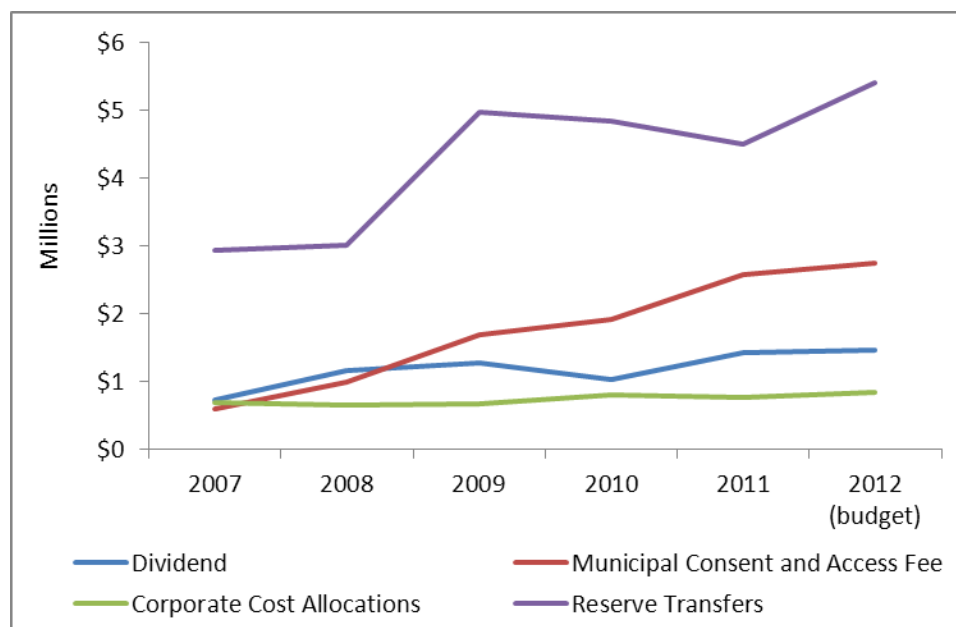


Table 40 and Figure 71 show the expenditure trends in each of the non-discretionary expense categories. The reserve transfers are the largest single payment, while growth of the MCAF payments appear to be outpacing that of other non-discretionary payments and transfers.

**Table 40: Water Utility Trends in Non-Discretionary Expenditures**

Year	Dividend	Municipal Consent and Access Fee	Corporate Cost Allocations	Reserve Transfers
2007	\$ 724,255	\$ 602,397	\$ 680,668	\$2,933,833
2008	1,167,643	994,269	643,144	3,009,936
2009	1,279,583	1,694,445	674,214	4,968,841
2010	1,026,510	1,913,570	801,380	4,838,838
2011	1,415,865	2,578,580	769,427	4,501,386
2012 (budget)	1,466,306	2,736,745	843,212	5,393,545

**Figure 71: Water Utility Trends in Non-Discretionary Expenditures**

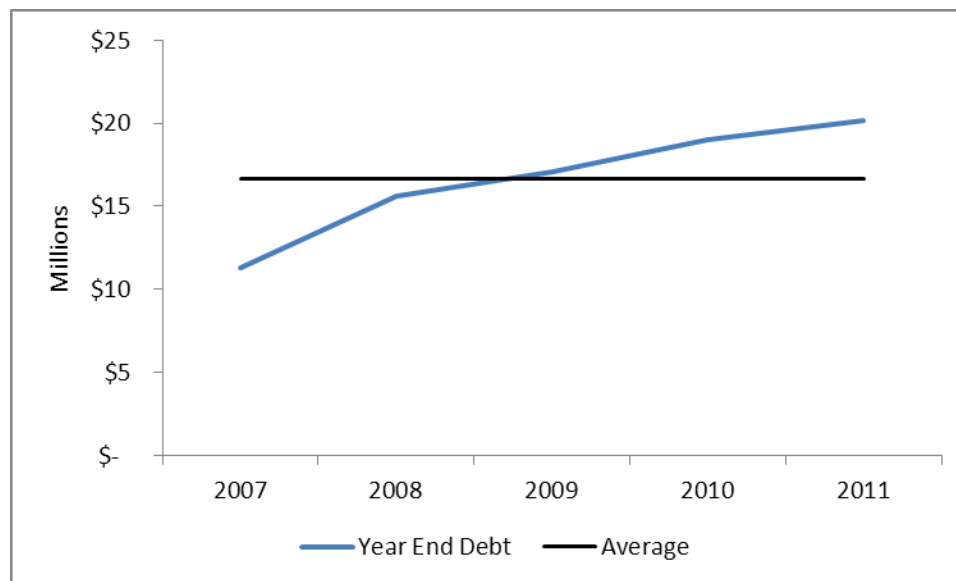


For the Water utility, the MCAF represented an average of 9.6% of total revenue between 2007 and the 2012 budgeted value, trending slightly upward from 8.4% in 2007 to 11.9% in 2011 and 11.4% budgeted for 2012. Dividends averaged 6.3% of total revenue, and fluctuated between lows of 5.3% and a high of 7.5%. Corporate cost allocations as a percent of revenue have been trending downward from a high of 5.0% in 2007 to 3.5% in the 2012 budget. Transfers to reserves varied between 19.4% to 27.4% of total Water utility revenue, averaging 22.8% across the period under review (see Table 41).

**Table 41: Water Utility Non-Discretionary Expenditures as a Percent of Revenue**

	2007 Actuals	2008 Actuals	2009 Actuals	2010 Actuals	2011 Actuals	2012 Budget
Revenue	\$ 13,542,846	\$ 15,484,603	\$ 18,111,542	\$ 19,372,051	\$ 21,638,729	\$ 24,100,289
MCAF	602,397	994,269	1,694,445	1,913,570	2,578,580	2,736,745
MCAF as % of Revenue	4.4%	6.4%	9.4%	9.9%	11.9%	11.4%
Dividend	724,255	1,167,643	1,279,583	1,026,510	1,415,865	1,466,306
Dividend as % of Revenue	5.3%	7.5%	7.1%	5.3%	6.5%	6.1%
Corporate Cost Allocations	680,668	643,144	674,214	801,380	769,427	843,212
CCA as % of Revenue	5.0%	4.2%	3.7%	4.1%	3.6%	3.5%
Transfer to Reserves	2,933,833	3,009,936	4,968,841	4,838,838	4,501,386	5,393,545
Transfers as % of Revenue	21.7%	19.4%	27.4%	25.0%	20.8%	22.4%

Year-end debt held by the Water utility demonstrated an increasing trend from 2007 (\$11.3 million) to 2011 (\$20.2 million) and the average level of debt over this period was \$16.6 million (see Figure 72). The actual debt-to-equity ratio for the Water utility's 2012 budget is 19.99% debt to 80.01% equity.

**Figure 72: Water Utility Year-End Debt**

Total operating cost expenses on a per-meter basis increased by 27.5% between 2007 and 2011, averaging a yearly increase of 6.1% but experiencing a large increase from 2008 to 2009 due primarily to increasing power and other utility charges (see Table 42). This increase was also influenced by direction given during the budget preparation process to maximize debt to the deemed level and to lower user rates. Operating cost per meter averaged \$298 over the five-year period.

**Table 42: Water Utility Total Operating Cost Per Customer (Service Connection)**

Year	Total Meters	Total Utility Operating Costs	Operating Cost per Meter	% Change
2007	26,792	\$ 7,200,617	\$ 269	4.3%
2008	27,944	7,924,815	284	5.5%
2009	28,520	9,307,776	326	15.1%
2010	29,092	9,022,118	310	(5.0)%
2011	29,967	10,268,618	343	10.5%
Average	28,463	\$ 8,387,934	\$ 298	6.1%

Operating costs per km of distribution pipe increased by an average rate of 7.6% every year between 2007 and 2011, for a total five-year increase of 26.9%. As with total operating costs per meter, operating costs per km of pipe experienced a larger increase of 16.1% in 2009 followed by a decrease of 4.0% in 2010 and a subsequent increase of 11.2% in 2011 (see Table 43).

**Table 43: Water Utility Operating Cost per Km of Distribution Pipe**

Year	Km of Pipe	Total Utility Operating Costs	Operating Cost per km	% Change
2007	524	\$ 7,200,617	\$ 13,741	12.4%
2008	563	7,924,815	14,064	2.4%
2009	570	9,307,776	16,328	16.1%
2010	575	9,022,118	15,680	(4.0)%
2011	589	10,268,618	17,431	11.2%
Average	560	\$ 8,387,934	\$ 14,912	7.6%

As shown in Table 44, the average operating cost to treat one megalitre of water between 2007 and 2011 was \$525. Yearly cost per megalitre ranged from a low of \$447 in 2007 to \$665 in 2011, and experienced an overall increase in cost per megalitre of 48.7% (averaging an increase of 10.2% year-over-year).

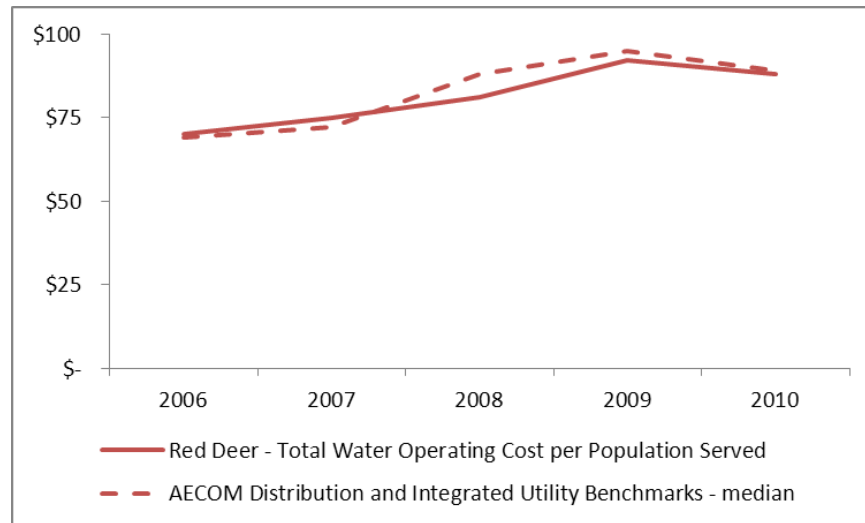
**Table 44: Water Utility Operating Cost per Megalitre of Water Treated at the WTP**

Year	Total Treated Water (ML)	Total Utility Operating Costs	Operating Cost per ML	% Change
2007	16,102	\$ 7,200,617	\$ 447	9.1%
2008	16,334	7,924,815	485	8.5%
2009	16,573	9,307,776	562	15.8%
2010	15,503	9,022,118	582	3.6%
2011	15,444	10,268,618	665	14.2%
Average	15,991	\$ 8,387,934	\$ 525	10.2%



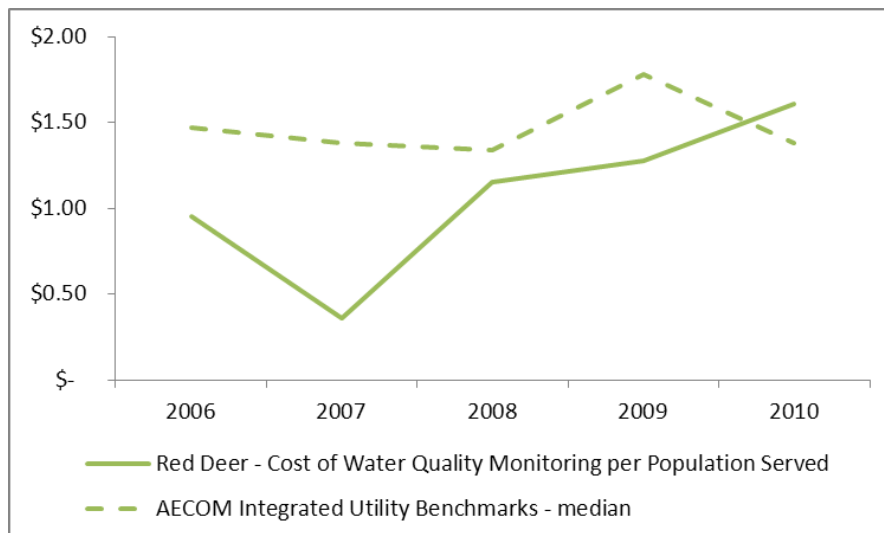
Red Deer's total water operating costs as calculated for the AECOM benchmarking study (including the cost of any bulk water purchases, applicable only to benchmark utilities as Red Deer does not purchase any of its water supply) per customer averaged \$81.20 between 2006 and 2010, which was lower than the average of \$82.60 experienced by comparable distribution and integrated utilities during the same timeframe (see Figure 73).

**Figure 73: Water Utility Total Water AECOM Operating Cost per Population Served**



As shown in Figure 74, the cost of water quality monitoring per customer (i.e. population served) increased from 2007 (\$0.36 per customer) to 2010 (\$1.61 per customer) while the cost per customer of comparable integrated utilities remained relatively constant with some fluctuation from 2008 to 2010. Red Deer's per customer cost averaged \$1.07 between 2006 and 2010 while comparable organizations averaged \$1.47 per customer. Increasing costs are consistent with higher levels of activity around water quality monitoring.

**Figure 74: Water Utility Cost of Water Quality Monitoring per Population Served**





Water customers are charged a fixed monthly fee based on the size of their water meter in addition to a consumption charge (per cubic meter) as shown in Table 45. Fixed and consumption-based fee rates increased by just over 54% from 2008 to 2012, which resulted in the average residential bill increasing by 11.8% per year.

While these increases are somewhat higher than those seen in other utilities, it is noted that all utilities contacted had experienced varying levels of rate increase over the same period, and that these increases were commonly the result of capital upgrades and expansion. Given Red Deer's recent capital activity, the rate increases experienced by the Water utility appear to be reasonable. However, the utility should endeavor to find alternate funding solutions wherever possible, and engage in coordinated capital planning with the Wastewater utility to minimize rate shock.

**Table 45: Water Utility Fees and Typical Residential Bill**

Fixed Monthly Charge						
Meter Size (mm)	2008	2009	2010	2011	2012	2008 to 2012 % increase
16	\$ 13.84	\$ 15.64	\$ 17.52	\$ 19.60	\$ 21.36	54.3%
19	22.16	25.04	28.04	31.38	34.20	
25	40.34	45.58	51.05	57.12	62.26	
38	94.15	106.39	119.16	133.34	145.00	
50	227.31	256.86	287.68	321.91	351.00	
75	383.78	433.67	485.71	543.51	592.00	
100	812.45	918.07	1,028.24	1,150.60	1,254.00	
150	1,522.47	1,720.39	1,926.84	2,156.13	2,350.00	
200	2,690.43	3,040.19	3,405.01	3,810.21	4,153.00	
Consumption Charge (per cubic meter)						
All	\$ 0.52	\$ 0.59	\$ 0.66	\$ 0.74	\$ 0.81	54.4%
Typical monthly bill for residential customers						
16	\$ 25.38	\$ 28.68	\$ 32.12	\$ 35.94	\$ 39.17	54.3%
% increase	13.0%	13.0%	12.0%	11.9%	9.0%	

### Wastewater Utility

Total operating costs for the Water utility increased by 61.6% between 2007 and 2011 (see Table 37). The largest increase was due to the interest expense associated with debt acquired to support capital projects, which experienced a large increase between 2007 and 2009, with a year-over-year increase of 73.5% from 2007 to 2008 followed by an additional increase of 77.3% the following year. Depreciation increased by 209.1% over the same period, with large year-over-year increases in 2008 (35.7%), 2009 (53.9%) and 2010 (37.9%). Increases in depreciation were influenced both by an increasing capital base as well as the City's transition to PSAB reporting in 2009. The MCAF grew by 175.8% between 2007 and 2011, with the year-over-year changes showing significant fluctuation from small decreases to large increases (see Table 46).



**Table 46: Wastewater Utility Historical and 2012 Budgeted Operating Results**

Revenue and Expenditures	2007 Actuals	% change	2008 Actuals	% change	2009 Actuals	% change	2010 Actuals	% change	2011 Actuals	2007* to 2011 % change	2012 Budget
Revenue Summary	12,831,333	18.5%	15,209,652	12.2%	17,064,426	15.4%	19,687,717	5.3%	20,736,659	61.6%	24,018,063
Expenditure Object Summary											
Operating Costs	5,809,980	19.1%	6,919,957	26.0%	8,721,779	(0.6%)	8,673,765	2.5%	8,888,908	53.0%	10,096,957
MCAF	753,329	(14.5%)	643,858	73.2%	1,115,355	15.6%	1,288,812	61.2%	2,077,387	175.8%	2,172,937
Depreciation	1,179,318	35.7%	1,600,772	53.9%	2,464,162	37.9%	3,398,671	7.3%	3,645,631	209.1%	4,649,296
Interest Expense	577,422	73.5%	1,001,646	77.3%	1,775,984	10.8%	1,968,273	(3.7%)	1,894,609	228.1%	1,824,749
Dividend**	-	N/A	1,252,827	7.9%	1,351,814	(8.6%)	1,235,591	(8.0%)	1,137,288	N/A	1,183,251
Reserve Transfers	4,446,903	(16.2%)	3,726,221	10.0%	4,099,496	16.7%	4,782,683	2.7%	4,912,957	10.5%	6,832,667
Debtenture Principal Payment	64,377	0.0%	64,377	(100.0%)	-	N/A	1,738,597	5.0%	1,825,506	5.0%	1,907,502
Equity Transfer - Amortization	-	N/A	-	N/A	(2,464,161)	37.9%	(3,398,671)	7.3%	(3,645,631)	47.9%	(4,649,296)
<b>Total of Expenditure Objects</b>	<b>12,831,329</b>	<b>18.5%</b>	<b>15,209,658</b>	<b>12.2%</b>	<b>17,064,429</b>	<b>15.4%</b>	<b>19,687,721</b>	<b>5.3%</b>	<b>20,736,655</b>	<b>61.6%</b>	<b>24,018,063</b>
Net of Revenue and Expenditures	(2)		-		(4)		-		2		-
<b>Total Operating Costs</b>	<b>12,831,333</b>	<b>18.5%</b>	<b>15,209,652</b>	<b>12.2%</b>	<b>17,064,426</b>	<b>15.4%</b>	<b>19,687,717</b>	<b>5.3%</b>	<b>20,736,659</b>	<b>61.6%</b>	<b>24,018,063</b>

\* Equity Transfer - Amortization calculated as % change from 2009 to 2011; Debtenture Principal Payment calculated as % change from 2010 to 2011

\*\* % change in Dividend not calculated as 2007 Dividend payment was zero

Total utility expenditures include both discretionary expenses (those that can be controlled, at least to some extent, by the utility) and non-discretionary expenses (see Table 47). The non-discretionary expenses are all City controlled and include the MCAF (175.8% increase from 2007 to 2011), corporate cost allocations (39.0% increase), and reserve transfers (10.5% increase). The percent change in the dividend has not been calculated in the table as no dividend payment was made in 2007. From 2008 to 2011 the dividend paid by the Wastewater utility to the City has remained fairly consistent. In 2011, the MCAF represented 10.0% of all operating expenses incurred by the Wastewater utility, the dividend represented 5.5%, corporate cost allocations were 3.7%, and reserve transfers were 23.7% of utility costs.

**Table 47: Wastewater Utility Non-Discretionary Costs**

Non-Discretionary Expenditures	2007 Actuals	% change	2008 Actuals	% change	2009 Actuals	% change	2010 Actuals	% change	2011 Actuals	2007 to 2011 % change	2012 Budget
Municipal Consent and Access Fee (MCAF)	753,329	(14.5%)	643,858	73.2%	1,115,355	15.6%	1,288,812	61.2%	2,077,387	175.8%	2,172,937
Dividend*	-	N/A	1,252,827	7.9%	1,351,814	(8.6%)	1,235,591	(8.0%)	1,137,288	N/A	1,183,251
Corporate Cost Allocations	557,472	(6.1%)	523,261	19.3%	624,299	22.2%	763,165	1.5%	774,655	39.0%	819,334
Reserve Transfers	4,446,903	(16.2%)	3,726,221	10.0%	4,099,496	16.7%	4,782,683	2.7%	4,912,957	10.5%	6,832,667
<b>Total</b>	<b>\$ 5,757,704</b>	<b>6.7%</b>	<b>\$ 6,146,167</b>	<b>17.0%</b>	<b>\$ 7,190,964</b>	<b>12.2%</b>	<b>\$ 8,070,251</b>	<b>10.3%</b>	<b>\$ 8,902,287</b>	<b>54.6%</b>	<b>\$11,008,189</b>

\*\* % change in Dividend not calculated as 2007 Dividend payment was zero

As shown in Table 48 and Figure 75, the overall increase in expenditures is comprised of a 67.3% increase in discretionary expenses and a 54.6% increase in non-discretionary expenses. In 2011, discretionary expenses represented 57.1% of total operating expenses and the remaining 42.9% was non-discretionary expenses.

**Table 48: Wastewater Utility Discretionary and Non-Discretionary Costs**

Discretionary Expenditures	2007 Actuals	% change	2008 Actuals	% change	2009 Actuals	% change	2010 Actuals	% change	2011 Actuals	2007 to 2011 % change	2012 Budget
Total Operating Costs	\$12,831,333	18.5%	\$15,209,652	12.2%	\$17,064,426	15.4%	\$19,687,717	5.3%	\$20,736,659	61.6%	\$24,018,063
Non-Discretionary Expenses	5,757,704	6.7%	6,146,167	17.0%	7,190,964	12.2%	8,070,251	10.3%	8,902,287	54.6%	11,008,189
<b>Total Discretionary Expenses</b>	<b>\$ 7,073,629</b>	<b>28.1%</b>	<b>\$ 9,063,485</b>	<b>8.9%</b>	<b>\$ 9,873,462</b>	<b>17.7%</b>	<b>\$11,617,466</b>	<b>1.9%</b>	<b>\$11,834,372</b>	<b>67.3%</b>	<b>\$13,009,874</b>

Wastewater utility discretionary and non-discretionary expenses increased at a relatively consistent pace from 2007 to 2011, with discretionary expenses increasing at an average rate of 14.1% per year while non-discretionary expenses increased at an average rate of 11.6% per year.



Figure 75: Wastewater Utility Discretionary and Non-Discretionary Cost Trends

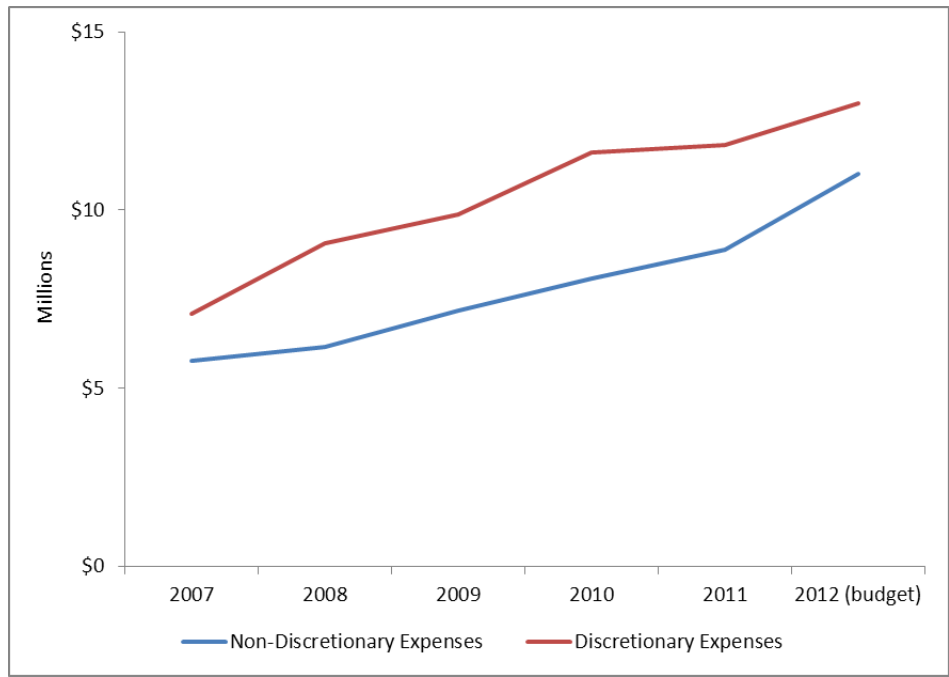


Figure 76 visualizes the break-down between discretionary and non-discretionary expenses, further breaking the non-discretionary expenses into its components as described above.

Figure 76: Wastewater Utility Discretionary and Non-Discretionary Costs

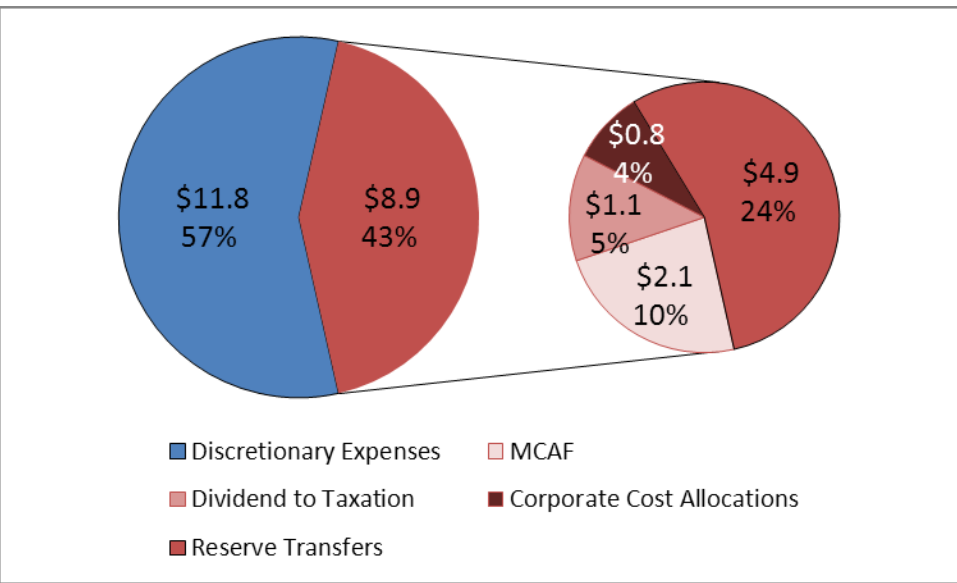


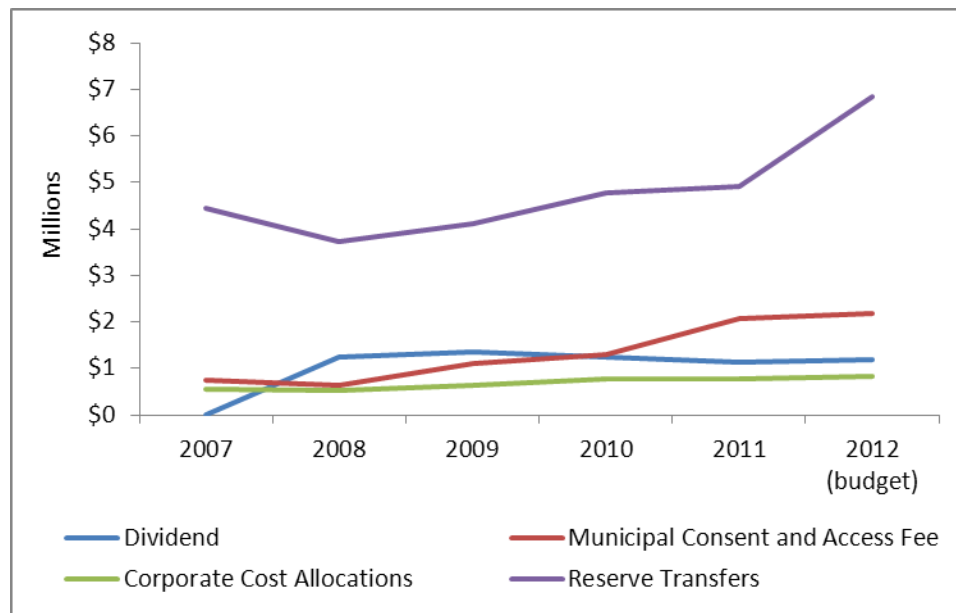


Table 49 and Figure 77 show the expenditure trends in each of the non-discretionary expense categories. The reserve transfers have consistently remained the largest non-discretionary account but experienced only moderate overall growth between 2007 and 2011. The MCAF payments saw the largest growth over the period, followed by corporate cost allocations.

**Table 49: Wastewater Utility Trends in Non-Discretionary Expenditures**

Year	Dividend	Municipal Consent and Access Fee	Corporate Cost Allocations	Reserve Transfers
2007	\$ -	\$ 753,329	\$ 557,472	\$4,446,903
2008	1,252,827	643,858	523,261	3,726,221
2009	1,351,814	1,115,355	624,299	4,099,496
2010	1,235,591	1,288,812	763,165	4,782,683
2011	1,137,288	2,077,387	774,655	4,912,957
2012 (budget)	1,183,251	2,172,937	819,334	6,832,667

**Figure 77: Wastewater Utility Trends in Non-Discretionary Expenditures**

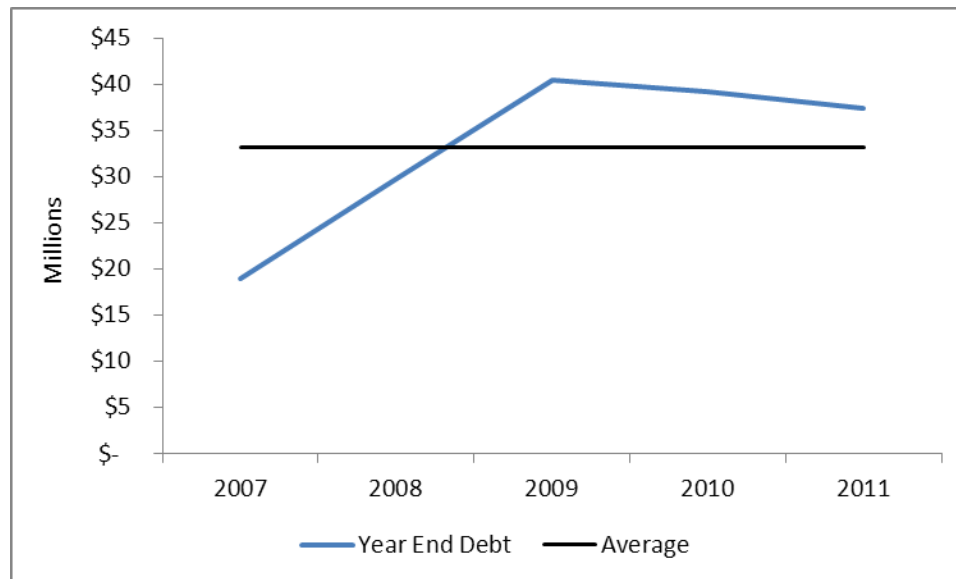


For the Water utility, the MCAF represented an average of 7.6% of total revenue between 2007 and the 2012 budgeted value, decreasing from 9.3% in 2007 to 4.2% in 2008 and then trending generally upward for the remainder of the period. Dividends averaged 5.5% of total revenue (6.6% from 2008 to 2012), and has been trending downward from 8.2% in 2008 to 4.9% budgeted for 2012. Corporate cost allocations as a percent of revenue fluctuated between 2007 and the 2012 budget, averaging 3.7% of revenue across the period. Transfers to reserves varied between a high of 34.7% and a low of 23.7% of total Water utility revenue, averaging 26.6% across the period under review (see Table 50).

**Table 50: Wastewater Utility Non-Discretionary Expenditures as a Percent of Revenue**

	2007 Actuals	2008 Actuals	2009 Actuals	2010 Actuals	2011 Actuals	2012 Budget
Revenue	\$ 12,831,333	\$ 15,209,652	\$ 17,064,426	\$ 19,687,717	\$ 20,736,659	\$ 24,018,063
MCAF	753,329	643,858	1,115,355	1,288,812	2,077,387	2,172,937
MCAF as % of Revenue	5.9%	4.2%	6.5%	6.5%	10.0%	9.0%
Dividend to Taxation	-	1,252,827	1,351,814	1,235,591	1,137,288	1,183,251
Dividend as % of Revenue	0.0%	8.2%	7.9%	6.3%	5.5%	4.9%
Corporate Cost Allocations	\$ 557,472	523,261	624,299	763,165	774,655	819,334
CCA as % of Revenue	4.3%	3.4%	3.7%	3.9%	3.7%	3.4%
Transfer to Reserves	4,446,903	3,726,221	4,099,496	4,782,683	4,912,957	6,832,667
Transfers as % of Revenue	34.7%	24.5%	24.0%	24.3%	23.7%	28.4%

The Wastewater utility year-end debt increased from 2007 (\$19.0 million) to 2009 (\$40.5 million) before decreasing in 2010 and 2011 (\$39.2 million and \$37.4 million, respectively). During this five year period the average level of year-end debt was \$33.2 million (see Figure 78). The Wastewater's 2012 budget actual debt-to-equity ratio is 46.97% debt to 53.03% equity.

**Figure 78: Wastewater Utility Year-End Debt**

Per-meter utility operating costs grew by 64.6% between 2006 and 2010. The average increase per year during this period was 13.7%, and the largest year-over-year increase was 27.9% from 2008 to 2009, due primarily to increases in electricity and other utility expenses (see Table 51).

**Table 51: Wastewater Utility Operating Cost Per Customer (Service Connection)**

Year	Total Meters	Total Utility Operating Costs	Operating Cost per Meter	% Change
2006	26,723	\$ 5,040,539	\$ 189	
2007	27,263	5,809,980	213	13.0%
2008	28,077	6,919,957	246	15.7%
2009	27,671	8,721,779	315	27.9%
2010	27,944	8,673,765	310	(1.5)%
Average	27,536	\$ 7,033,204	\$ 255	13.7%

Collection system expenditures per kilometer of sanitary sewer pipe increased by 30.6% between 2007 and 2011, with an average year-over-year increase of 10.1% (see Table 52). The largest increases occurred from 2006 to 2007 (20.8% increase) and from 2008 to 2009 (25.0%), followed by year-over-year decreases in 2010 and 2011.

**Table 52: Wastewater Utility Operating Cost per Km of Collection (Sanitary Sewer) Pipe**

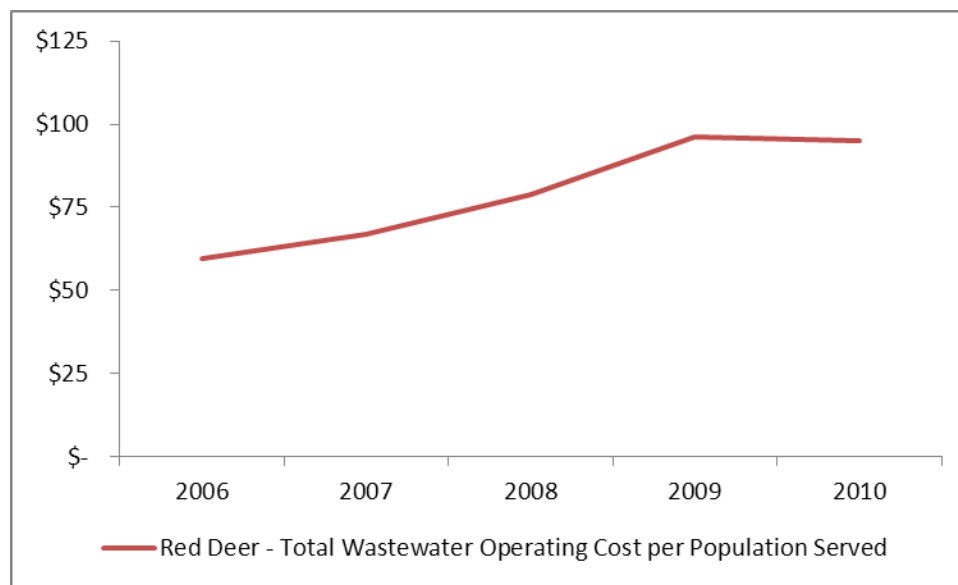
Year	Km of Pipe	Total Utility Operating Costs	Operating Cost per km	% Change
2007	420	\$ 5,809,980	\$ 13,840	20.8%
2008	453	6,919,957	15,270	10.3%
2009	457	8,721,779	19,090	25.0%
2010	463	8,673,765	18,729	(1.9)%
2011	492	8,888,908	18,076	(3.5)%
Average	457	\$ 7,802,878	\$ 17,001	10.1%

As shown in Table 53, the cost of treating wastewater averaged \$551 per megalitre between 2007 and 2011, increasing from \$373 per megalitre in 2007 to \$610 per megalitre in 2011. The average year-over-year increase during this period was 13.8%, but a large increases in costs per megalitre occurred from 2007 to 2008 (34.5% increase) and 2008 to 2009 (31.4% increase). Overall, costs to treat one megalitre of wastewater increased by 63.6% from 2007 to 2011.

**Table 53: Wastewater Utility Operating Cost per Cubic Meter of Water Treated at the WWTP**

Year	Total Treated Wastewater (ML)	Total Utility Operating Costs	Operating Cost per ML	% Change
2007	15,578	\$ 5,809,980	\$ 373	10.6%
2008	13,797	6,919,957	502	34.5%
2009	13,235	8,721,779	659	31.4%
2010	14,242	8,673,765	609	(7.6)%
2011	14,566	8,888,908	610	0.2%
Average	14,284	\$ 7,802,878	\$ 551	13.8%

Between 2006 and 2010, total Wastewater utility operating cost (as calculated for the AECOM benchmarking study) averaged \$79.21 per customer served. This ratio increased during the five-year period from \$59.43 per customer in 2006 to \$95.06 per customer in 2010 (see Figure 79).

**Figure 79: Wastewater Utility Total Wastewater AECOM Operating Cost per Population Served**

As of March 1, 2012, all residential Red Deer wastewater customers pay a fixed monthly wastewater fee of \$41.32 per month with no variable charge (see Table 54). In cases where one residential location contains more than two dwelling units, the customer is charged a rate of \$1.667 per cubic meter of wastewater (calculated as 80% of the water delivered to the customer's premises) with a minimum monthly fee of \$41.32.

The benchmarking review found that all wastewater utilities contacted had experienced varying levels of rate increases during the 2008 to 2012 period, and that these were almost exclusively the result of capital programs. The rate increases experienced by the Wastewater utility appear to be reasonable given the significant amount of capital upgrading and expansion the utility has recently undergone. While reasonable,



the utility should wherever possible evaluate alternative means of funding or modification of timelines for future projects so as to reduce the need for large rate increases.

**Table 54: Wastewater Utility Residential Fees**

	2008	2009	2010	2011	2012	2008 to 2012 % Increase
Fixed (Residential)	27.39	30.95	34.97	37.91	41.32	
% increase	15.0%	13.0%	13.0%	8.4%	9.0%	50.9%

When wastewater produced by an industrial or commercial customer has been determined to exceed the established limits for BOD, TSS or FOG then an overstrength surcharge is applied. The overstrength wastewater service charge includes a sampling and testing charge of \$100 per month for every month that the wastewater exceeds the overstrength limits, a volume charge of \$1.667 per cubic meter, and a treatment charge based on the total amount of BOD, TSS and FOG calculated as shown in Table 55.

**Table 55: Wastewater Utility Overstrength Surcharge Fees, 2012**

	Tier 1		Tier 2		Tier 3	
	Concentration (mg / L)	Surcharge (per kg)	Concentration (mg / L)	Surcharge (per kg)	Concentration (mg / L)	Surcharge (per kg)
BOD	> 300, < 2,400	\$ 0.87	> 2,400, < 4,800	\$ 1.16	> 4,800	\$ 1.74
TSS	> 300, < 2,400	\$ 0.83	> 2,400, < 4,800	\$ 1.10	> 4,800	\$ 1.66
FOG	> 100, < 250	\$ 0.68	> 250, < 500	\$ 0.90	> 500	\$ 1.36

The customer may choose to install and maintain (at the customer's expense) a meter, subject to the approval of the utility, to monitor wastewater production upon which the service charge will be based. In absence of this, the volume of wastewater is deemed to be equal to 80% of the water delivered to the customer's premises. Should a customer choose to dispose of FOG at a liquid waste station, the fee is \$8.30 per cubic meter with a minimum charge of \$5.00 per load.

### Conclusions

Both the Water and the Wastewater utilities follow proven practices in financial management and rate setting, which will be further refined with the adoption of the new rate model and the definition of utility fiscal policies. Further, appropriate oversight and monitoring of the utilities' financial position appears to be occurring.

For the Water utility, operating cost have increased 43% over the last five years, which appears reasonable given the plant and distribution infrastructure expansions and the corresponding increases that would be expected to accompany growth of this nature. Further, the per-meter, per-km of pipe and per-ML treated operating costs all appear to be appropriate and reasonable. While water rates have experienced a meaningful increase over the past five years, a significant driver of these increases has been non-discretionary expenditures outside of the utility's control.





Wastewater utility operating cost have increased 53% over the last five years, which appears reasonable given the significant operational expansion and upgrades experienced by the utility. As with the Water utility, rate increases have been significantly impacted by increases in non-discretionary expenditures beyond the utility's control, including both the MCAF and dividends to the City.

### **Recommendations**

- 2.6.1** Consider creating additional account codes to differentiate capital costs incurred that are driven by regulatory requirements (e.g. enhanced treatment processes).
- 2.6.2** Given the disaggregated utility model employed by the City, it could be beneficial for the engineering, planning, financial services, and utility groups to engage in a greater degree of coordinated budgeting and financial planning.
- 2.6.3** Senior staff should be involved and informed (to an appropriate level) regarding the rate model and rate development process to ensure a full understanding of the factors contributing to rates.

## **2.7 Infrastructure and Asset Management**

The corporate administrative policy around enterprise asset management (EAM) provides direction around the development of an EAM program for use across all City departments. The program is intended to include an asset registry (including an inventory of all assets, their value, performance characteristics and estimated remaining life), corporate work management systems to track workflow and integrate existing systems to improve quality and reliability of data in the registry, and asset management plans to identify and implement improvements in business processes.

The EVS department uses three primary systems for asset management: the JD Edwards and CityWide asset management systems, the Hansen work management system, and the Red Deer GIS mapping system. EVS also prepares a year end asset-add checklist, which details the year's capital additions for the WTP and the WWTP, including the capitalized value, the value of the year's additions, and the current total value for each job.

The Diamond Municipal Solutions utility billing system used by the Revenue and Assessment group is also used in the department to manage service connections and disconnections but is not considered a primary asset management system.

These systems appear to be effective in supporting the department's understanding of its assets in terms of capital cost, depreciation and replacement cost. However, as some systems have only recently been implemented, this is still considered to be a work in progress. Further, it has been suggested that the practice of notifying EVS administration regarding asset disposals has not always occurred in a timely manner, and this is something that is being addressed through the implementation of asset disposal forms.



In 2010, the City engaged a consultant to review several areas of City assets, including those owned and operated by the Water and Wastewater utilities, and to document an asset management plan for six asset portfolios. These plans were designed to support the utilities in delivering quality service to customers while effectively managing costs and risks. The reports fully document the department's assets at the point the report analysis was conducted. The assets are broken out into the linear water and wastewater networks and the WTP and WWTPs. The report describes an asset management approach that can be used by each utility, which includes levels of service, lifecycle management, risk management, financial planning, and future improvements to the asset management plan.

The analysis provides a detailed assessment of each asset class based on the above framework, including risk profiling, lifecycle management strategies, long-term funding analysis and short term investments, and suggestions for further action that could result in further refinement to the plan and improvements to asset management practices and procedures. This report appears to provide an excellent foundation for a comprehensive asset management strategy, and the implementation of these plans would result in alignment between the department's asset management strategy and the corporate asset management approach.

Comprehensive infrastructure integrity assessments are done as part of the routine inspection and planning process and also with the support of external engineering consultants. There also appears to be a good process in place for maintaining, refurbishing, replacing and upgrading utility infrastructure. Supported by schedules produced by the Hansen work management system, inspections are performed to identify maintenance, refurbishment, and replacement requirements, which are then scheduled and carried out based on priority and funding. The need for infrastructure upgrading is based on projected use and current capacity and age of existing infrastructure. The upgrading process involves consultation with external engineering groups with expertise in the infrastructure under assessment.

### **Water Utility**

As of June 2011, the first two phases of the WTP upgrades had been completed and the Water utility began embarking on phase three of the upgrades. These upgrades are intended to support the utility's ability to meet strict regulatory requirements as well as to expand plant efficiency and capacity to support a growing Red Deer and regional population.

In 2010, the Water utility managed 575.4 km of pipe with an average diameter of 170.1 mm and ranging from 32 mm up to 1,200 mm (see Table 56). This represents a 14.1% increase compared to 2006, with most of this increase due to pipe less than 200 mm in diameter.

**Table 56: Water Utility Distribution System (by Diameter) Infrastructure**

	Length of Pipe (km)				
Diameter (mm)	2006	2007	2008	2009	2010
< 200	333.49	355.38	378.42	382.33	384.69
200 to 300	122.81	120.30	130.66	133.55	136.17
> 300	47.90	48.36	54.40	54.17	54.54
<b>Total</b>	<b>504.20</b>	<b>524.04</b>	<b>563.48</b>	<b>570.05</b>	<b>575.40</b>
Average diameter	202.60	166.76	170.29	169.91	170.13

As of December 31, 2010, the average age of distribution pipe infrastructure was just over 29 years. As shown in Table 57, the majority of the distribution infrastructure managed by the Water utility was polyvinyl chloride (PVC) pipe (57.1%) and for the previous 24 years this was almost exclusively the only material used when replacing old infrastructure or in new developments (99.1%). Prior to this time, the utility used several different pipe materials including PVC, ductile iron (DI) and asbestos cement (AC). Infrastructure put in place more than 50 years ago was almost exclusively unlined cast iron (CI).

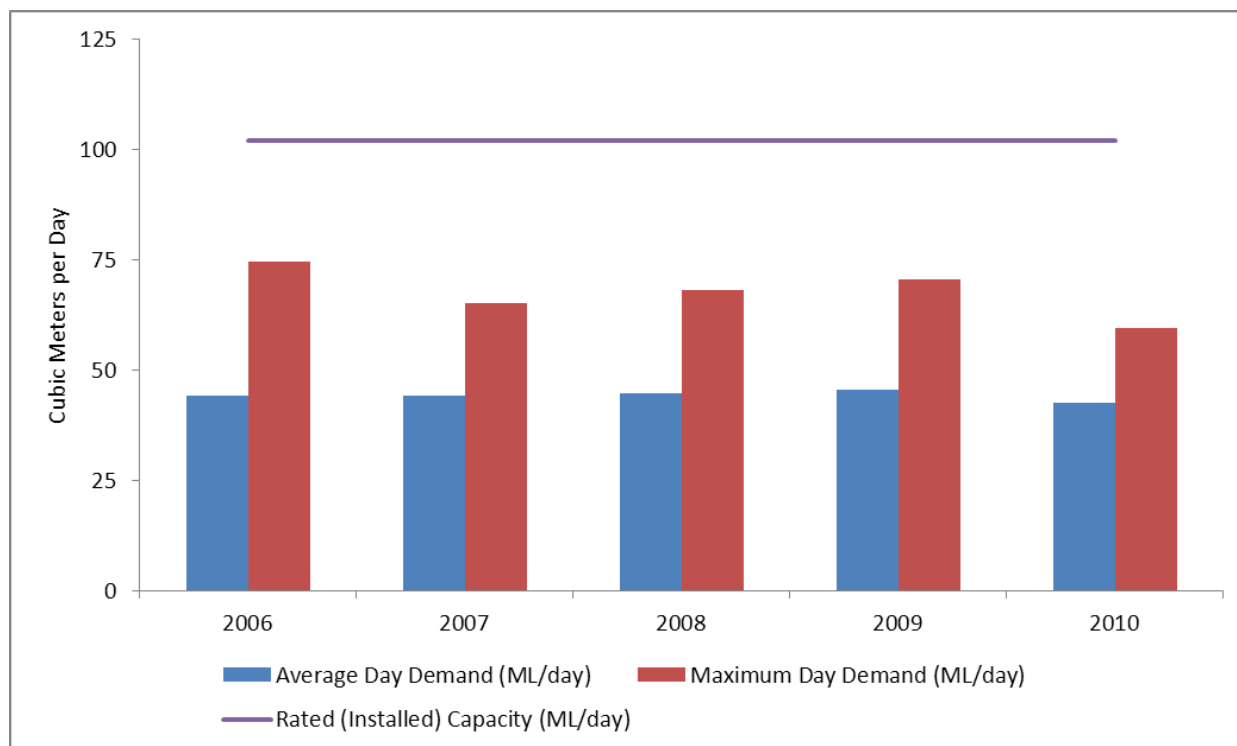
**Table 57: Water Utility Distribution System Infrastructure by Age and Material (as of December 31, 2010)**

	0-24 years	25 - 49 years	50 - 74 years	75 - 99 years	>100 years	Material Length (km)	% of Total
Total length (km)	277.28	224.06	63.83	9.68	0.52	575.37	100%
% of Total	48.2%	38.9%	11.1%	1.7%	0.1%	100%	
PVC %	99.1%	24.0%	0.2%			328.75	57.1%
HDPE %	0.1%					0.37	0.1%
Steel %		1.4%				3.16	0.5%
DI %	0.1%	31.0%	0.4%			70.01	12.2%
unlined CI %	0.04%	12.2%	96.6%	100%	100%	99.37	17.3%
Concrete %	0.6%	3.4%				9.18	1.6%
AC %	0.01%	27.8%	2.7%			64.07	11.1%
Other %	0.1%	0.04%				0.27	0.05%
Unknown %		0.05%				0.10	0.02%

Between 2006 and 2010, the average daily water demand remained fairly consistent at an average of 44.1 cubic meters per day, while the maximum daily demand fluctuated from a high of 74.6 in 2006 to a low of 59.3 in 2010 (see Figure 80). However, even at the peak, the rated (installed) capacity of the WTP at 102.0 cubic meters per day was well above the maximum day demand.



**Figure 80: Water Utility Average Daily Demand, Maximum Daily Demand, and WTP Plant Capacity**



For distribution infrastructure, the proportion of capital reinvestment per replacement value increased from 0.26% in 2006 to 0.43% in 2010. Compared to utilities with similar distribution and integrated systems, this represents a slightly lower-than-average investment (0.25% average for Red Deer compared to 0.51% for similar utilities over the same period) (see Table 58).

The proportion of capital reinvestment per the replacement value of the WTP averaged 2.1% between 2006 and 2010, which was higher compared to the average reinvestment of utilities operating similar treatment plants (1.2% per year over the same period) (see Table 58). This aligns with the significant upgrades that the utility was undertaking during this period.

**Table 58: Water Utility Asset Replacement Value and Percent Reinvested per Year**

	2006	2007	2008	2009	2010
Distribution system replacement value	N/A	\$ 544,305,598	\$ 569,189,360	\$ 742,999,000	\$ 489,090,000
Red Deer Capital Reinvestment / Replacement Value Distribution System	0.26%	0.15%	0.17%	0.22%	0.43%
AECOM Distribution & Integrated Systems Benchmarks - median	0.52%	0.48%	0.48%	0.44%	0.61%
WTP replacement value	\$95,480,000	\$ 112,700,000	\$ 112,400,000	\$ 71,482,000	N/A
Red Deer Capital Reinvestment / Replacement Value of WTP	3.72%	2.38%	1.91%	2.52%	0.09%
AECOM WTP Benchmarks - median	1.18%	1.08%	1.07%	1.47%	1.17%

### Wastewater Utility

The Wastewater utility WWTP has been undergoing a series up upgrades, the third phases of which was completed in 2009. The plant is just entering into phase four of the upgrading process, with the majority of this activity budgeted for 2013 through 2015, and phase five is currently budgeted to commence in 2019. The



plant upgrades are designed to address increasingly stringent regulatory requirements increased flow resulting from the growing Red Deer population as well as significant regional inflow expected to commence in 2012.

The Wastewater utility managed an average of 446.4 km of collection pipe between 2006 and 2010. During this period, the average diameter of pipe decreased by 15.8% from 236.9 in 2006 to 199.6 in 2010 while total length of the system increased by 5.5% from 438.9 km to 463.1 km (see Table 59).

**Table 59: Wastewater Utility Collection System Infrastructure (by Diameter)**

	Length of Pipe (km)				
Diameter (mm)	2006	2007	2008	2009	2010
< 200	299.20	293.76	315.60	318.82	322.71
200 to 300	70.90	71.22	74.31	74.61	75.33
> 300	68.80	54.82	63.27	63.45	65.09
<b>Total</b>	<b>438.90</b>	<b>419.80</b>	<b>453.18</b>	<b>456.88</b>	<b>463.13</b>
Average diameter	236.90	194.74	199.71	199.12	199.57

At December 31, 2010, the average age of wastewater collection infrastructure was 30.77 years. At this time, the majority of the collection infrastructure operated by the Wastewater utility was polyvinyl chloride (PVC) pipe (51.3%), followed by vitrified clay pipe (35.1%). In the past 24 years, almost all (96.1%) of new pipe installed was PVC, but for the 25 years prior to that it was typically a mix of vitrified clay (52.0%), concrete (24.0%), or PVC (22.3%). Older pipe was typically vitrified clay (see Table 60).

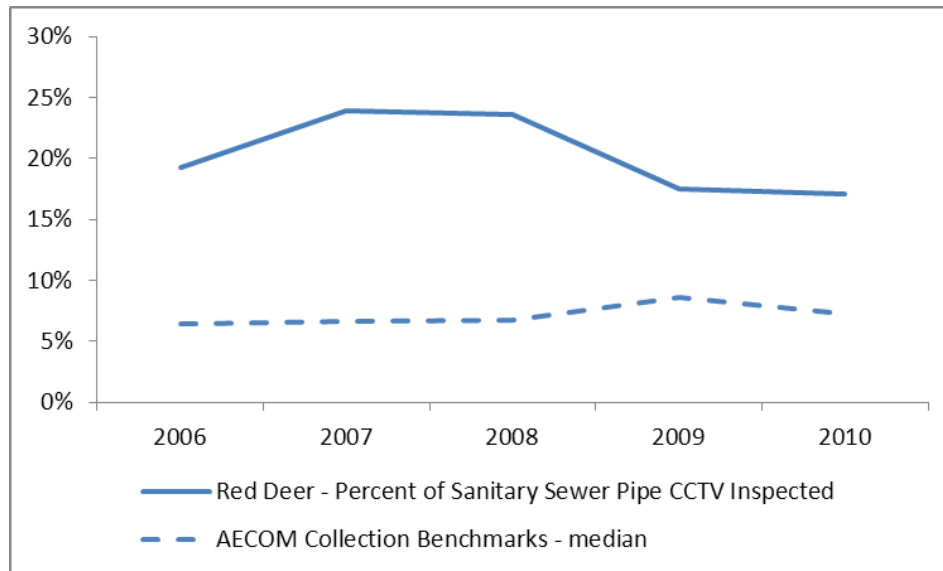
**Table 60: Wastewater Utility Collection System Infrastructure by Age and Material (as of December 31, 2010)**

	0-24 years	25 - 49 years	50 - 74 years	75 - 99 years	>100 years	Material Length (km)	% of Total
Total length (km)	206.55	175.35	80.52	0.61	0.36	463.39	100%
% of Total	44.6%	37.8%	17.4%	0.1%	0.1%	100%	
PVC %	96.1%	22.3%	0.3%		6.0%	237.93	51.3%
HDPE %	1.4%					2.91	0.6%
unlined CI %		0.1%	1.6%			1.43	0.3%
Concrete %	1.8%	24.0%	11.7%			55.21	11.9%
AC %		1.5%				2.56	0.6%
Vitrified Clay %	0.5%	52.0%	86.4%	100%		162.45	35.1%
Other %			0.1%		13.9%	0.11	0.0%
Unknown %	0.1%	0.15%	0.1%		69.4%	0.81	0.17%

Figure 81 shows the percent of collection system pipe inspected annually via CCTV. The Red Deer Wastewater utility inspected a significantly higher proportion of its collection pipe (20.3% on average between 2006 and 2010) compared to benchmark collection systems (average of 7.1%).

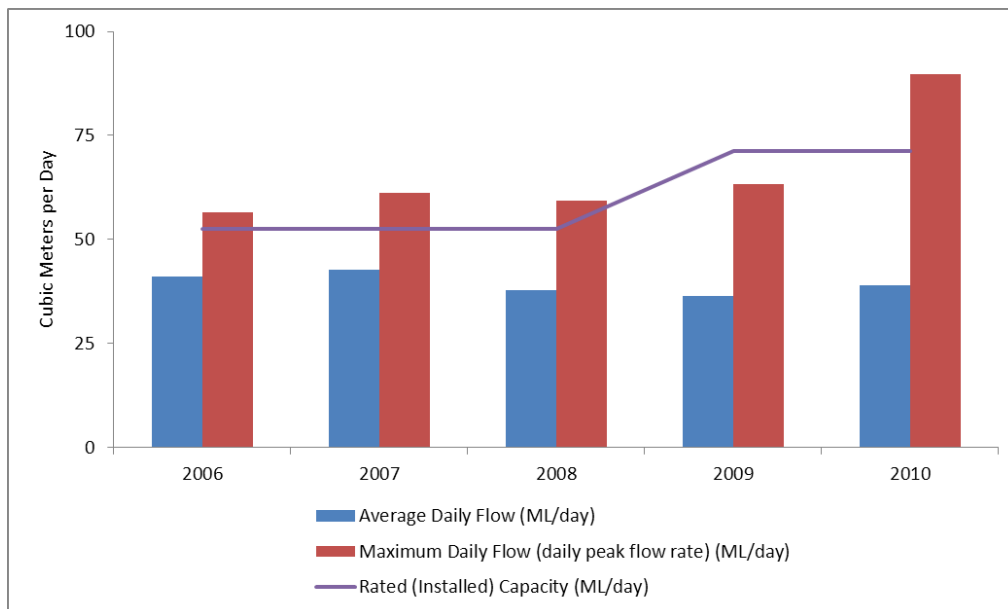


**Figure 81: Wastewater Utility Percent of Collection System Pipe CCTV Inspected per Year**



Between 2006 and 2010, the average daily wastewater flow remained fairly consistent at an average of 39.3 cubic meters per day, while the maximum daily demand increased from a low of 56.5 in 2006 to a high of 89.7 cubic meters per day in 2010 (see Figure 82). This is notable as the maximum day demand exceeded plant capacity in 2006 (30 days), 2007 (106 days) and 2008 (7 days) prior to the completion of phase three of the upgrade program in 2009. Further, while plant capacity in 2009 was sufficient, maximum day demand again exceeded capacity in 2010 (2 days). This suggests that while capacity is more than sufficient to handle typical flow, it has experienced challenges in the past when facing extreme flow situations.

**Figure 82: Wastewater Utility Average Daily Flow, Maximum Daily Flow, and WWTP Plant Capacity**





The utility does not measure inflow and infiltration (I&I) specifically, but notes that heavy storm situations result in a significant increase in flow to the WWTP. Some concern has been expressed regarding new construction where the contractor has failed to install the proper gaskets at pipe connections, which can lead not only to inflow during heavy storms, but also leakage of wastewater from the pipe on an ongoing basis.

For collection infrastructure, the proportion of capital reinvestment per replacement value remained fairly consistent at an average of 0.18%. Compared to benchmark utilities, which averaged 0.26% over the same period, this represents a slightly lower-than-average investment (see Table 61).

The proportion of capital reinvestment per the replacement value of the WWTP was 0.73% in 2009 and 0.09% in 2010 (2006, 2007 and 2008 data not available). Given the variance and lack of historical data for Red Deer, it is difficult to make a meaningful comparison with benchmark WWTPs, which averaged 0.47% capital reinvestment as a percentage of the replacement value of their plants (see Table 61).

**Table 61: Wastewater Utility Asset Replacement Value and Percent Reinvested per Year**

	2006	2007	2008	2009	2010
Collection system replacement value	\$ 506,476,995	\$ 383,551,765	\$ 399,673,828	\$ 650,600,000	\$ 650,600,000
Red Deer Capital Reinvestment / Replacement Value Collection System	0.17%	0.20%	0.17%	0.16%	0.19%
AECOM Wastewater Utility Benchmarks - median	0.22%	0.22%	0.29%	0.28%	0.31%
WWTP replacement value	N/A	N/A	N/A	\$ 209,766,000	\$ 209,766,000
Red Deer Capital Reinvestment / Replacement Value of WWTP	N/A	N/A	N/A	0.73%	0.09%
AECOM WWTP Benchmarks - median	0.43%	0.39%	0.47%	0.51%	0.48%

## Conclusions

The utilities have implemented and are using a best practice asset and work management system for all asset types. This is a relatively new system overall, and the functionality of the system is expected to continue to improve over time as the information in the system becomes more robust.

WTP capacity has historically been more than sufficient to meet average and maximum daily demand, but WWTP capacity appears to have struggled in meeting maximum daily capacity. This is likely a result of high I&I following heavy rainfall, which is a matter that requires further examination of infrastructure to ensure that large amounts of inflow are not paralleled by significant leakage from sanitary pipes, and that this infrastructure is being installed correctly and inspected in a timely manner to prevent this issue from continuing or increasing in the future.

## Recommendations

- 2.7.1** Continue to work with the data produced by the Hansen system to refine parameters and improve the consistency and reliability of the output and its relevance to utility assets.
- 2.7.2** Best practice is to develop strategic asset management plans for all linear assets, which includes a long term maintenance replacement plan for pipes, valves, etc. These plans typically include current infrastructure, expected growth, and replacement plans and cost associated with this. This information is then aggregated and feeds into the overall capital planning process.





## **2.8 Operating Risk and Business Continuity**

The City's Emergency Preparedness – Rescue and Evacuation corporate policy outlines the requirements for site specific emergency response plans to be prepared by each City department, which include the identification of potential emergencies, procedures for dealing with these emergencies, provision of emergency equipment and training, emergency facilities, etc. The City has also developed a corporate spill response procedure framework for responding to spills and releases that aims to minimize the risk of loss and environmental damage while complying with provincial and federal environmental legislation. The procedures include responding, reporting, containing, cleaning-up, and following-up on the spill, and require that departments comply with the procedures and provide training and equipment to their staff to ensure they are able to properly manage spills.

The emergency response procedure document used in EVS outline procedures for managing emergencies pertaining to fire, armed intruders, bomb threats, floods, gas leaks, or power failure. This document outlines minimum worker competencies, identifies and ranks potential hazards according to their respective severity, probability and frequency, describes the controls, equipment and PPE required, provides specific procedures and responsible parties for various types of emergencies, and compiles emergency contact information for key City staff.

In addition to the emergency response procedures, the department also has numerous emergency response plans, pandemic plans, environmental management plans, and documents describing safety and operating procedures to be carried out in the case of specific emergencies. These plans frequently involve a risk assessment of the severity, probability and frequency of the emergencies.

Staff are required to read and sign off on Standard Operating Procedures (SOPs), and there is an opportunity for them to provide feedback which helps to ensure they are clear, comprehensive and concise. The development and updating of the SOPs is managed by the Training Lead, who is responsible for reviewing and integrating feedback where appropriate. Previously, each section developed and maintained its own SOPs tailored specifically to its own operations, but these are now in the processes of becoming integrated and managed at a department level to ensure consistency and organizational alignment.

At this time the EVS does not have any formal mutual assistance agreements with similar organizations in the region.

Neither utility has experienced any significant security breaches. While minor cases of vandalism have occurred, there have been no cases of physical security breaches at either the WTP or the WWTP. There was also an unsuccessful attempt to breach the SCADA security firewalls. The Water and Wastewater utility Superintendents are members of a new municipal committee, the Security Resource Team, that is tasked with setting standards and guidelines and establishing an incident reporting telephone line for use by all City staff. This committee has strong representation from across the City and is seen to be a positive step that reinforces the City's commitment to establishing a safe work environment for staff and citizens.

**Water Utility**

Emergency response procedures have been developed for the Water utility outlining worksite emergency and evacuation plans and response procedures to deal with fire, armed intruders, bomb threats, floods, gas leaks, power failures or chemical leaks. The documents identify potential emergency hazards (e.g. lightning, water contamination, operator error, etc.) and rank each according to severity, probability and frequency of occurrence. Controls, equipment and PPE required for each worksite are identified and a personnel flow chart shows the responsibilities of emergency responders. The document describes the procedures to be carried out in the event of various types of emergencies as well as the responsibilities of staff, and provides contract information for emergency response services and key City staff.

In 2009, a third-party consultant was hired by the City to review the WTP redesign from a “*Crime prevention through environmental design*” (CPTED) perspective. The review provided suggestions regarding types of lighting (metal halide) and vegetation (hostile) to be placed around the WTP, materials to be used in guardrails and park furniture (metal or otherwise “carve”-resistant), and safety and security measures to be implemented (guard patrols, card access, video surveillance). This review and the resulting recommendations were part of phase three of the WTP upgrading process. In 2010, another study was undertaken to develop specifications for the WTP security system features, including compliance with UL 294 and ULC requirements, size and features of the access control system, ability to support dynamic graphical maps, remote communication, and mustering, badge management, and video capabilities and administration.

In 2011, facing increasing demand and significant planned upgrades to equipment, the Water utility engaged a consultant to assess the WTPs ability to support plant operations in the event of a power failure. Two options to address this issue were considered: installing an additional generator to support the existing generator, or replacing the existing generator with a larger unit. An analysis was conducted by the WTP’s standard engineering contractor to assess the level of power required, consequences of insufficient power, potential for power outage events and their frequency, mitigation and control strategies, and additional benefits of having standby power. The analysis resulted in the recommendation to replace the current generator with a larger unit.

**Wastewater Utility**

In accordance with the City’s spill response framework, the Wastewater utility has prepared spill response procedures. These procedures describe observation and evaluation of the spill, reporting the spill and seeking assistance from appropriate parties, immediate containment of the initial spill (if possible), containment of the spill after the fact, cleanup of the spill, and follow up activities to be completed.

The Wastewater utility has also developed specific emergency response procedures that identify potential emergency hazards (e.g. working in traffic, fire on site, working in confined spaces, etc.) and rank each according to severity, probability and frequency of occurrence. The document identifies controls, equipment and PPE required for each worksite (if applicable), procedures to be carried out, and the responsibilities of staff.



Specific to the WWTP, the Wastewater utility has prepared a site map showing areas where risk of flooding is highest. Not surprisingly, the risk is highest along the river, but specific areas of lower elevation are also identified as being at higher risk of experiencing flooding relative to other areas of the City. In the event that flooding were to occur at the WWTP, the utility has also developed a plan outlining sandbag dam specifications to ensure the flooding does not impact plant operations.

### **Conclusions**

The utilities have developed appropriate emergency response plans that take into consideration potential emergency situations specific to the unique nature of their operations within the City. While the City does not have a formalized corporate plan, the planning carried out within the utilities aligns with the City's general guidelines and directive to ensure a safe workplace.

### **Recommendations**

- 2.8.1** Corporate Services, in conjunction with the utilities and within the broader ERM approach currently being developed by the City, should develop business continuity plans for a wider range of scenarios and identify mitigation strategies that can be implemented in the short term to support these plans.
- 2.8.2** The Water and Wastewater utilities should review all activities and functions to determine if there are other emergency scenarios for which key risks can be identified and mitigation activities can be implemented.



## 3 Customer, Citizen and Stakeholder Engagement

### 3.1 Citizen Engagement

Neither the Water nor the Wastewater utilities have documented citizen engagement strategies or plans, nor do they appear to be part of a larger City strategy or plan. However, the utilities participate in the City's Let's Talk informational program wherein representatives from the utilities are available at a City booth in a local mall to respond to citizen questions about their services.

The utilities also provide information on their websites and produce brochures that are available which suggests that effort has been made to engage with citizens. The websites provide general information as well as tips for conserving energy, while the brochures cover topics including:

- Descriptions of the utilities, the services they provide, the treatment processes used, and their people;
- Information on the difference between the sanitary sewer and the storm sewer systems, and the proper disposal of wastewater;
- Information on the impact and control contaminants such as FOG and algae promoting chemicals in wastewater; and
- Flood protection.

The Water utility also recently hosted an event to celebrate World Water Day, while the WTP has recently implemented a new school tour program and is also open to tours by like-minded businesses and groups. The WWTP no longer offers school tours for safety reasons but is open to tours by smaller groups depending on the circumstances. There is also a specific school class that comes to the plant to do water testing at the plant and in the river.

The utilities do not currently track metrics such as the average number of hours or days to respond to citizen complaints or inquiries and do not conduct customer or citizen satisfaction surveys to evaluate satisfaction with their services and programs. However, both utilities were included as part of the 2011 Environmental Services Customer Satisfaction Survey. The survey concluded that citizens were generally satisfied with water quality (i.e. taste, odor, colour and hardness) and were supportive of seasonal outdoor water restrictions when



water rationing was in effect. For both the Water and Wastewater utilities, the most commonly mentioned suggestion for improvement for both water and wastewater services was to reduce fees.

### **Conclusions**

The utilities provide water and wastewater services to all Red Deer citizens, so citizen engagement and consultation activities have been developed with the customer experience in mind. The utilities have developed programs and documents to engage with and educate citizens on various aspects of the water and wastewater processes and systems, conservation, safety, etc.

### **Recommendations**

**3.1.1** The utilities should work with Communications to develop a citizen engagement strategy to inform potentially affected citizens about new developments and programs and to listen to and address their concerns where possible.

### **3.2 Customer Relationship Management**

The City's utility bylaw outlines general information regarding customer interaction, including application or modification of service, deposits and service charges, fees and payment, enforcement and termination, requirement for connection to utility service, utility sampling and monitoring, spills, and offences and penalties. The bylaw also provides information on each of the utilities' responsibilities and authorities including connection, supply and disconnection, wastage and water use restrictions, meter installation and maintenance, fire protection and hydrants, backflow prevention, cleanouts, prohibited substances in wastewater, manholes, and private and hauled wastewater.

There is no formal customer engagement strategy in place, and the utilities do not undertake customer surveys to assess the level of satisfaction with water or wastewater services. However, it is understood that customers want safe, quality water at a reasonable rate and the utilities endeavour to provide this. Further, the EVS department participates in customer engagement activities and produces informational material that is distributed with bills or otherwise made available to customers. For example, the Water utility has a lead services program to support the identification of lead water service pipes, and a billing insert has been prepared to help customers identify whether or not they have lead pipes and provides suggestions for limiting lead exposure.

Large users are consulted during the rate planning process to ensure they are aware of any changes and understand how they will be affected. Planning for new development is done on a broader organizational level and involves citizen consultation. Execution of repairs and maintenance and new construction involves the notification of citizens where the work may impact them (e.g. road closures, temporary disconnection of water service, etc.).

Neither utility tracks or records the average number of hours or days taken to respond to customer inquiries or the response time for service requests. While not formally tracked, most service disconnections are completed within a week of the customer being placed on the disconnection list as this activity is performed



weekly on random days. In some cases, such as a car being parked over the valve or inability of the disconnection team to access an interior valve, the disconnection is delayed until access can be obtained. ReconNECTIONS occur every weekday afternoon, so in most cases service is reconnected the same day payment is made.

For the most part the current processes and systems effectively support the customer relationship management function. However, most customer complaints are first routed through Revenue and Assessment or the administrative staff in EVS. Staff in the billing and administrative areas are not necessarily able to provide immediate responses to technical questions and must therefore consult with staff in the utility before re-contacting the customer, which can result in delays in customer response time and resolution of issues. In addition to the billing and administrative contact numbers, the department has an after-hours utility call centre, and emergencies are routed through to on-call staff.

While both utilities have identified target response times for customer concerns (i.e. one hour for emergencies for both water and wastewater, four hours for non-emergencies related to the water distribution system and 24 hours for non-emergencies related to the wastewater collection system), actual response times are not tracked. Metrics such as the average number of hours or days to respond to customer inquiries or customer satisfaction with the relationship and services and programs provided or received are also not currently tracked, but these are recognized as important metrics and consideration is being given to tracking them in the future.

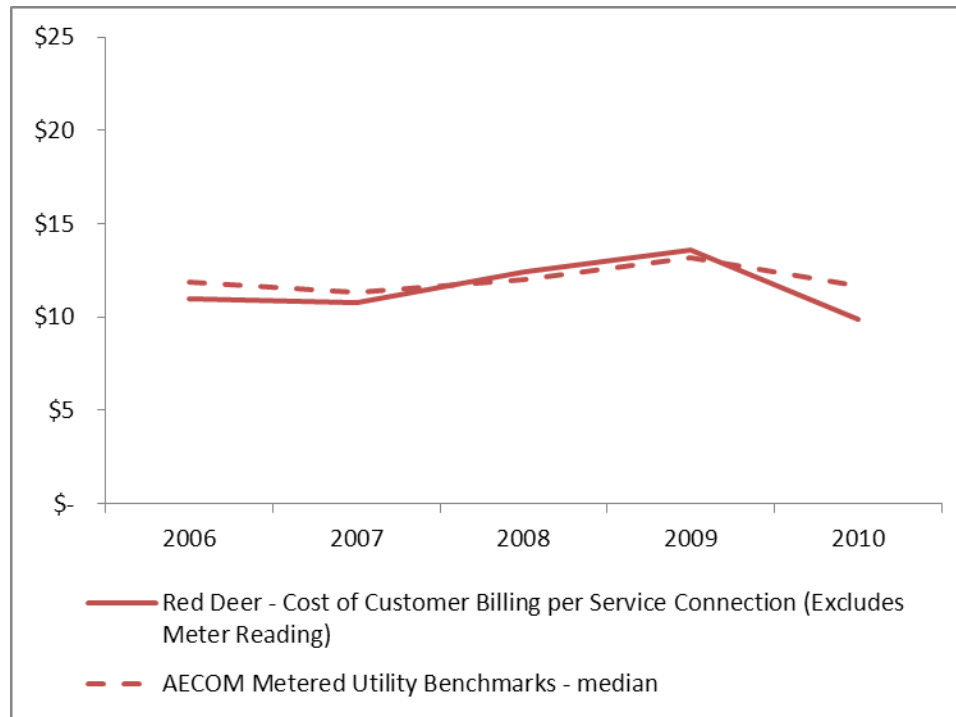
The City has a contract with DataCo (managed through Enmax) to read meters and provide electronic meter reports for billing purposes. The process turnaround is on an approximate monthly cycle and appears to be working well. There are twenty meter routes and the target is for DataCo to read four to five routes per week (approximately one route per day). There have been no issues identified regarding the accuracy or integrity of the data provided to the City.

Setting up or modifying a utility services account requires the submission of personal information including name, birthday, phone number, email, address, and whether the applicant is the owner, a tenant or a developer. Access to the account is only provided to the individuals listed on the application or added by the primary applicant after the fact, and confidentiality and privacy of information is taken very seriously. Billing is managed by the Revenue and Assessment group in the Corporate Services department, and uses the Diamond billing system. Meter reading is carried out by DataCo (though a contract with Enmax) and paper bills are printed by Data Group. The costs for the various services provided by external parties have remained fairly consistent over time and appear to be reasonable.

The cost of billing per service connection (excluding third party meter reading charges) was trending upward between 2006 and 2009 before decreasing to \$9.91 per meter in 2010. The average cost of billing per service connection over this five-year period was \$11.53, which was comparable to benchmark metered utilities which averaged \$12.02 per service connection over the same period (see Figure 83).



**Figure 83: Water and Wastewater Utilities Cost of Customer Billing per Service Connection**



The City is planning to pilot an e-billing system as well as a virtual “City Hall” system that will allow the account holder to log into the system to review their account and pay their bill. This will be tested with City employees beginning in July 2012, a goal of 10% uptake for the initial public launch.

Some issues were described regarding integration between Diamond and Hansen that requires the manual entry of data into the system. While some note that the use of the Hansen billing module could help to resolve these issues, it is recognized that the cost involved in establishing and training staff on a new system may be prohibitive at this time. However, as the City grows it will eventually require a new billing system as Diamond is intended for smaller municipalities and may not offer the needed functionality and capacity required by a larger City.

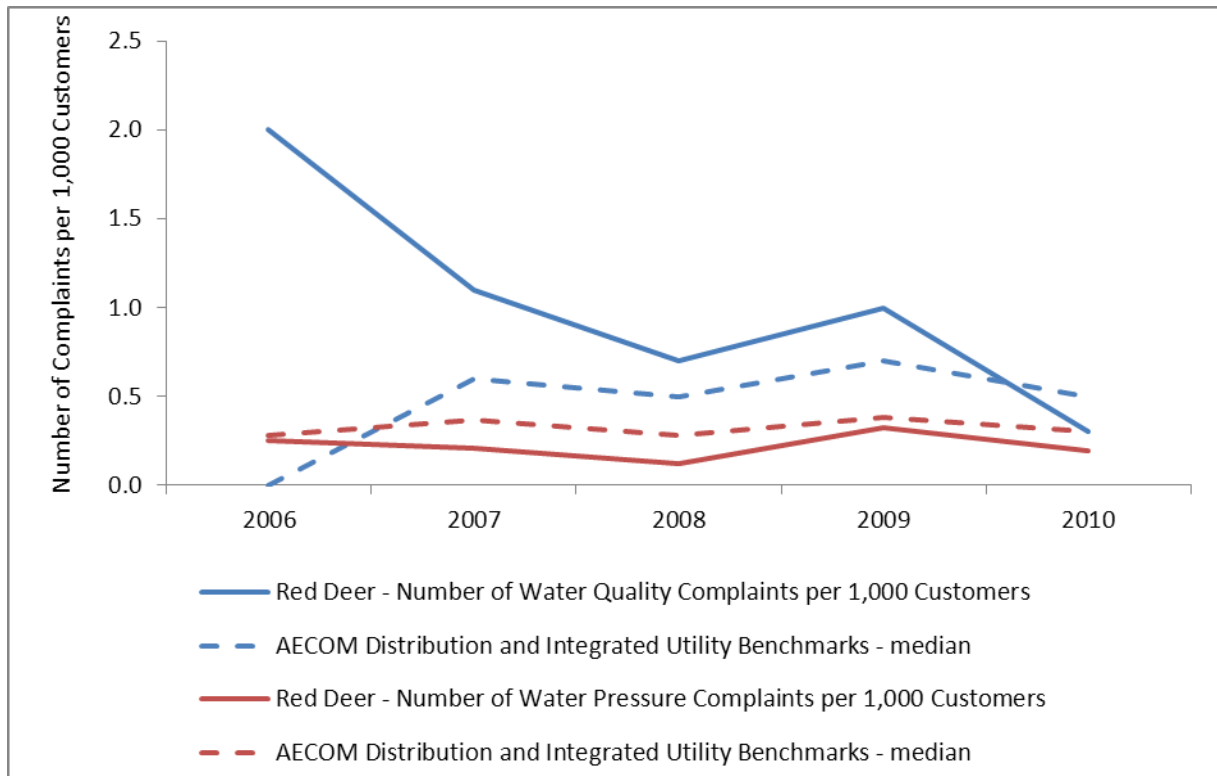
### **Water Utility**

From 2006 to 2010, the Water utility had an annual average of 1.0 complaint per 1,000 customers regarding water quality, and 0.2 complaints per 1,000 customers regarding water pressure (see Figure 84). Complaints regarding water quality were somewhat higher than the average for distribution and integrated utilities over the same period (0.5 complaints per 1,000 customers) while complaints regarding water pressure were lower (0.3 per 1,000 customers).



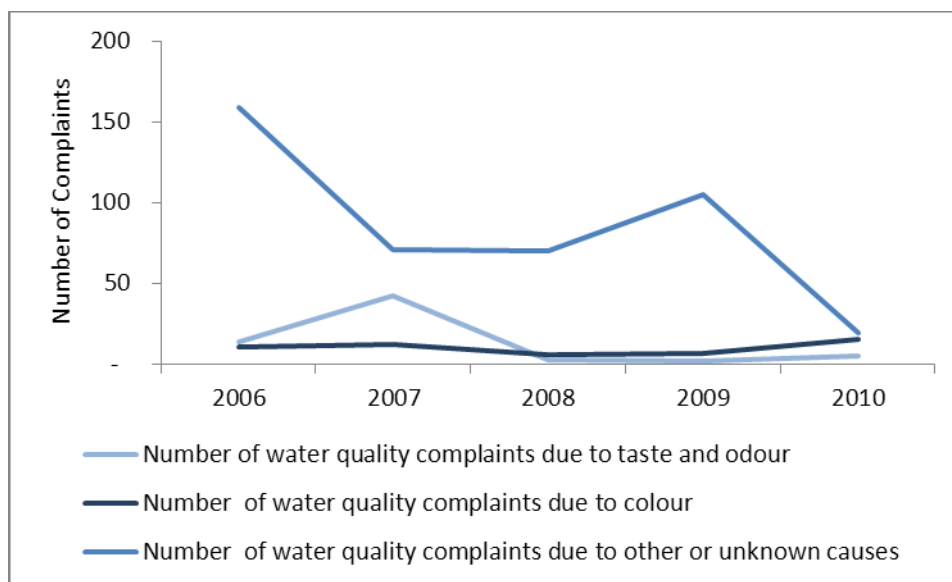


**Figure 84: Water Utility Number of Water Quality and Pressure Complaints per 1,000 Customers**



The total number of water quality complaints has been trending generally downward, from 184 complaints in 2006 to 39 in 2010. While the utility experienced some complaints due to taste and odour and colour, most of the water quality complaints were described as “other” or “unknown causes” (see Figure 85).

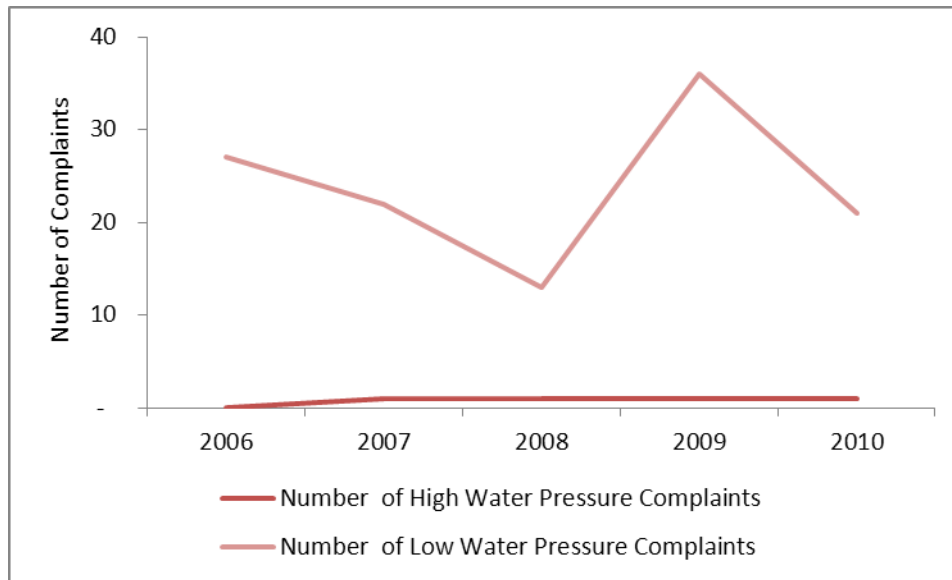
**Figure 85: Water Utility Reasons for Water Quality Complaints**





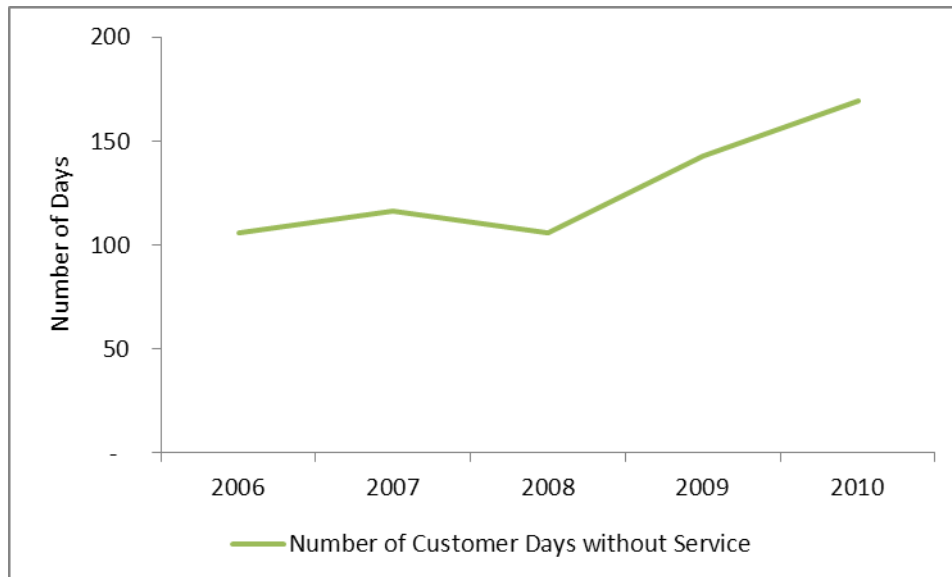
The number of water pressure complaints fluctuated between 2006 and 2010, with the majority due to low pressure, with a small proportion of customers complaining of high pressure (see Figure 86).

**Figure 86: Water Utility Reasons for Water Pressure Complaints**



The average annual number of customer days without service was 127.9 between 2006 and 2010, trending upward from a low of 106 in 2006 to a high of 169 in 2010 (see Figure 87).

**Figure 87: Water Utility Total Annual Number of Customer Days Without Service**

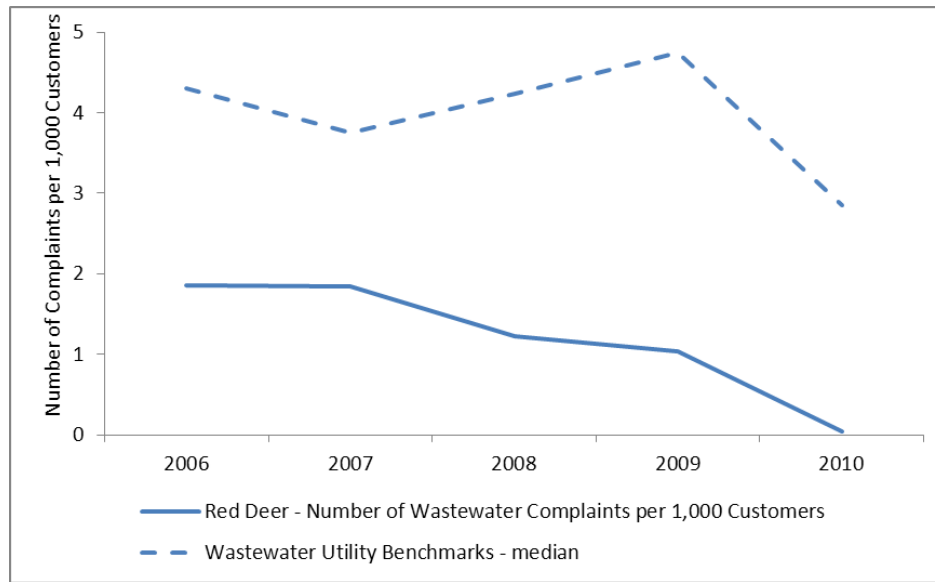




### Wastewater Utility

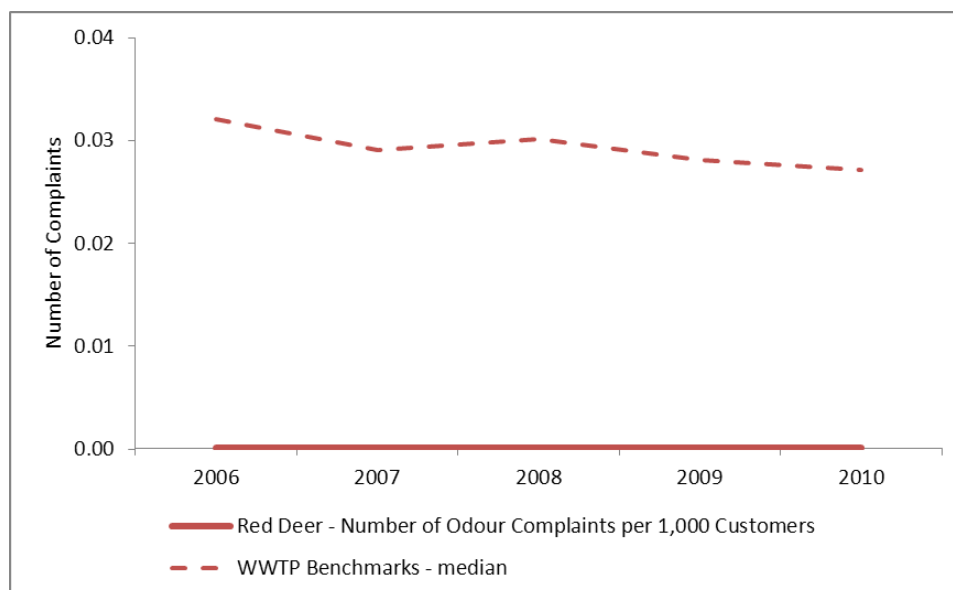
As shown in Figure 88, the number of wastewater related complaints per 1,000 customers decreased from 2006 (1.86) to 2010 (0.04) and averaged 1.2 over the five-year period. This average is lower than comparable Wastewater utilities, which averaged 4.0 complaints per 1,000 customers over the same timeframe.

**Figure 88: Wastewater Utility Number of Wastewater Complaints per 1,000 Customers**



Between 2006 and 2010 the Red Deer Wastewater utility received no odour complaints, while similar WWTPs received an average of 0.029 complaints per 1,000 customers (see Figure 89). This is not surprising as the WWTP is located in an industrial park and far from residential areas and customers.

**Figure 89: Wastewater Utility Number of Odour Complaints per 1,000 Customers**





While the utility received no complaints regarding the odour of the WWTP, complaints were received by City staff regarding the Waskasoo Regional Sewer. During dry periods, the amount of water in the basin has historically become depleted, resulting in the remaining material emitting a strong unpleasant odor. However, as this sewer is not technically the responsibility of the City, complaints regarding its odor are not included in the AECOM benchmarking reports.

### **Conclusions**

The Water utility has historically had few water pressure complaints, and the number of water quality complaints has been trending down in recent years. However, customer days without service has been trending upward so it is important that the utility continue to monitor this trend and work with the C&M group to ensure that issues are being responded to in a timely manner.

The Wastewater utility has been performing well in terms of customer service, with very few general wastewater complaints and no odour complaints regarding the WWTP.

### **Recommendations**

**3.2.1** The utilities should take steps to begin the design of a program to facilitate the tracking and reporting of response times to emergencies, non-emergencies, return to service, customer inquiries and customer satisfaction.

### **3.3 Partnerships and Stakeholder Relations**

Neither the Water nor the Wastewater utility has a documented stakeholder engagement strategy. Stakeholder relationships such as those with AESRD, Enmax / DataCo, and large customers are managed on a case-by-case and as required basis. The utilities appear to have a good understanding of the expectations of their partners and key stakeholders and understand the basis for these expectations. Further, it appears that partner and stakeholder concerns and priorities are taken into consideration during planning and execution activities carried out by the utilities.

The utilities have both been involved in the AECOM benchmarking initiative for several years. Internal to the City, management of the two treatment plants have met on multiple occasions with representatives of the Electric Light and Power (EL&P) utility to discuss and formalize future contract work to be carried out by EL&P for the plants. Engagement and communication with other City departments and functions such as Parks, Recreation and Culture and Public Works is generally seen to be working well, primarily due to the relatively small size of the City as a corporate organization and the effective communication practices of current staff members.

Metrics such as the average number of hours or days to respond to stakeholder inquiries or partner and stakeholder satisfaction with the relationship and services and programs provided or received are not currently tracked, but this is recognized as an important metric and consideration is being given to tracking it in the future.



### **Conclusions**

While the utilities do not formally document, monitor or report on partner and stakeholder relations, these relationships appear to be working well for all parties.

### **Recommendations**

**3.3.1** The utilities should consider working with Communications to develop a stakeholder engagement assessment and plan, which should be linked with the citizen engagement strategy.

**3.3.2** In conjunction with tracking customer response times, the utilities should also consider tracking and reporting on response times for stakeholder inquiries and concerns.

### **3.4 Regional and Other Integrated Planning**

While the department has not established a formal “Regional Planning Strategy” document, EVS is actively engaged in regional planning and expansion as partnership opportunities present themselves. This is particularly the case for the Wastewater utility, as grant funding from Alberta Transportation through the Alberta Municipal Infrastructure Program (AMIP) or the Alberta Municipal Water / Wastewater Partnership (AMWWP) is available to support regionalization of wastewater systems. The City does not have a formalized corporate approach to regional and other integrated planning, but is supportive of utility endeavours in this area.

Recent decisions to expand plant capacity were, in part, influenced by expectations around regional customer usage and growth. Regional partners express satisfaction regarding the level of consultation and participation in regional planning with the City.

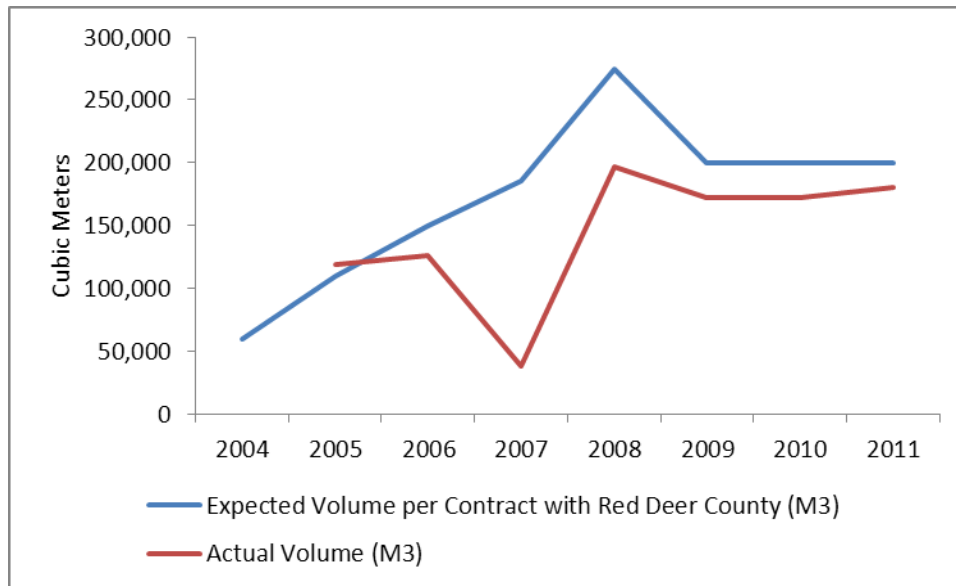
### **Water Utility**

The Water utility has signed a twenty-year contract, effective August 2004, with Red Deer County (the County) to provide potable water that the County would then use to supplement its groundwater supplies to provide water to County customers. The contract outlines the responsibilities of the Water utility and the County, including quantity and quality of water provided, responsibilities for distribution, consultation and rate setting, liability and arbitration, etc. In addition to the formal contracts, communication with the utility has been described as positive and supportive of an ongoing understanding of the needs and expectations of each party.

As shown in Figure 90, expected consumption of City water by customers in the County was anticipated to begin in 2004, but did not actually commence until 2005. In the first year of supply annual consumption was higher than anticipated but did not keep pace with anticipated growth. Between 2004 and 2011 the average expected annual consumption was 172,500 cubic meters per year, but actual average consumption between 2004 and 2011 was just 125,585 cubic meters per year. Consumption for future years has been forecasted using an expected annual increase of 1% per year.



**Figure 90: Water Utility Expected and Actual Consumption of Red Deer County (cubic meters)**

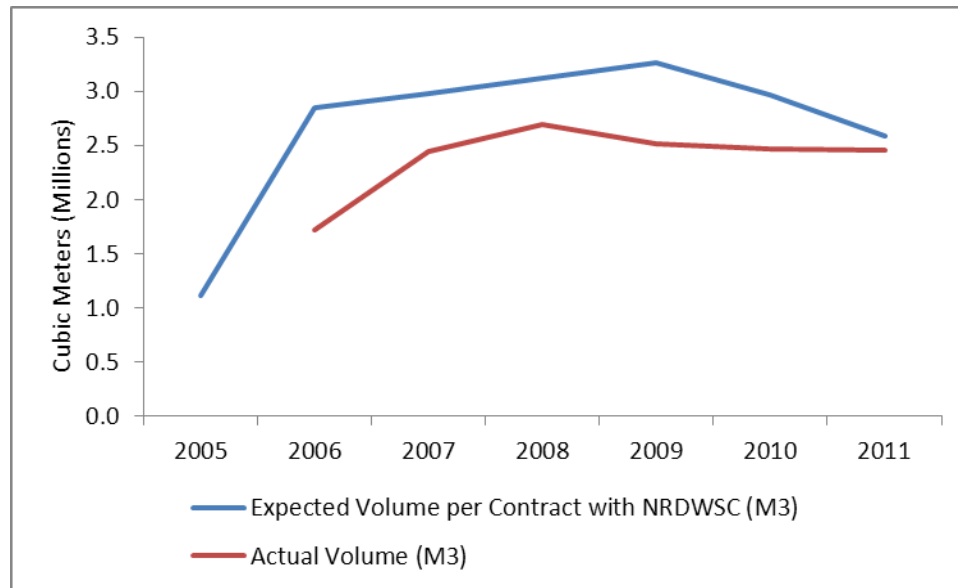


The Water utility also has a contract with the North Red Deer Water Services Commission (NRDWSC) to provide potable water, which is then distributed by the NRDWSC to five municipalities (Lacombe, Blackfalds, Ponoka, Lacombe County, and Ponoka County). The NRDWSC is also permitted under the terms of the contract to resell water to Red Deer County as well as the Montana Band. As with the utility's agreement with Red Deer County, the contract outlines the specific responsibilities and terms for both the City and the NRDWSC. Dated October 8, 2004 and effective September 1, 2005, the contract has a duration of 25 years but includes provisions for extension and earlier termination under specific circumstances.

The initial contract outlined out the expected consumption volume (in cubic metres) per year from 2005 to 2009, and anticipated that demand would increase from 1.1 million cubic meters in 2005 to 3.3 million cubic meters by 2009. Subsequent projections estimated 2010 and 2011 consumption at 3.0 million and 2.6 million cubic meters, respectively, resulting in an expected average of 2.7 million cubic meters per year over the entire period. Actual consumption did not commence until 2006, at which point the actual annual volume consumed was lower than anticipated, averaging 2.0 million cubic meters per year between 2005 and 2011. Further, after peaking in 2008 at 2.7 million meters, the annual volume has been declining (see Figure 91). Future consumption is forecasted using an anticipated 1% year-over-year increase.



**Figure 91: Water Utility Expected and Actual Consumption of NRDWSC (cubic meters)**



### **Wastewater Utility**

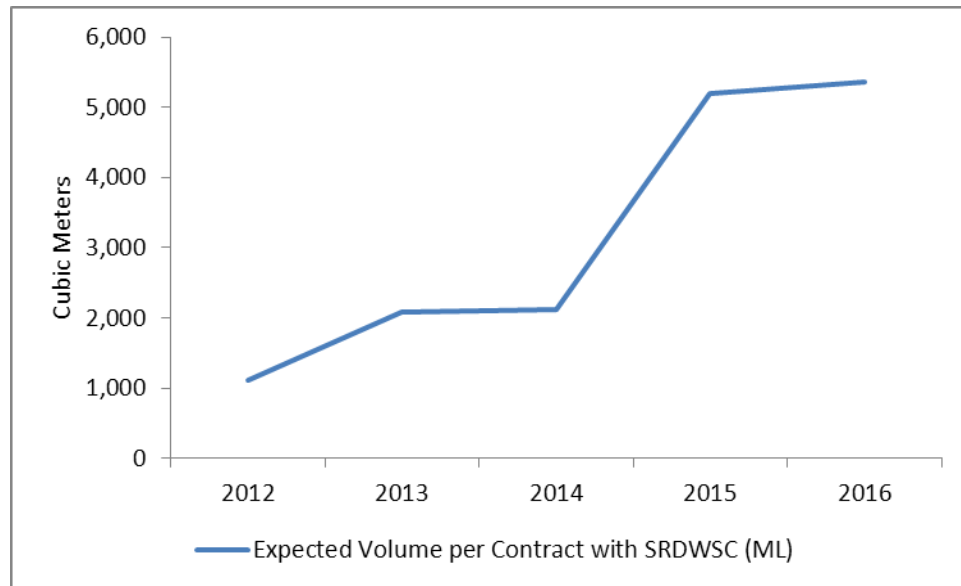
The twenty-year contract, dated February 2, 2012, between the South Red Deer Regional Wastewater Commission (SRDRWC) and the City of Red Deer Wastewater utility outlines the agreement wherein the SRDRWC will purchase wastewater services from the City. The SRDRWC was established to construct wastewater facilities and provide wastewater services to the Towns of Olds, Innisfail, Bowden, and Penhold as well as to Red Deer County and Mountain View County. The contract outlines the responsibilities of the City and the Wastewater utility as well as the SRDRWC, including source and quality of water, rates and payment, regional lines, planning and consultation, liabilities and arbitration, etc. In addition to the formal contract, it was noted that the regional partner views ongoing communication with the utility to be responsive and informative.

The annual flow is expected to commence in 2012 at 1,110 cubic meters for the year. Growth is expected to occur in two main stages, the first in 2013 (to 2,080 cubic meters) and the second in 2015 (to 5,200 cubic meters). Anticipated flow is not projected beyond 2016 (see Figure 92).





Figure 92: Wastewater Utility Expected Flow from SRDRWC (Megalitres)



### Conclusions

While the first several years of the Water utility regional customer interactions resulted in far lower consumption than was originally anticipated, more recent years show a closer alignment between expected and actual consumption. The Wastewater utility has yet to experience significant flow from regional customers, but volume is expected to ramp up in stages over the next several years. It is important that these are monitored and accurate as these volumes have the potential to significantly impact plant flow and capacity requirements.

### Recommendations

- 3.4.1** Continue to monitor deviations between expected and actual consumption of water and flow of wastewater from regional customers to ensure that associated capital planning is appropriate given actual usage of the treatment plants and pipe infrastructure.



## 4 Monitoring, Measurement and Results

### 4.1 Performance Monitoring and Reporting

Neither the City nor the utilities have a formal performance management system for tracking and monitoring corporate-wide performance. There are a variety of disparate measures that are being tracked at a City level, including:

- Safety metrics such as number, type and severity of incidents;
- HR information such as employee evaluations submitted, training hours and turnover; and
- Financial information presented in quarterly reports (which includes variances as well as information on the progress of projects and outcomes).

To facilitate the collection and communication of complete, credible and fair information that satisfies decision making and accountability requirements, the City is in the beginning stages of developing a more formal performance management system. As a foundation for this, the Corporate Strategist and City Manager's Office is leading a project to articulate what each department does for the dollars invested.

The more immediate goal is for all Service Plans to have performance measures within the next two years. The vision is for a City-wide performance measurement framework that is both broadly applied and specific to the department, utility, or function. This is motivated by the recognition by the City that measures are required for Council, management and operations, and are important to demonstrating value to citizens, customers and stakeholders. Service Plan measures specific to the Water and Wastewater utilities are expected to be selected from the OMBI initiative. These will be metrics currently tracked under either the AECOM benchmarking or regulatory reporting, so this is not expected to create additional work for utility staff.

Strategic and operational goals included in the EMP are on track where applicable. The AMI program has been deferred indefinitely so there is no reporting on this item, but others are all in progress. The development of a downstream water quality monitoring metric is still in progress as the Wastewater utility carries out a study to establish baselines and targets (expected completion by the end of 2012). The utilities also report on budget-actual variance analysis as part of financial performance monitoring and reporting.

As more time passes it is expected that data from the Hansen work management system will improve to provide better and more reliable data on operational performance. The Water utility is also considering the



creation of a water quality management team that would report directly to the utility Superintendent that would focus on ensuring that the water delivered to customers maintains the same quality level as when it first leaves the treatment plant.

### **Conclusions**

Participation in the AECOM benchmarking initiative by both utilities aligns with best practices. However, while it is positive that the utilities participate in this benchmarking initiative, it is just as important that the results of this report are reviewed and improvements integrated into utility operations where opportunities present. That being said, when reviewing the benchmarking output it is critical to understand that benchmarking is not an absolute comparison and should be considered as more of a relative scale that facilitates the identification of general comparative successes and opportunities for further improvement.

### **Recommendations**

**4.1.1** Building on efforts currently underway, develop a performance management framework that can be applied to all departments and sections in the City, with both general and specific measures as well as a roll-up to department level dashboards and a City-wide dashboard.

See **Appendix J** for recommended measures and metrics that could be used by the utilities to assess whether or not they are effective. See also **Appendix K** for guidelines for developing and selecting appropriate and meaningful measures and metrics and **Appendix L** for a sample performance dashboard summary page.

**4.1.2** The utilities should develop Water and Wastewater specific scorecards, potentially building on the Balanced Scorecard template, to identify and track specific operational metrics that are key indicators of performance.

**4.1.3** Given the magnitude of effort that goes into preparing and submitting the AECOM benchmark data, a greater level of analysis should be undertaken once results are obtained to understand trends and differences and identify areas where improvements could be made.

## **4.2 Regulatory Compliance and Reporting**

The Water and Wastewater utilities are subject to oversight from multiple parties, including City Council and AESRD. The utilities appear to comply fully with all regulatory requirements by making regular submissions and meeting requirements as set out in regulatory reports (e.g. monthly or annual reporting to AESRD).

AESRD regulates the utilities under the 2006 Standards and Guidelines document, which outlines the elements of the drinking water and wastewater (and storm drainage systems) to ensure the safety of the water and the protection of the ecosystem. Standards are provided for water quality, treatment (including chemicals and treatment plant waste) and performance; transmission and distribution; facility design, operation, accreditation and classification and operator certification; and water quality monitoring, record keeping and reporting and data quality assurance. Standards for the drinking water program are based directly on USEPA's



surface water treatment rule and provide either narrative criteria or numerical limits for a variety of design, construction and operational activities. All standards included in this section are mandatory as of April 1, 2012.

Feedback from AESRD was positive in regards to interaction with both utilities and supportive of the high standard to which the utilities operate.

The guidelines describe ways in which the mandatory level of system performance or reliability can be achieved, including best engineering and management practices. The guidelines are not mandatory practices, but represent a means of ensuring the system meets the minimum requirements when applying for an approval / license.

Under the purview of Council, the utilities are subject to all bylaws and related documents. Given the complexities of the Water and Wastewater utility operations under the utility rate model, there is some concern that Council as a whole does not have the comprehensive understanding that would support their ability to make informed decisions about utility financial matters.

### **Water Utility**

The Water utility submits monthly reports to AESRD as part of its water license approval. These reports include a certification or classification summary of all utility staff, a monthly operational summary, results of water sampling from various points in the distribution system, raw and treated water quality reports, bacteriological testing results, waste stream testing results, cleaning and maintenance reports, UV and chemical usage, and any contraventions and follow-ups to previous contraventions that occurred during the month.

In addition to the monthly reports, the Water utility also prepares and submits annual reports to AESRD. The annual report includes information on the utility's service area, population served, treatment processes, plant capacity and flow (raw and treated); staff and certification levels; a summary of operational problems and events, some of which were reported to AESRD during the year; raw water intake and treated production (in cubic meters), raw and treated water quality; chemical consumption and waste stream volumes; results of water sampling from the distribution system; lead service monitoring sample results; and the results of bi-annual performance testing. Between 2006 and 2010, Red Deer's average daily water demand comprised less than half (42% to 45%) of the City's water license capacity.

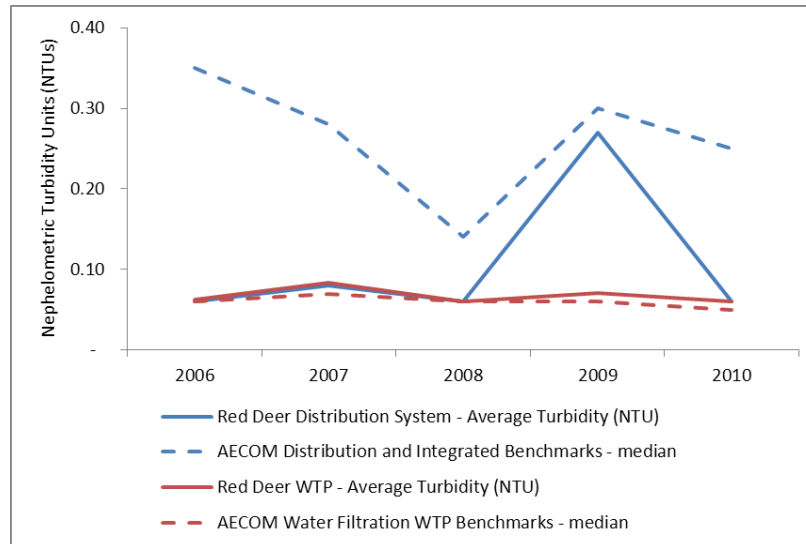
During 2011, the Water utility reported two low fluoride residual contraventions, three instances of the fluoride system being out of operation, and four low chlorine residual contraventions. Treated drinking water met provincial regulations an average of 99.1% of the time between 2006 and 2010.

The Water utility also prepares and submits annually a detailed account of the volume of water diverted and returned at the WTP and WWTP over the course of the year. This report indicates that the utility remained well within the limits of its licence during 2011.



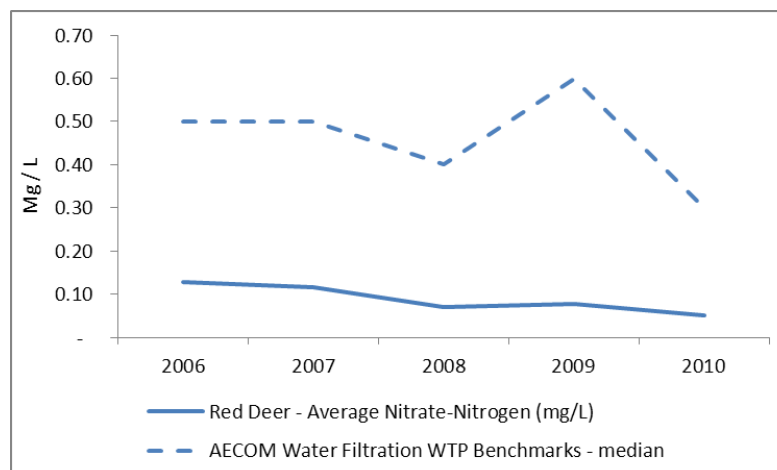
Water turbidity is measured separately within the distribution system and within the WTP. The turbidity target for the distribution system is less than 1 Nephelometric Turbidity Unit (NTU), while the turbidity target for the WTP is less than 0.3 NTU. Neither the distribution system nor the WTP exceeded their respective turbidity limits between 2006 and 2010. As shown in Figure 93, during this period the Red Deer distribution system experienced lower turbidity than benchmark comparators, while the WTP was very comparable to benchmark WTPs.

**Figure 93: Water Utility Average Turbidity (NTU)**



From 2006 to 2011, the level of nitrate-nitrogen in the treated water was generally in compliance with the standard target of <10 mg/L; however, exceedences were experienced for seven days in 2007 (1.9% of the time), four days in each of 2008 and 2009 (1.1% of the time), and one day in 2010 (0.3% of the time). Between 2006 and 2009 Red Deer's WTP averaged 0.09 mg/L while comparable water filtration treatment plants averaged 0.46 mg/L (see Figure 94).

**Figure 94: Water Utility Average Nitrate-Nitrogen (mg/L)**





### Wastewater Utility

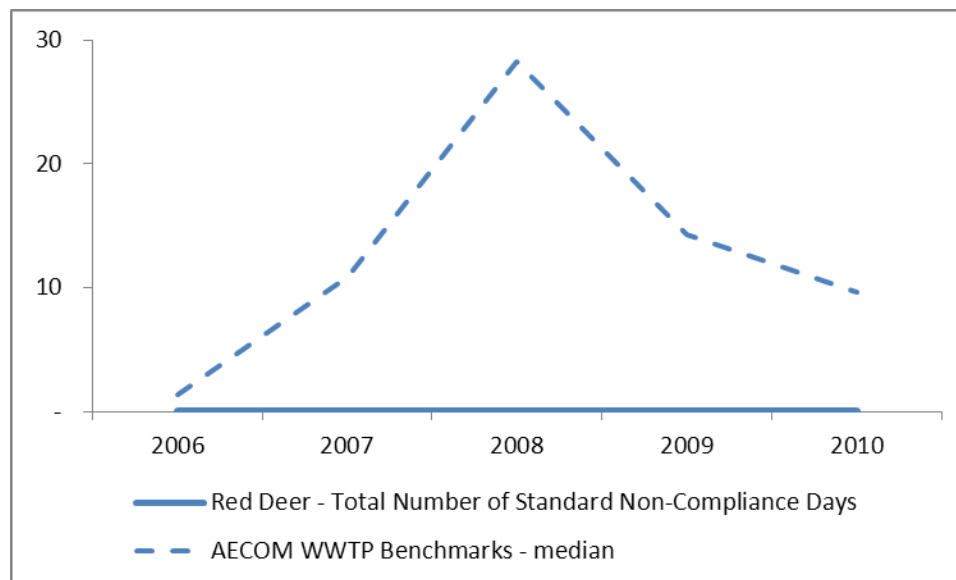
The Wastewater utility prepares a formal report for AESRD on an annual basis. This report contains information on the processes used at the WWTP as well as approved construction and upgrades, processes used in the collection system, employee certifications, average monthly influent flows and analysis, and effluent analysis. Throughout 2011 a number of approval contraventions were experienced by the utility. These were reported to AESRD when they occurred but were also compiled in a supplemental annual summary document submitted with the Annual Report. These contraventions included eight sanitary sewer contraventions, one environmental soil / groundwater issue, and two water leaks.

Before applying wastewater biosolids to agricultural land, the Wastewater utility must submit an application to AESRD. This document provides approval for application of biosolids to specific legal land locations. At the conclusion of the application the utility is required to submit a report summarizing the year's biosolids spreading program to the Municipal Approvals Engineer. There appear to be no issues with the process, and the contractor responsible for the biosolids land application is cooperative in providing the required information and adhering to the approval provided by AESRD.

Identified contaminants did not exceed maximum levels and treated wastewater met provincial regulations 100% of the time between 2006 and 2010.

As shown in Figure 95, the WWTP reported no instances of surcharges, unregulated overflows or other non-compliance issues between 2006 and 2010. Benchmark WWTPs experienced an average of 12.9 non-compliance days per year during this same timeframe.

**Figure 95: Wastewater Utility Total Number of Standard Non-Compliance Days per Year**





## Conclusions

Due to the more stringent provincial regulatory requirements in Alberta compared to other Canadian jurisdictions, to remain compliant the Water and Wastewater utilities must treat their water to a higher level of quality relative to benchmark comparators. This higher treatment requirement has an impact on the O&M costs experienced by the Red Deer treatment plants (see section 2.5 *Operations and Maintenance Planning and Execution*) as well as the number of staff required to support this activity (see section 2.3 *Employee Management*).

## Recommendations

**4.2.1** As part of the Rate Model Review Project, the Water and Wastewater utilities and City management should strive to educate Council about the utilities and how they operate under the utility rate model.

**4.2.2** Regulatory compliance is a major utility performance indicator. Accordingly, monitoring and reporting on regulatory compliance should be included as part of overall utility reporting to City management.

## 4.3 Financial Reporting

The City's Annual Financial Report describes how the City is organized, including the self-funding utilities. It includes a report from the Director of Corporate Services, which outlines key strategies undertaken, discusses operating results, financial position, high level financial metrics, and high level risk areas, and presents detailed financial statements and notes. The Water and Wastewater utilities, through the EVS department, provide information to Financial Services, which is rolled up into this report.

Supplementing the information provided for the City's financial report is the Departmental Representation Letter, which documents what has occurred in the department or utility in the past year, in several different respects:

- Municipal accounting principles and regulatory authority
- Controls
- Fraud/illegal acts
- Contingent liabilities
- Claims
- Environmental disclosure
- Estimates
- Subsequent events
- Related party transactions
- Grant revenue
- Fixed asset registry

Financial Services and the Division Controller assist each department or utility in developing this letter. It is signed by the Department Manager and the Development Services Controller and is used to confirm





compliance in all these major areas as well as to identify any major issues and indicate how they will be addressed so the City as a whole feels comfortable in signing off on its Annual Financial Report.

Based on a review of the 2011 EVS Departmental Representation letter, the department is in compliance in all the major areas identified above. Disclosures noted in the 2011 document pertaining to the Water and Wastewater Utilities include:

- The need to reconcile the budgeted and actual MCAF amount for 2011 due to an overstatement of linear assets in the opening inventory. The revaluation also impacted the regular dividend, necessitating an adjustment from 20% to 50% of both Water and Wastewater's respective deemed return on equity.
- Significant variation in actual regional customer consumption compared to forecasted consumption, with North Red Deer Regional Water consumption falling below expected levels and South Red Deer Regional Water consumption exceeding forecasts.
- Confirmation that linear asset inventories have been correctly revalued and that, while improvements in the communication process will support the accurate recording and reporting of asset disposals, further efforts will be required to ensure inventories are accurately maintained. *(specific activities to support this are not described in this document)*
- Acknowledgement of the risk associated with reliance on key contractors such as the party engaged to complete the WWTP phase four upgrades and firms with detailed knowledge of the Treatment Plants. The loss of any of these contractors would be expected to result in considerable time delays and loss of project momentum.
- Exposure to variation in consumption or non-payment of regional customers and large users of Water and Wastewater.

In addition to the Annual Report, monthly reports for business units and the Capital job balance report by job type are run each month following close and are distributed around the 18<sup>th</sup> to the 20<sup>th</sup> of each month. Quarterly operating variance reports are prepared for June, August and December. The June and August reports are usually ready for management review 25 working days (five weeks) after the period close date. The December variance report is usually delayed due to the year-end process, and is usually ready in early April. Sections are required to provide explanations for all variances exceeding  $\pm \$100,000$  but also provide explanations for some smaller variances.

Year-end is generally closed in the third week of January, depending on the AP accrual. Closing year-end entries ("##" entries) are targeted for completion by mid- to late-February, but have extended beyond this target deadline in the past few years. Once this process is complete (early March), the auditors take three to four weeks to review the information. The audit committee meeting is scheduled for the first or second week in April so that Council can review and approve the statements before April 30 (the provincial deadline).

No issues have been identified regarding the timelines or level of detail or accuracy of the financial summaries and statements. They are seen to be accurate and provide appropriate explanations for the numbers, they facilitate a good understanding of financial matters and whether or not financial goals and objectives have



been achieved, and are aligned with the overall corporate approach to financial reporting. However, there is opportunity to further segment expenditures to more easily identify those associated with regulatory requirements versus those for expanding capacity or other discretionary reasons.

In general, the City calculates the allowance for doubtful accounts (AFDA) on a proportional basis at the following rates:

- More than 30 but less than 60 days outstanding: 10% uncollectible;
- More than 60 but less than 90 days outstanding: 50% uncollectible;
- More than 90 but less than 120 days outstanding: 70% uncollectible; and
- More than 120 days outstanding: 90% uncollectible.

However, the information contained in this allowance is discussed and confirmed with the Division Controllers at the end of each fiscal year, at which point individual charges that should be treated differently from the standard collection rates are identified and adjusted as required.

### **Conclusions**

Interaction between the utilities and Financial Services and Revenue and Assessment Services is effective, and this process is facilitated by strong financial administrative support within EVS and the Development Services division.

### **Recommendations**

- 4.3.1** The issues identified in the Representation Letter should be linked to strategies in the annual Service Plan, ERM and operational risk planning.
- 4.3.2** Consider more finely segmenting capital costs to facilitate a better understanding of those driven by internal or capacity requirements and those driven by changing regulatory standards.



# Summary of Recommendations

## Strategic and Business Planning

- 1.1.1** In alignment with the City's efforts, EVS should strive to improve its annual Service Plan by including linkages to operating and capital budgets and performance measures, which will measure progress toward the achievement of goals. This would include linking actions to the individual budget requests of each section and utility within the department. However, as performance measures are driven by City Administration, EVS must ensure that any performance measures presented in its Service Plan are in line with the City's direction. Further, EVS is not permitted to change the content or presentation of its Service Plan to include any additional information at this time.
- 1.1.2** The Wastewater utility may benefit from the development of Operating Plans similar to those currently being developed for the Water utility. Collaboration between the two utilities to ensure a consistent approach and format would be desirable from a departmental standpoint.

## Sustainability Planning

- 1.2.1** While shifting to the conservation targets identified in the EMP, the Water utility should continue to pursue conservation initiatives and activities described in the Water Conservation Plan. This may also involve reviewing and revising this plan to align its goals with the EMP while updating and expanding potential conservation-supporting initiatives. Water conservation goals, which ultimately reduce consumption and revenue, need to be in balance with the requirement for financial stability and need to be managed accordingly.
- 1.2.2** Both the Water utility and the Wastewater utility should continue with efforts to educate citizens on appropriate water usage.
- 1.2.3** In conjunction with the EVS Storm Water section, the Wastewater utility should continue to study and identify metrics, baselines and targets for wastewater quality as per the EMP.



### **Enterprise Risk Management**

- 1.3.1** The City should develop a best practice ERM framework. Once the framework has been established, City Administration should support departments in applying this framework to develop a risk plan and mitigation strategies, including linking the mitigation strategies back to operating and capital budgets when required.
- 1.3.2** The Water utility should continue with efforts to complete the Drinking Water Safety Plan risk assessment by the end of 2012. Mitigation strategies should be developed based on this assessment and the City should support their implementation where required.
- 1.3.3** The Water utility should continue to develop the environmental risk management plan currently in progress.
- 1.3.4** Leveraging the template created by the Water utility, the Wastewater utility should develop a similar risk management plan for its operations. Other tools, such as the Water Research Foundation Tool for Risk Management of Water Utility Assets<sup>6</sup>, are available for supporting utilities in developing risk frameworks around their assets.

### **Revenue and Rate Approach**

- 1.4.1** All City utilities should continue to play an active role in the Rate Model Review and ultimately implement the resulting fiscal policies and rate model, providing a solid foundation for the financial management of the utility moving forward.
- 1.4.2** As the City, region, and the utilities themselves continue to grow, the utilities should consider engaging in a formal cost of service analysis every three years to ensure a full understanding of all costs as they pertain to the different customer classes. In particular, as the regional commissions represent a growing customer base, it is imperative that the cost of providing services to these customers is well understood.
- 1.4.3** Clear rate-setting philosophies should be identified and prioritized by Council. The prioritization of these philosophies should endeavour to reconcile the often conflicting objectives of utility revenue stability and conservation pricing. Current initiatives are underway to address this.

### **Budgeting and Capital Planning**

- 1.5.1** Financial Services should work with the Water and Wastewater utilities, as well as other City departments, to develop a system for capital and operational planning that ensures that all users are working in the most current version of the program, and which facilitates consolidation of information.
- 1.5.2** While they are separate entities, the Water and Wastewater utilities should consider capital investment and rate increases holistically, as they appear to the customer as one function. Where

---

<sup>6</sup> Available at: <http://www.waterrf.org/Pages/Projects.aspx?PID=4126>



there are options to defer capital investments between the two and smooth the impact on the customer the utilities should take advantage of this. This approach could help to mitigate rate shock by introducing a number of smaller increases over a longer period of time rather than requiring a few significant increases over a short period of time.

- 1.5.3** Consideration should be given, when engaging in capital construction with multi-generational benefit, to matching the timing of the cost with the duration of the benefit of the asset. Recognizing that the City and utilities face constraints on the level of debt they can utilize for these projects, the utilities should endeavor to strike the right balance in the use of reserves funded by current customers to fund assets that will continue to benefit customers well into the future.

### **Service Lines and Programs**

- 2.1.1** Certain areas of the department's website (e.g. the department mandate, information regarding upgrades to the WWTP) appear to require updating to align with current documentation or processes. It is recommended that website content be reviewed and updated where required, and that this responsibility be assigned to a specific individual within each section represented on the site.
- 2.1.2** Given that the system is relatively new and that most replacements are with PVC pipe, the Water utility should engage in further investigation to understand water loss and unmetered water consumption and to move forward with opportunities to meter water where appropriate (e.g. install meters on water trucks used by Parks, Recreation and Culture).

### **Organization Structure and Staffing**

- 2.2.1** The Wastewater utility should continue with the process of formalizing the Performance Reporting Coordinator position to support the utility Superintendent in the development and analysis of performance monitoring and reporting processes. This position should be modeled on the current skills and attributes demonstrated by its counterpart in the Water utility.
- 2.2.2** The utilities should work with Corporate services and other City departments and sections to determine the need for internal Service Level Agreements for specific functions and services, and to develop and agree upon reasonable service level expectations.

### **Employee Management**

- 2.3.1** Engage in a review and update of all job descriptions that have not been prepared or evaluated within the past two years to ensure they accurately reflect the nature of the work expected to be carried out by individuals in each position, as well as to confirm educational and experience requirements for each position. This process should involve management and supervisors, union representatives (where required), as well as the individuals currently in the positions.



- 2.3.2** Develop a clear and specific succession plan that addresses upcoming retirements and potential knowledge gaps that may arise. This is particularly important for the Water utility, where issues of succession are more immediate.
- 2.3.3** Ensure that all staff, management and operational, have access to role-specific and appropriate training and tools to facilitate their successful performance of their position requirements.
- 2.3.4** The City should consider adding FTEs in the distribution and collection areas, as both benchmarking results and staff comments suggest that these areas have historically been and currently are understaffed.
- 2.3.5** In the Wastewater utility, trends in the ratios of population and ML of treated wastewater per FTE have been going down due to increases in utility FTEs, which could be at least partially due to increasing processing and regulatory requirements. The trend has reversed in 2010, but efforts should continue in looking for areas to improve efficiencies.
- 2.3.6** For the Wastewater utility, safety training hours should be maintained at a consistent level to ensure a safe work environment.

### **Working Environment**

- 2.4.1** Both utilities should continue to track and report on all safety incidents to support a culture of safety among all staff.
- 2.4.2** The utilities should work with IT and the Human Resources department to assess the ability to create a staffing turnover report that more accurately demonstrates turnover of permanent staff and eliminate turnover “noise” resulting from the coming and going of seasonal staff.

### **Operations and Maintenance Planning and Execution**

- 2.5.1** The Water and Wastewater utilities could consider engaging in weekly or bi-weekly, scheduled meetings with C&M staff to ensure longer term projects and C&M staff allocation are understood by all groups. This would in turn create mutual understanding of the way resources are allocated when critical situations arise.
- 2.5.2** Both utilities should investigate why WTP and WWTP O&M costs have been trending upward and compare unfavourably to peer groups.

### **Financial Management and Rate Model**

- 2.6.1** Consider creating additional account codes to differentiate capital costs incurred that are driven by regulatory requirements (e.g. enhanced treatment processes).



- 2.6.2 Given the disaggregated utility model employed by the City, it could be beneficial for the engineering, planning, financial services, and utility groups to engage in a greater degree of coordinated budgeting and financial planning.
- 2.6.3 Senior staff should be involved and informed (to an appropriate level) regarding the rate model and rate development process to ensure a full understanding of the factors contributing to rates.

### **Infrastructure and Asset Management**

- 2.7.1 Continue to work with the data produced by the Hansen system to refine parameters and improve the consistency and reliability of the output and its relevance to utility assets.
- 2.7.2 Best practice is to develop strategic asset management plans for all linear assets, which includes a long term maintenance replacement plan for pipes, valves, etc. These plans typically include current infrastructure, expected growth, and replacement plans and cost associated with this. This information is then aggregated and feeds into the overall capital planning process.

### **Operating Risk and Business Continuity**

- 2.8.1 Corporate Services, in conjunction with the utilities and within the broader ERM approach currently being developed by the City, should develop business continuity plans for a wider range of scenarios and identify mitigation strategies that can be implemented in the short term to support these plans.
- 2.8.2 The Water and Wastewater utilities should review all activities and functions to determine if there are other emergency scenarios for which key risks can be identified and mitigation activities can be implemented.

### **Citizen Engagement**

- 3.1.1 The utilities should work with Communications to develop a citizen engagement strategy to inform potentially affected citizens about new developments and programs and to listen to and address their concerns where possible.

### **Customer Relationship Management**

- 3.2.1 The utilities should take steps to begin the design of a program to facilitate the tracking and reporting of response times to emergencies, non-emergencies, return to service, customer inquiries and customer satisfaction.

### **Partnerships and Stakeholder Relations**

- 3.3.1 The utilities should consider working with Communications to develop a stakeholder engagement assessment and plan, which should be linked with the citizen engagement strategy.





- 3.3.2** In conjunction with tracking customer response times, the utilities should also consider tracking and reporting on response times for stakeholder inquiries and concerns.

### **Regional and Other Integrated Planning**

- 3.3.1** Continue to monitor deviations between expected and actual consumption of water and flow of wastewater from regional customers to ensure that associated capital planning is appropriate given actual usage of the treatment plants and pipe infrastructure.

### **Performance Monitoring and Reporting**

- 4.1.1** Building on efforts currently underway, develop a performance management framework that can be applied to all departments and sections in the City, with both general and specific measures as well as a roll-up to department level dashboards and a City-wide dashboard.

See **Appendix J** for recommended measures and metrics that could be used by the utilities to assess whether or not they are effective. See also **Appendix K** for guidelines for developing and selecting appropriate and meaningful measures and metrics and **Appendix L** for a sample performance dashboard summary page.

- 4.1.2** The utilities should develop Water and Wastewater specific scorecards, potentially building on the Balanced Scorecard template, to identify and track specific operational metrics that are key indicators of performance.

- 4.1.3** Given the magnitude of effort that goes into preparing and submitting the AECOM benchmark data, a greater level of analysis should be undertaken once results are obtained to understand trends and differences and identify areas where improvements could be made.

### **Regulatory Compliance and Reporting**

- 4.2.1** As part of the Rate Model Review Project, the Water and Wastewater utilities and City management should strive to educate Council about the utilities and how they operate under the utility rate model.
- 4.2.2** Regulatory compliance is a major utility performance indicator. Accordingly, monitoring and reporting on regulatory compliance should be included as part of overall utility reporting to City management.

### **Financial Reporting**

- 4.3.1** The issues identified in the Representation Letter should be linked to strategies in the annual Service Plan, ERM and operational risk planning.



- 4.3.2 Consider more finely segmenting capital costs to facilitate a better understanding of those driven by internal or capacity requirements and those driven by changing regulatory standards.

The following table presents a summary of the above recommendations and is intended to be read in conjunction with the preceding report. This table rates the relative priority and complexity of each recommendation as follows:

*Priority:* A relative indicator using a scale of high, medium and low. Interpretation of this scale should be taken in the context that all recommendations are considered to be important, with some prioritized over others.

*Complexity:* A relative indicator using a scale of high, medium and low. Determination of this scale is based on an assessment of the amount of change necessary, requirement for consultation with internal and external stakeholders, and the amount of new learning or knowledge needed for the action to be implemented.

Business Sphere	Business Attribute	#	Recommendation	Relative Priority	Relative Complexity
Monitoring, Measurement and Results	Regulatory Compliance and Reporting	4.2.2	Monitoring and reporting on regulatory compliance should be included as part of overall utility reporting to City management.	High	Low
Strategic Design and Alignment	Revenue and Rate Approach	1.4.1	All City utilities should continue to play an active role in the Rate Model Review and ultimately implement the resulting fiscal policies and rate model.	High	Medium
Strategic Design and Alignment	Revenue and Rate Approach	1.4.3	Clear rate-setting philosophies should be identified and prioritized by Council, which reconcile the often conflicting objectives of utility revenue stability and conservation pricing. Current initiatives are underway to address this.	High	Medium
Strategic Design and Alignment	Budgeting and Capital Planning	1.5.2	While they are separate entities, the Water and Wastewater utilities should consider capital investment and rate increases holistically, as they appear to the customer as one function. Where there are options to defer capital investments between the two and smooth the impact on the customer the utilities should take advantage of this.	High	Medium
Management and Execution	Service Lines and Programs	2.1.2	Given that the system is relatively new and that most replacements are with PVC pipe, the Water utility should engage in further investigation to understand water loss and unmetered water consumption and to move forward with opportunities to meter water where appropriate (e.g. install meters on water trucks used by Parks, Recreation and Culture).	High	Medium
Management and Execution	Employee Management	2.3.2	Develop a clear and specific succession plan that addresses upcoming retirements and potential knowledge gaps that may arise. This is particularly important for the Water utility, where issues of succession are more immediate.	High	Medium
Management and Execution	Employee Management	2.3.3	Ensure that all staff, management and operational, have access to role-specific and appropriate training and tools to facilitate their successful performance of their position requirements.	High	Medium

Business Sphere	Business Attribute	#	Recommendation	Relative Priority	Relative Complexity
Management and Execution	Operations and Maintenance Planning and Execution	2.5.1	The Water and Wastewater utilities could consider engaging in weekly or bi-weekly, scheduled meetings with C&M staff to ensure longer term projects and C&M staff allocation are understood by all groups.	High	Medium
Management and Execution	Operations and Maintenance Planning and Execution	2.5.2	Both utilities should investigate why WTP and WWTP O&M costs have been trending upward and compare unfavourably to peer groups.	High	Medium
Customer, Citizen and Stakeholder Engagement	Customer Relationship Management	3.2.1	The utilities should take steps to begin the design of a program to facilitate the tracking and reporting of response times to emergencies, non-emergencies, return to service, customer inquiries and customer satisfaction.	High	Medium
Monitoring, Measurement and Results	Performance Monitoring and Reporting	4.1.2	The utilities should develop Water and Wastewater specific scorecards, potentially building on the Balanced Scorecard template, to identify and track specific operational metrics that are key indicators of performance.	High	Medium
Monitoring, Measurement and Results	Performance Monitoring and Reporting	4.1.3	Given the magnitude of effort that goes into preparing and submitting the AECOM benchmark data, a greater level of analysis should be undertaken once results are obtained to understand trends and differences and identify areas where improvements could be made.	High	Medium
Monitoring, Measurement and Results	Regulatory Compliance and Reporting	4.2.1	As part of the Rate Model Review Project, the Water and Wastewater utilities and City management should strive to educate Council about the utilities and how they operate under the utility rate model.	High	Medium
Strategic Design and Alignment	Revenue and Rate Approach	1.4.2	The utilities should consider engaging in a formal cost of service analysis every three years to ensure a full understanding of all costs as they pertain to the different customer classes, particularly regional customers.	High	High

Business Sphere	Business Attribute	#	Recommendation	Relative Priority	Relative Complexity
Management and Execution	Employee Management	2.3.5	In the Wastewater utility, trends in the ratios of population and ML of treated wastewater per FTE have been going down due to increases in utility FTEs, which could be at least partially due to increasing processing and regulatory requirements. The trend has reversed in 2010, but efforts should continue in looking for areas to improve efficiencies.	High	High
Management and Execution	Infrastructure and Asset Management	2.7.2	Develop strategic asset management plans for all linear assets, including a long term maintenance replacement plan for pipes, valves, etc. These plans typically include current infrastructure, expected growth, and replacement plans and cost associated with this.	High	High
Monitoring, Measurement and Results	Performance Monitoring and Reporting	4.1.1	Building on efforts currently underway, the City should develop a performance management framework that can be applied to all departments and sections in the City, with both general and specific measures as well as a roll-up to department level dashboards and a City-wide dashboard.	High	High
Strategic Design and Alignment	Sustainability Planning	1.2.2	Both the Water utility and the Wastewater utility should continue with efforts to educate citizens on appropriate water usage.	Medium	Low
Management and Execution	Organization Structure and Staffing	2.2.1	The Wastewater utility should continue with the process of formalizing the Performance Reporting Coordinator position to support the utility Superintendent in the development and analysis of performance monitoring and reporting processes.	Medium	Low
Management and Execution	Employee Management	2.3.4	The City should consider adding FTEs in the distribution and collection areas, as both benchmarking results and staff comments suggest that these areas have historically been and currently are understaffed.	Medium	Low
Management and Execution	Employee Management	2.3.6	For the Wastewater utility, safety training hours should be maintained at a consistent level to ensure a safe work environment.	Medium	Low

Business Sphere	Business Attribute	#	Recommendation	Relative Priority	Relative Complexity
Management and Execution	Infrastructure and Asset Management	2.7.1	Continue to work with the data produced by the Hansen system to refine parameters and improve the consistency and reliability of the output and its relevance to utility assets.	Medium	Low
Customer, Citizen and Stakeholder Engagement	Regional and Other Integrated Planning	3.4.1	Continue to monitor deviations between expected and actual consumption of water and flow of wastewater from regional customers to ensure that associated capital planning is appropriate given actual usage of the treatment plants and pipe infrastructure.	Medium	Low
Strategic Design and Alignment	Strategic and Business Planning	1.1.1	In alignment with the City's efforts, EVS should strive to improve its annual Service Plan by including linkages to operating and capital budgets and performance measures.	Medium	Medium
Strategic Design and Alignment	Strategic and Business Planning	1.1.2	The Wastewater utility may benefit from the development of Operating Plans similar to those currently being developed for the Water utility. Collaboration between the two utilities to ensure a consistent approach and format would be desirable from a departmental standpoint.	Medium	Medium
Strategic Design and Alignment	Sustainability Planning	1.2.1	While shifting to the conservation targets identified in the EMP, the Water utility should continue to pursue conservation initiatives and activities described in the Water Conservation Plan.	Medium	Medium
Strategic Design and Alignment	Sustainability Planning	1.2.3	In conjunction with the EVS Storm Water section, the Wastewater utility should continue to study and identify metrics, baselines and targets for wastewater quality as per the EMP.	Medium	Medium
Strategic Design and Alignment	Enterprise Risk Management	1.3.1	The City should develop a best practice Enterprise Risk Management (ERM) framework and support departments in its application.	Medium	Medium
Strategic Design and Alignment	Enterprise Risk Management	1.3.2	The Water utility should continue with efforts to complete the Drinking Water Safety Plan risk assessment by the end of 2012.	Medium	Medium

Business Sphere	Business Attribute	#	Recommendation	Relative Priority	Relative Complexity
Strategic Design and Alignment	Enterprise Risk Management	1.3.3	The Water utility should continue to develop the environmental risk management plan currently in progress.	Medium	Medium
Strategic Design and Alignment	Enterprise Risk Management	1.3.4	Leveraging the risk management template created by the Water utility, the Wastewater utility should develop similar risk management plan for its operations.	Medium	Medium
Strategic Design and Alignment	Budgeting and Capital Planning	1.5.3	Consideration should be given, when engaging in capital construction with multi-generational benefit, to matching the timing of the cost with the duration of the benefit of the asset. Recognizing that the City and utilities face constraints on the level of debt they can utilize for these projects, the utilities should endeavor to strike the right balance in the use of reserves funded by current customers to fund assets that will continue to benefit customers well into the future.	Medium	Medium
Management and Execution	Organization Structure and Staffing	2.2.2	The utilities should work with Corporate services and other City departments and sections to determine the need for internal Service Level Agreements for specific functions and services, and to develop and agree upon reasonable service level expectations.	Medium	Medium
Management and Execution	Financial Management and Rate Model	2.6.2	Given the disaggregated utility model employed by the City, it could be beneficial for the engineering, planning, financial services, and utility groups to engage in a greater degree of coordinated budgeting and financial planning.	Medium	Medium
Management and Execution	Financial Management and Rate Model	2.6.3	Senior staff should be involved and informed (to an appropriate level) regarding the rate model and rate development process to ensure a full understanding of the factors contributing to rates.	Medium	Medium
Monitoring, Measurement and Results	Financial Reporting	4.3.1	The issues identified in the Representation Letter should be linked to strategies in the annual Service Plan, ERM and operational risk planning.	Medium	Medium



Business Sphere	Business Attribute	#	Recommendation	Relative Priority	Relative Complexity
Monitoring, Measurement and Results	Financial Reporting	4.3.2	Consider more finely segmenting capital costs to facilitate a better understanding of those driven by internal or capacity requirements and those driven by changing regulatory standards.	Medium	Medium
Management and Execution	Service Lines and Programs	2.1.1	Certain areas of the department's website (i.e. the department mandate, information regarding upgrades to the WWTP) appear to require updating to align with current documentation or processes. It is recommended that website content be reviewed and updated where required, and that this responsibility be assigned to a specific individual within each section represented on the site.	Low	Low
Management and Execution	Working Environment	2.4.1	Both utilities should continue to track and report on all safety incidents to support a culture of safety among all staff.	Low	Low
Management and Execution	Financial Management and Rate Model	2.6.1	Consider creating additional account codes to differentiate capital costs incurred that are driven by regulatory requirements (e.g. enhanced treatment processes).	Low	Low
Customer, Citizen and Stakeholder Engagement	Citizen Engagement	3.1.1	The utilities should work with Communications to develop a citizen engagement strategy to inform potentially affected citizens about new developments and programs and to listen to and address their concerns where possible.	Low	Low
Customer, Citizen and Stakeholder Engagement	Partnerships and Stakeholder Relations	3.3.1	The utilities should consider working with Communications to develop a stakeholder engagement assessment and plan, which should be linked with the citizen engagement strategy.	Low	Low
Strategic Design and Alignment	Budgeting and Capital Planning	1.5.1	Financial Services should work with the Water and Wastewater utilities, as well as other City departments, to develop a system for capital and operational planning that ensures that all users are working in the most current version of the program, and which facilitates consolidation of information.	Low	Medium

Business Sphere	Business Attribute	#	Recommendation	Relative Priority	Relative Complexity
Management and Execution	Employee Management	2.3.1	Engage in a review and update of all job descriptions that have not been prepared or evaluated within the past two years.	Low	Medium
Management and Execution	Working Environment	2.4.2	The utilities should work with IT and the Human Resources department to assess the ability to create a staffing turnover report that more accurately demonstrates turnover of permanent staff and eliminate turnover “noise” resulting from the coming and going of seasonal staff.	Low	Medium
Management and Execution	Operating Risk and Business Continuity	2.8.1	Corporate Services, in conjunction with the utilities and within the broader ERM approach currently being developed by the City, should develop business continuity plans for a wider range of scenarios and identify mitigation strategies that can be implemented in the short term to support these plans.	Low	Medium
Management and Execution	Operating Risk and Business Continuity	2.8.2	The Water and Wastewater utilities should review all activities and functions to determine if there are other emergency scenarios for which key risks can be identified and mitigation activities can be implemented.	Low	Medium
Customer, Citizen and Stakeholder Engagement	Partnerships and Stakeholder Relations	3.3.2	In conjunction with tracking customer response times, the utilities should also consider tracking and reporting on response times for stakeholder inquiries and concerns.	Low	Medium



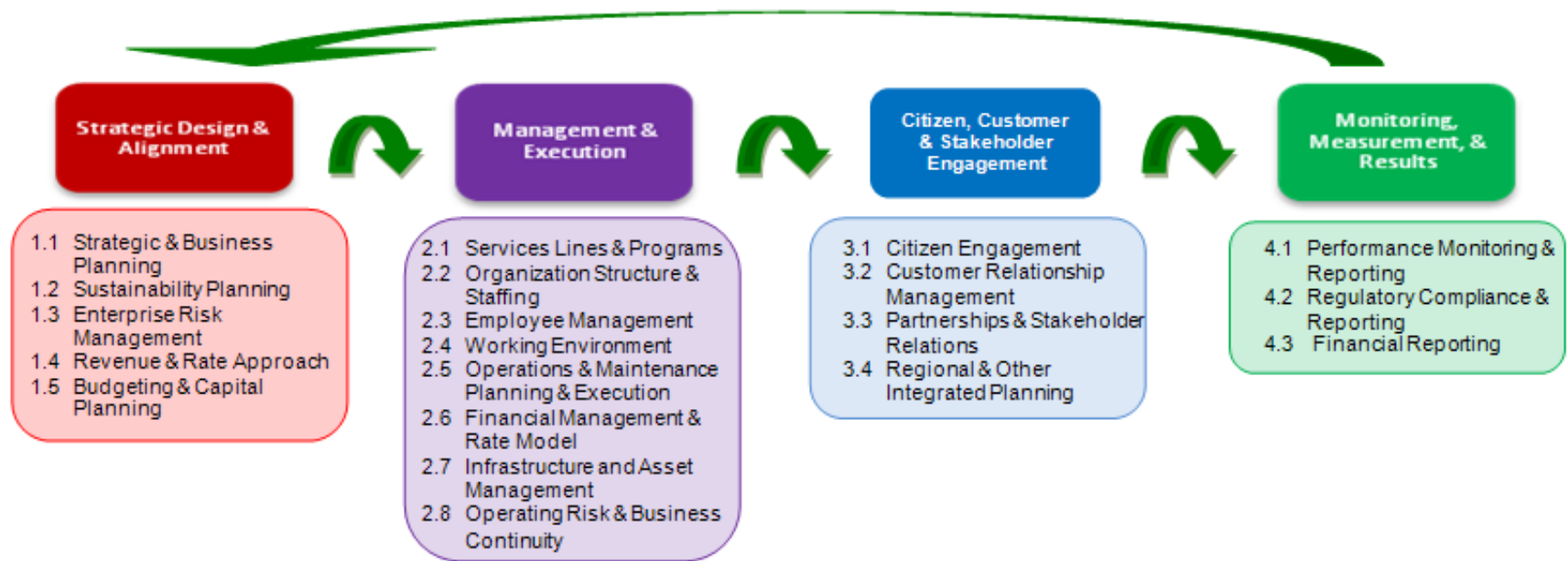
## Appendices



## **Appendix A**

### **Evaluation Framework**

## Appendix A Evaluative Framework



Business Sphere	Business Attribute	Best Practice Assessment			Criteria (Diagnostic Questions)	
		Management Practice	Documents	Measures/Metrics	General	Department/Utility/Function Specific
<i>Which business sphere is being evaluated?</i>	<i>Which business attribute is being evaluated?</i>	<i>What best practice management practices are typically seen when managing this business attribute?</i>	<i>What best practice documents are typically used when managing this business attribute?</i>	<i>What best practice measures/metrics are typically used to assess the effectiveness and efficiency (VFM) of this business attribute?</i>	<i>What questions relevant to overall management need to be answered about this business attribute in order to evaluate it?</i>	<i>What questions specific to this department/utility/function need to be answered about this business attribute in order to evaluate it?</i>
i.e. Strategic Design and Alignment	i.e. Working Environment	<ul style="list-style-type: none"> <li>Assessed via interviews and documents</li> </ul>	<ul style="list-style-type: none"> <li>Assessed to provide evidence of management practice and measures/metrics</li> </ul>	<ul style="list-style-type: none"> <li>Assessed via documents and benchmarking</li> </ul>	<ul style="list-style-type: none"> <li>Developed based on management practice, documents, measures/metrics</li> </ul>	<ul style="list-style-type: none"> <li>Developed based on management practice, documents, measures/metrics</li> </ul>

Business Sphere	Business Attribute	Criteria (Diagnostic Questions and Measures/Metrics)	
		Diagnostic Questions	Measures/Metrics and Documents
<i>Which business sphere is being evaluated?</i>	<i>Which business attribute is being evaluated?</i>	<i>What general questions relevant to overall management need to be answered about this business attribute in order to evaluate it?</i>	<i>What specific questions need to be answered about this business attribute in order to evaluate it?</i>
1.Strategic Design and Alignment	1.1. Strategic and Business Planning	<p><b>Description</b></p> <ul style="list-style-type: none"> <li>• How does the utility carry out strategic and business planning?</li> <li>• What are the key priorities and business goals?</li> </ul> <p><b>SWOT</b></p> <ul style="list-style-type: none"> <li>• What is working well and what could be improved in the way the utility carries out strategic and business planning?</li> <li>• What are the key challenges and opportunities facing the utility in this area moving forward?</li> </ul> <p><b>Management Practice</b></p> <ul style="list-style-type: none"> <li>• Does the utility follow best management practice in strategic and business planning? <ul style="list-style-type: none"> <li>○ Do strategic, business and/or other plans exist, and do they include a vision, mission, goals, strategies and actions?</li> <li>○ Does the process for carrying out strategic, business and/or other planning follow a recognized methodology and include all required parties?</li> <li>○ Does the utility identify and assess important issues and trends in its environment and incorporate them into planning (i.e. through environmental scans or SWOT analyses)?</li> <li>○ Do plans provide clear and appropriate direction and prioritize activities?</li> <li>○ Are plans communicated to and understood by management and staff?</li> <li>○ Are plans linked to operating and capital budgets so they have the resources to be implemented?</li> <li>○ Is the utility's planning process and resulting plans aligned with a broader corporate process (if required)?</li> </ul> </li> </ul>	<p><b>Measures/Metrics</b></p> <ul style="list-style-type: none"> <li>• The existence of planning documents and processes.</li> </ul> <p><b>Documents</b></p> <ul style="list-style-type: none"> <li>• Strategic plans or frameworks</li> <li>• Guidance documents</li> <li>• Business plans</li> <li>• Service plans</li> <li>• Master plans</li> <li>• Development plans</li> </ul>

Business Sphere	Business Attribute	Criteria (Diagnostic Questions and Measures/Metrics)	
		Diagnostic Questions	Measures/Metrics and Documents
		<ul style="list-style-type: none"> <li>○ To what degree does the utility have a history of being able to adapt or respond successfully to changing needs, circumstances, etc?</li> <li>○ Does the utility have other similar planning processes, i.e. master plans, service plans, development plans, etc.?</li> </ul>	
	1.2. Sustainability Planning	<p><b>Description</b></p> <ul style="list-style-type: none"> <li>• How does the utility undertake sustainability planning?</li> <li>• What are the sustainability priorities and goals?</li> </ul> <p><b>SWOT</b></p> <ul style="list-style-type: none"> <li>• What is working well and what could be improved in the way the utility carries out sustainability planning?</li> <li>• What are the key challenges and opportunities facing the utility in this area moving forward?</li> </ul> <p><b>Management Practice</b></p> <ul style="list-style-type: none"> <li>• Does the utility follow best management practice in sustainability planning? <ul style="list-style-type: none"> <li>○ Do sustainability plans exist, and do they include vision, mission, goals, strategies and actions?</li> <li>○ Does the process for carrying out sustainability planning follow a recognized methodology and include all required parties?</li> <li>○ Do sustainability plans provide clear and appropriate direction and prioritize activities?</li> <li>○ Are sustainability plans communicated to and understood by management and staff?</li> <li>○ Are plans linked to operating and capital budgets so they have the resources to be implemented?</li> <li>○ Are secondary impacts (social, economic, financial, environmental, governance, etc.) that the utility's activities, products, or services could have on customers, key stakeholders, related organizations and programs, and/or the community at large understood, explained, monitored and addressed?</li> </ul> </li> </ul>	<p><b>Measures/Metrics</b></p> <ul style="list-style-type: none"> <li>• The existence of sustainability planning documents and processes</li> <li>• Whether or not the utility has explored sustainable or green approaches.</li> <li>• Average daily water usage by customer</li> </ul> <p><b>Documents</b></p> <ul style="list-style-type: none"> <li>• Sustainability plans</li> <li>• Environmental plans</li> <li>• Guidance documents</li> <li>• News releases</li> <li>• Brochures</li> <li>• Web sites</li> </ul>



Business Sphere	Business Attribute	Criteria (Diagnostic Questions and Measures/Metrics)	
		Diagnostic Questions	Measures/Metrics and Documents
		<ul style="list-style-type: none"> <li>Are the utility's planning process and resulting plans aligned with a broader corporate direction (if required) such as the Triple Bottom Line, Five Pillars, an Environmental Master Plan, etc.?</li> </ul>	
	1.3. Enterprise Risk Management	<p><b>Description</b></p> <ul style="list-style-type: none"> <li>How does the utility undertake enterprise risk management?</li> <li>What are the key enterprise risks facing the utility?</li> </ul> <p><b>SWOT</b></p> <ul style="list-style-type: none"> <li>What is working well and what could be improved in the way the utility carries out enterprise risk management?</li> <li>What are the key challenges and opportunities facing the utility in this area moving forward?</li> </ul> <p><b>Management Practice</b></p> <ul style="list-style-type: none"> <li>Does the utility follow best management practice in enterprise risk management?               <ul style="list-style-type: none"> <li>Does an enterprise risk management approach exist, and does it facilitate the inclusion of risk identification into planning?</li> <li>Does the process for carrying out enterprise risk management planning follow a recognized methodology and include all required parties?</li> <li>Does enterprise risk management planning provide clear and appropriate direction and prioritize activities?</li> <li>Is enterprise risk management planning communicated to and understood by management and staff?</li> <li>Has both the potential likelihood and impact of risks been evaluated?</li> <li>Have mitigation strategies been developed and implemented for key risks?</li> <li>Are mitigation strategies linked to operating and capital budgets so they have the resources to be implemented?</li> <li>Is the utility's enterprise risk management approach aligned with a broader corporate process (if required)?</li> </ul> </li> </ul>	<p><b>Measures/Metrics</b></p> <ul style="list-style-type: none"> <li>The existence of an enterprise risk management approach and mitigation strategies.</li> <li>Evidence of the implementation of the plan and the strategies contained therein (if applicable).</li> </ul> <p><b>Documents</b></p> <ul style="list-style-type: none"> <li>ERM plans</li> <li>ERM guidance documents</li> <li>Strategic plans</li> <li>Business plans (risk component)</li> </ul>

Business Sphere	Business Attribute	Criteria (Diagnostic Questions and Measures/Metrics)	
		Diagnostic Questions	Measures/Metrics and Documents
	1.4. Revenue and Rate Approach	<p><b>Description</b></p> <ul style="list-style-type: none"> <li>• How is the utility funded? How does it generate revenue?</li> <li>• What is the utility's overall rate setting philosophy?</li> <li>• Do the utility follow the standard utility rate model?</li> <li>• How do you determine the annual revenue requirement?</li> </ul> <p><b>SWOT</b></p> <ul style="list-style-type: none"> <li>• What is working well and what could be improved in the utility's revenue and rate approach?</li> <li>• What are the key challenges and opportunities facing the utility in this area moving forward?</li> </ul> <p><b>Management Practice</b></p> <ul style="list-style-type: none"> <li>• Does the utility follow best management practice in its revenue and rate approach? <ul style="list-style-type: none"> <li>○ Are rates and fees developed according to a recognized methodology?</li> <li>○ Is the philosophy behind rate design clear and understood?</li> <li>○ Does the rate design facilitate this philosophy? (i.e. rates are equitable given different customer classes and they support desired outcomes such as energy conservation)</li> <li>○ Does the rate setting approach reflect a strong understanding of the relationship between utility costs and utility services provided?</li> <li>○ Does the calculation of the annual revenue requirement include all relevant requirements such as reserves and dividends?</li> <li>○ Does the design of rates and fees reflect the utility's other desired outcomes?</li> <li>○ Does the setting of rates and fees reflect a strong understanding between costs and the services and programs delivered?</li> <li>○ Is the utility's revenue and rate approach aligned with the overall corporate revenue and rate approach (if required)?</li> </ul> </li> </ul>	<p><b>Measures/Metrics</b></p> <ul style="list-style-type: none"> <li>• The existence of a revenue or rate model.</li> </ul> <p><b>Documents</b></p> <ul style="list-style-type: none"> <li>• Revenue policies</li> <li>• Rate model overview</li> <li>• Rate model policies</li> <li>• Fees and charges summary</li> </ul>

Business Sphere	Business Attribute	Criteria (Diagnostic Questions and Measures/Metrics)	
		Diagnostic Questions	Measures/Metrics and Documents
	1.5. Budgeting and Capital Planning	<p><b>Description</b></p> <ul style="list-style-type: none"> <li>• How does the utility carry out budgeting and capital planning?</li> </ul> <p><b>SWOT</b></p> <ul style="list-style-type: none"> <li>• What is working well and what could be improved in the way the utility carries out budgeting and capital planning?</li> <li>• What are the key challenges and opportunities facing the utility in this area moving forward?</li> </ul> <p><b>Management Practice</b></p> <ul style="list-style-type: none"> <li>• Does the utility follow best management practice in budgeting and capital planning? <ul style="list-style-type: none"> <li>○ Are there operating and capital budgets, which include all required data and information?</li> <li>○ Does the process for carrying out budgeting and capital planning follow a recognized methodology and include all required parties?</li> <li>○ Is the utility's budgeting and capital planning aligned with the overall corporate process for budgeting and capital planning (if required)?</li> <li>○ Do operating and capital budgets provide clear and appropriate direction?</li> <li>○ Are there appropriate levels of both oversight and delegation of authority, so budgets are both accountable and reflective of utility requirements?</li> <li>○ Are operating and capital budgets linked to or integrated with strategic, business, capital and/or other plans?</li> <li>○ Are operating and capital budgets communicated to and understood by management and staff?</li> <li>○ Are the systems used to develop and manage the operating and capital budgets accurate and user friendly?</li> <li>○ Is there a long term capital plan, and does it set out priorities for the next ten years (or longer)?</li> <li>○ Does the process for developing the long term capital plan follow a recognized methodology and include all required parties?</li> <li>○ Does the capital plan include an effective prioritization process?</li> </ul> </li> </ul>	<p><b>Measures/Metrics</b></p> <ul style="list-style-type: none"> <li>• The existence of operating and capital budgets and a long term capital plan that uses a recognized methodology.</li> <li>• Whether or not operating and capital budgets are linked to or integrated with strategic, business, capital and other plans.</li> <li>• Actual capital expenditures as a percentage of budgeted capital expenditures</li> <li>• Percent of capital programs implemented</li> <li>• Percent of capital budget that is for upgrades, renewal, regulatory, etc.</li> </ul> <p><b>Documents</b></p> <ul style="list-style-type: none"> <li>• Most recent operating and capital budgets (summary and detail)</li> <li>• Summary of the operating and capital budgets (and actuals) for the last five years</li> <li>• The capital plan and related summary documents</li> <li>• Budget submissions</li> <li>• Budget analysis and prioritization templates and results</li> <li>• Cost allocation policies and results</li> <li>• Analysis of revenue and cost drivers</li> <li>• Capital and operating reserves and projections</li> </ul>

Business Sphere	Business Attribute	Criteria (Diagnostic Questions and Measures/Metrics)	
		Diagnostic Questions	Measures/Metrics and Documents
		<ul style="list-style-type: none"> <li>Does the capital plan provide clear and appropriate direction?</li> <li>Is there an appropriate balance between how money is spent (e.g. operations versus capital, overhead versus operations and maintenance, capacity utilization of major resources, etc.)?</li> </ul>	
2.Management and Execution	2.1. Service Lines and Programs	<p><b>Description</b></p> <ul style="list-style-type: none"> <li>What are the utility's main service lines and programs?</li> <li>What is the utility's service area, including total population and total number of customers served?</li> <li>What are the utility's various customer rate classes and the numbers in each?</li> <li>How much total water/wastewater is distributed/collected? By each customer class?</li> <li>What are the utility's key pieces of service infrastructure and length (kms) of pipe?</li> <li>Does the utility provide any contract services? If so, describe how they are sourced and managed.</li> <li>Does the utility have formalized service levels or service level agreements?</li> </ul> <p><b>SWOT</b></p> <ul style="list-style-type: none"> <li>What is working well and what could be improved in the utility's service lines and programs?</li> <li>What are the key challenges and opportunities facing the utility in this area moving forward?</li> </ul> <p><b>Management Practice</b></p> <ul style="list-style-type: none"> <li>Does the utility follow best management practice in its service lines and programs? <ul style="list-style-type: none"> <li>Are all services and programs operating within an approved mandate?</li> <li>Are all services and programs relevant to achieving the utility's goals and objectives?</li> <li>Has the utility evaluated the option of providing other utility services, i.e. becoming more vertically integrated by in-sourcing currently out-sourced activities or vice-versa?</li> <li>Has the utility evaluated its service area to determine if contraction or expansion</li> </ul> </li> </ul>	<p><b>Measures/Metrics</b></p> <ul style="list-style-type: none"> <li>The existence of service line and program descriptions.</li> <li>The existence of core service delivery priorities.</li> <li>Whether or not the utility has explored sustainable or green approaches.</li> <li>Number of km of pipe</li> <li>Customers per km of pipe</li> <li>Percent metered accounts</li> </ul> <p><b>Documents</b></p> <ul style="list-style-type: none"> <li>Description or summary of service lines/programs and treatment levels</li> <li>Service area</li> <li>Customer classes</li> <li>Water/wastewater distribution/collection</li> <li>Key service delivery infrastructure</li> <li>Contracted services provided</li> <li>Service level summaries or agreements</li> <li>Evaluations of services and/or programs</li> </ul>

Business Sphere	Business Attribute	Criteria (Diagnostic Questions and Measures/Metrics)	
		Diagnostic Questions	Measures/Metrics and Documents
		<p>would be beneficial?</p> <ul style="list-style-type: none"> <li>Has the utility explored new and innovative ways to improve efficient use of infrastructure and the customer experience?</li> <li>Has the utility evaluated the services it provides to determine if they are being provided effectively and efficiently and meeting customer needs?</li> <li>Are the rationale, goals and objectives of various services and programs known?</li> <li>Do service line and program goals and priorities provide clear and appropriate direction?</li> <li>Have core service delivery priorities been formalized?</li> <li>Are goals and priorities communicated to and understood by management and staff?</li> <li>Are goals and priorities measurable and have they been evaluated?</li> <li>Is the potential for discontinuing, changing, evolving or starting various services lines and programs considered regularly?</li> </ul>	
	2.2. Organization Structure and Staffing	<p><b>Description</b></p> <ul style="list-style-type: none"> <li>How is the utility structured?</li> <li>What are the units and sub-units and their functions?</li> <li>How are corporate functions (e.g. HR, IT, finance, procurement, billing, records management and privacy and freedom of information, etc.) delivered?</li> <li>Is the utility part of a corporate shared services model? If so, describe.</li> <li>Does the utility contract out any functions? If so, describe.</li> </ul> <p><b>SWOT</b></p> <ul style="list-style-type: none"> <li>What is working well and what could be improved in the utility's organization and staffing?</li> <li>What are the key challenges and opportunities facing the utility in this area moving forward?</li> </ul> <p><b>Management Practice</b></p> <ul style="list-style-type: none"> <li>Does the utility follow best management practice in its organizational structure and</li> </ul>	<p><b>Measures/Metrics</b></p> <ul style="list-style-type: none"> <li>The existence of organizational charts.</li> <li>The existence of policies for corporate services.</li> <li>The existence of internal service level agreements.</li> <li>The existence of service level agreements with contractors.</li> <li>Management to staff ratio</li> <li>Cost of various corporate services (e.g. HR, IT, finance, procurement, billing, records management and privacy and freedom of information, etc.) as a percentage of overall costs</li> <li>Cost of various corporate services (e.g. HR, IT, finance, procurement, billing,</li> </ul>

Business Sphere	Business Attribute	Criteria (Diagnostic Questions and Measures/Metrics)	
		Diagnostic Questions	Measures/Metrics and Documents
		<p>staffing?</p> <ul style="list-style-type: none"> <li>Does the utility have up-to-date, accurate and sufficiently detailed organizational charts?</li> <li>Is the utility's design appropriate for achieving its goals and objectives?</li> <li>Does the utility's design allow for appropriate levels of oversight and delegation?</li> <li>Is the decision making process clear and effective?</li> <li>Are corporate functions (e.g. HR, IT, finance, procurement, billing, records management and privacy and freedom of information, etc.) delivered or provided effectively and efficiently? Are internal service level agreements in place?</li> <li>Has there been an analysis to determine if the methods of delivering services and programs (e.g. out-sourcing versus in-sourcing, partnering, etc.) are effective and efficient? Are service level agreements with contractors in place?</li> </ul>	<p>records management and privacy and freedom of information, etc.) per employee</p> <ul style="list-style-type: none"> <li>Percentage of IT incidents resolved within agreed service levels</li> <li>Internal service level agreement measures</li> <li>External service level agreement measures</li> </ul> <p><b>Documents</b></p> <ul style="list-style-type: none"> <li>Current organization chart</li> <li>Description of unit and sub-unit functions</li> <li>Organizational reviews or plans</li> <li>Policies for corporate services</li> <li>Corporate cost allocations</li> <li>Internal service level agreements</li> <li>List of contractors and their functions</li> <li>External service level agreements</li> </ul>
	2.3. Employee Management	<p><b>Description</b></p> <ul style="list-style-type: none"> <li>How many employees does the utility have overall and by type (full time, part time, temporary, seasonal, etc.) and function?</li> <li>What is the age breakdown of the utility employees by level and function?</li> <li>What are the typical working hours and the average workload in terms of standard and overtime hours?</li> <li>How does the utility carry out the main functions of employee management, including: <ul style="list-style-type: none"> <li>Recruitment</li> <li>Roles and responsibilities (job descriptions)</li> </ul> </li> </ul>	<p><b>Measures/Metrics</b></p> <ul style="list-style-type: none"> <li>The existence of current staffing levels by type and function.</li> <li>The existence of job descriptions for each employee.</li> <li>The existence of a formal employee evaluation process.</li> <li>Clients or customers per employee</li> <li>Staff cost as a percentage of total cost</li> <li>Overtime hours worked as a</li> </ul>

Business Sphere	Business Attribute	Criteria (Diagnostic Questions and Measures/Metrics)	
		Diagnostic Questions	Measures/Metrics and Documents
		<ul style="list-style-type: none"> <li>○ Performance management</li> <li>○ Compensation</li> <li>○ Professional development and training, and</li> <li>○ Succession?</li> <li>● Are staff performing to stated and agreed expectations?</li> </ul> <p><b>SWOT</b></p> <ul style="list-style-type: none"> <li>● What is working well and what could be improved in the way the utility carries out employee management?</li> <li>● What are the key challenges and opportunities facing the utility in this area moving forward?</li> </ul> <p><b>Management Practice</b></p> <ul style="list-style-type: none"> <li>● Does the utility follow best management practice in employee management? <ul style="list-style-type: none"> <li>○ Are current staffing levels known, by type (full time, part time, temporary, seasonal) and function?</li> <li>○ Are staffing levels and breakdowns by level and function appropriate for achieving the utility's goals in an effective and efficient manner?</li> <li>○ Are the workloads of various staff appropriate for achieving timelines and quality? Are they sustainable in the long term?</li> <li>○ Does the utility have all the staff it needs in the right jobs to be efficient and effective?</li> <li>○ Do job descriptions exist and are they up-to-date and accurate?</li> <li>○ Do staff know what is expected from them at work?</li> <li>○ Is the recruitment process effective by providing needed, qualified staff in a timely and efficient manner?</li> <li>○ Do staff receive appropriate feedback and recognition for their efforts?</li> <li>○ Is there a standard performance evaluation framework that is followed? Is it effective?</li> <li>○ Is compensation fair and in line with relevant comparators?</li> <li>○ Do staff have the required education/training for their jobs?</li> </ul> </li> </ul>	<p>percentage of total hours worked</p> <ul style="list-style-type: none"> <li>● Overall number of on-call and stand-by hours</li> <li>● Number of hours on-call as a percentage of total hours worked</li> <li>● Average number of response capable back-up staff for critical operations and maintenance functions</li> <li>● Number of field staff per km of pipe</li> <li>● Average days elapsed from a vacancy occurring to the acceptance of an offer</li> <li>● Percentage of staff who receive an annual face-to-face performance evaluation</li> <li>● Average days per employee (FTE) invested in development and training</li> <li>● Percentage of employees aged 50 or over</li> <li>● Percentage of vacant management positions that are filled internally</li> </ul> <p><b>Documents</b></p> <ul style="list-style-type: none"> <li>● Summary documents describing number of employees by type</li> <li>● Summary documents showing hours worked, both standard and overtime</li> <li>● Summary documents describing on-call and stand-by hours</li> <li>● Summary documents describing employing age by type, level and function</li> </ul>



Business Sphere	Business Attribute	Criteria (Diagnostic Questions and Measures/Metrics)	
		Diagnostic Questions	Measures/Metrics and Documents
		<ul style="list-style-type: none"> <li>Do staff have opportunities for training and learning that supports their development and effectiveness?</li> <li>Does the utility have a succession strategy that is clear and effective?</li> <li>Is the utility's employee management approach aligned with the overall corporate approach to employee management (if required)?</li> </ul>	<ul style="list-style-type: none"> <li>Job postings</li> <li>Job descriptions</li> <li>Compensation schemes</li> <li>Compensation reviews or analysis</li> <li>Professional development and training policies</li> <li>Summary of professional development or training hours</li> <li>Summary of the employee evaluation process</li> <li>Employee evaluation template</li> <li>Succession plans</li> </ul>
	2.4. Working Environment	<p><b>Description</b></p> <ul style="list-style-type: none"> <li>How would you describe the utility's culture and the employee experience?</li> <li>What are the utility's approaches to ensuring a positive and healthy work environment?</li> <li>What is the utility's approach to safety?</li> </ul> <p><b>SWOT</b></p> <ul style="list-style-type: none"> <li>What is working well and what could be improved in the utility's working environment?</li> <li>What are the key challenges and opportunities facing the utility in this area moving forward?</li> </ul> <p><b>Management Practice</b></p> <ul style="list-style-type: none"> <li>Does the utility follow best management practice in its working environment? <ul style="list-style-type: none"> <li>Is the utility's culture conducive to achieving its goals and objectives?</li> <li>Does the utility support change through communication, transparency, clarity, training, planning and other required supports?</li> <li>Does the utility experience a high rate of undesired turnover?</li> </ul> </li> </ul>	<p><b>Measures/Metrics</b></p> <ul style="list-style-type: none"> <li>Turnover ratio (employees leaving as a percentage of total employees)</li> <li>Average days per employee (FTE) lost due to absence</li> <li>Number of safety meetings</li> <li>Percent of safety inspections held</li> <li>Number of days lost to injury per 100 employees</li> <li>Employee job / workplace satisfaction rating</li> </ul> <p><b>Documents</b></p> <ul style="list-style-type: none"> <li>Employee satisfaction surveys</li> <li>Healthy work policies</li> <li>Safety policies and procedures</li> <li>Summary of safety incidents</li> <li>Safety audits and/or reports</li> </ul>

Business Sphere	Business Attribute	Criteria (Diagnostic Questions and Measures/Metrics)	
		Diagnostic Questions	Measures/Metrics and Documents
		<ul style="list-style-type: none"> <li>Does the utility actively recognize and promote a healthy workplace?</li> <li>Is the utility providing a safe environment for its staff, contractors, clients and the public?</li> </ul>	
	2.5. Operations and Maintenance Planning and Execution	<p><b>Description</b></p> <ul style="list-style-type: none"> <li>How does the utility carry out operations and maintenance planning?</li> <li>What systems are in place?</li> <li>How does this planning flow through to execution?</li> <li>How does the utility carry out project management?</li> </ul> <p><b>SWOT</b></p> <ul style="list-style-type: none"> <li>What is working well and what could be improved in the way the utility carries out operations and maintenance planning and execution?</li> <li>What are the key challenges and opportunities facing the utility in this area moving forward?</li> </ul> <p><b>Management Practice</b></p> <ul style="list-style-type: none"> <li>Does the utility follow best management practice in operations management planning and execution?               <ul style="list-style-type: none"> <li>Does the utility engage in active and on-going operations and maintenance planning?</li> <li>Are there up-to-date and realistic operations and maintenance plans?</li> <li>Does the process for carrying out operations and maintenance planning follow a recognized methodology?</li> <li>Does operations and maintenance planning provide clear and appropriate direction and prioritize activities?</li> <li>Is operations and maintenance planning communicated and understood by management and staff?</li> <li>Are there processes and/or systems in place for operational maintenance and planning and do they effectively facilitate this function?</li> <li>Are operations and maintenance activities carried out according to required and</li> </ul> </li> </ul>	<p><b>Measures/Metrics</b></p> <ul style="list-style-type: none"> <li>The existence of operations and maintenance plans</li> <li>The existence of a documented project management process.</li> <li>Cost of the O&amp;M function as a percentage of overall costs</li> <li>Cost of the O&amp;M function per employee</li> <li>O&amp;M costs per km of service area</li> <li>O&amp;M costs per km of pipe – distribution/collection system</li> <li>O&amp;M costs per ML water distributed/collected</li> <li>O&amp;M costs per hydrant</li> <li>Cost of the O&amp;M function per client or customer</li> <li>Percentage of maintenance that is planned (hours)</li> <li>Percentage of maintenance that is planned (dollars)</li> <li>Equipment utilization rates</li> <li>Number of malfunctioning meters as a percentage of total meters</li> <li>System losses as a percentage of supply</li> <li>Inflow and infiltration (I &amp; I) rates</li> <li>Number of mainline blockages per 100</li> </ul>

Business Sphere	Business Attribute	Criteria (Diagnostic Questions and Measures/Metrics)	
		Diagnostic Questions	Measures/Metrics and Documents
		<p>recommended policies, guidelines, standards or specifications?</p> <ul style="list-style-type: none"> <li>○ Are staff aware of these policies, guidelines, standards or specifications and is compliance monitored?</li> <li>○ Does the utility follow a standard and consistent approach to project management?</li> <li>○ Are there processes and/or systems in place for project management and do they effectively facilitate this function?</li> <li>○ Has the utility explored innovative ways to manage or delivery products and services?</li> <li>○ How well does the utility respond to changes in its operating environment?</li> </ul>	<p>km of pipe</p> <ul style="list-style-type: none"> <li>• Number of water main breaks per 100 km of pipe</li> <li>• Average cost of water main repair</li> <li>• Number of blocked sewers per 100 km of pipe</li> <li>• Percent of collection systems cleaned by type (e.g. High Performance Filter (HPF), Circulating Humus Filter (CHF), etc.)</li> <li>• Kg per day of total loading – Total Suspended Solids (TSS)</li> <li>• Percent of wet weather discharges monitored</li> </ul> <p><b>Documents</b></p> <ul style="list-style-type: none"> <li>• Operation and maintenances plans</li> <li>• Operating and maintenance policies, guidelines, standards or specifications</li> <li>• Project management processes or guidelines and related templates</li> <li>• Operations and maintenance efficiency and effective analyses or evaluations</li> </ul>
	2.6. Financial Management and Rate Model	<p><b>Description</b></p> <ul style="list-style-type: none"> <li>• How does the utility undertake financial management to manage and administer revenues and expenses?</li> <li>• How does the utility determine the rate to be charged for distribution/collection? What are the current rates, by customer class?</li> <li>• How does the utility determine the exact costs that need to be accounted for in the rate model?</li> </ul>	<p><b>Measures/Metrics – Financial Management</b></p> <ul style="list-style-type: none"> <li>• The existence of books of account</li> <li>• The existence of financial records and financial policies and procedures</li> <li>• The existence of regular reviews or audits of internal controls.</li> </ul>

Business Sphere	Business Attribute	Criteria (Diagnostic Questions and Measures/Metrics)	
		Diagnostic Questions	Measures/Metrics and Documents
		<ul style="list-style-type: none"> <li>• How does the utility determine the split between fixed and variable charges? What is the current split?</li> <li>• How does the utility determine the rate of return on rate base or equity that the utility will use? What is the current rate?</li> <li>• How does the utility determine if it will take on debt? What is the current debt level?</li> <li>• How does the utility determine the debt-to-equity ratio? What is the current ratio?</li> <li>• How does the utility determine operating and capital reserves? What is the current structure and levels?</li> <li>• How does the utility determine the dividends to be paid? What is the current policy?</li> <li>• How does the utility determine the local area franchise fee that customers will pay?</li> <li>• How does the utility carry out asset accounting and account for depreciation?</li> <li>• What are the utility's key financial policies and internal controls?</li> </ul> <p><b>SWOT</b></p> <ul style="list-style-type: none"> <li>• What is working well and what could be improved in the way the utility carries out financial management?</li> <li>• What are the key challenges and opportunities facing the utility in this area moving forward?</li> </ul> <p><b>Management Practice</b></p> <ul style="list-style-type: none"> <li>• Does the utility follow best management practice in financial management? <ul style="list-style-type: none"> <li>○ Are the utility books of account and financial records in accordance with sound financial policies and procedures?</li> <li>○ Are there processes and/or systems in place for financial management and do they effectively facilitate this function?</li> <li>○ Does the utility have internal controls in place, which are actively monitored for compliance?</li> <li>○ Does the utility have a demonstrated and solid understanding of internal and external costs?</li> <li>○ Does the utility employ life-cycle cost accounting?</li> <li>○ Does the utility generate cost and productivity data that is consistent and</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Number of control deficiencies and material weaknesses</li> <li>• Total cost per customer</li> <li>• Average cost of treatment per ML of water/wastewater</li> <li>• The percentage of variation of key revenue and cost items at each quarter and year end</li> <li>• Average number of days to pay for accounts payable</li> <li>• Average number of days client and customer accounts are outstanding</li> <li>• Number of suppliers with which there are procurement agreements</li> <li>• The percentage of variation of project costs and contractor costs</li> </ul> <p><b>Measures/Metrics – Rate Model</b></p> <ul style="list-style-type: none"> <li>• The existence of utility fiscal policies and a rate stabilization reserve.</li> <li>• All-in distribution/collection rates as compared to the rates for other similar utilities</li> <li>• Total expenditures per ML water/wastewater distributed/collected</li> <li>• Total expenditures per km of pipe</li> <li>• Number of rate adjustments per year</li> <li>• Debt-to-equity ratio</li> <li>• Reserve allocation as a percentage of total revenue</li> <li>• Dividends as a percentage of total</li> </ul>

Business Sphere	Business Attribute	Criteria (Diagnostic Questions and Measures/Metrics)	
		Diagnostic Questions	Measures/Metrics and Documents
		<p>understandable?</p> <ul style="list-style-type: none"> <li>○ Does the utility know if its service and product standards are being met at the least cost?</li> <li>○ Does the utility enter into agreements with key suppliers to reduce costs?</li> <li>○ Are third party contractors effectively managed to achieve time, cost and quality expectations?</li> <li>○ Is financial management aligned with the overall corporate approach to financial management (if required)?</li> </ul> <ul style="list-style-type: none"> <li>● Does the utility follow best management practice in utility rate setting? <ul style="list-style-type: none"> <li>○ Does the utility determine rates and tariffs using a best practice rate model that accounts for all costs and other charges?</li> <li>○ Is the process for developing rates sufficiently understandable, transparent and consistent?</li> <li>○ Does the utility engage in regular cost of service studies?</li> <li>○ Does the utility charge variable and fixed charges based on a rationale consistent with achieving its goals and objectives?</li> <li>○ Does the utility calculate its rate of return using an acceptable and recognized methodology?</li> <li>○ Does the rate of return reflect all requirements (e.g. reserves and dividends)?</li> <li>○ Is the process for the utility to take on debt sufficiently understandable, transparent and consistent?</li> <li>○ Are debt levels and the debt-to-equity ratio determined using an acceptable and recognized methodology?</li> <li>○ Does the utility determine and manage operating and capital reserves using an acceptable and recognized methodology?</li> <li>○ Does reserve management reflect realistic future operating and capital needs, and is it based on comprehensive infrastructure integrity assessments?</li> <li>○ Is the process for determining dividends sufficiently understandable, transparent and consistent?</li> <li>○ Does the utility determine dividends using an acceptable and recognized</li> </ul> </li> </ul>	<p>revenue</p> <p><b>Documents</b></p> <ul style="list-style-type: none"> <li>● Key financial and accounting policies</li> <li>● Internal control frameworks</li> <li>● Variance reports and analysis</li> <li>● Project monitoring or tracking documents</li> <li>● Procurement agreements with suppliers</li> <li>● Auditor reports and recommendations</li> <li>● Utility by-laws or applications</li> <li>● Summary of current rates by customer class</li> <li>● Documents related to the fixed versus variable split (e.g. internal analyses)</li> <li>● Documents related to the policy or calculation of rate of return</li> <li>● Documents related to debt policy, current debt structure and the debt-to-equity ratio</li> <li>● Documents related to capital and operating reserves such as policies, summaries and projections</li> <li>● Documents related to dividends such as policies and projections</li> <li>● Documents related to Local Access Fees (LAFs) such as policies and projections</li> <li>● Summary of dividends paid</li> <li>● Summary of LAFs paid</li> </ul>

Business Sphere	Business Attribute	Criteria (Diagnostic Questions and Measures/Metrics)	
		Diagnostic Questions	Measures/Metrics and Documents
		<p>methodology?</p> <ul style="list-style-type: none"> <li>Does the utility determine the local area franchise fee that customers will pay using an acceptable and recognized methodology?</li> <li>Does the utility account for its assets and associated depreciation using an acceptable and recognized methodology?</li> </ul>	<ul style="list-style-type: none"> <li>Documentation on practices and policies around asset accounting and accounting for depreciation</li> <li>Cost of service studies</li> </ul>
	2.7. Infrastructure and Asset Management	<p><b>Description</b></p> <ul style="list-style-type: none"> <li>What are the utility's key capital and other assets, broken down by categories?</li> <li>How does the utility carry out asset management?</li> </ul> <p><b>SWOT</b></p> <ul style="list-style-type: none"> <li>What is working well and what could be improved in the way the utility carries out asset management?</li> <li>What are the key challenges and opportunities facing the utility in this area moving forward?</li> </ul> <p><b>Management Practice</b></p> <ul style="list-style-type: none"> <li>Does the utility follow best management practice in asset management? <ul style="list-style-type: none"> <li>Does the utility have a good understanding of its assets in terms of original cost, depreciation and replacement cost?</li> <li>Are there processes and/or systems in place for asset management and do they effectively facilitate this function?</li> <li>Does the utility carry out comprehensive infrastructure integrity assessments as required?</li> <li>Does the utility have an effective program for maintaining, refurbishing, replacing and upgrading its infrastructure?</li> <li>Is inventory managed efficiently and effectively?</li> <li>Is asset management aligned with the overall corporate approach to asset management (if required)?</li> </ul> </li> </ul>	<p><b>Measures/Metrics</b></p> <ul style="list-style-type: none"> <li>The existence of a comprehensive asset management system.</li> <li>Evidence of the practice of assessing the status and integrity of assets.</li> <li>Percentage of critical assets that have been fully assessed</li> <li>Percentage of critical assets that require immediate refurbishment or replacement</li> <li>Percentage of assets refurbished or replaced by asset class (annually)</li> <li>Total dollars set aside for asset replacement as a percentage of total asset value (annually)</li> <li>Average age of inventory by asset class</li> </ul> <p><b>Documents</b></p> <ul style="list-style-type: none"> <li>Description or summary of capital assets such as a Tangible Capital Asset (TCA) register or other similar summaries</li> <li>Asset status or integrity reports</li> </ul>
	2.8. Operating	<b>Description</b>	<b>Measures/Metrics</b>

Business Sphere	Business Attribute	Criteria (Diagnostic Questions and Measures/Metrics)	
		Diagnostic Questions	Measures/Metrics and Documents
	Risk and Business Continuity	<ul style="list-style-type: none"> <li>• What is the utility's approach to managing operating risk and business continuity?</li> <li>• What are the key operating risks facing the utility?</li> </ul> <p><b>SWOT</b></p> <ul style="list-style-type: none"> <li>• What is working well and what could be improved in the way the utility manages operating risk and business continuity?</li> <li>• What are the key challenges and opportunities facing the utility in this area moving forward?</li> </ul> <p><b>Management Practice</b></p> <ul style="list-style-type: none"> <li>• Does the utility follow best management practice in managing operating risk and business continuity?               <ul style="list-style-type: none"> <li>○ Has the utility identified significant financial, organizational and employee operating risks?</li> <li>○ Does the utility understand the risk of impairment or loss of its key assets?</li> <li>○ Have mitigation strategies been developed and implemented?</li> <li>○ Does the utility have emergency planning and/or business continuity planning in place to respond to various types of emergencies?</li> <li>○ Is a process in place for developing emergency plans and/or business continuity plans?</li> <li>○ Are emergency plans and/or business continuity plans communicated to and understood by management and staff?</li> <li>○ Is business continuity planning aligned with the overall corporate approach to business continuity (if required)?</li> <li>○ Does the utility have effective assistance agreements in place with key stakeholders and/or partner organizations (when available)?</li> <li>○ Does the utility have effective corporate and site security in place?</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• The existence of mitigation strategies, emergency plans and/or business continuity plans.</li> <li>• The existence of mutual assistance agreements.</li> <li>• Number of security incidents or breaches</li> <li>• Percent of emergencies responded to within two hours</li> </ul> <p><b>Documents</b></p> <ul style="list-style-type: none"> <li>• Risk assessments</li> <li>• Emergency plans</li> <li>• Business continuity plans</li> <li>• Mutual assistance agreements</li> <li>• Privacy and freedom of information protocols</li> <li>• Security policies and/or reporting templates</li> </ul>
3.Citizen, Customer and Stakeholder	3.1. Citizen Engagement	<p><b>Description</b></p> <ul style="list-style-type: none"> <li>• What is the utility's overall approach to engaging with citizens?</li> </ul>	<p><b>Measures/Metrics</b></p> <ul style="list-style-type: none"> <li>• The existence of a citizen engagement strategy.</li> </ul>



Business Sphere	Business Attribute	Criteria (Diagnostic Questions and Measures/Metrics)	
		Diagnostic Questions	Measures/Metrics and Documents
Engagement		<ul style="list-style-type: none"> <li>Does the utility undertake any regular or one-off citizen engagement initiatives?</li> </ul> <p><b>SWOT</b></p> <ul style="list-style-type: none"> <li>What is working well and what could be improved in the way the utility carries out citizen engagement?</li> <li>What are the key challenges and opportunities facing the utility in this area moving forward?</li> </ul> <p><b>Management Practice</b></p> <ul style="list-style-type: none"> <li>Does the utility follow best management practice in citizen engagement?               <ul style="list-style-type: none"> <li>Does the utility know the expectations of its citizens and understand the basis for these expectations?</li> <li>Does the utility have a citizen engagement strategy that is being implemented?</li> <li>Are citizen concerns and priorities taken into consideration during planning and execution?</li> <li>Does the utility evaluate citizens' satisfaction with its services and programs, and does it achieve good results?</li> <li>Are citizen engagement activities aligned with the overall corporate approach to citizen engagement (if required)?</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Average number of hours/days to respond to citizen inquiries</li> <li>Citizen satisfaction rating</li> </ul> <p><b>Documents</b></p> <ul style="list-style-type: none"> <li>Citizen engagement plans</li> <li>Public satisfaction surveys</li> <li>News releases</li> <li>Brochures</li> <li>Summaries</li> </ul>
	3.2. Customer Relationship Management	<p><b>Description</b></p> <ul style="list-style-type: none"> <li>Who are the utility's customers and clients?</li> <li>Does the utility have a formal customer relationship management (CRM) system?</li> <li>What customer and client management activities does the utility engage in?</li> </ul> <p><b>SWOT</b></p> <ul style="list-style-type: none"> <li>What is working well and what could be improved in the way the utility carries out customer relationship management?</li> <li>What are the key challenges and opportunities facing the utility in this area moving forward?</li> </ul>	<p><b>Measures/Metrics</b></p> <ul style="list-style-type: none"> <li>The existence of a customer management strategy.</li> <li>Cost of customer care</li> <li>Cost of billing per customer</li> <li>Number of customer complaints per 1,000 customers</li> <li>Number of customer billing complaints per 1,000 customers</li> <li>Number of customer technical complaints per 1,000 customers</li> </ul>

Business Sphere	Business Attribute	Criteria (Diagnostic Questions and Measures/Metrics)	
		Diagnostic Questions	Measures/Metrics and Documents
		<p><b>Management Practice</b></p> <ul style="list-style-type: none"> <li>• Does the utility follow best management practice in customer relationship management? <ul style="list-style-type: none"> <li>○ Does the utility know the expectations of its customers and understand the basis for these expectations?</li> <li>○ Does the utility have a customer management strategy that is being implemented?</li> <li>○ Are there processes and/or systems in place for customer relationship management and do they effectively facilitate this function?</li> <li>○ Does the utility have an effective process for receiving and managing customer feedback and complaints?</li> <li>○ Are customer concerns and priorities taken into consideration during planning and execution?</li> <li>○ Does the utility evaluate customer satisfaction with its services and programs, and does it achieve good results?</li> <li>○ Are customer relationship management activities aligned with the overall corporate approach to citizen engagement (if required)?</li> <li>○ Is the utility billing function carried out in an efficient manner that meets the needs of customers?</li> <li>○ Does the utility regularly read meters?</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Average number of hours/days to respond to client or customer inquiries</li> <li>• Response time to service requests – percent overdue</li> <li>• Number of error driven billing adjustments per 1,000 customers</li> <li>• Average utility billing per single residential customer</li> <li>• Average number of days to start or stop service</li> <li>• Customer satisfaction with the services and programs provided</li> <li>• The frequency and accuracy of meter reading</li> </ul> <p><b>Documents</b></p> <ul style="list-style-type: none"> <li>• Customer management plans or approaches</li> <li>• Customer analyses (e.g. complaints, customer satisfaction surveys and results)</li> <li>• News releases</li> <li>• Brochures</li> <li>• Summaries</li> </ul>
	3.3. Partnerships and Stakeholder Relations	<p><b>Description</b></p> <ul style="list-style-type: none"> <li>• Who are the utility's key partners and stakeholders?</li> <li>• What is the utility's overall approach to engaging partners and stakeholders?</li> <li>• What partnership and stakeholder relation activities does the utility engage in?</li> </ul> <p><b>SWOT</b></p>	<p><b>Measures/Metrics</b></p> <ul style="list-style-type: none"> <li>• The existence of a stakeholder engagement strategy.</li> <li>• Average number of hours/days to respond to stakeholder inquiries</li> <li>• Partner and stakeholder satisfaction</li> </ul>

Business Sphere	Business Attribute	Criteria (Diagnostic Questions and Measures/Metrics)	
		Diagnostic Questions	Measures/Metrics and Documents
		<ul style="list-style-type: none"> <li>What is working well and what could be improved in the way the utility carries out partnerships and stakeholder relations?</li> <li>What are the key challenges and opportunities facing the utility in this area moving forward?</li> </ul> <p><b>Management Practice</b></p> <ul style="list-style-type: none"> <li>Does the utility follow best management practice in partnerships and stakeholder relations?               <ul style="list-style-type: none"> <li>Does the utility know the expectations of its partners and key stakeholders and understand the basis for these expectations?</li> <li>Does the utility have a stakeholder engagement strategy that is being implemented?</li> <li>Are partner and stakeholder concerns and priorities taken into consideration during planning and execution?</li> <li>Does the utility evaluate partner and stakeholder satisfaction with its services and programs, and does it achieve good results?</li> <li>Are partnerships and relations with key stakeholders aligned with the overall corporate approach to these partners and key stakeholders (if required)?</li> </ul> </li> </ul>	<p>with the services and programs provided</p> <p><b>Documents</b></p> <ul style="list-style-type: none"> <li>Stakeholder engagement plans</li> <li>Stakeholder analyses</li> <li>Description of partner organizations</li> <li>Partnership plans or agreements</li> </ul>
	3.4. Regional and Other Integrated Planning	<p><b>Description</b></p> <ul style="list-style-type: none"> <li>Does the utility engage in any regional or similar integrated planning?</li> <li>Who are the utility's key regional partners?</li> </ul> <p><b>SWOT</b></p> <ul style="list-style-type: none"> <li>What is working well and what could be improved in the way the utility carries out regional and other integrated planning?</li> <li>What are the key challenges and opportunities facing the utility in this area moving forward?</li> </ul> <p><b>Management Practice</b></p> <ul style="list-style-type: none"> <li>Does the utility follow best management practice in regional and other integrated</li> </ul>	<p><b>Measures/Metrics</b></p> <ul style="list-style-type: none"> <li>The existence of a regional planning strategy.</li> </ul> <p><b>Documents</b></p> <ul style="list-style-type: none"> <li>Regional plans, frameworks or agreements</li> <li>Description of regional partners</li> <li>Service agreements or standards</li> </ul>

Business Sphere	Business Attribute	Criteria (Diagnostic Questions and Measures/Metrics)	
		Diagnostic Questions	Measures/Metrics and Documents
		<p>planning?</p> <ul style="list-style-type: none"> <li>Does the utility know the expectations of its regional partners and understand the basis for these expectations?</li> <li>Does the utility have a regional planning strategy that is being implemented?</li> <li>Are regional issues and priorities taken into consideration during planning and execution?</li> <li>Is regional and other integrated planning aligned with the overall corporate approach to regional and other integrated planning (if required)?</li> </ul>	
4. Monitoring, Measurement and Results	4.1. Performance Monitoring and Reporting	<p><b>Description</b></p> <ul style="list-style-type: none"> <li>How does the utility carry out performance monitoring and reporting?</li> <li>What are the key measures and metrics that the utility monitors and reports on?</li> <li>What financial metrics are tracked?</li> <li>Have stated strategic and operational goals and objectives been achieved?</li> </ul> <p><b>SWOT</b></p> <ul style="list-style-type: none"> <li>What is working well and what could be improved in the way the utility carries out performance monitoring and reporting?</li> <li>What are the key challenges and opportunities facing the utility in this area moving forward?</li> </ul> <p><b>Management Practice</b></p> <ul style="list-style-type: none"> <li>Does the utility follow best management practice in performance monitoring and reporting? <ul style="list-style-type: none"> <li>Does the utility have a formal performance management system in place?</li> <li>Does the utility monitor and report on its progress towards achieving its strategic and operational goals and objectives?</li> <li>Does management receive complete, credible and fair information that satisfies its decision making and accountability requirements?</li> <li>Does the utility benchmark itself against other organizations or industry standards?</li> </ul> </li> </ul>	<p><b>Measures/Metrics</b></p> <ul style="list-style-type: none"> <li>The existence of a formal performance management system.</li> <li>Evidence of participation in benchmarking initiatives.</li> </ul> <p><b>Documents</b></p> <ul style="list-style-type: none"> <li>Summary of key performance indicators (KPI's) and the most recent results</li> <li>Performance dashboards</li> <li>Results of benchmarking initiatives</li> <li>Documents relating to reliability monitoring and reporting</li> </ul>

Business Sphere	Business Attribute	Criteria (Diagnostic Questions and Measures/Metrics)	
		Diagnostic Questions	Measures/Metrics and Documents
		<ul style="list-style-type: none"> <li>Does the utility's performance monitoring and reporting align with and support an overall corporate approach to performance management (if required)?</li> <li>Does the utility follow best management practice in utility benchmarking?               <ul style="list-style-type: none"> <li>Does the utility engage in monitoring and reporting?</li> <li>Does the utility benchmark against other utilities and industry standards?</li> </ul> </li> </ul>	
	4.2. Regulatory Compliance and Reporting	<p><b>Description</b></p> <ul style="list-style-type: none"> <li>Does the utility engage in any regulatory compliance and reporting? If so, what type and how is it carried out?</li> </ul> <p><b>SWOT</b></p> <ul style="list-style-type: none"> <li>What is working well and what could be improved in the way the utility carries out regulatory compliance and reporting?</li> <li>What are the key challenges and opportunities facing the utility in this area moving forward?</li> </ul> <p><b>Management Practice</b></p> <ul style="list-style-type: none"> <li>Does the utility follow best management practice in regulatory compliance and reporting?               <ul style="list-style-type: none"> <li>Does the utility understand, monitor and report on regulatory requirements?</li> <li>Does the utility monitor and submit the data required for compliance with Alberta Environment standards?</li> <li>Does the utility understand, plan for and address changing regulatory requirements?</li> <li>Does the utility have processes and/or systems in place for regulatory compliance and reporting that effectively facilitate this function?</li> </ul> </li> </ul>	<p><b>Measures/Metrics</b></p> <ul style="list-style-type: none"> <li>The existence of regulatory submissions and reports.</li> <li>Compliance with Alberta Environment Water Quality standards</li> <li>Percentage of time identified contaminants exceed maximum levels</li> <li>Percent of time drinking water meets provincial regulations</li> <li>Percent of time wastewater meets provincial regulations for wastewater treatment</li> <li>Number of incident reports</li> </ul> <p><b>Documents</b></p> <ul style="list-style-type: none"> <li>Documents related to regulatory compliance with Alberta Environment standards</li> <li>Regulatory compliance processes and activities</li> <li>Regulatory submissions</li> <li>Regulatory reports</li> </ul>

Business Sphere	Business Attribute	Criteria (Diagnostic Questions and Measures/Metrics)	
		Diagnostic Questions	Measures/Metrics and Documents
	4.3. Financial Reporting	<p><b>Description</b></p> <ul style="list-style-type: none"> <li>• How does the utility carry out financial reporting?</li> </ul> <p><b>SWOT</b></p> <ul style="list-style-type: none"> <li>• What is working well and what could be improved in the way the utility carries out financial reporting?</li> <li>• What are the key challenges and opportunities facing the utility in this area moving forward?</li> </ul> <p><b>Management Practice</b></p> <ul style="list-style-type: none"> <li>• Does the utility follow best management practice in financial reporting? <ul style="list-style-type: none"> <li>○ Does the utility prepare regular (i.e. quarterly, annually) financial summaries and statements?</li> <li>○ Are these summaries and statements accurate and do they provide explanations for the numbers?</li> <li>○ Do these summaries and statements facilitate a good understanding of financial matters and if financial goals and objectives have been achieved?</li> <li>○ Is financial reporting aligned with the overall corporate approach to financial reporting (if required)?</li> </ul> </li> </ul>	<p><b>Measures/Metrics</b></p> <ul style="list-style-type: none"> <li>• The existence of financial summaries and statements.</li> <li>• Cycle time in working days from period-end closure to the distribution of routine financial reports</li> <li>• Cycle time in working days from year-end closure to submission of audited accounts</li> </ul> <p><b>Documents</b></p> <ul style="list-style-type: none"> <li>• Required submission documents</li> <li>• Regular reports like annual or regular financial statements</li> <li>• Analysis of financial reporting cycle times</li> </ul>



## **Appendix B**

### **List of Documents Received**



## **Appendix B Documents and Information Reviewed**

### *General Information*

- Information on the Red Deer Web Site – Water Utility
- Information on the Red Deer Web Site – Wastewater Utility

### *Strategic and Business Planning*

- Red Deer City Council Strategic Direction 2011
- Environmental Services 2011 Departmental Representation Letter
- Environmental Services Department Proposed Service Plan 2012-2014
- List of Water Utility Operating Plans and Guide to Creating Operating Plans
- City of Red Deer Wastewater Treatment Plant Master Plan, February 2009
- City of Red Deer Wastewater Treatment Plant Master Plan Updates, Upgrading and Expansion, Upgrade Phasing, October 2008

### *Sustainability Planning*

- City of Red Deer Environmental Master Plan
- Miscellaneous Water, Wastewater and Stormwater Brochures
- Water Conservation Program Information (City of Red Deer, Water Section Website)
- City of Red Deer, Environmental Services – Water Conservation Strategy (September 2007)
- News Release and Poster for World Water Day

### *Enterprise Risk Management*

- City of Red Deer Corporate Administrative Policy 5310-CA: Risk Management
- Alberta Environment and Sustainable Resource Development Drinking Water Safety Plan guidance documents and template

### *Revenue and Rate Approach*

- Draft Recommendations for Utility Fiscal Policies (part of the Utility Rate Model Review) – May 2012
- No. 3464/2011 – Utility Bylaw Schedules Effective March 1, 2012

### *Budgeting and Capital Planning*

- 2012 to 2014 City of Red Deer Operating Budget
- 2012 to 2021 City of Red Deer Capital Plan
- 2012 Budget Fast Facts
- 2006-2011 Operating and Capital Budget / Actual Summary
- 2012 Capital Budget Request
- 2013 Enterprise Business Planning Manual (Financial Services Budget Guidelines)
- Budget Preparation Schedule (2013)
- Financial and Rate Model – Reserves Forecast
- Capital Projects Schedule, 2012 to 2015

- Water Treatment Plant 2012 and 2013 Planning Budget Spreadsheets
- Wastewater Treatment Plant 2012 Planning Budget Spreadsheet

#### *Service Lines and Programs*

- Information on Environmental Services Web Site
- Bylaws Relevant to Water and Wastewater
  - No. 3464/2011 - Utility Bylaw
  - No. 3464/2011 – Utility Bylaw Table of Contents
  - No. 3464/2011 – Utility Bylaw Schedules Effective March 1, 2012
- Service Area Map (Five-Year Historical Service Area)
- Infrastructure (km by Type, Five-Year Historical)
- Number of Customers (Five-Year Historical)
- System Losses (Five-Year Historical)

#### *Organization Structure and Staffing*

- Organizational Chart for the City of Red Deer
- Reporting Organizational Charts
- Work Group Functions
- Support Cost Allocations – 2012 Budget
- City of Red Deer 2011 Operating Fund Budget Summary (by Department)
- List of Contractors and types of service provided
- Water Utility HR Review Summary Report (September 11, 2008)
- Certification Organizational Charts for Wastewater

#### *Employee Management*

- Job Descriptions
- Permanent Employees Age Plus Years of Service
- Employee Wage Detail (2011)
- Performance Review Schedule
- Work Expectations and Review Worksheet (Employee Evaluation Template)
- Employee Training and Availability History (Five-Year Historical)
- Professional Development / Training policies
- AECOM Data Reports: Number of FTE's and Hours Worked (Five-Year Historical)
- Water Utility On-Call Hours, Stand-By Weeks and Stand-By Stats
- Standby-hours – Union Collective Agreement Rules

#### *Working Environment*

- City of Red Deer Corporate Safety Policies
- Emergency Management Bylaw
- City of Red Deer 2009 Employee Survey
- Employee Turnover Analysis, five-year historical
- Employee Absences, five-year historical

- Incident Assessment Template
- City of Red Deer Safety Incidents by Department

#### *Operations and Maintenance Planning and Execution*

- Environmental Services 2012 Project Schedule
- Water Distribution Maintenance Plan
- Biosolids Application Summary, Lambourne Environmental Ltd. – 2011 Biosolids Land Spreading Final Report

#### *Financial Management and Rate Model*

- Draft Recommendations for Utility Fiscal Policies (part of the Utility Rate Model Review) – May 2012
- Utility Rate Policy Review Presentation (February 27, 2012)
- 2011 Operating Variance
- Summary of Year-End Debt
- Allowance for Doubtful Accounts
- Debt to Equity Ratio
- Financial and Rate Models
- Financial Models
- Rate Models
- Capital Projects Tracking Schedules
- 10 Year (2012-2022) Cash Flow and Reserve Balance Forecast
- Cost of Service Analysis (COSA) Model
- Dividends Paid to the City, five-year historical
- Reserve Balances, five-year historical
- Water Treatment Plant 2013 Planning Budget Spreadsheet
- Water Treatment Plant Project Schedule (May 1, 2012)

#### *Infrastructure and Asset Management*

- 2011 Assets Added
- Fixed Asset Total Cost by Asset Item as of December 31, 2011
- Summary of Assets by Asset Code
- Five-year historical km of pipe
- Five-year historical square km of service area
- City of Red Deer Corporate Administrative Policy 5004-CA – Enterprise Asset Management Program
- Asset Management Plan – City of Red Deer – Asset Management Overview Report (Prior and Prior Associates)
- Asset Management Plan – City of Red Deer – Asset Management Overview Report – Water and Wastewater Treatment Plants (Prior and Prior Associates)
- Asset Management Plan – City of Red Deer – Asset Management Overview Report – Water, Wastewater & Storm Networks (Prior and Prior Associates)
- Water distribution infrastructure by diameter, age and type (2010)
- Water Treatment Plant Conceptual Design Summary

- Water Distribution Pumping Facilities Upgrade Report (June 2011), Including Appendices
- 2005 Flood Aerial View of WWTTP
- 2010 Capital Budget Briefing Note – Wastewater Treatment Plant Upgrade
- Sanitary Utility Index Drawings – Lions Campground and Kinex Area

#### *Operating Risk and Business Continuity*

- Emergency Management Bylaw
- City of Red Deer Emergency Preparedness Corporate Administrative Policy 2209-CA – Rescue and Evacuation
- Public Works Section, Civic Yards Site Emergency Response Procedure: Fire, Armed Intruder, Bomb Threat, Flood Gas Leak, Power Failure
- City of Red Deer Corporate Procedure 4205-CP – Spill Response
- Environmental Services Department, Water Distribution Section Emergency Response Procedure: Worksite Emergency & Evacuation Plan
- Environmental Services Section, Water Treatment Plant Emergency Response Procedure: Fire, Armed Intruder, Bomb Threat, Flood, Gas Leak, Power Failure, Chemical Leaks
- Water Treatment Plant Redesign – CPTED Review
- Memo Regarding Water Treatment Plant Security System Features
- Technical Memorandum No. 10 – Water Treatment Plant Upgrades – Phase 3: Standby Power Generation Upgrade (July 2011), Including Appendices
- Emergency Telephone List – Wastewater Utility
- Wastewater Utility Spill Response Plan, Standard Operating Procedure # 3 SC
- Environmental Services, Wastewater Utility Safe Work Practice #1 DP – WWTTP Emergency Response and Evacuation Plan
- Environmental Services, Wastewater Utility #7 DP – Worksite Emergency Response Procedure
- Wastewater Treatment Plant Flood Risk Mapping
- Wastewater Treatment Plant Door Sill Elevations – Calculated Elevations to Build Sandbag Dams

#### *Citizen Engagement*

- Miscellaneous Water, Wastewater and Stormwater Brochures
- News Release and Poster for World Water Day in Red Deer

#### *Customer Relationship Management*

- Utility Billing Account Forms
- Utility Bylaw 3464-2011
- Miscellaneous Water, Wastewater and Stormwater Brochures
- Lead Services Insert
- News Release on Lead Service Line Testing
- Backflow Prevention Brochure
- Water Treatment Plant Process Illustration Draft 4 (March 6, 2012)

*Partnerships and Stakeholder Relations*

- Minutes of EL&P and Water Treatment Plant Coordination Meeting (March 10, 2011)
- Minutes of EL&P and Wastewater Treatment Plant Coordination Meeting (March 14, 2011)

*Regional and Other Integrated Planning*

- Water Supply Agreement between Red Deer County and the City of Red Deer
- Water Supply Agreement between North Red Deer Water Services Commission and the City of Red Deer
- South Region Wastewater Agreement between the South Red Deer Regional Wastewater Commission and the City of Red Deer, February 21, 2012
- South Red Deer Regional Wastewater System Alignment Map

*Performance Monitoring and Reporting*

- 2009 AECOM Public Benchmarking Report
- 2010 AECOM Benchmarking Initiative Comprehensive Results for Red Deer
- 2006 to 2010 AECOM Benchmarking Data Sheets
- National Water and Wastewater Benchmarking Initiative Overview Presentation (November 18, 2010)

*Regulatory Compliance and Reporting*

- Alberta Environment Standards and Guidelines for Municipal Waterworks, Wastewater and Storm Drainage Systems
- 2011 Waterworks Annual Report, Environmental Services Approval # 1092-02-00
- 2011 Annual Water Use Return – File Number 298
- Alberta Environment Water Conservation Objective – Establishment of Red Deer River Sub-Basin Water Conservation Objectives
- Waterworks Monthly Report – Environmental Services Approval #1092-02-00 (January, February and March, 2012)
- Red Deer Wastewater Utility 2011 Annual Report Presented to Alberta Environment
- Alberta Environment Guide to Regulatory Requirements for Municipal and Domestic Wastewater
- Biosolids Land Application Letter of Authorization No. 1091-11349
- 2011 WWTP Summary of Approval Contraventions Reported to Alberta Environment

*Financial Reporting*

- The City of Red Deer 2011 Annual Financial Report
- Environmental Services 2011 Departmental Representation Letter
- Financial Reporting Cycle Times



## **Appendix C**

### **Interview Participants**



### Appendix C Interview Participants

City Functions and Departments			
<i>Role</i>	<i>Name</i>	<i>Phone</i>	<i>Email</i>
Financial Services Manager	Dean Krejci	403-342-8204	dean.krejci@reddeer.ca
Acting Director of Corporate Services / IT Services Manager	Dan Newton	403-342-8283	dan.newton@reddeer.ca
Director of Development Services	Paul Goranson	403-342-8162	paul.goranson@reddeer.ca
Division Controller	Karen Yetter	403-342-8734	karen.yetter@reddeer.ca
Corporate Strategist	Lisa Perkins	403-342-8738	lisa.perkins@reddeer.ca
Engineering Services Manager	Frank Colosimo	403-342-8168	frank.colosimo@reddeer.ca
Divisional Strategist	Darren Kuz	403-342-8265	darren.kuz@reddeer.ca
HR Consultant	Christine Rowland	403-356-8972	christine.rowland@reddeer.ca
Public Works	Greg Sikora	403-342-8241	greg.sikora@reddeer.ca
Parks Superintendent	Trevor Poth	403-342-8372	trevor.poth@reddeer.ca
Corporate Controller	Jo-Anne Rogers	403-309-9587	joanne.rogers@reddeer.ca
Divisional Strategist	Jeremy Bouw	403-356-8943	jeremy.bouw@reddeer.ca
Environmental Services			
<i>Role</i>	<i>Name</i>	<i>Phone</i>	<i>Email</i>
Manager	Tom Warder	403-342-8755	tom.warder@reddeer.ca
ES Office Supervisor	Shelley Masciangelo	403-342-8752	shelley.masciangelo@reddeer.ca
Water Superintendent	Randy Reaman	403-342-8374	randy.reaman@reddeer.ca
Wastewater Superintendent	Geoff Stewardson	403-342-8756	geoff.stewardson@reddeer.ca
Water Treatment Plant Supervisor	Smiley Douglas	403-342-8369	smiley.douglas@reddeer.ca
Distribution Supervisor	David Jaburek	403-342-8334	david.jaburek@reddeer.ca
Wastewater Treatment Plant Supervisor	Barry Tee	403-342-8251	barry.tee@reddeer.ca
Lead Operator – Wastewater Collection	Brian Stevens	403-309-8459	brian.stevens@reddeer.ca
Construction and Maintenance Superintendent	Ron Wardner	403-342-8242	ron.wardner@reddeer.ca
Planning Superintendent	Terry Prince	403-342-8753	terry.prince@reddeer.ca
ES Initiatives Supervisor	Nancy Hackett	403-342-8751	nancy.hackett@reddeer.ca
Water Utility Performance Reporting Coordinator	Nathalie Viau	403-314-5895	nathalie.viau@reddeer.ca
External Stakeholders and Partners			
<i>Role</i>	<i>Name</i>	<i>Phone</i>	<i>Email</i>
Alberta Environment	Pervez Sunderani	403-340-7742	pervez.sunderani@gov.ab.ca
North Regional Water Commission	Mike Minchin	403-782-1253	mminchin@lacombe.ca
South Red Deer Water Commission	Dale Withage	403-586-0085	dwithage@srdwrc.com





## **Appendix D**

### **Interview Guide – City of Red Deer**



## **Appendix D Water and Wastewater VFM Interview Guide – City of Red Deer**

*Note: Individuals were asked selected questions from the following guide depending upon their role and level of knowledge / involvement in specific areas of the Water and/or Wastewater utilities*

### ***Roles and Responsibilities***

- 1 What is your role and what are your primary responsibilities as they pertain to the Water and/or Wastewater Utilities?

### ***1 Strategic Design and Alignment***

#### ***1.1 Strategic and Business Planning***

- 2 How does the utility carry out strategic and business planning? *Does the process follow a recognized methodology and include all required parties? Are important issues and trends in the environment identified and incorporated into planning (i.e. through environmental scans or SWOT analyses)? Does the utility have a history of being able to adapt or respond successfully to changing needs, circumstances, etc.?*
- 3 What are the key priorities and business goals? *Do plans provide clear and appropriate direction and prioritize activities? Are plans linked to operating and capital budgets so they have the resources to be implemented?*
- 4 What is working well and what could be improved in the way the utility carries out strategic and business planning?
- 5 What are the key challenges and opportunities facing the utility in this area moving forward?

#### ***1.2 Sustainability Planning***

- 6 How does the utility undertake sustainability planning? *Does the process follow a recognized methodology and include all required parties? Are plans linked to operating and capital budgets so they have the resources to be implemented? Are secondary impacts (social, economic, financial, environmental, governance, etc.) that the utility's activities, products, or services could have on customers, key stakeholders, related organizations and programs, and/or the community at large understood, explained, monitored and addressed?*
- 7 What are the sustainability priorities and goals? *Do sustainability plans provide clear and appropriate direction and prioritize activities?*
- 8 What is working well and what could be improved in the way the utility carries out sustainability planning?
- 9 What are the key challenges and opportunities facing the utility in this area moving forward?



### **1.3 Enterprise Risk Management**

- 10 How does the utility undertake enterprise risk management? *Does the process follow a recognized methodology and include all required parties? Do the plans provide clear and appropriate direction and prioritize activities?*
- 11 What are the key enterprise risks facing the utility? *Has both the potential likelihood and impact of risks been evaluated? Have mitigation strategies been developed and implemented for key risks? Are mitigation strategies linked to operating and capital budgets so they have the resources to be implemented?*
- 12 What is working well and what could be improved in the way the utility carries out enterprise risk management?
- 13 What are the key challenges and opportunities facing the utility in this area moving forward?

### **1.4 Revenue and Rate Approach**

- 14 How is the utility funded? How does it generate revenue?
  - a What is the utility's overall rate setting philosophy? *Does the rate design facilitate the rate philosophy? (e.g. rates are equitable given different customer classes and they support desired outcomes such as conservation)*
  - b Does the utility follow the standard utility rate model? *Does the rate setting approach reflect a strong understanding of the relationship between utility costs and utility services provided?*
  - c How does the utility determine its annual revenue requirement? *Does the calculation include all relevant requirements such as reserves and dividends?*
- 15 What is working well and what could be improved in the utility's revenue and rate approach?
- 16 What are the key challenges and opportunities facing the utility in this area moving forward?

### **1.5 Budgeting and Capital Planning**

- 17 How does the utility carry out budgeting and capital planning?
 

*Do budgets provide clear and appropriate direction? Are there appropriate levels of both oversight and delegation of authority, so budgets are both accountable and reflective of business unit requirements? Are the systems used to develop and manage the operating and capital budgets accurate and user friendly?*

*Does the process for developing the long term capital plan follow a recognized methodology and include all required parties? Does the capital plan include an effective prioritization process?*
- 18 What is working well and what could be improved in the way the utility carries out budgeting and capital planning?
- 19 What are the key challenges and opportunities facing the utility in this area moving forward?

## **2 Management and Execution**

### **2.1 Service Lines and Programs**

- 20 What are the utility's main service lines and programs? *Are these operating within an approved mandate? Are they relevant to achieving the utility's goals and objectives? Are the rationale, goals and objectives of various services and programs known? Is the potential for discontinuing, changing, evolving or starting various services lines and programs considered regularly?*
- 21 Have core service delivery priorities been formalized? *Are goals and priorities measurable and have they been evaluated?*



- 22 How many customers or clients does the utility serve? *Has the utility evaluated its service area to determine if contraction or expansion would be beneficial? Has the utility explored new and innovative ways to improve efficient use of infrastructure and the customer experience?*
- 23 Does the utility have formalized service levels or service level agreements? *Has the utility evaluated the contract services it provides (if applicable) to determine if they are being provided effectively and efficiently and meeting customer needs?*
- 24 What is working well and what could be improved in the utility's service lines and programs?
- 25 What are the key challenges and opportunities facing the utility in this area moving forward?

## **2.2 Organization Structure and Staffing**

- 26 How is the utility structured? *What are the units and sub-units and their functions? Is the utility's design appropriate for achieving its goals and objectives? Does the utility's design allow for appropriate levels of oversight and delegation? Is the decision making process clear and effective?*
- 27 How are corporate functions such as HR, IT, finance, procurement, billing, records management, and privacy and freedom of information etc. delivered? *Are these functions delivered or provided effectively and efficiently? Are internal service level agreements in place?*
- 28 Can you describe the utility's experience with the corporate shared services model?
- 29 Does the utility contract out any functions? If so, describe. *Are the methods of delivering services and programs (i.e. out-sourcing vs. in-sourcing, partnering) effective and efficient? Are service level agreements with contractors in place?*
- 30 What is working well and what could be improved in the utility's organization and staffing?
- 31 What are the key challenges and opportunities facing the utility in this area moving forward?

## **2.3 Employee Management**

- 32 How many employees does the utility have overall and by type (full time, part time, temporary, seasonal) and function? *Are staffing levels and breakdowns by level and function appropriate for achieving the utility's goals in an effective and efficient manner?*
- 33 What is the age breakdown of employees by level and function?
- 34 What are the typical working hours and the average workload in terms of standard and overtime hours? *Are the workloads of various staff appropriate for achieving timelines and quality, and are they sustainable in the long term? Does the utility have all the staff it needs in the right jobs to be efficient and effective?*
- 35 How does the utility carry out the main functions of employee management:
  - a Recruitment *Is the recruitment process effective by providing needed, qualified staff in a timely and efficient manner?*
  - b Roles and responsibilities (job descriptions) *Do staff know what is expected from them at work?*
  - c Performance management *Do staff receive appropriate feedback and recognition for their efforts? Is there a standard performance evaluation framework that is it followed and is it effective?*
  - d Compensation *Is compensation fair and in line with relevant comparators?*
  - e Professional development and training *Do staff have the required education / training for their jobs? Do staff have opportunities for training and learning that supports their development and effectiveness?*
  - f Succession *Does the utility have a succession strategy that is clear and effective?*
- 36 Are staff performing to stated and agreed expectations?



- 37 What is working well and what could be improved in the way the utility carries out employee management?
- 38 What are the key challenges and opportunities facing the utility in this area moving forward?

## **2.4 Working Environment**

- 39 How would you describe the utility's culture and the employee experience? *Is the culture conducive to achieving goals and objectives? Does the utility support change through communication, transparency, clarity, training, planning and other required supports?*
- 40 What are the utility's approaches to ensuring a positive and healthy work environment? *Does the utility actively recognize and promote a healthy workplace?*
- 41 What is the utility's approach to safety?
- 42 What is working well and what could be improved in the utility's working environment?
- 43 What are the key challenges and opportunities facing the utility in this area moving forward?

## **2.5 Operations and Maintenance Planning and Execution**

- 44 How does the utility carry out operations and maintenance planning? *Are these activities carried out according to required and recommended policies, guidelines, standards or specifications? Are staff aware of these policies, guidelines, standards or specifications and is compliance monitored?*
- 45 What systems are in place?
- 46 How does this planning flow through to execution? *How well does the utility respond to changes in its operating environment? Has the utility explored innovative ways to manage or delivery products and services?*
- 47 How does the utility carry out project management? *Does the utility follow a standard and consistent approach to project management? Are there processes and/or systems in place for project management and do they effectively facilitate this function?*
- 48 What is working well and what could be improved in the way the utility carries out operations and maintenance planning and execution?
- 49 What are the key challenges and opportunities facing the utility in this area moving forward?

## **2.6 Financial Management and Rate Model**

- 50 How does the utility undertake financial management to manage and administer revenues and expenses? *Does the utility engage in regular cost of service studies?*
- 51 What are the utility's key financial policies and internal controls?
  - a How does the utility determine the rates to be charged for distribution and collection? What are the current rates, by customer class?
  - b How does the utility determine the exact costs that need to be accounted for in the rate model?
  - c How does the utility determine the split between fixed and variable charges? What is the current split?
  - d How does the utility determine the rate of return on rate base or equity that it will use? What is the current rate?
  - e How does the utility determine if it will take on debt? What is the current debt level? *Is the process for the utility to take on debt sufficiently understandable, transparent and consistent?*
  - f How does the utility determine the debt-to-equity ratio? What is the current ratio?



- g How does the utility determine operating and capital reserves? What is the current structure and levels? *Does reserve management reflect realistic future operating and capital needs, and is it based on comprehensive infrastructure integrity assessments?*
- h How does the utility determine the dividends to be paid? What is the current policy?
- i How does the utility determine the local area franchise fee that customers will pay?
- j How does the utility carry out asset accounting and account for depreciation?
- 52 What is working well and what could be improved in the way the utility carries out financial management?
- 53 What are the key challenges and opportunities facing the utility in this area moving forward?

## **2.7 Infrastructure and Asset Management**

- 54 What are the utility's key capital and other assets, broken down by categories? *Does the utility carry out comprehensive infrastructure integrity assessments? Is there an effective program for maintaining, refurbishing, replacing and upgrading infrastructure? Is inventory managed efficiently and effectively?*
- 55 How does the utility carry out asset management? *Are there processes and/or systems in place for asset management and do they effectively facilitate this function?*
- 56 What is working well and what could be improved in the way the utility carries out asset management?
- 57 What are the key challenges and opportunities facing the utility in this area moving forward?

## **2.8 Operating Risk and Business Continuity**

- 58 What is the utility's approach to managing operating risk and business continuity? *Is the process for developing emergency plans and/or business continuity plans effective?*
- 59 What are the key operating risks facing the utility? *Has the utility identified significant financial, organizational and employee operating risks? Does the utility understand the risk of impairment or loss of its key assets? Have mitigation strategies been developed and implemented? Does the utility have effective corporate and site security in place?*
- 60 What is working well and what could be improved in the way the utility manages operating risk and business continuity?
- 61 What are the key challenges and opportunities facing the utility in this area moving forward?

## **3 Citizen, Customer and Stakeholder Engagement**

### **3.1 Citizen Engagement**

- 62 What is the utility's overall approach to engaging with citizens in general? *Does the utility know the expectations of its citizens and understand the basis for these expectations? Are citizen concerns and priorities taken into consideration during planning and execution? Does the utility evaluate citizens' satisfaction with its services and programs, and does it achieve good results?*
- 63 Does the utility undertake any regular or one-off citizen engagement initiatives?
- 64 What is working well and what could be improved in the way the utility carries out citizen engagement?
- 65 What are the key challenges and opportunities facing the utility in this area moving forward?





### **3.2 Customer Relationship Management**

- 66 Who are the utility's customers and clients? *Does the utility know the expectations of its customers and understand the basis for these expectations?*
- 67 Does the utility have a formal customer relationship management (CRM) system?
- 68 What customer and client management activities does the utility engage in? *Are customer concerns and priorities taken into consideration during planning and execution? Does the utility evaluate customer satisfaction with its services and programs, and does it achieve good results?*
- 69 What is working well and what could be improved in the way the utility carries out customer relationship management?
- 70 What are the key challenges and opportunities facing the utility in this area moving forward?

### **3.3 Partnerships and Stakeholder Relations**

- 71 Who are the utility's key partners and stakeholders? *Does the utility know the expectations of its partners and key stakeholders and understand the basis for these expectations?*
- 72 What is the utility's overall approach to engaging partners and stakeholders? *Are partner and stakeholder concerns and priorities taken into consideration during planning and execution?*
- 73 What partnership and stakeholder relation activities does the utility engage in? *Does the utility evaluate partner and stakeholder satisfaction with its services and programs, and does it achieve good results?*
- 74 What is working well and what could be improved in the way the utility carries out partnerships and stakeholder relations?
- 75 What are the key challenges and opportunities facing the utility in this area moving forward?

### **3.4 Regional and Other Integrated Planning**

- 76 Does the utility engage in any regional or similar integrated planning? *Are regional issues and priorities taken into consideration during planning and execution?*
- 77 Who are the utility's key regional partners? *Does the utility know the expectations of its regional partners and understand the basis for these expectations?*
- 78 What is working well and what could be improved in the way the utility carries out regional and other integrated planning?
- 79 What are the key challenges and opportunities facing the utility in this area moving forward?

## **4 Monitoring, Measurement and Results**

### **4.1 Performance Monitoring and Reporting**

- 80 How does the utility carry out performance monitoring and reporting? *Does the utility have a formal performance management system in place? Does the utility assess its overall effectiveness and efficiency in carrying out its activities?*
- 81 What are the key measures and metrics that the utility monitors and reports on?
- 82 What financial metrics are tracked?
- 83 Have stated strategic and operational goals and objectives been achieved? *Does the utility monitor and report on its progress towards achieving its strategic and operational goals and objectives? Does management receive complete, credible and fair information that satisfies its decision making and accountability requirements?*





- 84 What is working well and what could be improved in the way the utility carries out performance monitoring and reporting?
- 85 What are the key challenges and opportunities facing the utility in this area moving forward?

#### ***4.2 Regulatory Compliance and Reporting***

- 86 Does the utility engage in any regulatory compliance and reporting? If so, what type and how is it carried out?
- 87 What is working well and what could be improved in the way the utility carries out regulatory compliance and reporting?
- 88 What are the key challenges and opportunities facing the utility in this area moving forward?

#### ***4.3 Financial Reporting***

- 89 How does the utility carry out financial reporting?
- 90 What is working well and what could be improved in the way the utility carries out financial reporting?
- 91 What are the key challenges and opportunities facing the utility in this area moving forward?

#### ***Other Comments***

- 92 If you could just change one thing in Water / Wastewater / Environmental Services that would make a big positive impact, what would it be?
- 93 Do you have any other comments or questions?



## **Appendix E**

### **Interview Guide – External Stakeholders**



### **Appendix E Water and Wastewater VFM Interview Guide - External Stakeholders**

1. What is your organization's relationship with the Water / Wastewater utility? What services do you provide to them or they to you, and what information do they provide to you or you to them?
2. How would you characterize the current relationship? Does the utility provide you with what you need in a timely manner to the level of detail required? Are staff responsive to requests? Are they knowledgeable? Are they professional?
3. Does the utility work actively and consistently with you to understand your organization's needs and expectations? Is there good two-way communication?
4. [**Regional Partners Only**] What are your projected capacity needs in terms of the Red Deer water / wastewater system?
5. [**Regional Partners Only**] How are rates (costing) arrived at?
6. What would you say are the utility's biggest strengths when dealing with you? What do they do really well?
7. What would you say are the biggest challenges the utility has when dealing with you? What could they do better?
8. Are you aware of how well the utility is performing? Financially? Operationally? Environmentally? In relation to customers?
9. [**Regulator Only**] How well has the utility been performing in terms of compliance with its license?
10. Do you see any big challenges or risks for the utility going forward overall? What things do you think they need to address going forward, in order to be a high functioning, sustainable utility?
11. [**Regulator Only**] Are there any regulatory changes coming up that could impact the utilities in terms of processes, finances, etc.?
12. Do you see your organization's relationship and level of interaction with the utility staying the same, growing or declining in the future? Why?
13. Do you have any other comments or any questions for us?



## **Appendix F**

### **Summary of Interview Feedback and Documents Reviewed**

## Appendix F Summary of Interview Feedback and Documents Reviewed

Business Sphere	Business Attribute	Interview Feedback	Documents & Information
1.Strategic Design and Alignment	1.1. Strategic and Business Planning	<p><i>Service Plans</i></p> <ul style="list-style-type: none"> <li>Each department submits a Service Plan (Water and Wastewater are included in the Environmental Services (EVS) departmental Service Plan).</li> <li>Each area within the department creates its own plan and these are condensed into the overall department Service Plan. This is seen to be a very collaborative process within the department.</li> <li>Operational staff are aware of the Service Plan / City-wide strategic plan, but often do not feel that this directly connects to or guides their work in any way.</li> </ul> <p><i>Master Plans</i></p> <ul style="list-style-type: none"> <li>The plants have master planning documents which serve as a framework for planning but these don't flow through to the overall strategic plan.</li> </ul> <p><i>Council</i></p> <ul style="list-style-type: none"> <li>There are policy statements around the utility principles, but they are not ranked or prioritized, and there are different perspectives among Councillors (e.g. some do not feel that water should provide a return at all, some want conservation above all else, etc.).</li> <li>There is no "Utility Committee" so there can be different opinions and levels of understanding.</li> <li>Education of council seems to be really important – make sure they're aware of the multiple (often conflicting) roles they play with respect to the utilities (i.e. shareholder of the corporation, regulator of the utility, and representative of the citizens and customers)</li> <li>Council has been tasked with developing mandate statements for each department to identify high level outcomes and service level benchmarks</li> </ul>	<ul style="list-style-type: none"> <li>Red Deer City Council Strategic Direction 2011</li> <li>Environmental Services 2011 Departmental Representation Letter</li> <li>Environmental Services Department Proposed Service Plan 2012-2014</li> <li>List of Water Utility Operating Plans and Guide to Creating Operating Plans</li> <li>City of Red Deer Wastewater Treatment Plant Master Plan, February 2009</li> <li>City of Red Deer Wastewater Treatment Plant Master Plan Updates, Upgrading and Expansion, Upgrade Phasing, October 2008</li> </ul>

Business Sphere	Business Attribute	Interview Feedback	Documents & Information
		<p><i>Management</i></p> <ul style="list-style-type: none"> <li>The City holds a monthly Operational Leadership Team (OLT) meeting that includes all department managers – this helps everyone to understand and be aware of what's going on in the different departments and sections</li> </ul>	
	1.2. Sustainability Planning	<p><i>Environmental Master Plan (EMP)</i></p> <ul style="list-style-type: none"> <li>Environmental Master Plan guides sustainability planning.</li> <li>Water utility also has the Water Conservation Plan</li> <li>The utilities were heavily involved in the development of the water/wastewater section of the EMP in terms of setting targets and coming up with actions to achieve them. Wastewater is currently undertaking a river monitoring study to establish baselines, metrics and targets for their area in the EMP.</li> </ul> <p><i>Service Plans</i></p> <ul style="list-style-type: none"> <li>As part of the 2013 Service Plan, the utilities will be required to provide examples of outcome-based / benchmarked measures for each action identified in the department service plan, and what these measures indicate.</li> <li>AMI has been deferred indefinitely due to cost. This may be reconsidered in the future but likely only if provincial regulation requires it.</li> </ul> <p><i>Conservation Programs</i></p> <ul style="list-style-type: none"> <li>Conservation programs include low-flow toilet program, rain barrel program</li> </ul> <p><i>Conservation and Rates</i></p> <ul style="list-style-type: none"> <li>New rate model will likely have a higher proportion of consumption vs. fixed rates compared to the current approach, which is expected to also help promote conservation</li> <li>Conservation is a real issue, but there is a certain minimum revenue stream that the City needs to ensure infrastructure is maintained and expansions can occur. A break-even situation is ok, but the City is really expanding and services have to be able to grow along with this. However, the idea is that conservation should allow the</li> </ul>	<ul style="list-style-type: none"> <li>City of Red Deer Environmental Master Plan</li> <li>Miscellaneous Water, Wastewater and Stormwater Brochures</li> <li>Water Conservation Program Information (City of Red Deer, Water Section Website)</li> <li>City of Red Deer, Environmental Services – Water Conservation Strategy (September 2007)</li> <li>News Release and Poster for World Water Day</li> </ul>

Business Sphere	Business Attribute	Interview Feedback	Documents & Information
		City to defer capital construction (i.e. lower demand on the current system means existing infrastructure and capacity will be sufficient for longer)	
	1.3. Enterprise Risk Management	<p><i>Water Utility</i></p> <ul style="list-style-type: none"> <li>The province enacted legislation requiring municipalities to establish a drinking water safety plan by 2015 (provided a template and each utility needs to assess their attributes in each area, identify risks and determine whether or not the risks are under control) – includes distribution and treatment. Goal is to have this completed by the end of 2012</li> <li>Water utility also has an environmental risk plan that has been developed internally – risks are rated on frequency, severity, whether or not they are regulated, controllability, and probability</li> </ul> <p><i>Corporate Approach</i></p> <ul style="list-style-type: none"> <li>The City has established a “Security Resource Team” that includes representation from across the City, including Water and Wastewater – will be setting standards and guidelines and setting up an incident reporting hotline</li> </ul> <p><i>High Level Risks</i></p> <ul style="list-style-type: none"> <li>Aging workforce and pending retirements are seen to be a big risk to the utilities – will be losing “150 years of experience over the next three years”</li> <li>Regionalization could be a risk – puts pressure on the City’s debt limit as the City incurs the debt to increase capacity. There are grants available but there is a risk that the City will not end up receiving the full amount requested.</li> </ul>	<ul style="list-style-type: none"> <li>City of Red Deer Corporate Administrative Policy 5310-CA: Risk Management</li> <li>Alberta Environment and Sustainable Resource Development Drinking Water Safety Plan guidance documents and template</li> </ul>
	1.4. Revenue and Rate Approach	<ul style="list-style-type: none"> <li>The utilities are entirely self-funded – all revenue generated through rates and no tax support / subsidization</li> </ul> <p><i>Rate Approach</i></p> <ul style="list-style-type: none"> <li>Goal is to have rates that are defensible, equitable, incentive conservation, uses the utility basis for setting rates (not the cash basis), support a self-sustaining utility, and reflect causation (i.e. those who cause the cost get charged for it) – some of these are not currently in practice (e.g. incentive conservation) but are part of the rate</li> </ul>	<ul style="list-style-type: none"> <li>Draft Recommendations for Utility Fiscal Policies (part of the Utility Rate Model Review) – May 2012</li> <li>No. 3464/2011 – Utility Bylaw Schedules Effective March 1, 2012</li> </ul>



Business Sphere	Business Attribute	Interview Feedback	Documents & Information
		<p>model review.</p> <ul style="list-style-type: none"> <li>• Under the old model, rate setting philosophy centred around minimizing debt, maximizing the use of reserves, and right-sizing the capital program (by revisiting it every year).</li> <li>• Council has expressed a desire for the utilities to better link consumption to rates</li> <li>• There are multiple rate principles but they have not been prioritized and are sometimes conflicting so the utilities have to “optimize” them as best as they can</li> <li>• Revenue requirement is based on prior consumption, growth forecasting, regional customer growth projections, capital program (including inflation), depreciation, dividends, etc. Contributed assets do not factor into rates at all.</li> </ul> <p><i>Rate Model Review</i></p> <ul style="list-style-type: none"> <li>• Water and Wastewater are participating in the utility rate model review underway in the City.</li> <li>• This includes revamping the rate model and will change the way allocations are done – more based on actual cost drivers than the old model, which used some surrogates for allocation.</li> <li>• The rate structure for Water is expected to be fairly similar to the current approach, but likely weighted somewhat more on consumption fees and less on fixed fees.</li> <li>• Wastewater fees are expected to move toward the Water model of being partially fixed and partially usage rather than the current practice of being all fixed (residential) or all usage (commercial).</li> <li>• The new rate model will likely include a provision for a capital levy</li> </ul>	
	1.5. Budgeting and Capital Planning	<p><i>Budget Process</i></p> <ul style="list-style-type: none"> <li>• The budgeting process is pretty collaborative, with advice / feedback from operational staff taken into consideration for things like labour and resources required to accomplish goals.</li> <li>• Guidelines are provided by Financial Services so the process is the same for all City departments.</li> <li>• Once a draft is prepared in the department, the manager meets with the divisional</li> </ul>	<ul style="list-style-type: none"> <li>• 2012 to 2014 City of Red Deer Operating Budget</li> <li>• 2012 to 2021 City of Red Deer Capital Plan</li> <li>• 2012 Budget Fast Facts</li> <li>• 2006-2011 Operating and Capital Budget / Actual Summary</li> <li>• 2012 Capital Budget Request</li> </ul>

Business Sphere	Business Attribute	Interview Feedback	Documents & Information
		<p>controller and director to review / refine (this is an iterative process) and then the budget is reviewed with all others by the City Manager in September before it goes to Council in November.</p> <ul style="list-style-type: none"> <li>• The EVS office supervisor is seen to be very helpful in supporting the budgeting process for utility staff</li> <li>• Do a ten-year infrastructure maintenance projection, but this isn't integrated into an overall plan</li> <li>• The budgets / capital plans are currently prepared using Excel, and this model is updated by Financial Services and sent out to everyone but it is difficult to ensure that everyone is using the most current version.</li> </ul> <p><i>Capital Planning</i></p> <ul style="list-style-type: none"> <li>• Capital planning is mostly based on the Treatment Plant master plans prepared by external consultants and updated every ten years or so (Water last updated in 2006, Wastewater in 2009).</li> <li>• There is also a master plan for the pumping stations.</li> <li>• Prepare a ten-year capital plan that is built on prior year and incorporates new projects. This plan also identifies funding sources (e.g. reserves, grants, debt, etc.)</li> <li>• The utilities are often not able to complete all capital projects in the years they are included in the budget. There is a need to be more realistic about what can really be accomplished during a given year.</li> <li>• The capital plan doesn't break out the reason for the work (e.g. growth, upgrading, replacement, regulatory, etc.). Growth is typically done by developers so this is not typically part of the utilities' budgets.</li> <li>• Phase 3 of the WTP upgrade is for compliance (stopping the side-stream currently produced by the treatment process).</li> <li>• Upgrades for the WWTP are all related to capacity increases (no regulatory / compliance)</li> <li>• There is some perception that capital planning sometimes results in building more capacity than is currently needed – anticipating significant growth.</li> <li>• The capital program has been quite heavy, which has driven rates up (needed to</li> </ul>	<ul style="list-style-type: none"> <li>• 2013 Enterprise Business Planning Manual (Financial Services Budget Guidelines)</li> <li>• Budget Preparation Schedule (2013)</li> <li>• Financial and Rate Model – Reserves Forecast</li> <li>• Capital Projects Schedule, 2012 to 2015</li> <li>• Water Treatment Plant 2012 and 2013 Planning Budget Spreadsheets</li> <li>• Wastewater Treatment Plant 2012 Planning Budget Spreadsheet</li> </ul>

Business Sphere	Business Attribute	Interview Feedback	Documents & Information
		<p>ensure reserves are adequate to meet capital needs within exceeding debt limits).</p> <ul style="list-style-type: none"> <li>• Need to revisit the life-expectancy numbers for some of the older infrastructure because some pieces may not be lasting as long as originally anticipated, this needs to be updated in the Hansen / asset management systems to ensure appropriate maintenance and replacement scheduling</li> <li>• The EVS Planning group is seen to be effective in managing capital projects within the plants</li> </ul>	
2.Management and Execution	2.1. Service Lines and Programs	<ul style="list-style-type: none"> <li>• Water utility provides distribution and treatment</li> <li>• Wastewater utility provides collection and treatment</li> </ul> <p><i>Utility Billing</i></p> <ul style="list-style-type: none"> <li>• Utility Billing is done through the Revenue and Assessment group under Corporate Services.</li> <li>• Deals with all billing, sets up new customer accounts, notifies utilities of service connections and disconnections.</li> <li>• Uses the Diamond system which the City is starting to outgrow. Diamond also doesn't integrate very well with Hansen, which results in the need to manually enter information from one system to the other.</li> </ul> <p><i>New Customers</i></p> <ul style="list-style-type: none"> <li>• The developer requests a permit from the Engineering department.</li> <li>• Once a permit is received, a third party plumber installs the line.</li> <li>• Utility billing then sets up the account and sends a work order to the Water utility to connect service.</li> <li>• The Water lead operator sends staff to install the valve and meter and turn on the water.</li> <li>• If it is a really large customer the developer installs the meter but the utility still installs the valve.</li> </ul> <p><i>Goals and Targets</i></p> <ul style="list-style-type: none"> <li>• Goals and priorities are measured and evaluated through license requirements and</li> </ul>	<ul style="list-style-type: none"> <li>• Information on Environmental Services Web Site</li> <li>• Bylaws Relevant to Water and Wastewater</li> <li>• No. 3464/2011 - Utility Bylaw</li> <li>• No. 3464/2011 – Utility Bylaw Table of Contents</li> <li>• No. 3464/2011 – Utility Bylaw Schedules Effective March 1, 2012</li> <li>• Service Area Map (Five-Year Historical Service Area)</li> <li>• Infrastructure (km by Type, Five-Year Historical)</li> <li>• Number of Customers (Five-Year Historical)</li> <li>• System Losses (Five-Year Historical)</li> </ul>

Business Sphere	Business Attribute	Interview Feedback	Documents & Information
		<p>regulatory reporting as well as benchmarking</p> <ul style="list-style-type: none"> <li>The plants track their electricity and natural gas usage and are looking for ways to reduce this as prices continue to rise</li> </ul> <p><i>Repairs and Maintenance</i></p> <ul style="list-style-type: none"> <li>The utilities inspect and identify issues and manage their operations by testing their assets (e.g. valves). If an issue is identified then it is flagged for Construction and Maintenance (C&amp;M) who does the majority of actual maintenance and repair work.</li> <li>Line replacement is coordinated with Public Works when they do road replacement, try to coordinate this as best as possible but doesn't always align.</li> </ul>	
	2.2. Organization Structure and Staffing	<p><i>Department / Section Interactions</i></p> <ul style="list-style-type: none"> <li>EVS used to be combined with Public Works department, but was split about four years ago. Continue to coordinate work to minimize road restoration and control costs.</li> <li>Planning section does all the planning and engineering for capital, processing/treatment (with support from external consultants for plants)</li> <li>Corporate Engineering group is more development-related – more involved in distribution and managing developer projects</li> <li>Some concern is expressed regarding the utilities having to rely upon other City departments (e.g. Construction and Maintenance, Public Works, Engineering, Inspections and Licensing, IT, etc.) to get work done, and that these functions do not always prioritize work in the way utilities would like it to be prioritized (i.e. there is not always agreement on the urgency of certain activities).</li> <li>It's hard for the utilities to know if they receive value for money for corporate services because there are no Service Level Agreements and therefore no way to judge performance objectively.</li> <li>The WWTP has an operator / IT person that provides IT support at the plant as well as at the Civic Yards. This operator reports directly to IT but also received direction from the utility. Both the utility and IT see this as a successful pilot / test of approaching this service through a crossover position.</li> </ul>	<ul style="list-style-type: none"> <li>Organizational Chart for the City of Red Deer</li> <li>Reporting Organizational Charts</li> <li>Work Group Functions</li> <li>Support Cost Allocations – 2012 Budget</li> <li>City of Red Deer 2011 Operating Fund Budget Summary (by Department)</li> <li>List of Contractors and types of service provided</li> <li>Water Utility HR Review Summary Report (September 11, 2008)</li> <li>Certification Organizational Charts for Wastewater</li> </ul>

Business Sphere	Business Attribute	Interview Feedback	Documents & Information
		<ul style="list-style-type: none"> <li>• IT currently has 4 or 5 people supporting Hansen but will begin reassigning most of these over the next year, leaving one Hansen support person</li> </ul> <p><i>Construction and Maintenance (C&amp;M)</i></p> <ul style="list-style-type: none"> <li>• Construction and Maintenance group is similar to Planning in that they are separate and offer service to multiple parties within EVS.</li> <li>• Their emphasis is on capital projects in addition to emergencies. C&amp;M does not report to the utility managers but does report to the department manager who also oversees the utilities.</li> <li>• Work done by C&amp;M is charged back to the utilities</li> <li>• Current C&amp;M staff are very experienced and this plays a significant role in the effectiveness of this function. There is concern about the number of staff in this group that are nearing retirement age and what will happen once all this historical experience and knowledge is lost.</li> </ul> <p><i>External Contractors</i></p> <ul style="list-style-type: none"> <li>• Most major construction is outsourced, but a lot of the water main replacements and service line connections and replacements are done internally.</li> <li>• Most engineering is outsourced (capital, plants, pumping stations).</li> <li>• Meter reading is outsourced to DataCo (through contract with Enmax – they read the electric and water meters at the same time)</li> </ul> <p><i>Utility Staffing</i></p> <ul style="list-style-type: none"> <li>• As the distribution system grows and this function takes on additional programs (cross-connections, increased hydrant inspection, etc.) staff resources are becoming more stretched</li> <li>• For the utilities, the staffing decision is a challenge. Council is used to dealing with departments where staffing costs comprise 80% of the department's cost, but for the utilities it's such a small component relative to the overall capital costs and one extra FTE is not going to have any noticeable impact on the rate. It's important to remain competitive and be mindful of costs, but there are some significant differences</li> </ul>	

Business Sphere	Business Attribute	Interview Feedback	Documents & Information
		<p>between the utilities and other City functions that need to be better communicated and understood.</p> <ul style="list-style-type: none"> <li>• Turnover has been higher for the past five years or so due to retirements and seasonal staffing turnover</li> <li>• The WWTP could benefit from a different mix of maintenance staff to allow the plant to more effectively plan around absences (e.g. sick, vacation, etc.)</li> </ul>	
	2.3. Employee Management	<p><i>Succession</i></p> <ul style="list-style-type: none"> <li>• Many of the operators in both plants are in the baby-boomer demographic (particularly in the WTP), so there has been a focus on finding younger operators. It has also been challenging to find operators with level 3 or 4 certification on the distribution and collection side (easier for the plants).</li> <li>• General policy is to promote from within, but there have been some challenges in ensuring that operational staff have the right skills and resources to be effective managers (need mentoring, online and field training).</li> <li>• There is no documented succession strategy, and this is recognized as an issue (especially in Water)</li> </ul> <p><i>Staff Planning</i></p> <ul style="list-style-type: none"> <li>• The WTP is manned all the time, while the WWTP is not staffed in the evenings or weekends.</li> <li>• The WTP has identified an opportunity to change the operator shift pattern to free up resources and reduce overtime. This will be piloted in the fall of 2012.</li> <li>• Overtime is managed pretty well as CUPE staff are paid double-time and exempt employees get straight time-in-lieu, but the utilities have to be responsive to emergencies like main breaks so this is not entirely controllable.</li> <li>• There is a general sentiment that the utilities are short of staff, and that existing staff get pulled onto a variety of projects that results in them not being able to dedicate their time to their main functions, which end up falling behind and then they need support and so on. This is a challenge when it comes to data collection and analysis as well as routine maintenance activities, which can be significantly delayed if</li> </ul>	<ul style="list-style-type: none"> <li>• Job Descriptions</li> <li>• Permanent Employees Age Plus Years of Service</li> <li>• Employee Wage Detail (2011)</li> <li>• Performance Review Schedule</li> <li>• Work Expectations and Review Worksheet (Employee Evaluation Template)</li> <li>• Employee Training and Availability History (Five-Year Historical)</li> <li>• Professional Development / Training policies</li> <li>• AECOM Data Reports: Number of FTE's and Hours Worked (Five-Year Historical)</li> <li>• Water Utility On-Call Hours, Stand-By Weeks and Stand-By Stats</li> <li>• Standby-hours – Union Collective Agreement Rules</li> </ul>

Business Sphere	Business Attribute	Interview Feedback	Documents & Information
		<p>capital projects take priority.</p> <p><i>Performance Reviews</i></p> <ul style="list-style-type: none"> <li>Both utilities do work planning and performance reviews with staff multiple times a year using City-templates.</li> <li>This process is generally seen to be effective and useful in determining goals and areas where staff require training or other types of support.</li> </ul>	
	2.4. Working Environment	<ul style="list-style-type: none"> <li>In general, people feel that the utilities are a good place to work.</li> <li>A respectful workplace policy has recently been implemented and the department has proven that it is willing to stand up for its staff</li> </ul> <p><i>Safety</i></p> <ul style="list-style-type: none"> <li>There are numerous safety policies and procedures, staff participate in safety meetings every week, SOPs and SWPs are monitored and updated as needed, and there is a safety award program for staff who demonstrate a consistent work-safe attitude</li> <li>There is no formalized incident reporting framework in the WTP – they are in the process of developing this but there is currently no central database or staff assigned to coordinate and monitor it.</li> </ul>	<ul style="list-style-type: none"> <li>City of Red Deer Corporate Safety Policies</li> <li>Emergency Management Bylaw</li> <li>City of Red Deer 2009 Employee Survey</li> <li>Employee Turnover Analysis, five-year historical</li> <li>Employee Absences, five-year historical</li> <li>Incident Assessment Template</li> <li>City of Red Deer Safety Incidents by Department</li> </ul>
	2.5. Operations and Maintenance Planning and Execution	<p><i>Planning</i></p> <ul style="list-style-type: none"> <li>The department manager holds weekly meetings with the supervisors from each section, and meets bi-weekly with the division director and other department managers to discuss Council initiatives and find out what other departments are doing. This is reported back to the supervisors in EVS.</li> </ul> <p><i>Water Utility</i></p> <ul style="list-style-type: none"> <li>In Water, summer activity is pre-planned in Hansen through the winter and spring, and then refined on a week-to-week basis during the summer as staff are given specific work to complete.</li> <li>There is also a daily work-order that lists customer complaints, issues identified in</li> </ul>	<ul style="list-style-type: none"> <li>Environmental Services 2012 Project Schedule</li> <li>Water Distribution Maintenance Plan</li> <li>Biosolids Application Summary, Lambourne Environmental Ltd. – 2011 Biosolids Land Spreading Final Report</li> </ul>



Business Sphere	Business Attribute	Interview Feedback	Documents & Information
		<p>previous inspections, etc.</p> <ul style="list-style-type: none"> <li>• Water utility is developing 13 operational plans, only one complete so far (uni-directional flushing)</li> <li>• Planning has really helped the distribution side to become more proactive in maintenance work, but WTP is still mostly reactive – this should begin to shift as operating plans are developed for the plant</li> </ul> <p><i>Wastewater Utility</i></p> <ul style="list-style-type: none"> <li>• The Wastewater utility coordinates operations around the summer season, so most planning is done annually and adjusted as activities are carried out during the summer</li> <li>• Most work is reactive (~60%) and the Hansen system supports the preventative maintenance program. Hansen is seen to work better for linear assets vs. plant assets, but they are making it work as well as possible</li> <li>• Collection system is inspected by CCTV and information is updated directly into the Hansen system where it is flagged for maintenance if required (this is a new system – they formerly had to enter all condition information into Hansen manually)</li> <li>• The power flushing process is still managed manually and updated in the Hansen system based on the experience of senior staff</li> </ul> <p><i>Systems and Procedures</i></p> <ul style="list-style-type: none"> <li>• There are financial procedures in place to guide purchasing, contracts, tender documents, RFPs, etc.</li> <li>• There are no documented project management procedures but this is typically done by the contract engineers and technologists, or staff are sent to project management training courses.</li> <li>• Within Hansen, assets are defined by maintenance need (i.e. if it needs maintenance it becomes “high priority”), which changes as issues are identified</li> <li>• The prioritization process is expected to improve as Hansen begins to be used more effectively as this will provide more accurate information about proactive maintenance planning</li> </ul>	

Business Sphere	Business Attribute	Interview Feedback	Documents & Information
		<p><i>Execution</i></p> <ul style="list-style-type: none"> <li>• C&amp;M is funded from the Utility budgets, so the utilities are not able to control a portion of their budget – this was suggested as an area where having a formalized service level agreement could be beneficial.</li> <li>• It was not necessarily seen to be preferable to have the maintenance function located within each utility, but that the relationships and communication were what is really important, and these have to be managed regardless of what section people are housed in</li> <li>• There is also some perception of misalignment between utility priorities and C&amp;M priorities (due to C&amp;M dealing with projects for multiple parties) – better communication is needed to support alignment of goals</li> </ul>	
	2.6. Financial Management and Rate Model	<p><i>Current Rate Model</i></p> <ul style="list-style-type: none"> <li>• The rate model supports debt management and rate projections (new model will continue to support this). The rate review project is a form of cost of service study, but the last COSS was done about ten years ago – continue to use the same template and just update costs each year</li> <li>• Regional customers pay based on their expected consumption (e.g. if they will consume 25% of the water they should pay 25% of the costs) as well as part of the treatment cost. The department is aware that the main and service lines are accounted for as one and that this means that regional customers may be partially subsidizing City customers, but the rate model review is examining this to make sure their costs are fair and equitable.</li> <li>• Cost allocation for City customers uses an equivalent meter calculation based on meter size. The rate model review is looking at cross-subsidization to ensure that costs are allocated in a way that makes them palatable and appropriate for all users.</li> <li>• The fixed charges were developed when the current rate model was first developed, and then rate increases were added to this without revisiting what fixed costs should be each year. This was based on the assumption that if consumption goes up then chemical and energy usage would increase as well.</li> </ul>	<ul style="list-style-type: none"> <li>• Draft Recommendations for Utility Fiscal Policies (part of the Utility Rate Model Review) – May 2012</li> <li>• Utility Rate Policy Review Presentation (February 27, 2012)</li> <li>• 2011 Operating Variance</li> <li>• Summary of Year-End Debt</li> <li>• Allowance for Doubtful Accounts</li> <li>• Debt to Equity Ratio</li> <li>• Financial and Rate Models</li> <li>• Financial Models</li> <li>• Rate Models</li> <li>• Capital Projects Tracking Schedules</li> <li>• 10 Year (2012-2022) Cash Flow and Reserve Balance Forecast</li> <li>• Cost of Service Analysis (COSA) Model</li> <li>• Dividends Paid to the City, five-year historical</li> </ul>

Business Sphere	Business Attribute	Interview Feedback	Documents & Information
		<p><i>Financial Management</i></p> <ul style="list-style-type: none"> <li>• Water and Wastewater both pay a regular dividend and the MCAF, neither has paid a special dividend</li> <li>• Billing and collections are managed in Revenue and Assessment</li> <li>• Financial Services has developed procedures for all financial matters, and the EVS accountant and division controller work closely with Financial Services to carry out this work.</li> <li>• Effective January 1, 2012, utility reserves were split into an operating (rate stabilization) reserve and a capital reserve. Developing specific policies around these reserves is part of the rate model review.</li> <li>• Dividends are currently 50% of the budgeted ROE, but this is also under review as part of the rate model review.</li> <li>• MCAF is 33% of distribution revenue (because it applies to all utilities and was originally developed for Atco / the electric utility where these revenues are clearly distinguished from other revenues), but the Water and Wastewater utilities do not track distribution revenue separately from treatment revenue, so this has to be estimated based on the allocation of expenses between the two components. The rate model review is looking at other options for calculating this.</li> <li>• Depreciation is driven by PSAB (the City adopted this in 2009).</li> <li>• For new developments, the City has to fund the arterial infrastructure (funded through debt) up-front, and then this is charged back to the developers over a period of ten years. This is referred to as "off-site debt", and it has an impact on overall City and utility debt levels which means that this money cannot be spent on other community assets.</li> </ul> <p><i>Rate Model Review</i></p> <ul style="list-style-type: none"> <li>• The new model will break out additional cost centres (currently have treatment, collection, distribution, pumping stations)</li> <li>• The superintendents of the Water and Wastewater utilities were not actively involved in the rate model review</li> </ul>	<ul style="list-style-type: none"> <li>• Reserve Balances, five-year historical</li> <li>• Water Treatment Plant 2013 Planning Budget Spreadsheet</li> <li>• Water Treatment Plant Project Schedule (May 1, 2012)</li> </ul>

Business Sphere	Business Attribute	Interview Feedback	Documents & Information
	2.7. Infrastructure and Asset Management	<ul style="list-style-type: none"> <li>• The Prior and Prior report gave the utilities a good snapshot of their existing infrastructure at the time and provided cost estimations for maintenance over the next hundred years.</li> <li>• Some concern has been expressed around the basis for capital expansion – capacity growth projections were based off older data that may no longer be appropriate, so there is some desire to move toward capital planning based on life-expectancy of existing assets rather than projected growth</li> <li>• Asset / equipment disposals are not always reported to finance for removal from the asset list, but some tools have been developed to help with this.</li> </ul> <p><i>Systems</i></p> <ul style="list-style-type: none"> <li>• The Asset Analytics system (CityWide) rolls up both the asset management and work management pieces for capital planning. A lot of the data is GIS related which allows them to look at the assets as smaller components to better understand historical and replacement costs. This is a total asset management system that includes every City asset.</li> <li>• The updating of the asset management system and the Hansen workflow / maintenance management system have really improved asset management by providing more information and facilitating better management decision-making. However, as these systems have only recently been implemented, the data output is still considered to be a work-in-process and not wholly representative of the actual state of the infrastructure. As more history accrues and the assumptions in the model are fine-tuned it is expected that this information will become more robust and reliable.</li> <li>• The department is developing an analytical tool (“Public Sector”) to analyze Hansen output and help the department better understand and manage assets going forward. This will run in parallel with the JD Edwards financial models (additions and disposals).</li> <li>• Utilities also use GIS data – this is extremely detailed</li> </ul>	<ul style="list-style-type: none"> <li>• 2011 Assets Added</li> <li>• Fixed Asset Total Cost by Asset Item as of December 31, 2011</li> <li>• Summary of Assets by Asset Code</li> <li>• Five-year historical km of pipe</li> <li>• Five-year historical square km of service area</li> <li>• City of Red Deer Corporate Administrative Policy 5004-CA – Enterprise Asset Management Program</li> <li>• Asset Management Plan – City of Red Deer – Asset Management Overview Report (Prior and Prior Associates)</li> <li>• Asset Management Plan – City of Red Deer – Asset Management Overview Report – Water and Wastewater Treatment Plants (Prior and Prior Associates)</li> <li>• Asset Management Plan – City of Red Deer – Asset Management Overview Report – Water, Wastewater &amp; Storm Networks (Prior and Prior Associates)</li> <li>• Water distribution infrastructure by diameter, age and type (2010)</li> <li>• Water Treatment Plant Conceptual Design Summary</li> <li>• Water Distribution Pumping Facilities Upgrade Report (June 2011), Including Appendices</li> <li>• 2005 Flood Aerial View of WWTP</li> </ul>

Business Sphere	Business Attribute	Interview Feedback	Documents & Information
			<ul style="list-style-type: none"> <li>• 2010 Capital Budget Briefing Note – Wastewater Treatment Plant Upgrade</li> <li>• Sanitary Utility Index Drawings – Lions Campground and Kinex Area</li> </ul>
	2.8. Operating Risk and Business Continuity	<ul style="list-style-type: none"> <li>• The utilities have good system redundancies (e.g. sewage lift station with electric pumps and natural gas backup generation, treatment plants have the ability to pump).</li> <li>• The Water utility has set up an Environmental Management Design Team that is exploring risks associated with different aspects of the utility (e.g. operator shifts at the WTP).</li> <li>• There has been some work done on a contingency plan should the WTP ever be unable to produce water, and while there is a rough water-rationing plan no overarching plan has been developed. The plant has redundant pumps and electrical generation but this would not last beyond 12 to 24 hours.</li> <li>• Water contamination is a big risk for distribution</li> <li>• The Wastewater utility has developed a disaster plan that is undergoing the approval process and is being used in the interim</li> <li>• WWTP sees a high level of inflow when there are heavy rains – could be a result of poor installation of sewer lines (e.g. no gasket between connections) or something to do with the water table, but they are looking into this to try to identify the cause(s).</li> </ul>	<ul style="list-style-type: none"> <li>• Emergency Management Bylaw</li> <li>• City of Red Deer Emergency Preparedness Corporate Administrative Policy 2209-CA – Rescue and Evacuation</li> <li>• Public Works Section, Civic Yards Site Emergency Response Procedure: Fire, Armed Intruder, Bomb Threat, Flood Gas Leak, Power Failure</li> <li>• City of Red Deer Corporate Procedure 4205-CP – Spill Response</li> <li>• Environmental Services Department, Water Distribution Section Emergency Response Procedure: Worksite Emergency &amp; Evacuation Plan</li> <li>• Environmental Services Section, Water Treatment Plant Emergency Response Procedure: Fire, Armed Intruder, Bomb Threat, Flood, Gas Leak, Power Failure, Chemical Leaks</li> <li>• Water Treatment Plant Redesign – CPTED Review</li> <li>• Memo Regarding Water Treatment Plant Security System Features</li> <li>• Technical Memorandum No. 10 – Water Treatment Plant Upgrades – Phase 3: Standby Power Generation</li> </ul>

Business Sphere	Business Attribute	Interview Feedback	Documents & Information
			<p>Upgrade (July 2011), Including Appendices</p> <ul style="list-style-type: none"> <li>• Emergency Telephone List – Wastewater Utility</li> <li>• Wastewater Utility Spill Response Plan, Standard Operating Procedure # 3 SC</li> <li>• Environmental Services, Wastewater Utility Safe Work Practice #1 DP – WWTP Emergency Response and Evacuation Plan</li> <li>• Environmental Services, Wastewater Utility #7 DP – Worksite Emergency Response Procedure</li> <li>• Wastewater Treatment Plant Flood Risk Mapping</li> <li>• Wastewater Treatment Plant Door Sill Elevations – Calculated Elevations to Build Sandbag Dams</li> </ul>
3.Citizen, Customer and Stakeholder Engagement	3.1. Citizen Engagement	<ul style="list-style-type: none"> <li>• The WTP offers school tours and tours to businesses and other larger groups</li> <li>• The WWTP no longer offers school tours due to safety concerns, but has some smaller tours and a kids group that comes one a year to test water at the plant and in the river</li> <li>• Both utilities participate in the City's Let's Talk initiative and have their own sections on the EVS department website</li> </ul>	<ul style="list-style-type: none"> <li>• Miscellaneous Water, Wastewater and Stormwater Brochures</li> <li>• News Release and Poster for World Water Day in Red Deer</li> </ul>
	3.2. Customer Relationship Management	<ul style="list-style-type: none"> <li>• The plants don't have much interaction with the public or customers – this primarily occurs on the distribution / collection side</li> <li>• Most (if not all) customer management is considered to be reactionary – customers call into the after-hours utility call centre or come/call into the office or Revenue and Assessment office with their concerns</li> <li>• The WWTP does a survey with all the communities that submit samples to the plant lab</li> </ul>	<ul style="list-style-type: none"> <li>• Utility Billing Account Forms</li> <li>• Utility Bylaw 3464-2011</li> <li>• Miscellaneous Water, Wastewater and Stormwater Brochures</li> <li>• Lead Services Insert</li> <li>• News Release on Lead Service Line Testing</li> </ul>

Business Sphere	Business Attribute	Interview Feedback	Documents & Information
		<p><i>Billing Services</i></p> <ul style="list-style-type: none"> <li>• Utility billing is looking at moving to a system where only owners (and not tenants) can set up utility accounts. This would be expected to result in a significant reduction in work and reduce non-payment, but it could be a political issue</li> <li>• Utility billing often acts as a first point of contact for customer questions. While they are often able to respond to questions they do not always have the technical information so they have to follow-up with the utilities and get back to the customer after.</li> </ul>	<ul style="list-style-type: none"> <li>• Backflow Prevention Brochure</li> <li>• Water Treatment Plant Process Illustration Draft 4 (March 6, 2012)</li> </ul>
	3.3. Partnerships and Stakeholder Relations	<ul style="list-style-type: none"> <li>• Epcor provides services to Red Deer County (Gasoline Alley and outlying areas)</li> </ul>	<ul style="list-style-type: none"> <li>• Minutes of EL&amp;P and Water Treatment Plant Coordination Meeting (March 10, 2011)</li> <li>• Minutes of EL&amp;P and Wastewater Treatment Plant Coordination Meeting (March 14, 2011)</li> </ul>
	3.4. Regional and Other Integrated Planning	<ul style="list-style-type: none"> <li>• There is not a large amount of interaction between the regions and the utilities, but for what interaction does occur both parties agree that it is effective and valuable</li> </ul> <p><i>Water Utility</i></p> <ul style="list-style-type: none"> <li>• Water utility takes the regional operations and maintenance needs into account during planning.</li> <li>• The WTP is in regular contact with the maintenance people in the regions as they need valves turned on or off (e.g. increasing flow to a reservoir to enable them to fight a wildfire)</li> </ul> <p><i>Wastewater Utility</i></p> <ul style="list-style-type: none"> <li>• There is more risk associated with regional partnerships on the Wastewater side because they can't control what wastewater is being put into the system and what long term impact this could have on the plant</li> <li>• The WWTP has been accepting a small amount of water from the Penhold region for a number of years, but this will be extended under the new agreement and is</li> </ul>	<ul style="list-style-type: none"> <li>• Water Supply Agreement between Red Deer County and the City of Red Deer</li> <li>• Water Supply Agreement between North Red Deer Water Services Commission and the City of Red Deer</li> <li>• South Region Wastewater Agreement between the South Red Deer Regional Wastewater Commission and the City of Red Deer, February 21, 2012</li> <li>• South Red Deer Regional Wastewater System Alignment Map</li> </ul>



Business Sphere	Business Attribute	Interview Feedback	Documents & Information
		<p>expected to begin toward the end of 2012.</p> <ul style="list-style-type: none"> <li>• Planning and coordination for this expansion is working well so far.</li> </ul>	
4. Monitoring, Measurement and Results	4.1. Performance Monitoring and Reporting	<ul style="list-style-type: none"> <li>• Performance monitoring and reporting is primarily comprised of quarterly and year-end variance reporting and results from the AECOM benchmarking (though this may not be reviewed or utilized to its full potential).</li> <li>• The utilities do not have a dashboard roll-up that indicates operational performance relative to identified targets.</li> <li>• The Service Plan does not currently include any performance measures, but this is expected to change as the City Manager's Office has engaged in a project to identify metrics for each department.</li> </ul> <p><i>Water Utility</i></p> <ul style="list-style-type: none"> <li>• Within the Water utility, performance monitoring and reporting has been improved and streamlined through the addition of the Performance Reporting Coordinator, but there is currently no formalized corresponding position in the Wastewater utility.</li> <li>• Water is treated to a higher level of quality than is required by regulation. This may appear to be a good thing from a customer's point of view but this has an impact on costs which in turn gets pushed down into rate increases.</li> </ul> <p><i>Wastewater Utility</i></p> <ul style="list-style-type: none"> <li>• The Wastewater utility engages in monthly budget meetings to track expenditures and variances and identify areas where they may be getting off track.</li> </ul>	<ul style="list-style-type: none"> <li>• 2009 AECOM Public Benchmarking Report</li> <li>• 2010 AECOM Benchmarking Initiative Comprehensive Results for Red Deer</li> <li>• 2006 to 2010 AECOM Benchmarking Data Sheets</li> <li>• National Water and Wastewater Benchmarking Initiative Overview Presentation (November 18, 2010)</li> </ul>
	4.2. Regulatory Compliance and Reporting	<ul style="list-style-type: none"> <li>• There have been no issues around regulatory compliance (there have been some contraventions e.g., residual chlorine too high, no fluoride in the water, etc. but nothing serious / life threatening).</li> <li>• The utilities are very diligent in ensuring quality meets all regulatory standards, and in reporting contraventions immediately.</li> <li>• The regulator feels that the relationship with Red Deer is very good; one of the best in the region</li> <li>• Water utility reports monthly and annually.</li> <li>• Wastewater reports annually but has to have the information available if it is</li> </ul>	<ul style="list-style-type: none"> <li>• Alberta Environment Standards and Guidelines for Municipal Waterworks, Wastewater and Storm Drainage Systems</li> <li>• 2011 Waterworks Annual Report, Environmental Services Approval # 1092-02-00</li> <li>• 2011 Annual Water Use Return – File Number 298</li> </ul>

Business Sphere	Business Attribute	Interview Feedback	Documents & Information
		<p>requested during the year</p> <ul style="list-style-type: none"> <li>• For Wastewater, the strongest link to AESRD is through Source Control, and both the regulator and the utility feel that this relationship is strong and positive.</li> </ul>	<ul style="list-style-type: none"> <li>• Alberta Environment Water Conservation Objective – Establishment of Red Deer River Sub-Basin Water Conservation Objectives</li> <li>• Waterworks Monthly Report – Environmental Services Approval #1092-02-00 (January, February and March, 2012)</li> <li>• Red Deer Wastewater Utility 2011 Annual Report Presented to Alberta Environment</li> <li>• Alberta Environment Guide to Regulatory Requirements for Municipal and Domestic Wastewater</li> <li>• Biosolids Land Application Letter of Authorization No. 1091-11349</li> <li>• 2011 WWTP Summary of Approval Contraventions Reported to Alberta Environment</li> </ul>
	4.3. Financial Reporting	<ul style="list-style-type: none"> <li>• Financial reporting is seen to be appropriate</li> <li>• The Department is able to access the JD Edwards system and can look at the financial information whenever necessary.</li> <li>• A monthly variance report is provided to the audit committee</li> <li>• Financial Services is working with EVS to provide a more streamlined financial report that eliminates all of the internal transfers and provides a more crisp picture of operating information.</li> </ul>	<ul style="list-style-type: none"> <li>• The City of Red Deer 2011 Annual Financial Report</li> <li>• Environmental Services 2011 Departmental Representation Letter</li> <li>• Financial Reporting Cycle Times</li> </ul>



## **Appendix G**

### **Benchmarking Participants**



### **Appendix G Benchmarking Participants**

<i><b>Municipality / Utility</b></i>	<i><b>Name</b></i>	<i><b>Role / Position</b></i>
City of Calgary	Kathy Davies Murphy	Leader, Asset Management
City of Chilliwack	Chandra Naiduwa	Utilities Engineer
City of Brantford	Selvi Kongara	Director of Environmental Services
Epcor (Edmonton region)	Stephen Stanley	VP, Water and Wastewater Services
Aquatera (Grande Prairie region)	Doug Anderson	Acting Chief Executive Officer



## **Appendix H**

### **Benchmarking Questionnaire**



## **Appendix H Value for Money Review Water & Wastewater Benchmarking Guide**

### **Prepared by Grant Thornton on behalf of the City of Red Deer Water & Wastewater Utilities**

#### **Name of Utility:**

#### **Background**

The City of Red Deer is currently undertaking a value for money / operational review of its Water utility. The goal of this review is to identify performance improvement recommendations and metrics to help the utility not only achieve its desired goals and objectives, but also position it for long-term sustainability.

The City of Red Deer's Water utility has two main areas of responsibility: the water treatment plant and water distribution. The water treatment plant utilizes a three-stage treatment process, including a recently installed UV process. Red Deer's distribution system consists of over 400 km of pipe, four storage reservoirs, and one booster station. The water distribution section is responsible for maintaining hydrants, water mains and water valves in the system, installing and removing services, and installing and maintaining water meters in all residential and commercial buildings in the City of Red Deer. The Water utility also provides water to regional water commissions for distribution to regional customers.

The City of Red Deer's Wastewater utility is responsible for wastewater (sanitary sewer) systems collection and the wastewater treatment plant (the Wastewater utility is also responsible for storm sewer systems collection, but this function is beyond the scope of this audit). The wastewater treatment plant collects and treats wastewater from residential, commercial and industrial wastewater collection systems for both the City of Red Deer and regional areas. In 2010, the wastewater plant treated an average of 39 million litres per day. The City of Red Deer has recently introduced a UV disinfection process as part of its overall wastewater treatment process.

We would like to ask for and greatly appreciate your participation in this peer review. Included in this document are questions for your consideration. Please be assured that all information exchanged will be confidential and will not be shared with other organizations.



## Utility Profile

1. What services are provided by your utility (e.g. water/wastewater treatment, distribution/collection, etc.)?
2. What is the total length of the system managed (pipe in km) and related infrastructure (e.g. reservoirs, booster / pump stations)? What is the replacement value? Average age of the infrastructure? What is the total population and land area serviced by the utility? Are you able to provide specific data on the number of customers (service connections) you serve per kilometer of water and wastewater pipe?
3. Have there been changes in consumption patterns over the last five years or so? Would you be able to provide specific data regarding year-over-year increases / decreases?
4. How have your rates changed over the past five years? Would you be able to provide specific data regarding year over year changes? What is driving your rate increases?
5. Is the utility fully-costed (i.e. follow a standard utility model) or is it subsidized by the tax base? What are the utility fiscal policies / directives related to rates of return, reserves, dividends, franchise / access fees, debt, etc.? Does the utility / City have an overall philosophy that guides rate design?
6. Does the utility pay to the City a Local Access Fee or Franchise Fee? Dividends? What is the rate?
7. Do you track and would you be able to provide the Water & Wastewater utility's customer costs per population served? Costs per kilometre of pipe?
8. How many employees do you have? What is the breakdown of by function (can you provide an org chart if available)? What is your employee turnover ratio (including / excluding seasonal)? What is your training expenditures ratio per field employee?





#### *Strategic, Business and Risk Planning*

1. How does your utility carry out strategic and/or business planning? How is this integrated into the overall planning of the municipality? Does your utility follow a formal risk planning approach that identifies risks and mitigation strategies? Is it linked with an overall risk management approach for the municipality?

#### *Sustainability Planning*

2. Has your utility integrated other priorities (i.e. environmental, social) into planning through things like the Triple Bottom Line, Five Pillars, or an Environmental Master Plan? What is your utility's approach to environmental sustainability?

#### *Budgeting and Capital Planning*

3. How does your utility carry out operating budgeting? Capital budgeting? How are capital priorities determined?

#### *Service Lines and Programs*

4. Does your utility have formalized service delivery priorities and standards? If so, what are they and how are they tracked and monitored? What innovative services, programs, practices or approaches has your utility employed?

#### *Organizational and Staffing Structure*

5. How are corporate functions like IT, HR, procurement, etc. provided (i.e. by the utility, by the municipality in a shared services model, or by a third party)? If provided by the municipality or by a third party, are formal service level agreements in place? What are the shared services cost allocations and how are they calculated?
6. Are any significant portions of your utility's service delivery or other functions contracted out or outsourced? If so, what are they and how much is contracted out?

#### *Operations and Maintenance Planning and Execution*

7. How does your utility carry out operations and maintenance planning? How much of your maintenance activities are proactive versus reactive?

#### *Employee Management and Working Environment*

8. What formal employee engagement activities does your utility engage in? Does your utility track employee satisfaction? How does your utility manage safety (e.g. safety plan, safety meetings, safety manager, etc.)?

#### *Infrastructure and Asset Management*

9. How does your utility manage its assets? Do you have a formal asset management system in place? How does this link to planning and maintenance activities?



*Operating Risk and Business Continuity*

10. Does your utility engage in formal emergency planning and/or business continuity planning?

*Citizen Engagement Customer Relations Management*

11. What activities does your utility undertake to engage with citizens? How is citizen feedback gathered and used? How does your utility gather feedback from customers and measure customer satisfaction?

*Partnerships and Stakeholder Relations*

12. How does your utility manage important partner and stakeholder relationships? Is your utility engaged in regional planning? If so, how do you manage these important relationships?

*Performance Monitoring and Reporting*

13. Does your utility have a formal performance management system in place, i.e. KPI's, performance dashboard? If so, what are the key metrics? How does it link to budgeting and financial reporting?



## **Appendix I**

### **Benchmarking Results Summary**

**Appendix I - Benchmarking Results Summary**

1	City of Brantford.....	i
2	City of Calgary.....	iv
3	City of Chilliwack.....	viii
4	City of Edmonton (Epcor).....	xi
5	City of Grande Prairie (Aquatera).....	xv
6	City of Lethbridge.....	xvii
7	City of Medicine Hat.....	xviii
8	City of Thunder Bay.....	xix

## **1 City of Brantford**

### **1.1 Services**

- Water treatment and distribution
- Wastewater collection and treatment

### **1.2 Infrastructure**

- WTP – screening, coagulation, sand ballasted flocculation (John Meunier's Actiflo™), sedimentation, chlorination, filtration, chloramination
  - Can produce up to 100 ML per day
- Residue Management Facility (RMF) – three gravity settler thickeners and two belt filter presses
- Water distribution system – three reservoirs (in addition to two reservoirs in the WTP), one booster pumping station and an elevated tank
- Wastewater collection (sanitary sewer system) – this is a separate department from Water but is operated by the City
- WWTP – primary and secondary treatment of raw sludge and anaerobic digestion for biosolids – management of the plant is contracted to the Ontario Clean Water Agency (OCWA), an arms-length agency of the Ontario Ministry of Environment
  - Rated capacity of 81.8 ML per day (average daily flow in 2010 was 31 to 46 ML per day)
- Water is drawn from the Grande River at the Holmedale Canal

### **1.3 Consumption**

- Total population served is approximately 100,000
- Water consumption has been decreasing
- 2009 residential water demand was 230 Litres per Capita per Day (LCD), industrial was 248 LCD, combined was 250 LCD
- Consumption ranges from 49 ML per day to 45 ML per day, but this is greatly impacted by weather in the summer
- The decrease is due partly to weather, but also increased rates and general awareness around conservation.

### **1.4 Rates**

- Rates have increased steadily by around 5 to 6% every year from 2009 to 2014, then a planned 2% inflationary adjustment each year thereafter.
- Rate increases are driven mainly by capital programs (maintenance and replacement)
- A financial plan done in 2006 looked at the value of assets for water and wastewater and developed sustainability rates based on operating costs, capital needs, revenue sources for the next ten to twelve years (this was updated in 2010)

### **1.5 Fiscal Policies**

- The utility is 100% fully-costed
- The business plan has high level fiscal policy information, but general financial policies come from the financial plan (specifies debt, reserves, capital investment targets)
- Pay an overhead charge for all corporate services (specific dollar amount each year)

### **1.6 Franchise / Access Fees and Dividends**

- No franchise or access fees

- Do not pay any dividends to the City – the utilities are considered part of the municipal corporation like any other department (e.g. roads)

### **1.7 Strategic, Business and Risk Planning**

- Do business planning on an annual basis. This is supposed to be linked to the financial plan but there are actually no direct links. However, rates are set based on the financial plan, which are then used to set the budget for the City.
- Figure out operating costs, reserve needs, five year capital forecast, revenue projections – these all flow into rates
- With the financial plan prepared by the consultant this projection is done for us (and is more in depth than when the department did it internally)

### **1.8 Budgeting and Capital Planning**

- Work with operating staff to understand operating costs and needs and look at linear and vertical asset needs (supplemented by work order system for linear assets to see where we are spending a lot of time and money) – look at the existing budget and revenue forecasts to determine where capital dollars will be spent
- Have replaced many of the treatment plant assets over the last few years, so capital needs for vertical assets is low right now

### **1.9 Service Lines and Programs**

- Overhead charge for central service is supposed to be allocated based on the amount of time spent in each area but not sure how precise this actually is
- No SLAs in place but would like to have them

### **1.10 Operations and Maintenance Planning and Execution**

- This is mainly based on operators' experience and work orders history, as well as manufacturer's recommendations
- There is a plan but it is not really streamlined – there is no real structure to it (e.g. linear assets are "scored" for replacement, but there is not a similar system in place for the maintenance side)
- About 15% is reactive, with 85% proactive (but this is a very loose estimate and they haven't looked at this closely)

### **1.11 Employee Management and Working Environment**

- Had a consultant come in to do an evaluation that resulted in changes to some leadership and operations
- Have periodic meetings to give people an opportunity to provide input, and also have union management meetings to hear any complaints or concerns from union staff

### **1.12 Infrastructure and Asset Management**

- Better for linear assets than vertical assets. Use a scoring mechanism to rate the assets, and the poorest scoring are then matched with the roads program to determine which to replace and at what time
- Look at water main only projects separately – if there is a water quality issue then there is separate funding set aside specifically for this that is in addition to the general annual replacement program

**1.13 Operating Risk and Business Continuity**

- Required to have an emergency plan as part of license – drinking water quality management – identify risks and rank them and then come up with ways to address the risks. Also look at emergencies, identify those that could occur and develop plans to deal with them.
- Most of the critical ones are done, but this is a working document and is updated as new situations or risks are identified

**1.14 Citizen Engagement and Customer Relations Management**

- Done only periodically – last one done in 2005 by billing services
- Track calls and complaints from the public and the numbers are provided for the AECOM report – target to keep the number of complaints below 50

**1.15 Partnerships and Stakeholder Relations**

- N/A, we are a single-tier municipality

**1.16 Performance Monitoring and Reporting**

- Have a service level standard, and review the AECOM data to compare to other municipalities as well as to Brantford's past performance
- Aside from this there is no dashboard
- We only report compliance information or other information required by the Ministry of Environment to Council. However, as part of our licensing we have to report specific operating performance information to council and the Ministry (e.g. main replacement program stats)



## 2 City of Calgary

### 2.1 Services

- Water, wastewater and storm
- Also a small portion of reclaimed water for Enmax

### 2.2 Infrastructure

- Water
  - Total length of the system = 4,475 km (excludes service connections and hydrant supply leads)
  - Related infrastructure: two WTPs, 39 water pumping stations (booster pumping stations distribution and transmission)
  - Water pipes average 29 years old
  - Total operating cost for treatment and distribution per ML of drinking water treated = \$713.75 / ML
- Wastewater
  - Total length of the system = 4,310 km (excludes service connections)
  - Related infrastructure: three WWTPS, 38 lift stations
  - Wastewater pipes average 33 years old
  - Total operating cost for treatment and collection per ML of wastewater treated = \$647.26 / ML
- Total replacement value (as of 2009) \$33,720 million – includes drainage, plants, etc. (also includes storm) – not a combined system
- 2012 census – 1.12 million people, also service Strathmore, Cochrane, Chestermere, Airdrie, and also have some non-municipal regional customers like the T'Su T'sina Nation
- 301,406 service connections (both water and wastewater)
- Service area = 848 square km (not including regional customers)

### 2.3 Consumption

- LCD is decreasing – overall demand has increased but has decreased on a per capita basis
- In 2010 typical single family residential was 257 LCD

	Total Consumption	All Customers	Calgary Only	LCD (Average Calgary)
2007	168,440 ML	1.03 million	1.02 million	440
2008	167,982 ML	1.06 million	1.04 million	428
2009	172,513 ML	N/A	1.06 million	431
2010	164,282 ML	1.12 million	1.07 million	407
2011	164,145 ML	N/A	1.09 million	373
2012	N/A	N/A	1.12 million	N/A

- Initiative to have a 1% decrease in withdrawals from the Bow river over the next 30 years

### 2.4 Rates

- Rates have been increasing, driven by debt repayment (principal and interest) and growth (didn't used to have a development levy for W&WW, last year a 50% levy was approved and as of Jan 1 2012 developers pay a set rate per acre)

	Water	Wastewater
2009	5.8%	5.0%
2010	5.8%	5.0%

2011	5.8%	5.0%
2012	7.6%	13.5%

## 2.5 Fiscal Policies

- Fully costed
- Debt limit policy, debt servicing, debt vs. cash financing policy, sustainment reserve policy, debt term limit policy
- Reserves built up out of cash (included in the rate model) – 10% of revenues goes to the sustainment reserve (target) – this was just implemented in the last year

## 2.6 Franchise / Access Fees and Dividends

- Return on equity of 10% (capped at \$42.5 million) - all paid to the City as a “dividend”
- Have franchise fee – pay about \$40 million per year – this is just a set fee that has been around for a long time. Doesn’t seem to be a clear mechanism for how this is calculated (e.g. not based on area of land or length of ROWs)
- ROE and LAF is budgeted every year

## 2.7 Costs

- Annual O&M per capita targets

	Water	Wastewater
2010 actual	\$61	\$48
2011 estimate	\$61	\$48
2012 budget	\$64	\$51

- Used to measure per km but changed to per capita because it was felt that demand drivers on the system were more population based than system based, particularly on the WW side (due to BOD, TSS, etc.)

## 2.8 Strategic, Business and Risk Planning

- Do a three-year business plan and a three-year operating and capital budget (just submitted last September and now in the first year of implementing it)
- Develop annual work plans within the business unit
- Business plan and budgets are very much linked

## 2.9 Sustainability Planning

- Have a 20th Sustainability direction – we align with this

## 2.10 Budgeting and Capital Planning

- Recently gone through an exercise to develop a prioritization process that includes a business case system that includes nine factors that projects are rated on – use a system to input this data
- Have a process with project managers to tweak the actual spending plan, and any changes go back to council for an annual budget adjustment process

## 2.11 Service Lines and Programs

- No formalized service standards, but have some internal benchmarks that we work toward (e.g. respond to a main break within 2 hours 80% of the time). We are working toward developing something like this but it will take about 5 years

**2.12 Organizational and Staffing Structure**

- No formal internal SLAs
- Costs allocated on various bases
- Pay an overhead (admin) fee
- Customer billing and care services (Enmax)
- Have the municipal 311 service
- Handle about 50% of the construction work, rest is contracted out
- Construction and engineering are within the utility, but design is contracted out
- Construction is coordinated with the roads department
- The work is managed between water and wastewater together

**2.13 Operations and Maintenance Planning and Execution**

- Have maintenance coordinators within the plants with budgets, and a similar process in the field
- Try to be proactive but there is still quite a bit of unplanned

**2.14 Employee Management and Working Environment**

- Conduct an annual employee satisfaction survey, and the manager of each division is responsible for managing the issues within their division
- Corporate rewards and recognition program
- Training and development opportunities – divisions have a training budget and each employee has a competency based development program and training needs are associated with the position and decided on by the employee and their manager

**2.15 Infrastructure and Asset Management**

- Follow the PAS 55 methodology – 29 questions (scaled) – best practice approach out of the UK (like an ISO program) – use Oracle WHAM to issue work orders, have asset management plans, conduct condition assessment (ongoing process – no formal requirement or process for updating these in a standard way – based on criticality, condition and risk), have maintenance plans
- This is still under development, but we are working on it
- There is also a corporate asset management group and we align with their processes and submit reports to them
- TCA – making sure we're in compliance
- The engineers determine the maintenance planning programs, and they give this to the systems / plant folks to implement. Field staff then report back to engineering

**2.16 Operating Risk and Business Continuity**

- Safety / emergency drills

**2.17 Citizen Engagement and Customer Relations Management**

- City has an annual satisfaction survey – Asks: “are you satisfied with your drinking water?”
- Conduct focus groups and specific satisfaction surveys for specific issues (specifically for service interruptions)
- Get stats on the 311 calls that relate to water or wastewater
- Have a team dedicated to customer and community engagement

**2.18 Partnerships and Stakeholder Relations**

- Three staff dedicated to regional servicing – manage relationships and contracts / agreements with the regional partners

- It's quite a large focus of the strategic services team
- This is a fairly small proportion of our overall capacity / demand

### **2.19 Performance Monitoring and Reporting**

- Have formal KPIs that we report to Council – there are 20 of them and they are in the business plan posted online – Calgary.ca – search for “UEP business plan” – on page 3 (there are 40 KPIs overall but includes other areas of the department)
- Have 6 outcomes – customer satisfaction, water availability, O&M cost per capita, financial measures (total debt, % of capital maintenance financed with cash, DE ratio), water quality measures (regulation), demand measures around daily water consumption and river withdrawals, asset condition assessment, projected remaining treatment capacity (how many years until we have to build the next plant – based off of peak day demand – peak day water demand in 2011 was 644 ML, average was 436 ML in 2011, wastewater is about 90% of water)
- Business plan and the budget are intricately linked, and the KPIs are based on the success of the business plan implementation (including priorities identified in the plan) – KPIs are measured annually / quarterly depending on the measure, but are reported to Council semi-annually.
- Within W&WW the management team has a dashboard that links to the capital measures that are more operational – they see these monthly
- Council has a utility and corporate services sub-committee

### 3 City of Chilliwack

#### 3.1 Services

- Water distribution but NO treatment (groundwater)
- Wastewater collection, conveyance and disposal of sewage as well as the wastewater treatment plant
- WWTP processes and treats over 6.4 million litres of wastewater per year. The plant is continually upgraded to cope with increased volumes as the City's population increases
- In 2011, Chilliwack began construction of Digester #3 to improve the hydraulic capacity and plant operation. Project cost is \$6.0 million with completion estimated in summer 2012

#### 3.2 Infrastructure

- Maintains and operates 47 sanitary pump stations, 300 km of sanitary sewer, and a wastewater treatment plant – secondary treatment
- 400 km water pipe, no treatment plant for water (groundwater)
- Total population is 83,000, water service is 73,000 and wastewater is 65,000
- Provides sewer service to over 17,000 properties within the municipal boundaries – 17,800 for water, 13,500 for sewer

#### 3.3 Consumption

- Have a water conservation plan, and have seen some reduction in consumption – about 5% decrease over the last five years (1% per year or so) – summer water consumption has reduced due to sprinkler restrictions (~10% to 15% reduction in the summer) as well as weather patterns, also have a toilet rebate program and public education programs
- Population has increased but growth is not very strong (last few years has been about 1% per year, but 2008 and earlier was about 2.5% growth per year)

	Production	Water Service Population	Production per Capita
2007	10,911,678 ML	68,115	160.2 ML
2008	10,669,811 ML	70,038	152.3 ML
2009	10,662,938 ML	70,838	150.5 ML
2010	10,296,600 ML	71,647	143.7 ML
2011	10,217,340 ML	72,463	141.0 ML

- There is some misalignment between production and consumption (flushing, general loss, etc.)
- Wastewater is about 90% of water usage, but not all water customers are connected to the sewer system

#### 3.4 Rates

- Rate increases are tied to inflation (3% to 4%) – do not do cost of service studies, but are planning one for this year for water
- Rates were set a long time ago and have just been pegged to inflation since then – increase the tax rate and water/wastewater rates increase by the exact same percentage
- Customers are billed quarterly
- The owner of the property is responsible for the payment of all accounts in arrears, and the City may refuse to provide sewer service to an owner or occupier until such arrears have been paid in full
- 2012 residential fixed fee is \$9.52 per month (\$9.22 in 2011) and variable fee is \$0.75 per ML (\$0.72 in 2011) – the average residential customer experienced a 3.7% increase from 2011 to 2012
- Industrial customers pay an annual fee of \$250 (\$20.83 per month) and \$0.36 per ML of discharge. Additional overstrength charges are \$1.25/kg of BOD and \$0.93/kg of TSS

- Development cost charge is \$1,202.83 per parcel for community residential water services (\$5.35 per square meter for commercial and \$3.05 per square meter for industrial) and \$2,116.42 per parcel for community residential sanitary sewer services (\$4.70 per square meter for commercial and \$2.69 per square meter for industrial)

### **3.5 Fiscal Policies**

- Fully costed – self-funded and don't borrow any money for upgrades or O&M

### **3.6 Franchise / Access Fees and Dividends**

- Do not pay dividends or franchise fees, don't have a rate of return provided back to the City

### **3.7 Costs**

- Opening cost of all sewer assets totals \$222.3 million (land - \$1.6, equipment - \$1.8, engineering structures - \$216.0, under construction - \$2.8 million)
- 2011 NBV of all sewer assets totalled \$159.3 million (land - \$1.6, equipment - \$1.1, engineering structures - \$153.8, under construction - \$2.8 million)
- Sewer currently has \$9.93 million in restricted operating funds, and \$2.14 million in unrestricted operating funds

### **3.8 Strategic, Business and Risk Planning**

- Have a ten year capital plan that includes the DCC
- Finance dictates our reserves
- System is fairly new so don't have to set aside too much in reserves for replacement at this time

### **3.9 Sustainability Planning**

- Have an environmental protection plan and have strict guidelines for all development

### **3.10 Budgeting and Capital Planning**

- Review the ten year capital plan and budget every year with Council. Look at requirements for upgrades / replacement and discuss with finance before finalizing the budget
- Based on status of infrastructure (e.g. is it impacting water quality, is it leaking, etc.)

### **3.11 Organizational and Staffing Structure**

- Sanitary sewer is part of the Public Works department (along with potable water, roads, open drainage, storm sewer, dyke infrastructure, and fleet maintenance)
- Planning for sewer projects is done by the engineering department
- Costs are allocated for things like finance, IT, etc.
- No significant portion of service delivery are contracted out or outsourced

### **3.12 Operations and Maintenance Planning and Execution**

- Within the public works department there is a group that does this for the utilities, and then charges the time to the utility
- Most maintenance is proactive, the director of public works, with input from engineering, sets the plan, and maintenance is carried out by staff within the utility

### **3.13 Infrastructure and Asset Management**

- No formal plan, but conduct infrastructure condition studies to determine how much we have to spend each year to make sure it is in good condition
- Water was last done in 2004, WW in 2008

- Do benchmarking with AECOM

#### **3.14 Operating Risk and Business Continuity**

- Have an emergency plan coordinator for the whole City, but also have a water emergency plan (because there is no water treatment)

#### **3.15 Citizen Engagement and Customer Relations Management**

- The City does some citizen feedback surveys, but the utilities do not do anything separately from this

#### **3.16 Partnerships and Stakeholder Relations**

- Do not have any regional partnerships

#### **3.17 Performance Monitoring and Reporting**

- No formal system in place
- Prepare an annual plan that includes metrics like maintaining water quality, reducing bacteria, flushing water system at least once per year, testing water mains every week, no wastewater spillages or backed-up sewers



## **4 City of Edmonton (Epcor)**

### **4.1 Services**

- Water treatment and distribution
- Wastewater treatment
- Wastewater collection (i.e. drainage) is provided by the City of Edmonton

### **4.2 Infrastructure**

- Water
  - 3,681 km
  - 12 reservoirs
  - 805 ML capacity
  - 17,780 hydrants
  - Don't know replacement value
  - In-city: 812,000 served; also have about 60 regional communities: 347,000 – total = 1.16 million
  - Customer counts: 9 regional water commissions (serves 65 counties and communities); residential meters 218,000; multi-res 17,400; ICI 3,300
- Wastewater
  - In-city customers is the same as water, no regional customers
  - 400 ML per day, tertiary treatment
  - Combined sewers – also treat wet weather flow – cap increased to 1,200 ML per day for enhance primary treatment
- Provide water, wastewater and distribution services to more than one million people across Western Canada
- Recently completed upgrades to the E.L Smith WTP (2005 to 2008), construction began in 1970 and officially opened in 1976
- Three Rosedale WTPs – commissioned in 1947, 1956 and 1967
- UV disinfection was added to the Rosedale WTP in 2003 and at the E.L Smith WTP in 2002
- Took ownership of Gold Bar WWTP March 31, 2009

### **4.3 Consumption**

- Total Annual water consumption (ML) 2 to 3% reduction in water per customer, and 2 to 3% increase in customer count, so it balances out
  - Domestic 60,000 ML – have seen quite a reduction
  - ICI 28,500 ML
  - Regional 33,000 ML
- 2007 – 92,638
- 2008 – 92,869
- 2009 – 95,486
- 2010 – 89,550

### **4.4 Rates**

- In general rates have been increasing, but there is a formalized rate process – Performance Based Rates – renewed every 5 years – initially set on full COSS then increases based on inflation (partly Alberta CPI and hourly wage index increase) minus an efficiency (0.25%) factor (includes a five year capital project projection) – uses a traditional rate setting process (like AUC)
- Water rates have increased by an average of about 4.7% per year from 2007 to 2012

- Wastewater treatment rates increased by 8.0% in 2012 and are set to increase by 8.0% 2013 and 2014 as well
- Wastewater collection (undertaken by the City of Edmonton) rates increased by 6.4% in 2012

#### **4.5 Fiscal Policies**

- Rates are based on a full cost recovery approach
- Targets a consolidated senior debt to consolidated capitalization ratio of 40:60
- Full-costing, true utility approach
- Regulated jointly by the City of Edmonton, regional customer rates are set by AUC, so generally use a common approach for both
- Have a D:E ratio of 60:40 – based on AUC but City also involved
- In-City target rate of return of 10.85% (taking a risk on five-year PBR)
- Regional rate of return is 8.75% (generic from AUC)
- Biggest risk is on volume of water sales, as well as capital project costs and operating costs.

#### **4.6 Franchise / Access Fees and Dividends**

- Franchise fee is \$11.6 million for 2012 (8% of water and wastewater revenue for in-City customers)
- Epcor as a whole pays a dividend that is the greater of the previous year's dividend adjusted for the change in the CPI or 60% of earnings. – there isn't a set percentage for water on its own (~\$142 million for all of Epcor, not really any way to pull out what Water pays)
- The dividend policy is subject to amendment in the event of a significant change in Epcor's business or financial condition.
- In accordance with the policy, the annual dividends from Epcor were as follows:
  - 2008: \$130 million,
  - 2009: \$134 million,
  - 2010: \$136 million,
  - 2011: \$138 million, and
  - 2012 estimated: \$142 million

#### **4.7 Costs**

- Customers and regions are all very different so there is no aggregate

#### **4.8 Strategic, Business and Risk Planning**

- Epcor is wholly owned by the City of Edmonton and City Council appoints the utility's Board of Directors and Chairman.
- Produce a long-term plan every year
- Has a core focus on five years out but it's a ten year plan
- Goes to the board for approval, and year one becomes the budget target for the next year
- There are core sections on Edmonton, growth and other activities, as well in other regions
- Have a pretty well developed ERM process, loosely based on ISO type programs but includes internal growth, also going through the process to get OSHA certified in safety
- In the last couple of years the board has been involved in setting a "risk appetite" – drives decisions operationally, financially, growth, etc. – the management team ensures that our risk management aligns with this. This in turn helps with the prioritization of capital decisions (i.e. what is the risk of doing / not doing a project).

#### **4.9 Sustainability Planning**

- Comprehensive corporate accountability report (last 5 or 6 years) – third party assessment (Deloitte) – used by a bunch of different organizations (not benchmarking, but standardized format) – Global Reporting Initiative
- Look at metrics around customers, communities, conservation, stakeholder approaches, people (safety / growth), environment, etc.

#### **4.10 Budgeting and Capital Planning**

- Driven by business planning and PBR – have to be approved internally through the board and then have to apply for regulatory approval – the budget is not approved by the City, but the Rates are – this is a component of the budget process but it's really a small part

#### **4.11 Service Lines and Programs**

- PBR includes performance requirements that we have to meet – have a series of KPIs that we have agreed upon with the City (e.g. system reliability – number of water main breaks, time to repair breaks, plan interruption factors, water pressure factor, water loss)
- Under the PBR Epcor can get fined if they don't meet the targets (up to \$1 million)
- Other performance areas include water quality, customer service (post-service follow-up survey, response time to emergencies), environment (emergency response training, reporting to the regulator, water conservation, vehicle fuel efficiency), safety (worksite inspections, first aid training, safety meetings)
- These are all reported to City council on an annual basis – these actually impact the rates and they are audited by KPMG

#### **4.12 Organizational and Staffing Structure**

- Epcor water as a whole has 1,050 staff (Edmonton only has 460)
- Goldbar plant has 145
- Vast majority of services are internal (HR, corporate finance, legal, etc. are all corporate, costs are allocated) – we then have to allocate these costs across our internal customer groups – these allocations have to be approved by the regulators of the various regions / operating groups
- Don't do any in-house construction – most of the capital work is all contracted out

#### **4.13 Operations and Maintenance Planning and Execution**

- O&M is managed internally, and also provide these services to other utilities (i.e. Canmore, Banff, etc.)
- Mostly proactive.
- Almost 50% of capital budget is proactive maintenance, and has increased in scope significantly over the last couple rounds of PBR

#### **4.14 Infrastructure and Asset Management**

- Water Capital Steering Committee – broad group within Water (plants and distribution) – coordinate the long and shorter term capital programs
- This is rolled into the PBR rate application and links back to the risk management program that helps us analyze and prioritize in the longer term (there are always emerging issues that you can't plan for) – the risk tool really supports and guides this function

#### **4.15 Citizen Engagement and Customer Relations Management**

- Pretty significant – part of the KPIs in the PBR
- Includes surveying customer satisfaction, system reliability to ensure we are meeting expectations

- Have to benchmark ourselves against other utilities to show that our rates are reasonable and appropriate
- Customer Advisory Committees – gauge customer support and issues – representatives of a mixture of customers (large industrial like Labatts, U of A, community leagues, etc.)
- Historically had a challenge in the spring with taste and odour so run a voluntary panel in the spring to test their water – target of 93.4% satisfaction, 96.7% in 2011 (results are on the website)
- Board is selected by city of Edmonton and citizens' interests are addressed from this action.

#### **4.16 Performance Monitoring and Reporting**

- Epcor applies the Global Reporting Initiative (GRI) framework to report on its environmental, economic and social performance. GRI is a network-based organization that developed the world's most widely used sustainability reporting framework. The reporting framework is developed through a consensus-seeking process with participants drawn globally from business, civil society, labour, and professional institutions.

## **5 City of Grande Prairie (Aquatera)**

### **5.1 Services**

- Water
  - Treatment & distribution, hydrants, bulk water stations
  - WTP – capacity = 52 ML / day; average daily flow = 20 ML / day
  - Treatment includes: pre-settling, coagulation, flocculation, sedimentation, filtration, fluoridation, & chlorination
  - Distribute to Grande Prairie, Sexsmith, Clairmont, Wedgewood, and other areas in the County of GP
- Wastewater
  - Collection & treatment, sewage lagoons

### **5.2 Consumption**

- Consumption has been going down (from 34.4 cubic meters per customer in 2001 30.5 in 2007 to 26.0 in 2011)
- Volumes have decreased (they had wet summers which reduced consumption)

### **5.3 Rates**

- Yes, going up each year
- Aquatera rates are usually at the top of their comparators
- 2011, 2012 Water went up 3.6% each year
- 2011, 2012 Wastewater went up 9.7% each year
- Doing a \$50 million upgrade to WWTP which is driving the increases

### **5.4 Fiscal Policies**

- Fully costed (no tax support)
- Operate under a cash management policy
- EBITA
  - 35% ceiling for dividends (though they exceeded this last year)
  - 50% debt servicing
  - 10% into capex reserve
  - 5% for business development
  - Whatever is left they divide 50/50 in capex and business development (acquisitions and other businesses)

### **5.5 Franchise / Access Fees and Dividends**

- MCAF – 10% of revenue (shown directly on the customer's bill) for City, County and Sexsmith
- Dividend
  - For any assets transferred to Aquatera from a shareholder, they get a \$1,000 preferred share for each \$1,000 in asset value, and they also get a \$0.01 common share.
  - Prior to asset transfers, a stock dividend is declared and the shareholders receive preferred shares in the amount of their proportionate share of the retained earnings.
  - A portion of the dividend is mandatory - 5% of the value of assets transferred in
  - Directors make a decision each year on a discretionary dividend – 2.5% of all preferred and common shares (in 2011 they paid \$2.2 million mandatory and \$1.3 million discretionary, which was 38% of EBITA)
  - Max ceiling is 60% of net income
- IFRS – focusing on cash flow

- In 2011, Aquatera paid \$3.5 million in cash dividends to shareholders (City of GP, County of GP, & Town of Sexsmith) and \$2.4 million in franchise fees (\$2.2 million and \$2.4 million, respectively, in 2010)

	2011					2010			
	Franchise Fee	Regular Dividend	Discretionary Dividend	Total		Franchise Fee	Regular Dividend	Discretionary Dividend	Total
City of GP	\$2.1	\$1.6	\$1.0	<b>\$4.7</b>		\$2.2	\$1.6	\$-	<b>\$3.8</b>
County of GP	\$0.18	\$0.4	\$0.21	<b>\$0.79</b>		\$0.16	\$0.4	\$-	<b>\$0.56</b>
Sexsmith	\$0.05	\$0.19	\$0.1	<b>\$0.34</b>		\$0.05	\$0.19	\$-	<b>\$0.24</b>
<b>Total</b>	<b>\$2.33</b>	<b>\$2.19</b>	<b>\$1.31</b>	<b>\$5.83</b>		<b>\$2.41</b>	<b>\$2.19</b>	<b>\$-</b>	<b>\$4.60</b>

- Since 2003, Aquatera has returned \$28 million in dividends and franchise fees to shareholders

### **5.6 Strategic, Business and Risk Planning**

- Business plan every 2 years – operating budgets, capital, service levels
- Revise operating budgets maybe on the 2nd year

### **5.7 Organizational and Staffing Structure**

- Last year they have their own IT / moved systems
- Entirely on their own as of January 1, 2012 (cut all ties to the City except as shareholder)
- IT contracted out

### **5.8 Employee Management and Working Environment**

- They conduct employee satisfaction surveys

### **5.9 Infrastructure and Asset Management**

- Just implementing an asset management system. Generally rely on distribution and maintenance guys. Don't have a formalized system. Depend on experience of manager

### **5.10 Operating Risk and Business Continuity**

- Developing their ERM plan this year
- Developing Emergency Response and business continuity plans at the Enterprise level. Already have these at the treatment plants

### **5.11 Citizen Engagement and Customer Relations Management**

- Conduct customer satisfaction surveys

### **5.12 Partnerships and Stakeholder Relations**

- Went to a business board a year and a half ago, no elected officials on the board any more

### **5.13 Performance Monitoring and Reporting**

- Putting in a balanced scorecard – this is a work in progress, currently getting all the groups to identify KPIs

## **6 City of Lethbridge**

### **6.1 Services**

- Water
  - WTP – capacity of 150 ML per day, peak demand ~ 80% of capacity
- Wastewater
  - WWTP – secondary treatment and UV disinfection; capacity of 49,000 M3 per day, treats 14 million M3 per year

### **6.2 Rates**

- Water:
  - 2009 – 6.1%
  - 2010 – 6.5%
  - 2011 – 6.5%
- Wastewater
  - 2009 – 5.8%
  - 2010 – 5.8%
  - 2011 – 5.8%

### **6.3 Fiscal Policies**

- The City of Lethbridge sets fees and user charges for each utility fund at a level that fully supports the total direct and indirect cost of the utility.
- The accumulated surplus balance of the Water and Wastewater utilities is limited to 5% of current year revenues. The primary purpose of the surpluses is to set aside funds to provide for unanticipated or emergency expenditures that could not be reasonably foreseen during the preparation of the budget and/or for down payments on the utility's capital projects.
- The Water utility transfers an amount equal to 8% of water revenues to the general fund for relief of taxation
- The purpose of the Municipal Revenue Stabilization Reserve (MRSR) is to stabilize the effects of fluctuating interest revenues and General Fund operating surpluses and deficits on annual taxation requirements. The annual allocation from the MRSR to relief of taxation will equal normalized return on investments, MCAF, and police fines and penalty revenues.

### **6.4 Franchise / Access Fees and Dividends**

- There is no MCAF applicable to the Water or Wastewater utilities
- Neither Water nor Wastewater utilities pay a dividend



## **7 City of Medicine Hat**

### **7.1 Services**

- Water (treatment & distribution)
  - Service population – 75,000 customers
  - WTP Capacity - 180 ML / day; planned upgrade to build a treatment facility to process wastes generated during the water treatment process; plant is staffed 24-7-365; Clearwell system and UV disinfection facility
- Wastewater (collection & treatment)
  - WWTP – secondary treatment

### **7.2 Rates**

- Water
  - 2011 – 5.5%
  - 2012 – 4.3%
- Wastewater
  - 2011 – 5.9%
  - 2012 – 7.6%

### **7.3 Franchise / Access Fees and Dividends**

- Water and Wastewater utilities do not pay dividends or LAFs

## **8 City of Thunder Bay**

### **8.1 Infrastructure**

- Water – 36,732 water service connections
  - 719 km of water mains
  - 3,402 fire hydrants, 9,212 valves chambers and pressure reducing stations and six river crossings, one lab, five water storage facilities, eight water pumping stations, eight pressure zones
  - Bare Point Water Treatment Plant produced an average of 41 million litres of water per day in 2011 (capacity = 113.5 million litres per day; averaged 36% of potential capacity)
  - Two Residential Water Fill Stations
- Wastewater
  - Water Pollution Control Plant (WPCP) - Secondary treatment and nitrification, phosphorous removal, sludge digestion, and de-watering
  - One lab
  - Rated capacity of 84.5 ML / day, future expansion to allow for 109 ML / day

### **8.2 Consumption**

- Total water volume in 2011 14,726 ML, averaged 40.78 ML/day

### **8.3 Rates**

- Rates have seen some volatility
- Rate structure changed in 2010 to better reflect fixed costs of operating and maintaining the water system, and to be more equitable, easier to understand, and to benefit customers who conserve
- Pre-2010 - Very low fixed rate, high consumption / usage
- 2010 to current – Fixed rate more than doubled 2009 rate, consumption/usage decreased by about 30% (both of these are again trending upward)

### **8.4 Fiscal Policies**

- Fully-costed

### **8.5 Franchise / Access Fees and Dividends**

- Pays municipal taxes
- No dividend or franchise fees

### **8.6 Costs**

	Wastewater Annual Flow (ML)	Cost per ML
2007	22,957	\$239.06
2008	25,951	\$212.24
2009	25,329	\$234.33
2010	22,607	\$262.53
2011	21,741	\$256.35



## **Appendix J**

### **Measures and Metrics**

## **Appendix J – Water and Wastewater Utility Performance Measures and Metrics**

The following are select metrics commonly used by water and wastewater utilities in assessing operational performance. This list is not intended to be exhaustive, but instead highlights measures relevant to obtaining an overall understanding of operational efficiency and effectiveness.

### *Operations and Performance*

- O&M costs per km of service area
- O&M costs per km of distribution / collection pipe
- O&M costs per ML of water / wastewater treated
- System losses as a percentage of supply
- Customers per km of distribution / collection pipe
- Customer interruptions per km of distribution pipe
- Number of mainline breaks or blockages per 100 km of pipe
- Percent of emergencies responded to within two hours

### *Employee Management*

- Average days per employee (FTE) invested in development and training
- Number of field FTEs per km of distribution / collection pipe
- Turnover ratio (employees leaving as a percentage of total employees)
- Number of days lost to injury per 100 employees
- Percent of staff / safety / tailgate meetings held

### *Regulatory*

- Percent of time provincial regulations met
- Number of unplanned reportable releases

### *Financial Management*

- All-in water / wastewater rates as compared to the rates for other similar utilities
- Total expenditures per ML water / wastewater treated
- Total expenditures per km of distribution / collection pipe
- Debt-to-equity ratio
- Dividends as a percentage of total revenue
- Percent of capital budget actually spent
- Percent of utility fiscal policy targets met
- Capital planned as a percent of replacement costs

### *Customer Relationship Management*

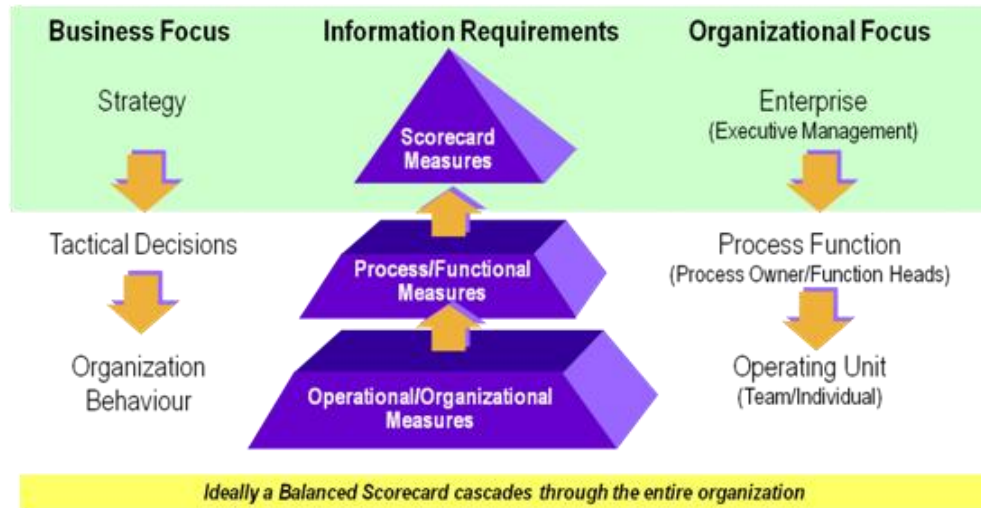
- Cost of customer care and billing per customer
- Number of customer complaints per 1,000 customers
- Customer satisfaction with the services and programs provided
- Number of customer damage claims per 100 accounts



## **Appendix K**

### **Best Practice Guide for Developing Measures and Metrics**

### Appendix K - Best Practice Guide for Developing Measures and Metrics



Metrics should abide by the following guidelines:

- Stakeholders agree upon the metric measurements.
- Metrics are linked to clear goals, assigned actions and defined consequences.
- The metrics measure the right thing and cause people to act in the organization's best interest (in contrast with simply "making their numbers").
- Metrics can be accurately, completely and efficiently collected.
- Metrics are not excessive and do not promote bureaucracy at the expense of innovation.
- Metrics are limited in quantity and meaningful (e.g. drive best-in-class performance, productivity and time, cost and quality improvement).
- Metrics are clearly visible by using management dashboards.
- The metrics' details can be benchmarked for comparative purposes.
- Individual, group, project and enterprise metrics are linked together to reflect the best interest of the organization as a whole.
- The cause and effect of the metrics are understood and a business-driven balance is achieved across the entire organization.
- Metrics are not overly complex or difficult to explain.
- Metrics measure *performance* (i.e. what is going on in a process) rather than attempt to *diagnose* (i.e. explain why a process performs the way it does).

## Approach

Phase	Step	Objectives
<b>Phase 1: Define Detailed Definitions</b>	1. Define Metrics program	<ul style="list-style-type: none"> <li>Define metrics program charter and work plan</li> <li>Define metrics program objectives to articulate how the organization benefits from these metrics</li> </ul>
	2. Define strategy and high-level objectives	<ul style="list-style-type: none"> <li>Link organizational strategy and high-level objectives to performance metrics</li> <li>Measure the right metrics</li> </ul>
	3. Define balanced performance metrics	<ul style="list-style-type: none"> <li>Assess current metrics and leverage where possible</li> </ul>
	4. Determine current process capabilities	
<b>Phase 2: Implementation</b>	5. Define decision-making structure	<ul style="list-style-type: none"> <li>Define who will review current performance and identify improvement opportunities</li> <li>Ensure timely, fact-based operational decisions</li> </ul>
	6. Establish data collection and reporting process	<ul style="list-style-type: none"> <li>Define tasks and responsibilities for data analysis and reporting (facilitates efficient metrics tracking)</li> <li>Ensure appropriate tracking</li> </ul>
	7. Define metrics tracking systems	
<b>Phase 3: Rollout</b>	8. Establish pilot metric process	<ul style="list-style-type: none"> <li>Identify first set of improvement targets and test new performance measurement process</li> <li>Identify improvement opportunities; take corrective actions</li> </ul>
	9. Conduct ongoing performance reviews	<ul style="list-style-type: none"> <li>Review and improve metrics and their measurement processes as necessary</li> <li>Track bottom-line impact of improvement program</li> </ul>
	10. Implement continuous improvement	

**Phase 1** identifies the metrics needed to evaluate current performance and establishes targets that will drive the organization. Successful organizations typically choose metrics that balance four key dimensions: quality, time, productivity and cost. These metrics should extend beyond traditional performance measurements and include key predictive measures.

**Phase 2** defines the program's data collection mechanisms and the management responsibilities that need to be in place to collect, support and track the program's metrics. During this phase, organizations decide:

- Who will collect their data and what systems will be used to facilitate this?
- Who will review the data and prepare the reports?
- Who will communicate the conclusions drawn after the data has been analyzed?

**Phase 3** identifies key opportunities for improvement and establishes new processes as required.

For the organization as a whole, it is important to find a balance between metrics that apply to different groups and understand how these metrics relate to and interact with each other.



## Criteria

Performance monitoring and reporting process is only as good as the measures and indicators that form its foundation. When choosing metrics, it is important to ensure that they adhere to the following criteria:

The Ten Criteria For Excellent Performance Measures	
<b>Relevant</b>	The measure should be linked to the core businesses, goals and strategies of the organization, and directly related to the outcomes it is measuring. The measure should also be relevant within the context of government legislative priorities and direction.
<b>Reliable</b>	The measure can be duplicated by others using the same information and methodology, and is complete and free from significant error.
<b>Responsive</b>	The measure should respond in a significant way to the interventions of the organization and should explain the degree to which the organization can influence outcomes, including an explanation of uncontrollable influences.
<b>Credible</b>	The source of the measures and data collection methods should have a reputation for accuracy and stability. Significant assumptions relating to the information should be explained and changes in methodology or presentation should be described.
<b>Unbiased</b>	The measure should be neutral and fair in the way the data is collected and reported.
<b>Useful</b>	The measure should be useful to management in making program and policy decisions. The measure should be clear in presentation, content and format, in a way that can be easily understood by users and sufficient to provide an understanding of the performance being assessed.
<b>Timely</b>	The measure should be reported in sufficient time to influence decisions.
<b>Comparable</b>	The measure should allow users to compare information from year to year and among similar organizations. At a minimum, prior and current years' actual results and current year targets should be included.
<b>Outcome Oriented</b>	The measure should focus on the immediate or longer term outcomes obtained through the interventions of the organization.
<b>Cost Effective</b>	The benefits of the measure should exceed the costs of producing the measure.

## Setting Targets

- *Align metrics with the organization's success criteria* – so that everyone from the Council to individual employees understand how their personal performance can affect the organization's overall performance.
- *Define a manageable set of metrics* – so that the organization can balance quality, productivity, time and cost in a manner that enables each metric to have a positive impact on the organization as a whole.
- *Create simple, explicit and understandable metric definitions* – so that everyone in the organization can easily communicate by using the same business language.
- *Define program objectives up front* – so that the organization can align these objectives with the needs of the organization and clearly identify what the program is trying to achieve.
- *Identify ongoing improvement opportunities using program metrics* – so that the organization can monitor the program's bottom-line impact, maintain the program's momentum and reestablish performance targets whenever necessary.

- *Increase visibility into the program's operational metrics* – so that the organization has a complete solution for improving its decision-making structure, organization structure, business processes, tracking mechanisms and reporting templates.
- *Benchmark regularly* – so that the organization can establish internal standards and predictably measure external success.
- *Review metric results regularly* – so that senior administration is able to review organizational performance and rapidly correct rising dysfunctions.



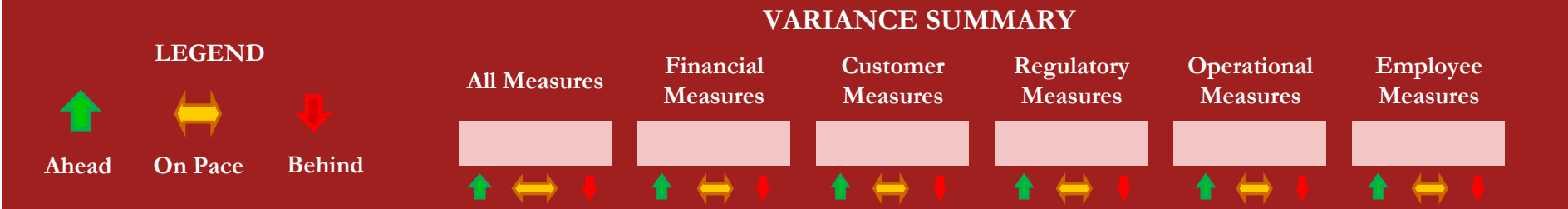
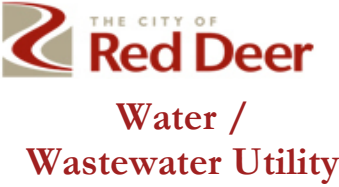
## **Appendix L**

### **Sample Performance Dashboard Summary Page**

Appendix L Sample Performance Dashboard Summary Page

Water / Wastewater Utility      Key Performance Indicator (KPI) Dashboard      1st Quarter 2013

Goal	Measure	Quarter Result	Quarter YTD Target - Q1	Quarter YTD Result - Q1	Variance	Trend
Financial Measures	% of capital budget spent	%	%	%	%	▲
	Capital planned as a % of replacement costs	%	%	%	%	▼
	Debt-to-equity ratio	#	#	#	#	▼
Customer Measures	# customer complaints per 1,000 customers	#	#	#	#	→
	% customers satisfied with response to system interruption	%	%	%	%	→
	# customer damage claims per 100 accounts	#	#	#	#	▲
Regulatory Measures	% of time provincial regulations met	%	%	%	%	▼
	# unplanned reportable releases	#	#	#	#	→
Operational Measures	\$O&M per km of pipe	\$	\$	\$	\$	▼
	\$O&M per ML (waste)water treated	\$	\$	\$	\$	▼
	% of emergencies responded to within two hours	%	%	%	%	▼
	# customers per km of pipe	#	#	#	#	→
Employee Measures	Average # days of training per FTE	#	#	#	#	→
	# of FTEs per km of pipe	#	#	#	#	▼
	% turnover	%	%	%	%	▼
	# of days lost to injury per 100 employees	#	#	#	#	▼



Definitions

KPI Dashboard:	A one-page summary of the Key Performance Indicators (KPIs) of an organization.
Quarter:	The quarter of the fiscal year the Dashboard is reporting on.
Goal:	The Balanced Scorecard perspective under which desired outcomes are identified as an organization aspires to achieve its vision and mission.
Measure:	Qualitative or quantitative metrics on resources, state of activity, product (service) outputs or outcomes.
Quarterly Result:	The result for the quarter of the calendar year the Dashboard is reporting on.
Quarterly YTD Target:	A pre-determined level of performance for the quarter year-to-date. It may be a percentage/ratio or a fixed number.
Quarterly YTD Result:	The result year-to-date, that is, the cumulative result for all the quarters up to and including the quarter the Dashboard is reporting on.
Variance:	The difference between the Target and the Actual Result, which indicates if performance is on pace to achieve the target at the end of the year.
Trend:	A measure specific value that is a specific roll-up of past performance that indicates if the measure is on a positive or negative path over time.
Variance Summary:	A summary of the variance status for the measures overall and for the measures under each goal perspective.

Variances and Trends	Explanation of variance	Trend approach
----------------------	-------------------------	----------------

% of capital budget spent	Comments	e.g. 3-year average
Capital planned as a % of replacement costs		e.g. 5-year rolling average
Debt-to-equity ratio		e.g. Same quarter last year
# customer complaints per 1,000 customers		
% customers satisfied with response to system interruption		
# customer damage claims per 100 accounts		
% of time provincial regulations met		
# unplanned reportable releases		
\$O&M per km of pipe		
\$O&M per ML (waste)water treated		
% of emergencies responded to within two hours		
# customers per km of pipe		
Average # days of training per FTE		
# of FTEs per km of pipe		
% turnover		
# of days lost to injury per 100 employees		