

# 2 Year Business Plan 2017-2018 Utilities Business Support

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Business Support | Environmental Sustainability | Utility Data Systems

## DEPARTMENTAL OVERVIEW

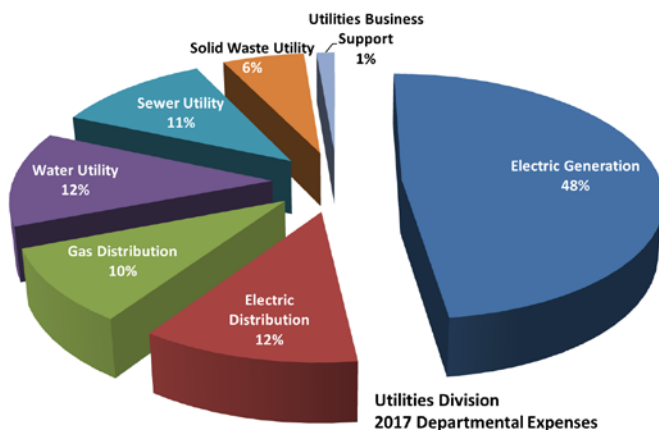
- To develop commodity and non-commodity rates and provide analytical support and strategies to the Electric Distribution, Electric Retail, Gas Distribution, Gas Retail, Water, Sewer and Solid Waste departments of the City of Medicine Hat’s Utilities Division.
- To identify Utility Division synergies and provide analysis to support decisions.
- To provide leadership and strategies to support sustainable activities such as waste diversion, energy conservation, renewable energy and water conservation.
- To manage Electric, Water and Gas automated metering data systems in order to support customer billing and Utility-specific analytics



## SERVICES PROVIDED BY THE DEPARTMENT INCLUDE:

Consists of the following lines of service:

- Business Support for Utilities Division
  - Electric Distribution
  - Electric Retail
  - Gas Distribution
  - Gas Retail
  - Water Utility
  - Sewer Utility
  - Solid Waste Utility
- Environmental Sustainability
  - HAT Smart
- Utility Data Systems
  - Automated Metering Infrastructure



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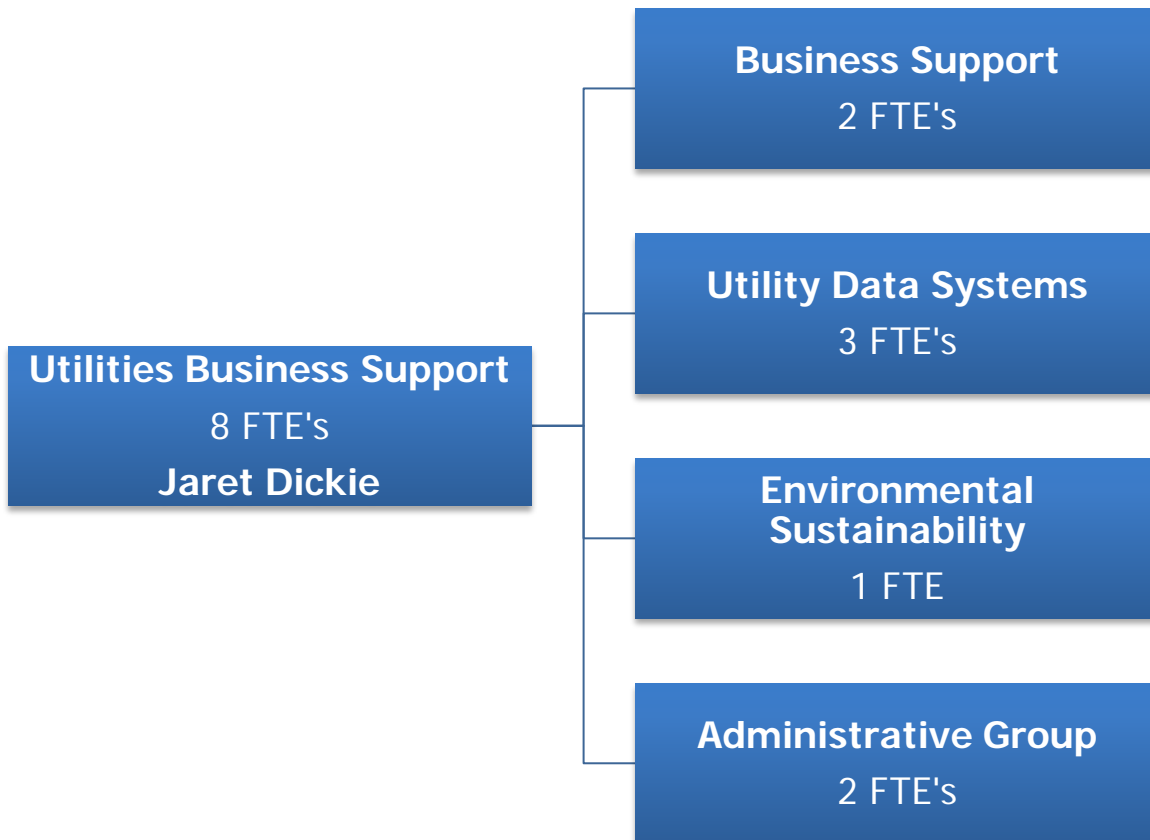
## DEPARTMENT OVERVIEW

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### Corporate Mission Statement

*“Deliver value through exceptional public service.”*

### Organizational Chart (8 FTE's)



## **Core Services & Customers**

### **Utilities Business Support:**

- Utilities Business Support (UBS) provides support to the Electric Distribution, Electric Retail, Gas Distribution, Gas Retail, Water, Sewer and Solid Waste departments of the City of Medicine Hat's Utilities Division. Services include: Cost of Service Analysis (COSA), Rate Analysis, Forecasting / Trending, Budgeting, Commodity Rates, Rate Bylaws and Business Analysis.
- The department will develop rate tariffs for the Utilities ensuring regulatory compliance is maintained and cost recovery is achieved, and will continue to provide rate comparison analysis.
- UBS will administer rate contracts and advise customers regarding rates.
- UBS will lead the development, delivery and execution of diverse strategies that deliver ratepayer satisfaction and fair returns to the utilities.
- UBS will work to identify organizational efficiencies and create synergies in areas of common service delivery within the Utilities Division.
- Statistical and data mining techniques will be used to optimize current (i.e. Automated Metering Infrastructure) and future data sources.
- Customers include CMH Utilities (electric, gas, water, sewer and solid waste departments) and customers located within the service area.

### **Environmental Sustainability:**

- The Environmental Sustainability department provides leadership and guidance in setting policies and in developing customer-centric initiatives (i.e. HAT Smart program to support customers in reducing their consumption).
- These strategic initiatives will continue to be funded from the Environmental Conservation Charge.
- The Utilities Division will continue to fund customer care and awareness / education initiatives regarding environmental conservation and renewable energy options.
- Customers include CMH Utilities (electric, gas, water, sewer and solid waste departments) and customers located within the service area.

### **Utility Data Systems:**

- Provide power generation and consumption data for the City of Medicine Hat to Alberta Electric System Operator (AESO).
- Provide co-generation data (Cancarb and Wind Turbines) for monthly financial settlement.
- Provide electricity consumption data for the City to Electric Generation.
- Collect and verify meter data reads in order to provide accurate and timely utility statements.
- Provide residents with the ability to monitor water, electric and natural gas consumption online through customer connect.
- Produce data for asset analytics to assist in identifying operational efficiencies (i.e. transformer loading).
- Manage systems to enable remote functionality.
- Integrate into utility-specific systems including SCADA.
- Monitor meter events (hot socket, empty pipe, high/low voltage, etc.) for utilities.

## **2016 Year Service Highlights and Achievements**

### **Utilities Business Support:**

- Provided the final update to the 2008 Community Environmental Roadmap.
- Supported the Utilities Rates Lever for the Financial Fit for the Future Initiative.
- Implemented 2016 Gas and Electric non-commodity rates.
- Continued to offer support for Large Commercial and Industrial customers.
- Redesigned the Shallow Utilities Capital Investment Business Model.

### **Environmental Sustainability:**

- Developed new incentives for the next HAT Smart program.
- Refreshed the HAT Smart brand, including a new wrap on the Smart Car and integrating the HAT Smart website in to the City's website for a uniform look.
- Upgraded the solar array on the Medicine Hat Public Library.
- Updated sign at the Solar Demonstration Project by the Family Leisure Centre.

### **Utility Data Systems:**

- Manual truck roll disconnects were reduced from an average 1,300 to 668 in 2016 as a result of AMI functionality.
- Upgraded SCADA servers.
- Integrated GIS into SCADA.
- Improved infrastructure and customer connection by implementing and monitoring meter alarms.
- Improved meter accuracy allowing for more accurate utility statements.

## **Significant Issues and Trends**

### **Business Support:**

- CMH Utility costs are effectively allocated to each customer class.
- Utilize AMI technology to develop additional rate options / incentives.
- Cost of Service review to align methodology with industry best practices.

### **Environmental Sustainability:**

- Medicine Hat renewable energy potential (solar, wind, micro-generation, etc.).
- Increasing community awareness, interest and education in environmental issues and conservation options.
- Evaluate the feasibility of Combined Heat and Power project.
- Continue to monitor the Government of Alberta Climate Change Action Plan and the implications to the City of Medicine Hat and HAT Smart program.
- Align the HAT Smart program with Provincial and Federal programs while providing desired incentives for City of Medicine Hat utility customers.

### Utility Data Systems:

- Assist internal departments with:
  - Pole testing software;
  - Outage Management System (OMS) project ;
  - Power plant with network infrastructure;
  - Substation and network connection of relays, communication devices, etc.; and
  - Determining fiber design needs.
- Regional Network Interface (RNI) upgrade.
- Stay current with industry best practice and technology updates.

## CURRENT STRATEGIES & ACTION PLANS

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### UTILITIES BUSINESS SUPPORT

#### **Sub-Department Name:** Business Support

1. **Goal:** Establish utility rates and tariffs following regulated cost of service principles.
  1. Review existing COSA models / create consistent methodology.
  2. Develop tariffs that support utility infrastructure upgrades and sustainability strategies.
  3. Update the Environmental Utilities cost of service models to reflect industry best practice.
  4. Support the Solid Waste Strategic plan by developing rates that encourage waste diversion.
  5. Continue to monitor trends in the natural gas and electric retail markets.
2. **Goal:** Provide excellent business support services to the Utilities Division.
  1. Attract and retain qualified, dedicated team members.
  2. Promote a positive team environment.
  3. Initiate dialogue with utility departments to identify support service requirements.
3. **Goal:** Develop a cost effective UBS operating budget.
  1. Streamline processes and maintain efficiencies within the UBS department.
  2. Identify areas where efficiencies can be implemented.
4. **Goal:** Monitor carbon levy and impact to City of Medicine Hat.
  1. Continue to monitor progress with Energy Efficiency Panel.
  2. Review Federal and Provincial Environmental policies.
5. **Goal:** Implement new shallow utilities investment model.
  1. Work with development community and customers to ensure new model is understood.
6. **Goal:** Establish new franchise agreements.
  1. Work with Cypress County and the Town of Redcliff to negotiate fair and equitable franchise agreements.

#### **Sub- Department Name:** Environmental Sustainability

7. **Goal:** Provide education to utility customers to assist in increasing awareness and changing behaviors to reduce non-renewable resource consumption and support renewable energy.
  1. Increase awareness through attendance at one tradeshow per year.
  2. Promote and educate through social media and increased advertising.
  3. Attend / initiate community functions and develop internal and external relationships.
  4. Create new HAT Smart incentives for 2017.

**Sub-Department Name:** Utility Data Systems

**8. Goal:** Implement Load Limiting.

1. Upgrade MDM.
2. Upgrade RNI.
3. Pilot load limiting on meters.

**9. Goal:** Complete Civic Pin to meter locations for GIS \ SCADA.

1. Coordinate with Electric Distribution to provide technical resources.

**10. Goal:** Implement cathodic protection for Environmental Utilities and Gas Distribution.

1. Create pilot project to support cathodic protection.
2. Evaluate costs / technologies to support access to the data and develop business processes.

**11. Goal:** SENSUS Systems Acceptance Testing (SAT)

1. Review RNI testing requirements with Electric Distribution, Gas Distribution and Water Utility.

**12. Goal:** Strategy to Reduce Radio Noise.

1. Develop partnerships with internal stakeholders and define ownership of radio equipment.

**13. Goal:** Transition of Data Systems Hardware to ICS.

1. Develop a responsibility matrix to identify department responsibilities.
2. Identify synergies in coordinating infrastructure procurement and standardization.
3. Create a service level agreement with ICS based on recommendations from the project team.

**Strategy & Action Plans:**

#	SP Ref	KR Ref	Strategic Priority & Key Result & Action Plans	Who	When
<b>Strategic Priority: Fiscal Management</b>					
1	5	5.3	<ul style="list-style-type: none"> <li>• Ensure CMH is following industry best practices in establishing rates</li> <li>• Develop a phased implementation of new rate models for Environmental Utilities</li> <li>• Develop KPI to measure return on investment for utilities</li> <li>• Monitor and report on debt to equity ratios within each operational area</li> </ul>	UBS Manager	Q3
<b>Strategic Priority: City Government</b>					
2	6	6.1	<ul style="list-style-type: none"> <li>• Develop and maintain a high performance team that delivers value through supporting strategic initiatives within the Utilities Division</li> </ul>	UBS Manager	Q1



#	SP Ref	KR Ref	Strategic Priority & Key Result & Action Plans	Who	When
<b>Strategic Priority: Fiscal Management</b>					
3	5	5.1	<ul style="list-style-type: none"> <li>UBS operating costs are within approved budget</li> </ul>	UBS Manager	Q4
<b>Strategic Priority: Infrastructure and Amenities</b>					
4	2	2.3	<ul style="list-style-type: none"> <li>Develop and promote conservation and renewable energy and provide incentives through the HAT Smart program</li> </ul>	UBS Manager	Q2
<b>Strategic Priority: Economic Development</b>					
5	1	1.2	<ul style="list-style-type: none"> <li>Create clear and concise messaging to ensure the new Shallow Utilities investment model is understood</li> </ul>	UBS Manager	Q1
<b>Strategic Priority: Fiscal Management</b>					
6	5	5.2	<ul style="list-style-type: none"> <li>Ensure inter-municipal franchise agreements are fair and equitable to all parties</li> </ul>	UBS Manager	Q2
<b>Strategic Priority: Image and Profile</b>					
7	4	4.4	<ul style="list-style-type: none"> <li>Increase awareness of sustainability initiatives offered by the HAT Smart program through education and promotion</li> <li>Develop partnerships within the community to increase public recognition</li> </ul>	Environ. Sustain. Officer	Q4
<b>Strategic Priority: Infrastructure and Amenities</b>					
8	2	2.1	<ul style="list-style-type: none"> <li>Ensure network software updates are installed with minimal disruption to stakeholders</li> <li>Monitor and troubleshoot effects of updates</li> </ul>	UDS Supervisor	Q4
9	2	2.1	<ul style="list-style-type: none"> <li>Complete meter locating upgrades</li> <li>Initiate load-limiting pilot project for more comprehensive understanding of the AML capabilities and restrictions</li> </ul>	UDS Supervisor	Q1
10	2	2.1	<ul style="list-style-type: none"> <li>Create and initiate cathodic protection pilot project to identify areas of concern and maintain equipment integrity</li> </ul>	UDS Supervisor	Q2
	5	5.1	<ul style="list-style-type: none"> <li>Investigate technologies and evaluate costs to provide integrity-based solutions while staying within the approved department budget</li> </ul>	UDS Supervisor	Q4
11	2	2.1	<ul style="list-style-type: none"> <li>Coordinate with Utilities Division departments to ensure testing requirements are inclusive</li> </ul>	UDS Supervisor	Q4

#	SP Ref	KR Ref	Strategic Priority & Key Result & Action Plans	Who	When
12	2	2.1	<ul style="list-style-type: none"> <li>Work with ICS to identify and communicate clearly defined roles and responsibilities for radio equipment</li> </ul>	UDS Supervisor / UBS Manager	Q3
13	2	2.1	<ul style="list-style-type: none"> <li>Develop a mutually-accepted responsibility matrix for workload and equipment maintenance between ICS and AMI departments</li> </ul>	UDS Supervisor	Q3

## FINANCIAL PLAN SUMMARY & HIGHLIGHTS

### Departmental Operating Revenues & Expenses Summary:

Recovery from Utilities	Prior Year Actuals 2015	Current Year Budget 2016	2017 Operating Budget	2016-2017 Change	2018 Operating Budget	2017-2018 Change	2019 Operating Forecast	2020 Operating Forecast
UBS Recovery	N/A	586	542	(44)	566	24	567	566
Utility Sustainability Recovery	486	234	180	(54)	180	-	180	180
Environmental Conservation	N/A	325	325	0	325	-	325	325
Utility Data Systems <sup>1</sup>	946	950	639	(311)	654	15	662	670
Interest Earnings	16	-	-	-	-	-	-	-
<b>Total Recoveries</b>	<b>1,448</b>	<b>2,095</b>	<b>1,686</b>	<b>(409)</b>	<b>1,725</b>	<b>39</b>	<b>1,734</b>	<b>1,741</b>
<b>Expenses</b>								
Salaries & benefits <sup>2</sup>	493	1,072	939	(133)	962	23	985	993
Other Personnel Costs	9	18	35	17	35	-	35	35
Contracted services <sup>3</sup>	346	513	622	109	629	7	617	616
Materials & Supplies	39	25	23	(2)	31	8	26	25
Interdepartmental Charges <sup>4</sup>	382	282	66	(216)	67	1	70	71
Interest & Debt	41	59	-	(59)	-	-	-	-
Amortization <sup>5</sup>	126	126	1	(125)	1	-	1	1
<b>Total Expenses</b>	<b>1,436</b>	<b>2,095</b>	<b>1,686</b>	<b>(409)</b>	<b>1,725</b>	<b>39</b>	<b>1,734</b>	<b>1,741</b>
<b>Permanent Positions</b>		<b>10.0</b>	<b>8.0</b>	<b>(2.0)</b>	<b>8.0</b>	<b>0.0</b>	<b>8.0</b>	<b>8.0</b>
<b>Net Earnings / (Loss)</b>	<b>12</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>

Changes in the current year net operating costs are primarily due to the following factors:

<sup>1</sup> Incorporation of Utility Data Systems department	\$	311,000
Change in other (recoveries)	\$	98,000
	Total change	\$ 409,000
<sup>2</sup> Salaries & Benefits – full impact of reorganization	\$	(133,000)
<sup>3</sup> Increased contracted services	\$	109,000
<sup>4</sup> Change in methodology – centralized interdepartmental charges	\$	(216,000)
<sup>5</sup> Amortization – UDS assets remained with Electric Distribution	\$	(125,000)
Change in other (expenses)	\$	(44,000)
	Total change	\$ (409,000)
Change in Net Operating Costs from 2016-2017	\$	-

**MOE DECISION PACKAGE SUMMARY**

Refer to Attachment A for detailed information on each decision package.

2017-2018 MOE Decision Packages (listed in priority order):\*

<b>Ref.</b>	<b>Year</b>	<b>Name</b>	<b>\$ Operating Impact**</b>	<b>Status</b>
	2017	HAT Smart – Residential	\$ 210,000	Recommended
	2018	HAT Smart – Residential		

## 2014-2018 COUNCIL STRATEGIC PRIORITIES AND KEY RESULTS

### Strategic Priority 1:

**Economic Development:** We foster a sustainable, growing and diverse economy with a strong industrial base and a vibrant downtown.

### Strategic Priority 2:

**Infrastructure and Amenities:** We have high quality, sustainable infrastructure and amenities, and a reputation for excellent management and maintenance.

### Strategic Priority 3:

**Social Wellness:** A safe community that welcomes diversity and supports all citizens with high quality and accessible cultural, recreational and public services.

### Strategic Priority 4:

**Image and Profile:** We promote our distinctive community and excellent quality of life to our citizens and the world.

### Strategic Priority 5:

**Fiscal Management:** Responsible financial management focused on the long term ensures a sustainable city.

### Strategic Priority 6:

**City Government:** The City increasingly stands out as a well-governed and well-organized Municipal Corporation with a positive corporate culture.

### **Strategic Priority 1: Economic Development Key Results**

- **KR 1.1:** At least one more heavy industrial operator or major expansion of existing heavy industry occurs by December 2018.
- **KR 1.2:** A cohesive economic development strategy is completed and being implemented by December 2014.
- **KR 1.3:** The Downtown Revitalization Plan is funded and being implemented by June 2018.
- **KR 1.4:** Value added manufacturing and processing is increased by December 2016.

### **Strategic Priority 2: Infrastructure and Amenities Key Results**

- **KR 2.1:** Improve and implement an asset management plan with attention to our deep utilities and transportation network by December 2016.
- **KR 2.2:** The flood mitigation plan is fully implemented by April 2016.
- **KR 2.3:** The percentage of renewable energy production and consumption increases relative to other business growth by September 2015 and thereafter

### **Strategic Priority 3: Social Wellness Key Results**

- **KR 3.1:** The river valley is developed as an aesthetic, recreational feature and as a tourist attraction by December 2018 and thereafter.
- **KR 3.2:** Appropriate river valley commercial development increases by December 2018 and thereafter.
- **KR 3.3:** Meaningful engagement opportunities for youth are developed and implemented by December 2015 and thereafter.
- **KR 3.4:** Opportunities to enhance existing green space are identified and implemented by December 2016 and thereafter.
- **KR 3.5:** Increased recreational opportunities in the south side of the city are identified and developed by December 2018.

### **Strategic Priority 4: Image and Profile Key Results**

- **KR 4.1:** Medicine Hat promotional agencies align behind a strong external brand and promote Medicine Hat with a unified external voice by December 2015 and thereafter.
- **KR 4.2:** Visitors increasingly choose Medicine Hat as a destination, and increasingly leave with a positive impression of the city by December 2014 and thereafter.
- **KR 4.3:** Citizens are increasingly positive ambassadors for Medicine Hat by December 2014 and thereafter.
- **KR 4.4:** Medicine Hat is increasingly viewed as a choice community and a great place to work, live and play by December 2016 and thereafter.

### **Strategic Priority 5: Key Results**

- **KR 5.1:** The City's healthy balance sheet provides flexibility for the future by March 2015 and thereafter.
- **KR 5.2:** A risk tolerance framework is articulated and adopted by Council by September, 2014.
- **KR 5.3:** The City's sustainable equity pool continues to produce dividends by March 2014 and thereafter.

### **Strategic Priority 6: City Government Key Results**

- **KR 6.1:** A high performance culture with clear accountabilities is in place in the City by December 2014.
- **KR 6.2:** Councilors are role models for excellence in governance by December 2014 and thereafter.
- **KR 6.3:** Increasingly efficient and effective customer-oriented service delivery is implemented in the City by December 2014 and thereafter.
- **KR 6.4:** Employee turnover is reduced and measurable increases in employee satisfaction are recorded by September 2014 and thereafter.
- **KR 6.5:** Council is a resource for strategic direction and advice to the CAO by September 2014 and thereafter.
- **KR 6.6:** The best organization structure for the City to move forward into the future is determined and implemented by December 2016.