Alberta Municipal Benchmarking Initiative (AMBI)

Transit Services

Community Development / Finance
City Council – July 3, 2018
What is AMBI?

The Alberta Municipal Benchmarking Initiative is a collaboration of small and large-municipalities. Their objective is to develop and implement a framework that will enable a continuous, multi-year benchmarking process for participating municipalities.

- Nine Alberta Municipalities
- Grant from Alberta Municipal Affairs
- Retrospective analysis of 2012-2015

A benchmark is an established point of reference against which things can be measured and compared.

“The devil is in the definition!”
Why Benchmarking?

- Helps to tell the municipal “performance story”
- Sound business practice
- Share knowledge and best practices
- Identifies opportunities for change
- Encourages continuous improvement
- Demonstrates transparency and value for money
- Supports results-based accountability
Two Dimensions

**Efficiency**
- A measure of productivity: quantity
- Often expressed in cost per unit

**Effectiveness**
- a measure of value or benefit of service: quality
- Often expressed as percentage or rate

The Transit report looks at:
9 Efficiency measures
9 Effectiveness measures
Participating Municipalities

Three Municipalities Participated in the Benchmarking

- Medicine Hat
- Lethbridge
- Banff
Transit Services

Transit services are defined as a public passenger transportation system that provides citizens with a safe, reliable, efficient and affordable way of traveling to local locations in the municipality, e.g. work, school, shopping, health care, special events, and to locations in the municipalities region.

There are three types of service;

• **Local Transit** - public transit along specific routes for set hours
• **Specialized Services Transit** – Small transit vehicles available to qualified riders on request
• **Regional Transit** – Service that travels to and from the municipality beyond the municipal boundaries
Key Factors Influencing Transit Services Costs

- **Age of Infrastructure**: Age and condition of transit system assets and frequency of maintenance costs.
- **Size of System**: Size and complexity of the transit system.
- **Urban Density**: Denser population may lower collection costs for the transit system.
- **Urban Growth**: High growth municipalities have newer infrastructure with higher amortization (depreciation) costs.
- **Service**: Standards. Service Standards differ in municipalities.
- **Local Factors**: Local factors such as Geography, local industries and population type.
Total Transit Costs

2.2 **Total** Costs ($/capita or VAP) – Efficiency

Total Costs ($/capita or VAP)

- 2012: $74
- 2013: $75
- 2014: $73

Efficiency

- 2012: $122
- 2013: $172
- 2014: $123

Year/Municipality

- Medicine Hat
- Banff
- Lethbridge
Conventional Transit Costs

2.4 Costs ($/capita or VAP) – Efficiency

- Amortization Costs
- Overhead Costs
- Indirect Costs
- Direct Costs

### Costs ($/capita or VAP)

<table>
<thead>
<tr>
<th>Year/Municipality</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medicine Hat</td>
<td>$74</td>
<td>$73</td>
<td>$73</td>
</tr>
<tr>
<td>Banff</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lethbridge</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Efficiency

- Conventional Transit
  - $130
  - $105
  - $103
Specialized Services Transit Costs

2.5 Costs ($/population served) – Efficiency

<table>
<thead>
<tr>
<th>Year/Municipality</th>
<th>Amortization Costs</th>
<th>Overhead Costs</th>
<th>Indirect Costs</th>
<th>Direct Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medicine Hat 2012</td>
<td>$16</td>
<td>$5</td>
<td>$12</td>
<td>$6</td>
</tr>
<tr>
<td>Medicine Hat 2013</td>
<td>$25</td>
<td>$6</td>
<td>$20</td>
<td>$9</td>
</tr>
<tr>
<td>Medicine Hat 2014</td>
<td>$29</td>
<td>$6</td>
<td>$22</td>
<td>$8</td>
</tr>
<tr>
<td>Lethbridge 2012</td>
<td>$29</td>
<td>$4</td>
<td>$21</td>
<td>$6</td>
</tr>
<tr>
<td>Lethbridge 2013</td>
<td>$42</td>
<td>$10</td>
<td>$20</td>
<td>$12</td>
</tr>
<tr>
<td>Lethbridge 2014</td>
<td>$42</td>
<td>$10</td>
<td>$20</td>
<td>$12</td>
</tr>
</tbody>
</table>

$29 $16
Conventional Transit Cost Recovery

2.7 Cost Recovery (%) – Efficiency

<table>
<thead>
<tr>
<th>Year/Municipality</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medicine Hat</td>
<td>15%</td>
<td>15%</td>
<td>16%</td>
</tr>
<tr>
<td>Lethbridge</td>
<td>22%</td>
<td>22%</td>
<td>22%</td>
</tr>
<tr>
<td>Banff</td>
<td>19%</td>
<td>39%</td>
<td>39%</td>
</tr>
</tbody>
</table>

- Medicine Hat: 15%, 15%, 16%
- Lethbridge: 22%, 22%, 22%
- Banff: 19%, 39%, 39%

- 2012 Cost Recovery: 24%
- 2013 Cost Recovery: 24%
- 2014 Cost Recovery: 22%

- Overall average: 33%
Specialized Transit Cost Recovery

2.8 Cost Recovery (%) – Efficiency

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Community Development and Finance

City of Medicine Hat

12%
10%
14%
Medicine Hat’s Story

• **Costs per capita** (how much is spent per population):
  – *Total costs* = spend less when compared with similar Municipality
  – *Conventional* = spend less when compared with similar Municipality
  – *Specialized* = spend less when compared with similar Municipality

• **Cost recovery** (how much revenue is received compared to costs):
  – *Conventional* = receive slightly less when compared with similar municipality
  – *Specialized* = receive slightly more when compared with similar municipality
Vehicle Maintenance Costs

2.10 Costs Vs. Direct Costs (%) - Efficiency

- 2012: 11%
- 2013: 11%
- 2014: 17%
- 2015: 14%
- 2016: 13%
- 2017: 11%
- 2018: 17%

City of Medicine Hat
Medicine Hat’s Story

• During this period Medicine Hat Transit was undergoing a transition from an aging diesel fleet to a part CNG fleet.
Conventional Transit; Revenue Hours

2.11 (hours/capita or VAP) – Effectiveness

![Graph showing revenue hours for conventional transit in different years and municipalities.](image)

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Community Development and Finance

City of Medicine Hat
Specialized Transit, Revenue Hours

2.12 \((\text{hours/capita or VAP}) – \text{Effectiveness}\)

0.3
Conventional Transit, Utilization

2.13 \( \frac{\text{boardings}}{\text{revenue hour}} \) – Effectiveness

<table>
<thead>
<tr>
<th>Year</th>
<th>Conventional Transit Utilization (boardings/revenue hour)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>25.1</td>
</tr>
<tr>
<td>2013</td>
<td>17.0</td>
</tr>
<tr>
<td>2014</td>
<td>18.6</td>
</tr>
<tr>
<td>2015</td>
<td>39.6</td>
</tr>
</tbody>
</table>
Specialized Transit, Utilization

2.15 (boardings/revenue hour) - Effectiveness

3.3 3.1 3.6
Medicine Hat’s Story

- Revenue hour per capita (how long are buses running when compared to the population figure):
  - Conventional = slight less hours run when compared with similar Municipality
  - Specialized = equal amount of hours run when compared with similar Municipality

- Passenger Boardings per revenue hour (how many passengers do we have each hour the buses run):
  - Conventional = slightly higher when compared with similar municipality
  - Specialized = slightly lower when compared with similar municipality
Conventional Transit, Spare Ratio

2.17  (%)

97%

64%  76%  68%

2018
Specialized Transit, Spare Ratio

2.18 (%)

107%

63%

2018
Medicine Hat’s Operations Story

• Spare Ratio can be affected by Charter requirements

• In 2018 the spare ratio is 42%; a lot less than 2012-2014 figures
Conclusions

- Comparable levels of service, while maintaining a total cost below median, when compared to a similar municipality.
- There are advantages to continue communication with other communities to identify best practices and efficiencies.
- Medicine Hat has a joint monthly pass system which can be used on both our conventional and specialized systems.
- New technology can greater enhance the accuracy of the data moving forward.
- Improved cost-capture will also enhance the accuracy of data and benchmarking.
Conclusions

• Direct comparisons can be difficult due to:
  • Indirect costs are a municipality’s interpretation on the amount of effort to support their operations.
  • Larger municipalities having greater internal capacity.
  • Transit Service Standard/levels vary.
  • Local factors such as Geography, local industries and population type.
Questions?