City of Hamilton

Audit and Accountability Reviews

Prepared by: BMA
Management Consulting Inc.
Audit & Accountability Fund – Provincially Funded Third-Party Reports

To engage in a third-party review to help municipalities become more efficient and modernize service delivery

The City’s focus is to review the use of external resources with the objective of reducing external resource costs and bringing expertise in-house.
Three Areas Selected by the City

Transportation Modelling

Water Distribution Asset Maintenance

Development Charges Support
Approach

- Review background information for each program area of focus;
- Interviews with staff;
- Review other municipal best practices;
- Undertake analysis and rationale;
- Analyze key issues
- Make recommendations
Highlights from Performance Audit of External Consultants

- Recommendation - senior leadership team identify opportunities for insourcing and cost savings using the following criteria.
Transportation Modelling
Highlights from City in Motion Master Plan Review

• The report noted the following actions items with respect to transportation modelling:

  • *Create in-house transportation modelling and data analysis capacity* to support transportation decision and planning needs, and the monitoring of TMP outcomes.

  • Update the City's travel demand forecast to reflect the updates from the revised Growth-Related Integrated Development Strategy (GRIDS).
Analysis

In-House Advantages:

✓ Efficiency opportunities
✓ Service is ongoing in nature
✓ Strong preference to have the ability to readily and efficiently respond to changes in assumptions, run alternative scenarios and identify the impact of new studies on transportation management decision-making
✓ Build inhouse capacity
✓ More timely responses
✓ External costs can be mitigated fully, or in part, by the availability of internal resources
Financial Analysis

**Contracted Service**
- 2021-2025 Capital Budget identified between $175,000 to $200,000 annually in Transportation Modelling costs for outside consultants

**In-House Resources**
- An in-house resource with an estimated salary of approximately $111,000 could update the model and run scenarios

**Projected Annual Savings**
Range of $64,000-$89,000. This position would also be responsible for monitoring and maintaining the model.
Leading Practices - Transportation Modelling

- Single tier and regional municipalities with a population greater than 250,000 in the GTHA were contacted

- The municipalities that responded have internal transportation modelling resources:

<table>
<thead>
<tr>
<th>Region</th>
<th>FTEs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Durham Region</td>
<td>1 FTE</td>
</tr>
<tr>
<td>Peel Region</td>
<td>3 FTEs</td>
</tr>
<tr>
<td>City of Brampton</td>
<td>1 FTE</td>
</tr>
<tr>
<td>City of Mississauga</td>
<td>1 FTE</td>
</tr>
<tr>
<td>City of Vaughan</td>
<td>1 FTE</td>
</tr>
</tbody>
</table>
Summary of Benefits

• Reduced reliance on external resources, a savings of approximately $64,000 - $89,000 annually

• Respond to staff and Council inquiries in a more timely manner

• Work more closely with the respective departments to make modifications and run alternative scenarios and sensitivity analysis

• Improved quality control

• Assist the management of development reviews within the transportation network based on proposed Zoning and Official Plan amendments

• Retain knowledgeable staff that can more quickly respond to changes in strategic directions
Recommendation

- City hire a Transportation Planning Technologist position with an anticipated cost savings of approximately $64,000 - $89,000 by decreasing or eliminating the need for external consultants.
Development Charges Support Review
Background

- Development Charges (DCs) are a critical source of revenue used to finance growth-related capital infrastructure.

- The completion of the DC Background Study is almost exclusively undertaken by external consultants.

- Preparation of the DC Background Study was determined by management as an opportunity for efficiencies and program enhancements to improve information available to Council on a timely basis, specifically related to future policy setting and the impact of Bill 108.
New Legislative Requirements – Bill 108

- Bill 108, the More Homes, More Choice Act - Royal Assent June 2019
- The new Act makes significant changes to the Development Charges Act (DCA) and also introduces a new Community Benefit Charge (CBC).

- Soft Services
  - Soft services will no longer be eligible service under the DCA, commencing in January 2021
  - May be eligible for inclusion in a Community Benefit Charge By-law
  - The amount charged will be capped in accordance with the legislation as a percentage of land values
  - CBC eligible services will be determined in regulation which have yet to be released
  - CBC requires development of a strategy, identification of the facilities, services and matters that will be funded
New Legislative Requirements – Bill 108

- The new CBC legislation will increase workloads and require additional resources to:
  - Evaluate the approach to these studies
  - Collect background data including property value information
  - Identification of the facilities, services that will be funded
  - Carry out the study
  - Undertake a public process
  - Prepare a by-law
  - Transition from DCs to CBC’s will need to be carefully monitored

- The City has limited staff resources to undertake such analysis
- The transition of winding down the soft services from the DC By-law to a CBC By-law will need to be carefully monitored and the options for the City will need to be assessed
Analysis

• Opportunities to better support Council-policy decision making

• Early identification and vetting of key policy matters is critical because implementation and associated adjustments can be difficult if introduced towards the end of the process

• An In-house Senior Financial Analyst would provide an additional internal resource to help develop and analyze various policy decisions and ongoing support at a lower cost

  • Position could also be used to undertake certain activities required for the DC Background Study and the CBC study
Analysis - Efficiency

• DC Background Study and development charge policies and opinions in 2018 to Sept 2019 was $687,000:
  • $613,000 - DC Background Study
  • $74,000 - DC opinions

• **Minimum** charge-out rates by the external consulting services for an Analyst position is $120/hour
  • In excess of 850 hours for the consulting Analyst in last study - $100,000+
  • Hourly rate of a Senior Financial Analyst at the City, taking into consideration benefits and chargeable hours is 30%-40% lower

• CBC report will increase workloads and consultation efforts
Summary of Benefits - Effectiveness

- Assist in stakeholder engagement
- Impact analysis to respond to changes to the legislation and regulations and the impact to stakeholders on a more efficient and timelier basis
- Assist in the preparation of the CBC Study
- Undertake background research and impact analysis
- Could potentially reduce the cost of outside consultants
- External consultant liaison and contract oversight
- In-house expertise
Recommendation

- That the City consider the hiring of a Senior Financial Analyst to potentially reduce the cost of outside consultants in the preparation of the DC Background Study and the CBC Study subject to additional clarity once the new regulations are enacted.
Water Distribution
Asset Maintenance Review
Background

- Objective - Review options of a mixed service delivery model by employing an additional crew for sub-standard water services (lead replacement)

- Replacing the City’s portion of the line is done exclusively by outside contractors at a cost of approximately $4.1 million

- City currently has 4 in-house crews for services such as fire hydrant replacement, watermain breaks, valve installations, water service line replacements

- Approximately 20,000 homes have been identified with lead water services

- On average, approximately 700 of these houses per year are replacing the water service line
Analysis

• Direct and indirect costs:
  • Internal direct costs include salaries, wages, equipment and supplies.
  • The indirect costs include training and meeting allowance (cell, phone, computer, etc.).
  • Yard facilities and supervisory staff have the capacity to oversee and accommodate the human and equipment resources.
  • Assumption: Based on available hours and assuming it takes four hours to complete, it is estimated that a City crew can complete approximately 343 sub-service water services/yr

Staffing for an additional crew

<table>
<thead>
<tr>
<th>New Staff Position</th>
<th>Equipment Needed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Backhoe Operator</td>
<td>Backhoe</td>
</tr>
<tr>
<td>Water Distributor Operator</td>
<td>Float</td>
</tr>
<tr>
<td>Truck Driver</td>
<td>2 Trucks</td>
</tr>
<tr>
<td>Labourer/Truck Driver</td>
<td></td>
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</tbody>
</table>
## Comparison

<table>
<thead>
<tr>
<th>In-house</th>
<th>Cost Per Job</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salaries, Wages, Benefits per Job</td>
<td>$947</td>
</tr>
<tr>
<td>Vehicles</td>
<td>$355</td>
</tr>
<tr>
<td>New Vehicle Amortization</td>
<td>$205</td>
</tr>
<tr>
<td>Materials</td>
<td>$450</td>
</tr>
<tr>
<td>Other Costs</td>
<td>$222</td>
</tr>
<tr>
<td>Soil Disposal</td>
<td>$60</td>
</tr>
<tr>
<td>Final Restoration</td>
<td>$1,800</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$4,039</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Contract</th>
<th>Cost Per Job</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salaries, Wages, Benefits per Job - City</td>
<td>$322</td>
</tr>
<tr>
<td>Vehicles - City Inspector</td>
<td>$38</td>
</tr>
<tr>
<td>Contract Costs</td>
<td>$3,685</td>
</tr>
<tr>
<td>Final Restoration</td>
<td>$1,800</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$5,845</strong></td>
</tr>
</tbody>
</table>

### Assumptions
- 4 hours per job on average
- $600,000 in equipment expenses, amortized over 10 years at 3%
- Other costs includes tool charge out costs, staffing ancillary costs
- Soil disposal of 5 tonnes
- Final restoration costs have been assumed to be the same under both scenarios
## Cost Comparative Analysis and Potential Savings

### Comparative Analysis

<table>
<thead>
<tr>
<th></th>
<th>Contracted Service</th>
<th>In-house</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Existing</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td># of Substandard jobs completed annually</td>
<td>700</td>
<td>700</td>
<td></td>
</tr>
<tr>
<td>Avg Cost per Unit</td>
<td>$</td>
<td>5,845</td>
<td></td>
</tr>
<tr>
<td>Estimated Cost of Service</td>
<td>$ 4,091,842</td>
<td></td>
<td>$ 4,091,842</td>
</tr>
</tbody>
</table>

### Mix of Inhouse Crew and Contract

<table>
<thead>
<tr>
<th></th>
<th>Contracted Service</th>
<th>In-house</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td># of Substandard jobs completed annually</td>
<td>357</td>
<td>343</td>
<td>700</td>
</tr>
<tr>
<td>Avg Cost per Unit</td>
<td>$</td>
<td>5,845</td>
<td>$ 4,039</td>
</tr>
<tr>
<td>Estimated Cost of Service</td>
<td>$ 2,086,839</td>
<td>$ 1,385,499</td>
<td>$ 3,472,338</td>
</tr>
</tbody>
</table>

**Estimated Annual Savings**: ($619,504)
Summary of Benefits

Savings of approximately $620,000 annually

Having a combination of internal and external resources allows for more timely response to substandard water service requests.

Should the need arise, the new crew provides the City with additional flexibility to address emergency watermain breaks.

A combination of internal and contracted services would allow the City to continually monitor the costs of associated with insourcing and outsourcing.
Recommendations

• Employ a hybrid of in-house and contract services for the Substandard Water Program. Results of the financial analysis reflect a significant savings by adding a new City crew to undertake approximately 50% of the Substandard Water Program replacements.

• Continue to monitor costs of in-house versus outside contractors for substandard watermain replacement to determine the optimum mix.