Office of the Auditor General

Follow-up to the 2015 Audit of the Automated Meter Reading Project

Tabled at Audit Committee
May 29, 2019
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Executive summary

The Follow-up to the 2015 Audit of the Automated Meter Reading (AMR) Project was included in the Auditor General’s 2018 Audit Work Plan.

The key findings of the original 2015 audit included:

- The AMR project had a governance structure to ensure it was implemented and managed economically and efficiently. However, it lacked a steering committee; and a single business owner was not defined until over three years after the project was completed.
  - The project reported to Council semi-annually and informally to senior management; however, given the size and duration of the project, it was expected that a project steering committee (or similar) would have been established to provide guidance, direction and control.

- The project was adequately planned, implemented and managed economically and efficiently.
  - All 195,000 endpoints originally in-scope were successfully installed, including the 10,000 installs originally scoped out; and the project remained on schedule and budget.

- Most of the project’s intended objectives, expected efficiencies, strategic goals and service improvements were achieved. However, cost-savings and the achievement of the project’s strategic goals were not comprehensively tracked or reported on.
  - Although savings were realized as a result of a reduction in staff, the cost savings realized from the implementation of Advanced Metering Infrastructure (AMI) were not reported on.
Follow-up to the 2015 Audit of the Automated Meter Reading Project

Table 1: Summary of status of completion of recommendations

<table>
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<th>Recommendations</th>
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Conclusion

Management has made significant progress, implementing all four recommendations. We suggest that in the future management include variable and fixed pricing in relevant contracts to incent contractors to carry out their duties in a manner consistent with City objectives.

Acknowledgement

We wish to express our appreciation for the cooperation and assistance afforded the audit team by management.
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Detailed report – Assessment of implementation status

The following information outlines management’s assessment of the implementation status of each recommendation as of January 2019 and the Office of the Auditor General’s (OAG) assessment as of March 2019.
Follow-up to the 2015 Audit of the Automated Meter Reading Project

Recommendation #1

Table 2: Status

<table>
<thead>
<tr>
<th>Management update</th>
<th>OAG assessment</th>
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Audit recommendation:

That the City define and adopt an approach for defining when a formal steering committee is required, including factors such as project size and duration, project risk and complexity, and the capability and experience of the organization to manage the project.

Original management response:

Management agrees with this recommendation.

The City’s project management methodology already contains guidance on governance and stakeholder management. The need for a formal steering committee is dependent on the unique needs of each project and it is the project manager's responsibility to bring together stakeholders, clients and the project authority to ensure appropriate governance.

Management recognizes that enhancements can be made to provide further guidance on when a formal steering committee is required and as such, management will update the Project Management Policy and Framework. This update will occur by the end of Q1 2017.

Management update:

The Project Management Policy was updated to include more references to project steering committees. The policy was renamed the Business Case and Project Management Policy to better reflect that it applies prior to project start.

The Project Authority and Escalation Guidelines were also updated to include project steering committees as governance, stakeholder management and escalation bodies.

The Framework consisted of high-level information that, upon staff review, did not require an update; information that required updates were reflected in the Business Case and Project Management Policy and Project Authority and Escalation Guidelines, as outlined above.
OAG assessment:

The Business Case and Project Management Policy has been updated and now indicates conditions under which a steering committee may be required.
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**Recommendation #2**

**Table 3: Status**

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**Audit recommendation:**
That the City expand the Project Management Policy to require a clear definition of the business owner at the outset of the project.

**Original management response:**
Management agrees with this recommendation.

While the City’s project management methodology does contain guidance on governance and stakeholder management, management recognizes that enhancements can be made to clarify the role of a business owner.

As such, management will update the Project Management Policy, Framework and Project Charter template to require a clear definition of the business owner at the outset of the project. This update will occur by the end of Q1 2017.

**Management update:**
The Project Management Policy was renamed the Business Case and Project Management Policy and includes the business owner as part of the expected overall project governance. It also includes a definition for the term business owner, and a description of the expected responsibilities of the business owner.

The Framework consisted of high-level information that, upon staff review, did not require an update; information that required updates were reflected in the Business Case and Project Management Policy and Project Authority and Escalation Guidelines, as outlined above.

**OAG assessment:**
The Business Case and Project Management Policy has been updated and now requires that the business owner be confirmed at the project initiation stage.
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**Recommendation #3**

Table 4: Status

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**Audit recommendation:**

That the City, for future projects of similar scope and scale, consider including both variable and fixed pricing mechanisms in the contract to provide incentives for contractors to carry-out their contracted duties in a manner that is consistent with the City’s objectives.

**Original management response:**

Management agrees with this recommendation.

For future projects of similar scope and scale a detailed assessment of potential Bases of Payment, which could include the use of variable and/or fixed pricing mechanisms, will be undertaken and documented as part of the development of the procurement strategy.

It is expected that this will be implemented in Q1 2017 contingent upon when projects of similar scale and scope arise.

**Management update:**

This recommendation is considered implemented. There have been no projects of similar scope and scale to the AMR; however, Supply proactively assesses the most effective Basis of Payment for each individual contract when developing procurement strategies. This is documented in the Contract Approval Request and/or Procurement Plan Approval Request, as appropriate.

**OAG assessment:**

Ideally, in order to assess the recommendation’s implementation status, we would have reviewed subsequent projects to confirm the consideration of both variable and fixed pricing. However, management indicated that there have been no projects of similar scope and scale.
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Given this, we assessed the recommendation’s implementation status based on the current contract approval request form as it includes a basis of payment field where variable and fixed pricing mechanisms can be outlined.

We suggest that when projects of similar scope and scale do arise, management should ensure that the basis of payment includes variable and fixed pricing mechanisms where relevant and document this consideration on the contract approval request form.
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Recommendation #4

Table 5: Status

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Audit recommendation:

That the City should consider the value of assessing and reporting on the amount of cost savings and benefits realized to date to provide stakeholders and interested parties information on whether the project achieved its intended objectives.

Original management response:

Management agrees with this recommendation.

Consideration will be given to determine how to assess and report back to interested parties and stakeholders on the outcome of the AMR project and whether or not the intended benefits were achieved.

City staff will complete this reporting in Q3 2017.

Management update:

A joint communication by the General Manager, Public Works and Environmental Services and the General Manager, Corporate Services and City Treasurer was sent to stakeholders, including the City Manager and the Senior Leadership Team, in January 2018.

Highlights included the following:

- The intended benefits of the AMR project were realized once the system was operationalized.
- In terms of cost savings, an estimated $23 million over 20 years will be saved due to a reduction in FTEs (from 14 FTEs at project commencement to 2 FTEs in 2016).
- The City now benefits from accurate and abundant data for renewal and investment planning of water infrastructure.
Annual reporting on the reduction of FTEs was included in the City’s annual budget.

In February 2019, a communication was sent to Mayor and City Council highlighting corporate efficiency and productivity savings; the AMR project was one of many highlighted.

**OAG assessment:**

The City Manager, the Senior Leadership Team, the Mayor and City Council have received information regarding anticipated cost savings and benefits of the AMR project.
Table 6: Status legend

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<th>Status</th>
<th>Definition</th>
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<td>Not started</td>
<td>No significant progress has been made. Generating informal plans is regarded as insignificant progress.</td>
</tr>
<tr>
<td>Partially complete</td>
<td>The City has begun implementation; however, it is not yet complete.</td>
</tr>
<tr>
<td>Complete</td>
<td>Action is complete, and/or structures and processes are operating as intended and implemented fully in all intended areas of the City.</td>
</tr>
<tr>
<td>No longer applicable</td>
<td>The recommendation is obsolete due to time lapses, new policies, etc.</td>
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