

AUDITOR GENERAL

Halifax Regional Municipality



LED Streetlight Conversion Project Audit

November 20, 2019

Overview of Audit



Source: LED Roadway Lighting

- Overall effective systems and procedures to manage LED streetlight conversion project
- Savings realized from LED technology
- Adequate processes to monitor project issues, schedule and budget
 - Room for improvement in project planning
- Contracts complied with procurement policy

Detailed Results

- LED savings realized
 - Project payback period – 12 years
- Completed six months late – cost \$49.6 million
- Approximately 4% over 2015 budget

Streetlight Operating Costs	Pre-LED Conversion 2018-19 Budget ¹	Post-LED Conversion 2018-19 Actuals ²	2018-19 LED Savings ¹
Electricity	\$6,822,384	\$2,276,011	\$4,546,373
Maintenance	\$324,730	\$399,854	\$(75,124)
Additional LED Costs (System, Sim Cards, other)	-	\$292,195	\$(292,195)
Total:	\$7,147,114	\$2,968,060	\$4,179,054

Source: ⁽¹⁾ HRM Finance

⁽²⁾ SAP

Detailed Results

- LED conversion project effectively managed
- Project issues, schedule and budget adequately monitored
 - External project manager tracked project progress against schedule and budget
 - Regularly communicated with HRM
- Project changes appropriately approved



Detailed Results

- Contracts
 - LED Installation Contractor – \$39.6 million
 - Project Management Services – \$0.7 million
 - Design Review Services – \$0.1 million
 - Most aspects effectively managed
- Budget increases reviewed for three contracts
 - All appropriately approved



Detailed Results



- Comprehensive risk assessment not complete
 - Project funding approval assessed risk relatively low
 - No support
- Most key roles and responsibilities defined
 - IT role not clearly identified
 - IT hardware and system management costs not considered in planning
- Project budgets prepared
 - Lack of supporting documentation
 - Submitted to Regional Council for approval and project funding
 - No central file

Detailed Results

- LED installation contract: adequate terms
- Procurement policy followed
 - Proposals publicly posted – Nova Scotia procurement website
 - Vendors – highest-scoring proponents
 - Appropriate approvals obtained



Detailed Results



- Processes implemented to identify, track and claim warranties
 - 10-year parts warranty, one-year service warranty
- Dimmable streetlights
 - Initial project deliverable
 - Lights currently at lowest level to meet standards
- Review of staffing requirements in progress
 - Pre-LED conversion – 13,000 streetlights
 - Post-LED conversion – 43,000 streetlights

Wrap-up



AUDITOR GENERAL

Halifax Regional Municipality



Questions?