

**LED STREET LIGHTING TASK FORCE**  
**February 7, 2013**  
**Ontario Room**

<b><u>Attendance:</u></b> Regional Councillor Gord Landon Councillor. Howard Shore Councillor Alex Chiu  Guest: Bill Smelser, Consultant, Laurilliam Lighting Technologies Ltd.	<b><u>Staff</u></b> Brenda Librecz, Commissioner of Community & Fire Services Gary Adamkowski, Acting Director, Asset Management Prathapan Kumar, Senior Manager, Capital ROW & Environmental Assets Rachel Prudhomme, Manager of Special Projects Graham Seaman, Senior Manager Sustainability Office Andrea Tang, Manager of Financial Planning Jonathan Tate, Senior Business Analyst Laura Gold, Council/Committee Coordinator
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The LED Street Lighting Taskforce convened at 9:05 a.m., with Regional Councillor Gord Landon presiding as Chair.

## **1. LED STREET LIGHTING TASK FORCE**

Mr. Bill Smelser, Consultant, Laurilliam Lighting Technologies Ltd., was in attendance to provide an update to the LED Street Lighting Taskforce. The following presentations were provided: (1) Phase II Works; and (2) Monitoring, Metering & Dimming Systems.

Copies of both presentations were provided to the Committee.

### **Phase II Works Presentation**

The presentation included the following information: recap of phase 1 works completed to date; technical specifications for the Phase II works; procurement process, RFPQ, Primary evaluation of RFPQ, field testing of product samples; pre-qualified LED manufactures; Qualified Replacements; funding sources; payback calculations and available incentive programs.

Highlights of the presentation:

- Installation of the LED streetlight would result in approximately 60% reduction in hydro use;
- Life expectancy of the LED streetlight driver is 20 to 21 years;
- Projected annual operating savings from LED conversion is estimated to be \$924,000 (based on the selected lowest wattage fixtures and current hydro rates); with a simple payback period of 8.2 years.

Staff was requested to prepare a communications plan in consultation with CorpComm prior to the proposed LED streetlight conversion program. Communication plan should be provided to all Councillors so that it could be included in Councillor's newsletter.

Moved by Councillor Howard Shore  
Seconded by Councillor Alex Chiu

That the Committee endorse the presentation on Phase II Works; and,

That staff to report the results of the RFPQ to the General Committee and further;

That staff be directed to do all things necessary to give effect to this resolution.

CARRIED

#### Monitoring, Metering & Dimming Systems

The presentation included the following information: available types of dimming systems; feasibility of dimming for Markham streets; dimming options; and monitoring & metering dimming systems.

#### Highlights of the presentation:

- Dimming is applicable only when pedestrian activity is reduced during night and only 3,744 higher wattage cobra heads (out of 12,735) could be dimmed;
- It is recommended to pass a by-law, if the City proceed with the dimming system;
- Dimming system would slightly increase the lifecycle of the LED fixture and driver;
- Projected annual operating savings from part-night dimming is estimated to be \$32,500 (based on current hydro rates); with a simple payback period of 20 years;
- Projected annual operating savings from part-night & CLO dimming is estimated to be \$53,500' with a simple payback period of 37 years;
- Projected annual operating savings from monitoring, part-night & CLO dimming is estimated to be \$111,700, with a simple payback period of 37 years;

The Committee requested that a business case be conducted considering that there will be a reduction in the number of site visits by the maintenance contractor to detect the faults.

In addition, the Committee requested that the staff report to the General Committee include information on the full monitoring, metering & dimming system.

Moved by Alex Chiu  
Seconded by Councillor Howard Shore

That the Committee endorse the presentation on Monitoring, Metering & Dimming Systems; and,

That a staff report be brought forward to the General Committee on this matter; and further;

That staff be directed to do all things necessary to give effect to this resolution.

CARRIED

The Committee wanted to ensure that the installation of the monitoring system should not preclude the amalgamation of systems in the future (e.g. adding traffic signals, water metering etc.). The Consultant reported that additional features can be added to the monitoring system in future.

It was noted that York Region is also looking into installing LED street lighting. Staff was requested to contact York Region on this matter.

## **ADJOURNMENT**

The LED Street Lighting Task Force meeting adjourned at 10:32 pm.