

August 9, 2017

Report To: Mayor and Council

From: Travis Rob, Manager of Operations and Facilities

RE: Removal of Traffic Control Signals – 2017 Budgetary Cost Reducing Strategy – Report 2

At the July 5, 2017 meeting of the Operations and Facilities Executive Committee a traffic volume and traffic signal study was presented including recommendations, all of which is attached to this report. At that meeting the committee decided to table the recommendations to allow time for administration to put together a costing for the replacement of one traffic signal controller including required upgrades to meet accessibility requirements. This would provide some spare parts to support the out dated equipment currently installed throughout town.

The intersection of Keating Avenue and Kings Highway was used as the design intersection to replace the controller on as this intersection is a relatively simple intersection that could see the one of the biggest benefits of the installation of some smart technologies to allow east/west traffic to flow when there is no cross traffic queue. The below table outlines the cost associated for the replacement of one intersections traffic control signals.

- Replace existing controller and cabinet with new NEMA Cabinet - \$13,000.00
- Pedestrian Signal APS – Full Intersection - \$9000.00
- Autoscope Vision Video Detection – Full Intersection - \$30,000.00

The costs provided are for a simple controller similar to that currently installed as well as the optional addition of photo detection and other intelligent features to improve traffic flow, especially in the off peak times at certain intersections. Under new regulations spurring from the Accessibility for Ontarians with Disabilities Act, when upgrading traffic controllers, you have to bring the pedestrian signals up to compliance with the regulations. This will be accomplished with the APS addition noted above. FFPC would be completing the installation of the new controllers and provided that programming information could be sent to Econolite in advance and proper grounding is on site, it is anticipated that the installation of a simple controller cabinet would take 4 hours. Therefore the installation cost would start at \$650.00. Addition of video detection, the repair/replacement of any wiring or grounding, and any onsite programming required would be in addition to this. Also to note is that all prices are exclusive of HST and shipping and budgetary in nature, once direction is provided final quotations can be sought.

The Town of Fort Frances currently operates 12 signalized intersections, all with the exact same equipment that has not been supported by the manufacturer for a number of years. These controllers were all installed in 1998 and have a useful life of 12 years. Most municipalities plan for the replacement of their controllers on a 12 year cycle to avoid any disruptions to service, these units are almost 20 years old, placing the Town in a precarious position. In speaking with the manufacturer, these controllers are “unrepairable with replacement components no longer available”. The Town needs to start a phased replacement of all controllers over the next 2 years, or sooner, starting in 2018 to avoid a failure causing sustained down time and unbudgeted expenses.

Given the age of the traffic control infrastructure currently in the Town, the lack of available repair parts, and the intention of the proposal to remove one set of lights discussed during the budget deliberations, it is the recommendation of Administration that

1. A new controller set complete with the addition of Pedestrian Signal APS to meet Accessibility requirements and video detection be purchased for the intersection of Keating Avenue and Kings Highway as a pilot in 2017.
2. Council approve the unbudgeted expense of \$52,000.00 to purchase the equipment.
3. The replacement of 6 additional controllers be brought forward to the 2018 Capital Budget.

Respectfully Submitted



Travis Rob, EIT
Manager of Operations and Facilities

Council approval of this report will ensure:

- 1. A new controller set complete with the addition of Pedestrian Signal APS to meet Accessibility requirements and video detection be purchased for the intersection of Keating Avenue and Kings Highway as a pilot in 2017.**
- 2. Council approve the unbudgeted expense of \$52,000.00 to purchase the equipment.**
- 3. The replacement of 6 additional controllers be brought forward to the 2018 Capital Budget.**