



City of
Peterborough

To: Members of the Budget Committee

From: W.H. Jackson, Director of Utility Services

Meeting Date: November 27, 2017

Subject: Report USTR17-020
Role of New Traffic Operations Technician

Purpose

A report to update Council on the work associated with the new Traffic Operations Technician position that was approved as part of the 2016 Budget Process.

Recommendation

That Council approve the recommendation outlined in Report USTR17-020 dated November 27, 2017, of the Director of Utility Services, as follows:

That Report USTR17-020 be received for information.

Budget and Financial Implications

There are no budget or financial implications as a result of this report.

Background

The Traffic Operations Section of the Transportation Division is responsible for the management of the road network in the City of Peterborough, including:

- the design and operation of the traffic signal system,
- pavement markings and traffic signs,
- establishing speed limits and other traffic regulations contained within the Traffic By-law,
- issuance of right-of-way occupancy permits for contractors undertaking work within the right-of-way,
- design and management of pedestrian crossings and managing the crossing guard program,
- traffic data collection and monitoring,
- transportation safety,
- the completion of various transportation studies to assess the need for operational / safety improvements, neighbourhood traffic calming, and new traffic control device application.

The Traffic Operations Section current manages and maintains 129 traffic signals across the City, 325 km of pavement markings, 16 railway crossings, 15,800 traffic signs, and 38 Adult School Crossing Guard locations. In addition to maintaining these assets, on an annual basis the group processes between 350-400 road occupancy permits; coordinates the deployment of the speed radar trailer to over 50 different streets; and completes between 60-100 operational reviews to address concerns raised by Council, members of the public, or other internal / external clients. Staff in the Traffic Section also undertake detailed reviews of new subdivision developments to ensure that new traffic control devices, parking restrictions, pavement markings, and signage required for the new streets are properly designed and installed by the developer, and they process and update the necessary traffic and parking by-laws to support assumption of these neighbourhood streets.

Prior to 2016, the workload of the group was completed by 1 Transportation Services Co-ordinator, 1 Traffic Operations Technologist, 1 Traffic Engineering Technologist, and 2 summer students, (0.67 FTE). The backlog in addressing requests for operational reviews was growing over the years due to a shortage of staff and staff were increasingly having to rely on consultants to assist in completing the more complex reviews and studies.

In the 2016 Draft Operating Budget, the Transportation Division included a “Below the Line” request for an additional Traffic Engineering Technologist position to assist with addressing the backlog of outstanding requests for operational reviews.

Council, at their meeting of December 7, 2015 approved the following resolutions:

- a) That a new Traffic Engineering Technologist position be created and the net provision of \$1,795,198 for Traffic, shown on page 78 of the 2016 Highlights Book and pages 74-75 of the 2016 Operating Budget Details Book, be adjusted as follows: the Personnel line be increased by \$58,000; the Contractual Services be decreased by \$20,000; and a Transfer from the Traffic Signal Reserve be increased by \$38,000 for a net tax levy impact of zero; and
- b) That staff provide a report for the 2018 Budget updating Council on the work associated with this position.

Item (b) is the topic of this report.

Implementation of Council Direction

The request for a new Traffic Engineering Technologist position in the 2016 Operating Budget assumed a start date for a new hire in April 2016, and recruitment began in the spring of 2016. At the same time, the existing Traffic Operations Technologist position became vacant, leaving a staff shortage of 2 positions for much of 2016. The initial recruitment in the spring of 2016 did not yield any suitably qualified candidates, and a second recruitment was completed over the winter of 2016.

In early 2017 a new Traffic Operations Technologist was hired and a replacement for the vacant position was also filled by an internal staff transfer. In May of 2017, the new Traffic Operations Technologist position became vacant again and recruitment began in the spring of 2017 to refill this position. As of September 2017, the position was refilled and the group has finally reached full staffing levels.

Work Associated with New Position

The immediate priority for the new position is to assist the group in completing the long list of operational review requests that are still outstanding. Staff currently has approximately 35 active projects ongoing, representing a range of citizen / Councillor requests for improvements covering everything from signal timing changes, new signals, new crossing guards, to requests for parking restrictions changes, requests for speed limit changes, and various forms of traffic calming in neighbourhoods. Many of these reviews involve the collection and analysis of traffic and collision data, the assessment of various alternatives, public consultation or neighbourhood surveys in some cases, and the preparation of staff reports to Council that involve changes to by-laws, capital improvement plans, or require financial expenditures that are not included in existing budgets.

In addition to the routine requests for reviews of various traffic operational matters, there are a number of internal projects that this new staff person will be involved in as discussed below:

- 1. City-Wide Collision Database** - In 2015 staff in the Traffic Operations group, in partnership with the Mapping/GIS group, began the development of a collision database and mapping application to assist in identifying city-wide collision trends, specific collision prone locations in the City, and prioritizing reviews of the most critical locations to identify necessary improvements. The database application was populated with all collision reports received from the Peterborough Police Service between 2010 and July of 2014, at which point the police converted to electronic collision reporting and discontinued sending any collision report information to the City.

Over the past two years, staff have been working with the Ministry of Transportation to obtain collision reports for all reportable collisions occurring in the City directly from the Ministry's collision reporting system. In August of 2017, an agreement with the Ministry was signed and staff are working to download the missing collision data from July of 2014 and to populate this new data into our internal collision database. It is expected that this will be completed in early 2018 and will involve a significant time commitment from our new Traffic Operations Technologist. This is a significant enhancement that will allow the Traffic Operations group to begin to take a more proactive approach to safety management of the transportation system; an initiative that will evolve over the next 2-3 years.

- 2. City-Wide Count Program** - In 2010/2011 the Traffic Operations group began a modest traffic count program to collect 24 hour vehicle volume counts using automatic traffic recorders (ATR), and 12 hour intersection turning counts at various locations across the City. The count data is used to calibrate our city-wide travel demand forecasting model and complete operational reviews at intersections. The Average Daily Traffic Count data is published on the City website for use by the public.

Over the years, the extent of traffic data collection has expanded such that 24 hour ATR counts are now collected at over 420 stations across the City in the fall each year, and 12 hour turning counts are completed at over 150 intersections. In addition, the count program has expanded to collect pedestrian and cyclist counts at intersections and on key multi-use trails across the City. In 2018, with the additional staff resource an assessment of historical traffic growth trends on various roads in the City will begin with the intent to prepare annual information reports on traffic growth patterns across the community.

- 3. Traffic Operations Review** - In the 2012 Comprehensive Transportation Plan, it was recommended that the City undertake a Traffic Operations Review to assess the performance of key intersections across the City and develop a series of short to medium term improvements to improve traffic operations and safety. This review has been delayed while the traffic count program and collision database program have been developed, as these information sources are critical to the completion of the Operations Review. The Traffic Operations Review will begin in earnest in early 2018, with the hiring of a consulting firm to complete major portions of the review. The review will include 4 major work

streams including; operational and safety reviews at key intersections, arterial road corridor signal operations reviews, development of traffic calming policies, and a strategic review of the City's computerized traffic signal system. The Traffic Operations Technologist position will be involved in assisting with this review, and in implementing the study recommendations.

- 4 Pedestrian Crossing Review** – Council at its meeting of October 24, 2016 requested that staff report back on pedestrian safety options on arterial roads, where there is greater than 500 meters between signalized intersections. Work on this project has been started with an initial review of best practices used in other similar sized municipalities across Ontario. The new Traffic Operations Technologist will assist with the assessment of opportunities for new protected pedestrian crossings on existing arterial roads, and will help to prepare guidelines for protected pedestrian crossings that can be used to assess future needs. A report to Council is anticipated late in the second quarter of 2018.
- 5 Road Safety Strategy** – Over the past 8 months, the Traffic Operations Section has been participating in a diverse working group including representatives from Peterborough Public Health, Peterborough Police Services, the Ontario Provincial Police, Peterborough County, Safe and Active Routes to School Program, and the Peterborough Bicycle Advisory Committee, to explore the idea of developing a Road Safety Strategy for the Greater Peterborough Area (City and County). Developing a strategy of this nature requires a significant amount of research and preparation work to understand the nature and pattern of collisions that are occurring in the community and various ways to address them through engineering, enforcement and education measures. The new Traffic Operations Technologist will play a key role in supporting this strategy. With receipt of the MTO collision data, City staff intend to begin a City-wide review of collision data trends and patterns to:
 - i. Identify priority safety concerns and work with the Road Safety Working Group to identify targeted education strategies that can be developed (i.e. red light running, pedestrian crossing / safety, cyclist safety, turning collisions, etc);
 - ii. Identify priority locations where certain key collision patterns are occurring and work with the Road Safety Working Group to identify education / enforcement campaigns that can be used to target these collisions to improve safety; and
 - iii. Identify priority locations where collision patterns can be addressed through engineering or traffic control measures
- 6 Intersection Pedestrian Safety Enhancements** – In the draft 2018 budget, a new capital work program has been established to enhance pedestrian safety at intersections across the City by installing countdown pedestrian timers and enhanced pedestrian crosswalk markings. The new Traffic Operations Technologist position will assist in implementing this program, beginning with key intersections in the downtown where we have the highest pedestrian crossing volumes and the greatest number of conflicts with motorized vehicles.

- 7 The Traffic Operations group works as an integrated team to deliver an aggressive work program to maintain and enhance the operation and safety of the City's road network. The complexity of this task is growing as the community grows, congestion begins to develop on the City's busiest road corridors, and staff are being continually challenged to utilize new and innovative methods to manage our transportation system. The Traffic Operations and Traffic Engineering Technologists are the key staff resources who deliver this work program on an annual basis.

SUMMARY

The request for a new Traffic Engineering Technologist position in the 2016 Operating Budget was approved by Council and recruitment began in the spring of 2016. As of September 2017, the position was filled and the group has finally reached full staffing levels. The Traffic Operations group works as an integrated team to deliver an aggressive work program to maintain and enhance the operation and safety of the City's road network. With a full complement of 3 full-time staff and 2 summer students, the group was increasingly forced to rely on consultants to assist in undertaking the more complex studies and projects. With the approval of 1 new Traffic Operations Technologist position in the 2016 Budget, the use of consultants has been reduced and staff are now in a position to deliver an aggressive work program in 2018.

Submitted by,

W.H. Jackson
Director of Utility Services

Contact Name:
Kevin Jones
Manager, Transportation
Phone: 705-742-7777 Ext. 1895
Toll Free: 1-855-738-3755
Fax: 705-876-4621
E-Mail: kjones@peterborough.ca