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Infrastructure, Development and Enterprise Services Friday, January 31, 2020 **2020 Transportation Engineering Program** IDE-2020-18

Executive Summary

Purpose of Report

To provide information about the planned 2020 Transportation Engineering program, including locations where new traffic control signal installation is warranted, pedestrian crossover installation and other program highlights.

Key Findings

- Increasing traffic and pedestrian volumes at one Guelph location satisfy Provincial warrants for a new pedestrian signal installation.
- The installation of two new intersection traffic signals is warranted.
- Eight pedestrian crossover installations are identified for 2020.
- The Automated Speed Enforcement program has begun in Ontario and the City of Guelph is participating in the provincial working group.
- The Community Road Safety Strategy project is commencing community engagement activities in Q1 2020 and is scheduled for Council review and endorsement in Q3 2020.

Financial Implications

All planned traffic control signal and pedestrian crossover related work is either developer funded or is within the approved Capital Budgets accounts.

The launch of the Community Road Safety Strategy is funded through capital account TF0008 "Traffic Management Initiatives".

Report

Details

Traffic Signals

When traffic control signals are installed after thorough analysis and careful consideration, the results ensure efficient traffic flow, minimize the likelihood of certain types of collisions and help to prevent unnecessary fuel consumption, delay and driver frustration.

Based on analysis of traffic, pedestrian and collision data, new traffic signals are recommended for installation in 2020 at the following locations:

- Paisley Road at Stephanie Drive: This location satisfies the Provincial four-hour traffic signal warrant for installation and activation in 2020
- 1888 Gordon: As a result of the development at 1888 Gordon Street, a new traffic signal will be installed at the intersection of Gordon Street at Gosling Gardens in 2020, funded by the developer.

Furthermore, based on a 2019 study satisfying the Provincial warrant, a new pedestrian signal will be installed crossing the east leg of the Stone Road East at Evergreen Drive intersection.

Traffic Signal Modernization

Traffic signal modernization work is carried out annually for numerous beneficial reasons, namely:

- Achieving Accessibility for Ontarians with Disabilities Act (AODA) compliance
- Reducing maintenance costs by completing lifecycle replacements
- Reducing expected collision rates by upgrading to current industry standards.

Traffic signal modernizations planned for 2019 will be completed in spring 2020 at the intersections of Edinburgh Road North at Speedvale Avenue and Edinburgh Road North as Paisley Street/Paisley Road. These improvements were not completed in 2019 due to delays in receiving permit agreements with CN Rail.

The City will also complete a traffic signal modernization at the intersection of Speedvale Avenue West at Dawson Road. Portions of this signal were modernized in 2010 during the reconstruction of Dawson Road south of Speedvale Avenue and the 2020 work will complete the remainder of the intersection work.

Additional traffic signal modernizations will occur at various locations throughout the city, including the following:

- Upsizing all signal lenses to 30 centimetre displays
- Adding an additional auxiliary signal head with 30 centimetre displays on the far left of the intersection
- Improving accessibility to pedestrian push buttons
- Installing reflecting backboards to enhance traffic signal visibility
- Continuation of accessible pedestrian signal installations
- Completion of countdown pedestrian signal installation

Traffic Signal System Update

Transportation Engineering staff will continue to convert more signalized locations in 2020 onto the new traffic signal system. This work will help ensure co-ordination with adjacent traffic signals by accurate to-the-second traffic signal programming for intersections communicating with the system. Other benefits include real-time alarm notifications to electrical maintenance staff and report generation capabilities for signal timing optimization. Higher volume signal corridors will be converted over to the new system first to maximum the system's ability to maintain signal coordination across a number of intersections.

Pedestrian Crossovers

Pedestrian crossover installations provide designated crossing locations for pedestrians where vehicles lawfully are required to stop until pedestrians fully clear the crosswalk. They have proven to be an effective pedestrian mobility tool on lower volume roadways where pedestrian signal are not warranted. The expansion of the City's Pedestrian Crossover program will continue in 2020 with installations at:

- Kortright Road East at Fieldstone Road
- Arkell Road at Amos Drive/Zecca Drive
- Farley Drive between Porter Drive and Eugene Drive
- Colonial Drive between Baxter Drive and Lambeth Way
- Goodwin Drive between Pearson Street at Wilkie Crescent
- Cityview Drive North at Lee Street
- Lane Street at Ryan Avenue
- Huron Street at Ferguson Street

Pedestrian Crossovers identified in 2019 will be activated in 2020 at:

- Bagot Street at Suffolk Street
- Delhi Street at Emma Street
- York Road at Harris Street/Boult Avenue
- London Road West at Kathleen Street

All-way Stop Installation

Warranted all-way stop installations are proven to reduce collision rates and balance out delay between two roadways of similar traffic volumes. Based on a 2019 study, the intersection of Macalister Boulevard at Zaduk Place satisfies the Provincial warrant and an all-way stop will be installed in spring 2020.

Automated Speed Enforcement

The City of Guelph is currently on the automated speed enforcement (ASE) working group, which consists of other municipalities and the Ontario Traffic Council. The Ministry of Transportation of Ontario (MTO) has provided each participating municipality with guidelines for the use of ASE in Ontario. The legislation authorizes the use of ASE devices in school zones and community safety zones across the province. The City is part of the conversation with other municipalities and the Ontario Traffic Council to ensure that ASE is being effectively used as a road safety tool throughout Ontario.

Sixteen municipalities are expected to use ASE in the first year. As of December 2019, Toronto has begun to implement ASE signs "municipal speed camera coming soon", as part of their 90-day public education campaign. Toronto will be issuing warning letters prior to setting up mobile and permanent locations that will issue tickets.

City of Guelph staff are closely observing the roll out of ASE in other neighbouring municipalities and the subsequent evaluation to determine if this is a worthwhile safety investment for our city. Further, the City will continue to be part of the ASE

working group and tailor our future program based on lessons learned from other municipalities.

Red Light Camera Implementation Update

The City is working towards implementation and activation of a red light camera program at six locations in 2022. In 2020, staff will identify the initial six locations through a detailed site selection process. The analysis will review collision history, traffic volumes, and location installation suitability due to geometric conditions (road grade, asphalt conditions, visibility).

City staff will update Council throughout the implementation process for this project.

Community Road Safety Strategy

At the Guelph City Council meeting on January 28, 2019 the following resolution was approved:

"That staff be directed to explore a Community Road Safety Strategy that includes mitigation measures to reduce the likelihood of frequent traffic infractions as well as red light violations and that funding support for this strategy be referred to in the 2019 budget process."

The successful recruitment of a Transportation Safety Specialist was completed in Q3 2019 and work has begun on the creation of the Community Road Safety Strategy (CRSS). The CRSS is scheduled for Council review and endorsement in Q3 2020.

CRSS Framework

The CRSS is a high-level road safety plan that will summarize best practices, provide a collision data review and summary, highlight road safety emphasis areas and appropriate countermeasures, and outline implementation and evaluation plans. The scope of work for the CRSS includes:

- Task 1 Best Practices Review
- Task 2 Collision Data Analysis & Summary
- Task 3 Public Feedback
- Task 4 Stakeholder workshops
- Task 4 Identify emphasis areas
- Task 5 Identify countermeasures/strategies for inclusion
- Task 6 Implementation plan
- Task 7 Evaluation plan
- Task 8 Annual collision reports

An important part of the CRSS is the community engagement program. The project team developed a community engagement/consultation program to collect and incorporate public input to the CRSS consistent with the City's Community Engagement Framework. The engagement program beginning in February 2020 includes:

- Consultations with internal stakeholders
- Information drop-in sessions with Immigrant Services, Accessibility Advisory Committee, Guelph-Wellington Seniors Association, University of Guelph, community residents

As part of the new CRSS, the existing Neighborhood Traffic Management Policy (2006) will also be updated. To address traffic concerns on local and collector roadways, the updated neighborhood traffic management review will outline procedures for initiating, reviewing, prioritizing, implementing and evaluating traffic management plans related to speeding and high vehicle volumes. Safety concerns on arterial roadways will be addressed on a case-by-case basis under the CRSS.

Financial Implications

All planned traffic control signal and pedestrian crossover related work is funded directly through development or is within the approved Capital Budgets accounts.

The launch of the Community Road Safety Strategy is funded through capital account TF0008 "Traffic Management Initiatives".

Consultations

N/A

Strategic Plan Alignment

Priority

Navigating our Future

Direction

Improve local transportation and regional transit connectivity

Provide attractive, affordable and reasonable transportation options for everyone

Improving the safety, efficiency and connectivity of the whole transportation system

Alignment

These projects align with the directions within the City's Navigating our Future strategic priority by expanding, modernizing and enhancing the transportation network within the City to encourage active transportation and enhance the safety of the transportation network.

Attachments

None

Departmental Approval

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