

TO:	CHAIR AND MEMBERS CIVIC WORKS COMMITTEE MEETING ON SEPTEMBER 26, 2017
FROM:	KELLY SCHERR, P.ENG., MBA, FEC MANAGING DIRECTOR ENVIRONMENTAL & ENGINEERING SERVICES AND CITY ENGINEER
SUBJECT:	TRANSPORT CANADA GRADE CROSSINGS REGULATIONS AND RAILWAY FUNDING APPLICATIONS

RECOMMENDATION

That, on the recommendation of the Managing Director, Environmental & Engineering Services and City Engineer, the following actions **BE TAKEN** with respect to planned railway improvements:

- (a) the following report with respect to Grade Crossing Regulations and railway related funding applications **BE RECEIVED** for information; and,
- (b) the budget implications of implementing the Grade Crossing Regulation compliance action **BE FORWARDED** for consideration as a business case as part of the next multi-year budget process.

PREVIOUS REPORTS PERTINENT TO THIS MATTER
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- Environment and Transportation Committee – February 14, 2000 – Railway Issues in London
- Environment and Transportation Committee – November 28, 2005 – Priority Setting Factors for Future Rail / Road Grade Separations
- Civic Works Committee – February 25, 2013 – Railway Pedestrian Crossing Safety
- Civic Works Committee – October 7, 2013 – Railway Pedestrian Crossing Safety
- Civic Works Committee – April 28, 2014 – Rail Safety Week
- Civic Works Committee – March 29, 2016 – Transport Canada Grade Crossing Regulations
- Civic Works Committee – April 24, 2017 – Rail Safety Week

2015-19 STRATEGIC PLAN

The 2015 – 2019 Strategic Plan identifies the implementation and enhancement of road safety measures for all users as a means to deliver convenient and connected mobility choices.

BACKGROUND

Purpose

The purpose of this report is to provide the Committee and Council with a summary of:

- The road authority compliance works completed to date in response to the recent Grade Crossings Regulations (Statutory Order and Regulations 2014-275); and,
- The applications for funding under Transport Canada's Rail Safety Improvement Program (RSIP-ITR) and the National Trade Corridors Fund (NTCF).

City of London Context

The City of London is serviced by a network of railway lines that move freight and passengers. The network is comprised of railways owned and/or leased by Canadian National Railway (CNR), Canadian Pacific Railway (CPR) and Goderich Exeter Railway (GEXR), which account for over 60 at-grade crossings within the City of London. The railways are crucial to the economic prosperity of London and Southwestern Ontario as they provide a reliable and affordable way to transport goods.

GRADE CROSSING REGULATIONS

Introduction

Railway companies, road authorities and private crossing owners are each responsible for managing railway crossing safety in Canada. Historically, the majority of at-grade crossing improvements have been based on adherence to Transport Canada standards at times of maintenance or capital works. The roles and responsibilities for monitoring conditions at these at-grade crossings can be unclear and the previous standards that were in place were typically applied as guidance. A 2011 Transport Canada study found that only 30% to 50% of the crossings met these standards.

In late 2014, Transport Canada published new Grade Crossing Regulations (GCR), pursuant to sections of the Railway Safety Act. The intended purpose of the new GCR is to address gaps within the existing voluntary standards and regulations in order to improve safety performance of grade crossings across Canada. The GCR aims to bring grade crossing safety standards to a consistent level across the country and promote collaboration between the road authorities and railway companies to ensure that all at-grade crossings are pro-actively brought up to current standard within seven years from the date the regulation came into force in November 2014.

Key Aspects of Grade Crossing Regulations

There are many aspects to be considered as part of the new GCR. The key items include: Grade Crossings Standards Roles and Responsibilities for each party, Sharing of Safety Information, Sightlines, Signage and Warning Systems.

Timelines/Main Components

In order to comply, the road authority must undertake the following actions according to the schedule below:

GCR Requirements	Steps for Road Authority	Deadline	Status
Critical safety information must be shared between the road authority and railway companies	<ol style="list-style-type: none"> 1. Collect/Assemble roadway data. 2. Share/Exchange data with railway companies (by November 2016). 	November 2016	Items 1 and 2 completed.
All existing grade crossings must comply with the standards	<ol style="list-style-type: none"> 3. Develop Review Plan. 4. Detailed Safety Assessment. 5. Safety Upgrades Implementation. 	November 2021	<p>Item 3 is complete.</p> <p>Item 4 is completed in draft.</p>
Continuing compliance	<ol style="list-style-type: none"> 6. On-going regular inspection. 	Post 2021	Future

The critical safety information collection and sharing identified as Steps 1 and 2 outlined above were completed with the railway companies in 2016.

Item 3, the development of a plan to review crossings was also developed in 2016. Item 4, rail crossing safety assessments have been undertaken for all railway lines. The City retained specialized consulting services from CIMA+ to undertake the detailed safety assessments of all at-grade crossings within the City of London. Various data related to road authority elements was collected and tabulated for each of the crossings, including recommendations for improvements according to the GCR. The main categories that require attention are signage, vegetation maintenance, surface works, and railway infrastructure. CIMA+ undertook only a cursory review of railway elements because each railway company is responsible to undertake their own review and recommendations for rail infrastructure.

The initial findings of the assessments have identified various improvements that include works such as pavement markings and signage, sidewalk and road improvements, crossing surface improvements, sightline obstructions such as vegetation and warning systems. Implementation of improvements to infrastructure that is City owned is underway. Improvements to railway infrastructure under the jurisdiction of the railway companies is pending discussion with the railways.

Through communication with the rail companies, the City has shared the findings, data and recommendations for improvements at all at-grade crossings in an effort gain concurrence on the draft recommendations, outline the strategy for implementation, determine cost apportionment of shared items and other logistic measures required to complete these upgrades. Discussions are being held with the railway companies as it relates to their own independent assessment and identified improvements that are of shared or of railway responsibility.

Preliminary Cost Estimate

The estimated scope of required improvements and associated costs has been determined through the completed draft detailed safety assessments. A very preliminary cost estimate to implement improvements at all at-grade rail crossings that require modifications to meet the new Regulation is in the order of \$2 million. This estimate includes costs for both the City and rail companies where cost apportionment is appropriate. This estimate will be refined once the assessments are finalized and appropriate cost apportionment is established with the railway companies. The entire

scope of modifications is also subject to the railway assessments of their infrastructure.

The GCR does not specify how the costs for the improvements and upgrades to meet the standards are to be shared between the road authority and railway companies. Cost apportionments will be reviewed subsequent to the conclusion of the safety assessments with discussions partaking between the City and railway companies.

Funding of improvements has traditionally been based on board order direction, seniority at the specific crossing locations (road authority or rail company) and on cost apportionment as approved by the Canadian Transportation Agency. Staff have been allocating a portion of transportation life cycle renewal capital funds to cover these costs.

If a railway company and road authority cannot agree on who should pay for work at a road-rail crossing, either party can ask the Canadian Transportation Agency to mediate and apportion the costs of the project.

The City currently does not have specific allotted funds to deal with the increased number of studies and/or upgrades required as per the new GCR. Internal staffing resources and the approved four-year transportation lifecycle capital accounts are/will be utilised to deal with these capital upgrades in the near future. The preparation of the next four-year budget will consider anticipated costs in 2020 and 2021 as the program and cost apportionment is better understood. The cost sharing with the railway companies and applications for funding will augment some of the financial pressures.

TRANSPORT CANADA FUNDING OPPORTUNITIES

RSIP – Rail Safety Improvement Program

Transport Canada's Rail Safety Improvement Program (RSIP) provides federal funding, in the form of grants or contributions. The program consists of \$55 million in funding which is available over a three year timeframe. The program's objective is to improve rail safety, contribute to the reduction of injuries and fatalities, and increase public confidence in the Canada's rail transportation system. The deadline for 2017-2018 funding was August 1st 2017.

RSIP builds on three rail safety programs: the Grade Crossing Improvement Program (GCIP); the Grade Crossing Closure Program (GCCP); and Operation Lifesaver with an increase overall funding level, an expanded list of eligible recipients and a broadened scope of projects that could be funded to enhance rail safety. The new program is a comprehensive approach to improving the safety of rail transportation across Canada, through two key components:

- 1) Public Education and Awareness; and,
- 2) Infrastructure, Technology and Research.

The Infrastructure, Technology and Research category may provide an opportunity to reduce the financial impact of required GCR upgrades.

The City of London submitted ten applications involving infrastructure upgrades identified during the recent GCR safety assessments. The selected GCR improvements are for works at the following crossings that are the responsibility of the City and that ranked high on Transportation Canada's Grade Crossing Inventory. Works include items such as: road and sidewalk surface improvements, pavement markings, signage,

and vegetation removal/clearing. The ten locations are:

- CNR – William Street (south of York Street)
- CNR – Maitland Street (south of York Street)
- CNR – Egerton Street (south of Brydges Street)
- CPR – St. George Street (intersecting Piccadilly Street)
- GEXR – Clarke Road (north of Oxford Street East)
- CPR – Richmond Street (south of Oxford Street East)
- CNR – Rectory Street (south of Florence Street)
- CNR – Gore Road (west of Marconi Gate)
- GEXR – Highbury Avenue (south of Florence Ave North)
- CNR – Colborne Street (south of York Street)

The City of London also partnered with CPR on one joint application for Pall Mall Street Pedestrian Crossing warning system upgrades.

Any projects that receive federal funding (eligible for up to a maximum of 80% or 50% for joint applications) will need to be completed by March 31, 2019.

NTCF – National Trade Corridors Fund

The National Trade Corridors Fund (NTCF) is a dedicated source of funding that will help infrastructure owners and users to invest in the critical assets that support economic activity and the physical movement of goods and people in Canada. It represents a long-term commitment by the federal government to work with stakeholders on strategic infrastructure projects that help to address transportation bottlenecks, vulnerabilities and congestion.

The NTCF is one component of the Investing in Canada Plan, the federal government's strategy for addressing long-term infrastructure needs in Canada and supporting middle class growth and jobs. At the same time, it is a key component of Transportation 2030, the Minister of Transport's strategic plan for the future of transportation.

NTCF funding will be allocated to projects based on how they help to strengthen the efficiency and resilience of transportation assets that are critical for Canada's continued success in international commerce. This includes, for example, ports, airports, roads and railways, international bridges and border crossings - assets that are the primary building blocks of supply chains that enable the physical exchange of goods around the world. Grade separations that provide more efficient and safer road and rail interaction are identified as an eligible type of project.

A total of \$2 billion has been allocated over 11 years for the NTCF. Over this time frame, Transport Canada will request Expressions of Interest (EOI), to be followed by Comprehensive Project Proposals. The first call for Expressions of Interest were due on September 5th 2017.

The City of London submitted two NTCF EOIs for the Adelaide Street/CPR Grade Separation and the Wharncliffe Road/CNR Grade Separation Projects to meet the September 5th EOI deadline. Environmental assessments are underway for major improvements at both of these locations. If the EOIs are successful and chosen by Transport Canada, the application will be followed by a comprehensive project proposal phase that is due on November 6, 2017.

CONCLUSION

As part of the Grade Crossings Regulation compliance actions, critical crossing safety information was shared with the Railway Authorities in late 2016 and were followed by detailed safety assessments with draft infrastructure recommendations. Once the detailed safety assessments and recommendations for upgrades are finalized with the railway input, the remaining components, including the building of a capital and implementation plan of required recommendations to satisfy GCR will be undertaken. The City will continue to pursue discussions with the railway companies in order to finalize the plan and financial obligations. Potential opportunities to assist the funding of capital projects through Transport Canada were identified through two programs. The City of London has submitted 11 project applications under the RSIP for localized improvements required under the GCR. One of these was a joint application with CPR. The City also submitted two NTCF EOIs for the Adelaide Street/CPR Grade Separation and the Wharncliffe Road/CNR Grade Separation projects.

Acknowledgements

This report was prepared with assistance from Ardian Spahiu, P.Eng., Transportation Design Engineer and Sam Shannon, C.E.T., Technologist II, in the Transportation Planning & Design Division.

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