



INFORMATION REPORT

TO:	Chair and Members Public Works Committee
COMMITTEE DATE:	September 16, 2019
SUBJECT/REPORT NO:	Railway Grade Crossing Regulations Update (PW19077) (City Wide)
WARD(S) AFFECTED:	City Wide
PREPARED BY:	Rob Decleir (905) 546-2424 Ext. 4391
SUBMITTED BY:	Kim Wyskiel Acting Director, Transportation Operations & Maintenance Public Works Department
SIGNATURE:	

COUNCIL DIRECTION

Not Applicable.

INFORMATION

Report PW17066 was approved by the Public Works Committee in August 2017 and provided an introduction to the new Transport Canada Grade Crossing Regulations. The 2017 report identified the status of the data collection, mandatory information sharing, and inspections required regarding railway crossings in the City. This report provides an update regarding progress to date and identifies needs going forward.

Transport Canada introduced the new Grade Crossing Regulations in November 2017. The purpose of the regulations are to:

- Improve railway crossing safety;
- Provide consistent safety standards for new and existing public and private railway grade crossings;
- Define responsibilities to improve the safety of public and private railway grade crossings;

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OUR Mission: To provide high quality cost conscious public services that contribute to a healthy, safe and prosperous community, in a sustainable manner.

OUR Culture: Collective Ownership, Steadfast Integrity, Courageous Change, Sensational Service, Engaged Empowered Employees.

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- Promote collaboration between railways and road authorities; and
- Implement new regulations for a consistent level of safety for all classes of railway crossings.

The regulation includes the following key dates and deliverables:

- Step 1 - Information Sharing – completion by November 27, 2016
- Step 2 - Safety Inspections/Audits and Upgrades to Crossings – completion by November 27, 2021

Site visits and information for 91 public grade level crossings in the City were collected between May and October of 2016. An information sheet for each crossing was prepared and this information was provided to the railway authorities on November 25, 2016.

Table 1 below summarizes the number of crossings by railway authority.

Table 1 – Number of Crossings by Railway Authority	
Railway Authority	Number of Crossings
Canadian National Railway	24
Canadian Pacific Railway	44
Southern Ontario Railway *	20
Private	3
Total	91

*Southern Ontario crossings reverted back to Canadian National Railway in December 2018 upon expiry of railway line leases.

Detailed safety inspection/audits for all 91 locations were completed through a consulting assignment by CIMA+ in July 2019. Results from inspections indicate minor improvements and some significant improvement needs. Generally, these are:

- Installation of interconnection between railway crossing signals and nearby traffic signals;
- Installation of crossing signals for pedestrians at walking trail railway crossings;
- Installation of UPS battery back-ups systems with interconnected traffic signals;
- Relocation of rail crossing ahead signs;
- Installation of emergency notification signs;
- Relocation of “X” pavement markings;
- Installation of additional warning lights on cantilever arm;

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- Routine maintenance of road, grade crossing and sidewalk approach surfaces;
- Replacement of asphalt sidewalk with concrete and reduce slope of sidewalk;
- Minor tree and bush trimming for visibility.

The improvements identified were classified into three categories:

- a) Immediate improvements;
- b) Improvements required by November 2021; and
- c) Improvements for future consideration.

Within each category, cost allocation was also identified as 100% City of Hamilton, 100% railway authority or 50/50 cost sharing between the City of Hamilton and the railway authority.

Table 2 below is a summary of improvements that are to be fully or partially funded by the City of Hamilton. A detailed breakdown of City funded improvements is attached to Report PW19077 as Appendix “A”.

Estimated costs are budget estimates and as improvements are designed and details are determined, more precise cost estimates will be determined. Adjustments to funding allocations for improvements will be included in future budget requests.

Table 2 – Improvements Funded by the City of Hamilton			
Improvement Category	Cost Allocation	Number of Improvements Required	Estimated City Cost of Improvement
Immediate Improvement	100% City	102	\$369,495
Immediate Improvement	50/50 Cost Share	87	\$200,600
Total:		189	\$570,095
Improvement Required by November 2021	100% City	342	\$371,350
Improvement Required by November 2021	50/50 Cost Share	4	\$165,000
Total:		346	\$536,350
Future Improvements	100% City	115	\$2,165,500
Future Improvements	50/50 Cost Share	3	\$150,000

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Total:		118	\$2,315,500
Grand Total		653	\$3,421,945

Table 3 below is a summary of improvements that are funded by the railway authorities.

Table 3 – Improvements Funded 100% by the Railway Authorities	
Improvement Category	Number of Improvements Required
Immediate Improvement	66
Improvement Required by November 2021	213
Future Improvements	31
Grand Total	310

Cost estimates for future improvements funded by the City of Hamilton include hydro pole relocations that accounts for over 50% of the estimated costs. Hydro poles were found to be blocking sightlines to railway signals and signing.

Capital Budget Project ID 4031710715 was established in the 2017 with a total budget of \$2,500,000 starting in 2017 and ending in 2021 and \$55,404 has been expended to date. Immediate improvements are being implemented using existing capital funds. Improvements to warning signs and pavement markings are planned to be completed in 2019 at a cost of \$90,000. The bulk of the improvements are planned for 2020.

Transport Canada provides grant and contribution funding through the Rail Safety Improvement Program (RSIP). This program provides up to 80% of total eligible expenditures for any one project with the maximum grant amount payable of \$500,000 per project. Each project submitted is assessed by Transport Canada to determine if the project meets the following mandatory selection criteria:

- Relevance of the project to the RSIP objectives and eligible activities;
- Quality of the proposal; and
- Value for the money in that the project represents an appropriate use of the public monies.

Applications for projects funded in 2020-21 have been submitted. The City of Hamilton submitted 13 applications to the RSIP program for 2020/2021 projects. In total the 13 projects equate to a City cost of \$856,118 with up to \$684,923 (80%) eligible for RSIP grant funding. The list of projects is attached to Report PW19077 as Appendix “B”.

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Transport Canada will advise the City by April 1, 2020 of those projects which have been approved for grants. Additional projects beyond 2021 will be submitted by August 1, 2020.

APPENDICES AND SCHEDULES ATTACHED

Appendix “A” to Report PW19077 – Summary Details of City Funded Improvements
Appendix “B” to Report PW19077 – Railway Safety Improvement Program (RSIP)
Applications