то:	CHAIR AND MEMBERS CIVIC WORKS COMMITTEE MEETING ON MAY 28, 2017	
FROM:	KELLY SCHERR, P.ENG., MBA, FEC MANAGING DIRECTOR, ENVIRONMENTAL & ENGINEERING SERVICES AND CITY ENGINEER	
SUBJECT:	RAILWAY RATIONALIZATION	

RECOMMENDATION

That, on the recommendation of the Managing Director, Environmental and Engineering Services and City Engineer, the following actions **BE TAKEN** with respect to Railway Rationalization initiative:

- a) that a strategy of strategic grade separations combined with the implementation of technologies or infrastructure aimed at improving the safety of the rail/urban interface **BE ENDORSED** as the long term approach to mitigating the impact of rail activity in the City of London;
- b) that Civic Administration **BE DIRECTED** to identify, review and prioritize locations for the implementation of technologies and infrastructure for inclusion in the Capital Budget and Development Charges processes; and,
- c) the Mayor BE REQUESTED to submit a letter to the Federal Minister of Transport and Federal Minister of Infrastructure and Communities, and London MPs, outlining the need for increased sustained funding for railway grade crossing improvements.

PREVIOUS REPORTS PERTINENT TO THIS MATTER

- 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 June 19, 2012 London 2030 Transportation Master Plan
- Civic Works Committee February 25, 2013 Railway Pedestrian Crossing Safety
- Civic Works Committee October 7, 2013 Railway Pedestrian Crossing Safety
- Civic Works Committee March 29, 2016 Transport Canada Grade Crossing
- Regulations
- Civic Works Committee July 17, 2017 High Speed Rail
- Civic Works Committee September 26, 2017 Transport Canada Grade Crossing Regulations and Railway Funding Application

COUNCIL'S 2015-2019 STRATEGIC PLAN

Municipal Council has recognized the importance of rapid transit, improved mobility and improving travel to other cities through better transportation connectivity specifically regional transit connections in its 2015-2019 - Strategic Plan for the City of London (2015 – 2019 Strategic Plan) as follows:

Strengthening Our Community

• Healthy, safe, and accessible city

Building a Sustainable City

Robust infrastructure

Growing our Economy

- Local, regional, and global innovation
- Strategic, collaborative partnerships
- Convenient and connected mobility choices

BACKGROUND

Municipal Council, at its meeting held on May 16, 2017 resolved:

e) the Civic Administration BE AUTHORIZED to work with appropriate parties, including the Canadian Transportation Agency (CTA) to request they facilitate discussion between CP and CN Rail in order to negotiate an agreement for CP operations to relocate and merge onto the CN operational tracks within the City of London limits;

In response to Council's direction, Civic Administration has held a number of meetings with the railway companies and authorities. This report summarizes their positions on the concept of a rail rationalization.

DISCUSSION

Context

London's residents and visitors are increasingly delayed by Canadian Pacific (CP) and Canadian National (CN) freight trains that pass through level crossings throughout the city. This delays motorists and pedestrians, increases the risk of accidents, causes congestion at adjoining intersections, restricts access to businesses and residences, increases vehicle emissions and operating costs, and may delay emergency services response times.

Canadian National Railway (CN) and Canadian Pacific Railway (CP) both have a long history in the city as the mainlines were established starting in 1853.

The City of London is traversed by the CN main line double track between Toronto and Chicago (Dundas and Strathroy subdivisions) and a CN secondary single track line to St. Thomas (Talbot subdivision). Goderich-Exeter Railway (GEXR) leases a CN secondary single track line to Stratford (Thorndale subdivision), which enters the city from the northeast. The CP main line single track between Toronto and Detroit (Galt and Windsor subdivisions) runs through the centre of the city.

Freight trains do not run on a set schedule like passenger trains do -- trains operate 24 hours a day, seven days a week. Railways transport goods based on customer

requirements, the number of trains fluctuate with customer demands and schedules are influenced by network logistics.

Rail transportation is a relatively economical and environmentally friendly means of transporting freight containers of large and bulk goods over long distances, reducing the amount of truck traffic on provincial and local roadways. CP operates a yard terminal immediately to the east of Adelaide Street. CN operates a yard in the area of Egerton Street.

Via Rail operates regional passenger service through the London station on the CN main line as part of the Quebec City–Windsor Corridor, with connections to the United States.

The City has a total of 91 at-grade and grade separated crossing within City boundaries as identified on **Figure 1** and **Table 1**.



Railway Company	Crossings		
Canadian National Railway			
At-Grade Crossings			
Flashing Lights, Bells and Gates	12		
Standards Railway Crossing Sign	21		
Flashing Lights and Bells	6		
Grade Separated Crossings	14		
Total	53		
Canadian Pacific Railway			
At-Grade Crossings			
Flashing Lights, Bells and Gates	14		
Standard Railway Crossing Sign	0		
Flashing Lights and Bells	1		
Grade Separated Crossings	13		
Total	28		
Goderich-Exeter Railway			
At-Grade Crossings			
Flashing Lights, Bells and Gates	10		
Standard Railway Crossing Sign	0		
Flashing Lights and Bells	0		
Grade Separated Crossings	0		
Total	10		

Table 1 – Railway Crossing Breakdown

Rail Rationalization History

The fact that many rail lines continue into the centers of cities is a reminder of days gone by. Passenger travel by train has been overtaken by roadway travel across most of the country. in its place, freight rail traffic has intensified. Trains have also gotten longer and heavier in a drive to lower unit costs and increase the productive capacity of railway networks. Up until the 1990s, for example, train lengths were on average around 5,000 feet; now they stretch up to 12,000 feet or more.

Although longer trains provide benefits for railways and their customers, there are disadvantages for communities when longer trains translate into longer wait times at level crossings.

In 1972, the City undertook the London Urban Transportation Study. As part of the study, a London Railway Relocation or Consolidation Study was completed to review existing railway facilities and operations, inventory industrial rail needs and to develop conceptual schemes for railway changes. The goal was to reduce rail/roadway conflicts and release right of way for other potential purposes. The study was completed incorporating a potential ring road for the city (extension of Highbury Avenue freeway north of Hamilton Road).

The recommended rail rationalization concept was a consolidation of the CN and CP railways along the existing CN mainline corridor, the relocation of the railway yards outside of the city boundaries and a relocated CN corridor (Thorndale subdivision) to the east of the airport as illustrated on **Figure 2**.



Figure 2 – Recommended Rail Consolidation (1972)

Due to a lack of funding and absence of agreement with the railway companies and surrounding municipalities, the rail consolidation was never implemented. A number of new grade separations were implemented to enhance safety and improve traffic flows.

In 2000, Council received a report entitled "Rail in London". The report looked at a creating a strategic disposition regarding rail by examining three options. It reviewed an enhanced status quo whereby grade separations were implemented at strategic locations, an integration of CP and CN on a single corridor and a relocation option outside the developed portion of the City.

The absence of funding from senior levels of government rendered the implementation of integration or relocation as unaffordable.

Key Factors for Consideration of Relocation and/or Consolidation

There are a number of key factors to take into consideration when considering a potential consolidation of the CP railway with the CN railway mainline.

Strategic Linkages – The CP and CN lines are core strategic linkages for both companies. The consolidation of railway lines in the 1990's through southern Ontario removed alternative opportunities for bypassing of railway freight in the event of operational disruptions and when capital improvements are required. Combining all rail traffic on one corridor provides no system flexibility in rail operations.

Capacity – The existing CN is a capacity constrained corridor. The relocation of the CP would require an additional third track to be built along the CN mainline. The current proposal to add High Speed Rail to the CN corridor could stress this capacity further.

Relocation of CP Yard – A location external to the city boundary in another municipality would be required to accommodate the yard, which would require approval of that municipality.

Business Integration – The scheduling of freight traffic between two independent highly competitive railway companies would be operationally challenging. For both railway companies to cooperate, there must be significant benefits to be realized by both parties.

Passenger Train Service – VIA Service or the future potential High Speed Rail would be operationally challenged to share space and track priority with two freight companies.

Capital and Operating Costs – The high cost of relocating the CP operations, the cost of a new line and yard and business operating losses from existing freight customers in London will be factors in obtaining approval from the railways. Typically the railways seek to recover these costs from governments.

Several cities (including Red Deer, Lethbridge, Regina, and Calgary) have worked with railway companies and the federal government to relocate rail operations to sites on the periphery of urban centres. These relocations help moderate noise, vibration, safety concerns and traffic delays, along with risks associated with dangerous goods transport, and create new options for the introduction or expansion of passenger or commuter rail.

The City of Saskatoon recently undertook a feasibility study to assess relocation on a new corridor or consolidation of CP onto a CN corridor. The City determined that consolidation is largely challenged by the legislative requirement to not impose additional costs on the railway. The option to consolidate CP and CN operations was deemed to have the least potential given the complexity of running two railways in the same corridor. The cost to relocate CP was approximately \$590 million.

Legislative Environment

Railways are under federal jurisdiction by virtue of s. 92(10)(a) of the Constitution Act, 1867. As railways are explicitly listed as an undertaking that is excluded from provincial jurisdiction it is unnecessary to consider whether they are a "work for the general advantage of Canada" under s. 92(10)(c).

Railway companies do not independently have the power to expropriate land, however under s. 4.1 of the federal Expropriations Act, they can request for the Minister of Transport to have the land expropriated if the railway requires the land for the purposes of its railway and has unsuccessfully attempted to purchase the land. The Minister will expropriate the land if he or she is of the opinion that the land is required for the railway and recommends to the Governor in Council, who in turn consents.

The Canadian Transportation Agency (CTA) administers the approvals for specific railway line construction projects. Under subsection 3(1) of the Railway Relocation and Crossing Act (RRCA), if a municipality cannot reach an agreement with a railway company on the relocation of railway lines, it permits an application to the CTA for an order to carry out an accepted plan.

The RRCA empowers the CTA to order a railway company to do things like:

- remove railway structures;
- build new facilities;
- stop operating on certain lines; or,
- allow other railway companies onto their trackage in urban areas.

However, these powers may only be used when certain criteria are met, including a determination by the CTA that any such relocation or rerouting would occur at **no net cost to the railway company.**

Before the CTA may receive the application, the Minister of Transport, Infrastructure and Communities must be satisfied that any federal programs contemplated for use in the urban development plan are available and would contribute significantly to the improvement of the urban area.

The Governor in Council must also be prepared to authorize the allocation of the necessary funds for relocation grants for the transportation plan.

An application must contain a financial plan showing how the costs and benefits of the transportation plan are to be shared by the province, the municipalities and the railway companies or any other parties affected by the accepted plan. It must also indicate how and when the costs of the transportation plan are to be met and all financial assistance available to meet those costs.

The CTA may accept the transportation and financial plan as submitted or with changes it considers necessary if, among other factors, the CTA finds that the financial plan will not:

- impose on the railway company any losses greater than the benefits received; or,
- confer on the railway company any benefits greater than the losses incurred.

The CTA must also be satisfied that the financial assistance set out in the financial plan will be committed.

Financial Impacts

A common principle is that every stakeholder who benefits from a rail relocation project will pay their fair share of the expense, which is significant for all parties. Municipalities promoting rail relocation to address proximity concerns are often the major beneficiaries of the initiative and will be expected to assume a proportionate percentage of the total costs. Railways will contribute, but only in proportion to their net benefit. The percentage that each stakeholder will pay is usually determined by negotiation. Due to major costs involved, the negotiation process are onerous.

The costs include items such as the capital construction of track and new yards, land expropriation, rezoning, environmental assessments, remediation of contamination, physical defences (berms, fences, crossings), upgrading existing or building new grade separations. Municipalities are also asked to pay railway operating costs associated with increased track lengths and/or travel time between railroad sites.

The federal government has funding available for a proportion of relocation expenditures, but not for the entire project. The RRCA states that other levels of government are responsible for a substantial share of the overall costs.

The "Rail in London" report in 2000 identified a potential cost of \$200 to \$300 million dollars plus property, \$280 to \$420 million plus property in 2018 dollars. The regulatory framework has changed considerably since the initial "Rail in London" report. There would be a need for additional grade separations due to higher traffic volumes. Environmental cleanup costs would also be significantly higher, as would the requirement for impact mitigation measures. The proposed addition of High Speed Rail

to the CN main corridor creates additional constraints and would likely increase costs further, particularly property costs to widen the corridor. The total cost would have to be confirmed through a detailed engineering assessment.

Railway Funding

Two federal funding programs exist related to rail. Based on the stated program objectives and recent applications to both programs, a low probability of program acceptance is anticipated.

The **Rail Safety Improvement Program (RSIP)** provides grant and contribution funding to improve rail safety and reduce injuries and fatalities related to rail transportation. The program funds:

- safety improvements to existing rail lines;
- closures of grade crossings; and,
- initiatives to raise awareness about rail safety issues across Canada.

The program consists of \$55 million in funding which is available over a three year timeframe. The programs objective is to improve rail safety, contribute to the reduction of injuries and fatalities, and increase public confidence in 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 increased 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:

- Public Education and Awareness; and,
- Infrastructure, Technology and Research.

There are 16,000 public rail crossings in Canada. The City of London submitted ten applications involving infrastructure upgrades identified in 2017. The selected GCR improvements are for works that are the responsibility of the City and that ranked highly 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. The total value of the 2017 applications is \$286,000.

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. The City is awaiting a response to the application.

The City's only recent successful application to this program was for 2015/2016 rail gates and road modifications at the CP / St. George at-grade crossing. The City received \$34,000 for this safety improvement.

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.

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 City of London submitted two NTCF EOIs for the Adelaide Street/CPR Grade Separation and the Wharncliffe Road/CNR Grade Separation Projects in 2017. The City was shortlisted for submission of the Adelaide Street/CPR Grade Separation through a comprehensive project proposal in November of 2017, one of more than 350 applications received. The Wharncliffe Road/CNR Grade Separation EOI was not shortlisted.

The submission was not selected for funding as the NTCF is a merit-based program and more applications for eligible projects were received than could be funded under the program.

Railway Monitoring System

In April 2018, the City installed a TRAINFO railway blockage information system in order to capture the timing and duration of train blockages along the CP railway as a pilot program. TRAINFO system will be capable of anticipating the likelihood of a train event and notify the public via variable messaging signs, a live web portal, or other real-time data feeds. Additional information is included in Appendix B.

Railway Consolidation Engagement

Civic administration has been in contact with CN, CP, CTA and Ministry of Transportation of Ontario through project specific discussions regarding Western Road/CP, Wharncliffe/CN, Adelaide/CP, High Speed Rail and the rapid transit project. Further to Council's direction, a separate meeting was held with the CN, CP and CTA representatives regarding the potential railway rationalization. The railways identified a number of concerns related to the initiative.

CP indicated there was no business case for the railway to justify the relocation, so they would not contribute funds to either the cost of the feasibility study or any costs associated with a future proposal to relocate. While they agreed to participate in a

study at the City's cost, CP would not provide any confidential or propriety information related to business operations.

CN identified that the corridor is capacity constrained, would require an enormous amount of capital to upgrade the rail infrastructure, identified the need for additional grade separations on their railway line and identified that the relocation would create a detrimental impact on their operations and competitiveness. CN will not participate in any scoping exercise nor would they share data related to their operations.

MTO indicated that the High Speed Rail Planning Branch would be pleased to participate to consider existing and future railway needs in the City and their integration with rapid transit.

CONCLUSION

This report provides Council with an update on the Rail Rationalization and potential consolidation of the CP railway into the CN mainline corridor.

The complexity and cost of rail relocation, and the legislated requirement for railways to maintain cost-effective service to their customers are the primary deterrents to the consolidation of railway services.

As set out in the Railway Relocation and Crossing Act, a municipality cannot unilaterally decide to expropriate land owned by a railway company or force a railway to relocate as it would circumvent federal oversight of the operation of the railways through the Canadian Transportation Agency. Furthermore the relocation of the CP yard into a separate municipality could not be mandated by the City.

Based on the response and willingness from the primary partners, CP and CN, to proceed with relocation of the CP freight traffic onto the CN railway corridor or to a new alignment outside of the City of London, it is highly unlikely a mutually agreeable agreement could be reached. The City would have to provide the majority, if not the total funding for the relocation given the lack of available federal programs.

It is recommended that the City continue with a strategy of strategic grade separations such as the Adelaide Street / CP Grade Separation combined with the implementation of technologies or infrastructure aimed at improving the safety of the rail/urban interface as the long term approach to mitigating the impact of rail activity in the City of London. The current train detection pilot for future real-time user data communication is an example of an emerging technology.

Further to the High Speed Rail report presented to the Civic Works Committee on May 28th 2018, it is recommended that the City undertake a High Speed Rail Corridor Protection Study to evaluate the potential land use impacts, develop design considerations for City infrastructure and identify corridor lands to be protected along the CN Railway mainline. The study would also take into consideration the protection of railway right of way for a future long term consolidation of CP and CN.

Acknowledgements

This report was prepared with input from Peter Kavcic, P.Eng., Transportation Planning and Design.

SUBMITTED BY:	RECOMMENDED BY:	
EDWARD SOLDO, P.ENG.	KELLY SCHERR, P.ENG., MBA, FEC	
TRANSPORTATION	MANAGING DIRECTOR ENVIRONMENTAL & ENGINEERING	
	SERVICES AND CITY ENGINEER	

Attach: Appendix "A" – External Stakeholder Submissions Appendix "B" – TRAINFO

Appendix A – External Stakeholder Submissions



Nathan Cato Director Government Affairs 81 Metcalfe Street, Suite 1110 Ottawa, ON K1P 6K7 1 613 237 1572 E nathan_cato@cpr.ca

October 20, 2016

Edward Soldo, P.Eng Director Roads & Transportation City of London 300 Dufferin Avenue P.O. Box 5035 London, ON N6A 4L9

Re: Rail Rationalization, City of London

Dear Mr. Soldo:

I am writing in response to your letter of September 7, 2016 addressed to my colleague, Ms. Jennifer Benedict, Public Works Manager, Eastern Region.

Thank you for writing with regards to the City of London's long-term infrastructure plans, as well as your request for details on the challenges associated with rail rationalization projects. I note that this letter was subsequent to the meeting between City officials, CP, and CN, regarding the same subjects, held on August 23, 2016, in London.

CP fully appreciates the City's desire to conduct proper due diligence in order to understand the future plans of the railways before committing significant infrastructure dollars to various projects as part of its long-term capital infrastructure planning. I can confirm that CP's mainline track that runs through London is a critically important component of our network. Consequently, CP has no plans to reduce our existing infrastructure footprint in London. Our mainline track and yard infrastructure in London will continue to be required in the future for CP to serve the needs of our customers, both in London and across our network, and by extension the needs of the broader Canadian economy that depends on CP to move Canada's goods and commodities to international markets.

Regarding rail rationalization, while CP understands the needs of growing cities, like London, the rationalization of existing rail infrastructure - particularly infrastructure that continues to be central to our rail network - is always a significant, complex, and costly proposition. The challenges should never be underestimated. To list a select few: there are often many different stakeholders involved in these projects; one community's desire to have rail infrastructure removed may be opposed by another community's desire to keep the railway out. The cost of rail relocation projects can often be

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prohibitive. Finally, the operational complexity involved often presents challenges that cannot be easily overcome.

Although CP is always willing to participate in open, constructive dialogue with the communities along our network, it is important to understand that CP would evaluate any rail rationalization proposal against a few core principles: (1) the preservation of existing rail capacity that is required to serve the needs of our customers, both now and in the future; (2) the preservation of our ability to continue serving customers in the London area and across our network; (3) the preservation of safety in all aspects of our infrastructure and operations; and finally, (4) the need for infrastructure investments to be guided by a sound business case that can properly justify a Return on Investment. These core principles are necessary for CP's support of any potential rail rationalization project, but they are also essential ingredients for the health of the Canadian economy.

We hope that you will find this information helpful as the City of London considers its future infrastructure investment plans.

If you have any additional questions, please do not hesitate to contact me. the second success in the Works Winks of Eastern Remain

Sincerely,

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www.cn.ca

Daniel Salvatore Manager of Public Affairs Ontario Daniel Salvatore Directeur – Affairres Publicques Ontario

 1 Administration Road
 1 Administration Road

 Concord, Ontario L4K 1B9
 Concord, Ontario L4K 1B9

February 12, 2018

Ms. Kelly Scherr The Corporation of the City of London, Managing Director Environmental & Engineering Services and City Engineer 300 Dufferin Avenue P.O. Box 5035 London, ON N6A 4L9

Dear Ms. Scherr:

This is further to your letter addressed to Drew Redden on January 23rd, 2018. As you are aware, Drew recently left CN and I have replaced him as Manager, Public Affairs Ontario. Regarding your request for CN's participation in a study where CP freight trains would operate on CN, we offer the following perspective and comments.

The line that runs through the City of London is part of CN's core strategic network linking Eastern Canada with the United-States and therefore maintaining an efficient rail operation over this important trade corridor is of utmost importance – not only for CN, but for the North American economy. Already today, capacity on this corridor is constrained given our current volume of freight trains cohabitating with VIA passenger trains, all on the same infrastructure.

Adding CP freight trains into a capacity-constrained corridor would be an extremely complex and expensive endeavor requiring an enormous amount of capital to upgrade the rail infrastructure and to purchase the required property for additional tracks, not to mention road-rail grade separations that would be justified given a substantial increase in the train count. Overall, this conceptual proposal would ultimately have a detrimental impact on CN's freight operations and competitiveness, and negatively impact the economy.

For the above reasons, we will not be participating in the scoping exercise or in the development of the terms of reference. Please also note that the data you have requested is of a commercially sensitive nature; therefore, we are not in a position to share it.

I trust you will understand our need to protect our freight rail capacity to meet the growing needs of a growing Ontario economy. I very much look forward to working with you and your colleagues at the City of London in the years ahead.

With best regard

Daniel Salvatore Manager, Public Affairs Ontario CN



Tony Marquis Senior Vice-President Operations East Region 2025 McCowan Road Scarborough Ontario Canada M15 5K3 T 416-297-3184 C 416-906-4407 E Tony_Marquis@cpr.ca

Ms. Kelly Scherr Managing Director, Environmental & Engineering Service and City Engineer City of London P.O. Box 5035 300 Dufferin Avenue London, ON N6A 4L9

March 1, 2018

Dear Ms. Scherr:

I am responding to your letter inviting Canadian Pacific (CP) to participate in a feasibility study regarding rail relocation in the City of London.

As we have previously noted, CP's mainline track that runs through London is a critically important component of our rail network in North America. CP's existing infrastructure footprint in London meets our present and future needs, as it allows us to provide strong service to our customers and by extension the broader needs of the North American economy. As such, CP sees no business case that would justify relocating our infrastructure elsewhere. Consequently, we have no desire to abandon or relocate any component of our footprint in the London area.

That being said, CP understands London's legitimate need to plan for its future infrastructure requirements and investments. CP is therefore willing to participate in your feasibility study to help the City develop a deeper understanding of the significant cost and complexity involved with any proposal to relocate rail infrastructure. As a condition of CP's participation, London must acknowledge that CP's participation shall be on a "without prejudice" basis as CP has no desire to relocate and will not contribute any funds to either the cost of the feasibility study or any costs associated with a future proposal to relocate our infrastructure in the region. Further, CP will not be required to provide any confidential or proprietary information, and where provided, may impose terms and conditions as CP deems appropriate.

With respect to the initial scoping exercise that you describe, we believe this task is better left to the City, since many aspects of the study may not directly involve railway infrastructure. CP can participate by providing operational expertise to inform the study's analysis.

As requested, CP will contact Mr. Edward Soldo, Director, Roads and Transportation at the City of London, in the coming days to confirm arrangements for our participation in the study.

Sincerely,

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Tony Marquis Senior Vice President, Operations – Eastern Region

c.c. Martin Hayward City Manager City of London

> Edward Soldo Director, Roads and Transportation Engineering and Environmental Services City of London

> > Page **2** of **2**

Ministry of Transportation

Policy and Planning Division High Speed Rail Branch 900 Bay Street, 1st Floor, Macdonald Block, Room M1-21 Toronto, Ontario M7A 2A2 Tel: 416-212-3444 Fax: 416-212-1936 Ministère des Transports

Division des politiques et de la planification Bureau du train à grande vitesse 900 rue Bay, 1er étage, édifice Macdonald, pièce M1-21 Toronto, Ontario M7A 2A2 Tél: 416-212-3444 Téléc: 416-212-1936



April 12, 2018

DIV2018-182

Edward Soldo, P. Eng. Director, Roads and Transportation 300 Dufferin Ave. P.O. Box 5035 London ON N6A 4L9

Dear Mr. Soldo,

Thank you and for the invitation to participate in scoping a study to consider the current and future railway needs for London. I want to apologize for the delay in responding to your correspondence as there was an administrative error and our response to was not sent. I thank you for your patience and appreciate the opportunity to respond.

The High Speed Rail Planning Branch would be pleased to participate in the scoping of a study that considers how London's Rapid Transit Master Plan might integrate with Ontario's commitment to high speed rail.

Please let Susan Ampleford, Manager, Policy, Coordination and Engagement know the next steps in participation and when we can set up a project initiation meeting. Susan can be reached at: <u>susan.ampleford@ontario.ca</u> or by phone at (416) 212-1899.

Thank you,

Jennifer Graham Harkness, P. Eng. Executive Director

С.

Martin Hayward, City Manager, London Kelly Scherr, Managing Director, Environmental & Engineering Services and City Engineer, London

Appendix B – TRAINFO

RAILWAY BLOCKAGE INFORMATION SYSTEM

Background

In April 2018, the City installed a TRAINFO railway blockage information system as a pilot program in order to capture the timing and duration of train blockages at three (3) railway crossing locations in London. The TRAINFO system is located on the City's right-ofway and uses patented algorithms to monitor train activity.

Preliminary Data

Although the project has just begun, preliminary train blockage data is now available from the TRAINFO system. The following is a summary snapshot of limited weekday (5 day period) train blockage information for the week of April 30, 2018:



- Richmond Street, south of Piccadilly Street. This crossing experiences 6-14 train blockages per day (45 total over 5 days) with up to 1-2 per day occurring during peak periods. On average, blockages last approximately 4.5 minutes, but can last up to 14 minutes. While mostly occurring in off-peak or overnight hours, long duration blockages can occur during peak periods.
- Adelaide Street, north of Central Avenue. This crossing can experience frequent, short duration blockages due to switching vehicles at the adjacent Canadian Pacific Railway yard in addition to regular railway traffic. This accounts for 11-30 train blockages per day (113 total over 5 days) with 3-10 per day occurring during peak periods, particularly in the morning hours. On average, blockages last approximately 4.25 minutes, but can last up to 22 minutes. Several blockages of 10 minutes or more have been observed during peak periods.
- Dundas Street, west of Eleanor Street. This crossing is an auxiliary line, therefore only experiences infrequent, short duration blockages with only 8 crossing events observed during the data period. On average, blockages last 1.75 minutes with the longest duration blockage of fewer than 4 minutes.



Live Web Portal

Once sufficient data has been gathered, the TRAINFO system will be capable of anticipating the likelihood of a train event. TRAINFO uses a three-pronged approach to mitigate congestion. TRAINFO delivers real-time information to a roadside dynamic message sign (DMS) that alerts road users when a crossing is blocked and the amount of delay to expect. TRAINFO integrates its information into mobile apps, such as Waze, to help drivers re-route around blocked crossings if necessary. TRAINFO can adjust traffic signal timing plans before and after a railway crossing blockage event based on real-time train and traffic characteristics to mitigate travel delays.

The City's live TRAINFO portal currently shows whether a crossing location is blocked, clear, or has an approaching train, but can be expanded upon to indicate when a train blockage is predicted and illustrate the number of trains per day.

