Office of the Commissioner
Transportation Services

Memorandum

To: Regional Chair and Members of Council

From: Paul Jankowski, Commissioner

Date: September 22, 2017

Re: **Proposed Rerouting of Greater Toronto Rail Network**

Background

In 2016, Council was updated on a report titled *Feasibility Study and Business Case of Constructing the Missing [Rail] Link* (Feasibility Study). The Feasibility Study was commissioned by the City of Mississauga, in partnership with the Cities of Toronto, Cambridge and the Town of Milton in August 2015.

Council recommendations on the Feasibility Study are documented in the minutes from the January 21, 2016 and April 21, 2016 Council meetings. Council had strong concerns regarding potential increases of hazardous freight rail traffic through the Region.

As part of the recommendations from April 2016, Committee of the Whole directed Regional staff to work in conjunction with staff at the Cities of Markham and Vaughan and the Town of Richmond Hill, to prepare a brief for the Federal and Provincial Ministries and Metrolinx.

The brief was completed in collaboration with Regional and local municipal staff and includes:

1. Background on the Feasibility Study
2. Regional and local Council resolutions that do not support the rerouting of freight rail traffic
3. An overview on:

    a) Potential impact to York Region
    b) Emergency management and preparedness
    c) Requirements of the Transport Canada Act

Actions Taken

The attached brief and covering letter were forwarded to the federal Ministry of Transport, the Ontario Ministry of Transportation and Metrolinx in September 2017. Digital copies of the brief have also been distributed to local municipal staff for their use.

Next Steps

Staff will continue to track this issue with Metrolinx and report to Council on any actions that may increase freight rail traffic through the Region.

_____
Paul Jankowski, Commissioner

PJ/mh

Attachments (2)

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Attachment 1

York Region

Transportation Services

September 22, 2017

Stephen Rhodes
Deputy Minister of Transportation
Queen's Park: Minister's Office
77 Wellesley Street West
Ferguson Block Third Floor
Toronto ON M7A 1Z8

Dear Deputy Minister:

Re: Proposed Rerouting of Greater Toronto Freight Rail Network

The letter reiterates the strong concerns of York Region Council with respect to potential increases to Canadian Pacific Railway (CPR) freight rail traffic through the Regional Municipality of York.

York Region Council passed resolutions on January 21, 2016 and April 21, 2016 advising that the rerouting of CPR freight rail traffic through York Region is not supported by York Region Council. Copies of these resolutions are attached and were circulated in April 2016 to the Prime Minister, the Premier, Federal and Provincial Ministries of Transport, Local MP's and MPP's, and the cities of Markham, Vaughan, Cambridge, Mississauga, Toronto and Towns of Richmond Hill and Milton, Metrolinx, CN Rail and CP Rail.

To assist in consultation and discussions with all levels of government, Council further directed Regional staff to work in conjunction with the City of Markham, City of Vaughan and Town of Richmond Hill to prepare a brief for the Federal and Provincial Ministries and Metrolinx. A copy of this brief is included with this letter for your review.

York Region continues to support multi-modal investments in both transit and highway infrastructure across the Greater Toronto and Hamilton area. It is important that continued communication and coordination between all municipalities and levels of government be achieved to ensure that local, regional, provincial and federal objectives are understood for all capital projects.

York Region requests that the Regional Municipality of York and the cities of Markham and Vaughan, and the Town of Richmond Hill be consulted on any initiatives that may significantly impact the movement of rail freight though our municipalities.

York Region and its local municipalities look forward to our ongoing partnership and collaboration in the development of the Greater Toronto Area transit, road, and freight and passenger rail networks, and are available to meet with your staff.

Sincerely,

For Paul Jankowski, Commissioner
Transportation Services

Attachment (1)

York Region

Transportation Services

September 22, 2017

Leslie Woo
Chief Planning Officer
Metrolinx
97 Front Street West
Toronto ON M5J 1E6

Dear Ms. Woo:

Re: Proposed Rerouting of Greater Toronto Freight Rail Network

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Sincerely,

FOR Paul Jankowski, Commissioner
Transportation Services

Attachment (1)

York Region

Transportation Services

September 22, 2017

Brian Jeans
Regional Director
Transport Canada
4900 Yonge Street
North York ON M2N 6A5

Dear Mr. Jeans:

Re: Proposed Rerouting of Greater Toronto Freight Rail Network

The letter reiterates the strong concerns of York Region Council with respect to potential increases to Canadian Pacific Railway (CPR) freight rail traffic through the Regional Municipality of York.

York Region Council passed resolutions on January 21, 2016 and April 21, 2016 advising that the rerouting of CPR freight rail traffic through York Region is not supported by York Region Council. Copies of these resolutions are attached and were circulated in April 2016 to the Prime Minister, the Premier, Federal and Provincial Ministries of Transport, Local MP's and MPP's, and the cities of Markham, Vaughan, Cambridge, Mississauga, Toronto and Towns of Richmond Hill and Milton, Metrolinx, CN Rail and CP Rail.

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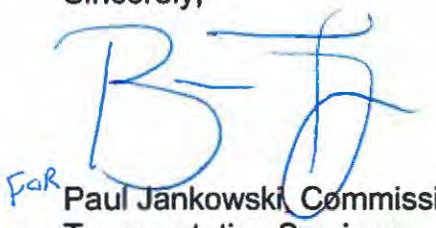
Sincerely,



For Paul Jankowski, Commissioner
Transportation Services

Attachment (1)

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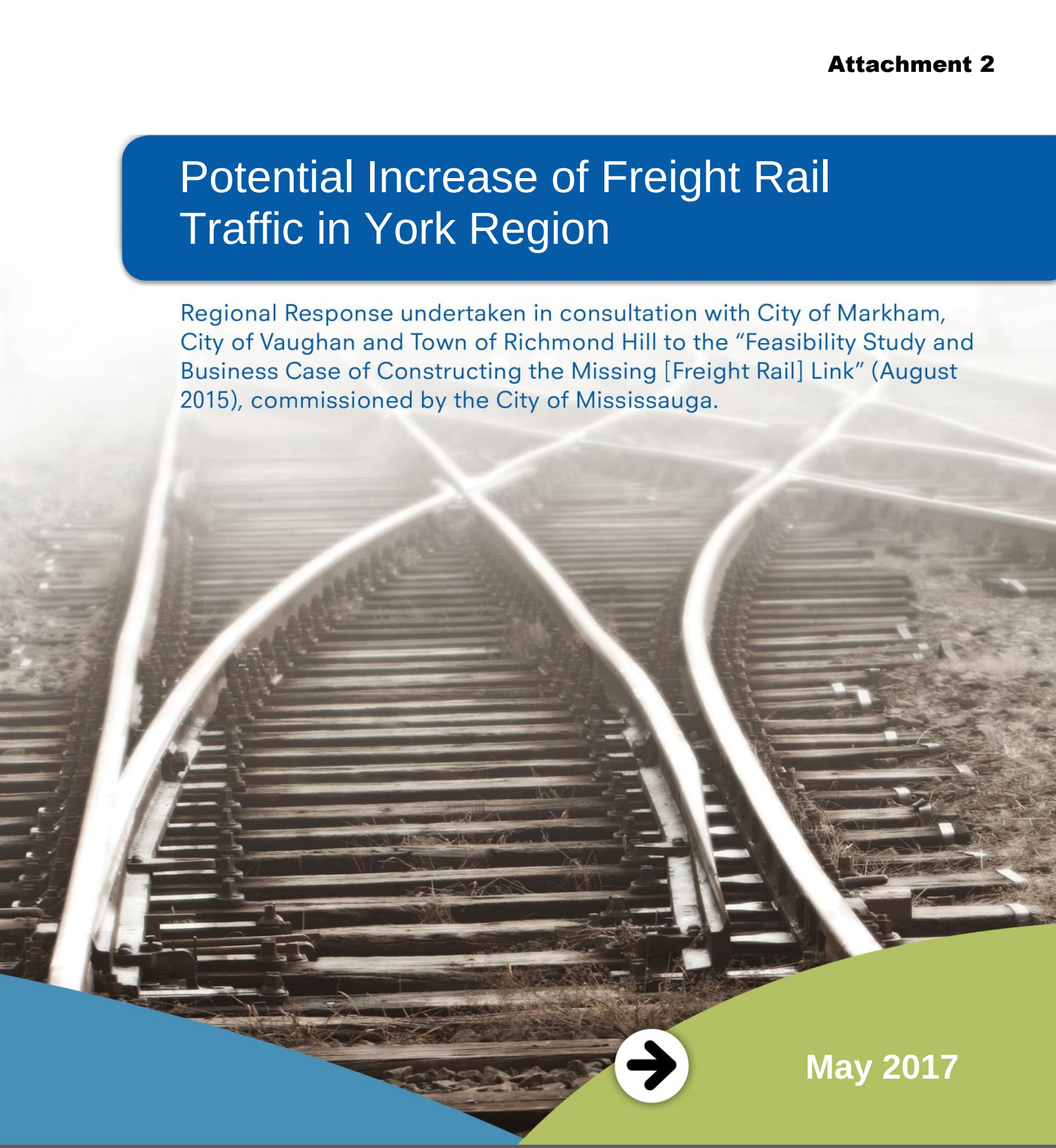
Attachment 2

Potential Increase of Freight Rail Traffic in York Region

Regional Response undertaken in consultation with City of Markham, City of Vaughan and Town of Richmond Hill to the "Feasibility Study and Business Case of Constructing the Missing [Freight Rail] Link" (August 2015), commissioned by the City of Mississauga.



May 2017

MARKHAM Richmond Hill VAUGHAN York Region

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THE REGIONAL MUNICIPALITY OF YORK

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Summary of Recommendations

The Regional Municipality of York, in consultation with the Cities of Markham and Vaughan and the Town of Richmond Hill recommend the following:

- The Province acknowledges that the rerouting of freight rail traffic through York Region (as depicted in Figure i below) is strongly opposed to by the Councils of the Regional Municipality of York, the Cities of Markham and Vaughan.
- The Province considers other rail and non-rail options which do not increase the movement of dangerous goods through York Region.
- The Province direct Metrolinx to undertake consultation with the Regional Municipality of York, the Cities of Markham and Vaughan and the Town of Richmond Hill before proceeding with additional detailed studies relating to the proposed rerouting of a freight rail.

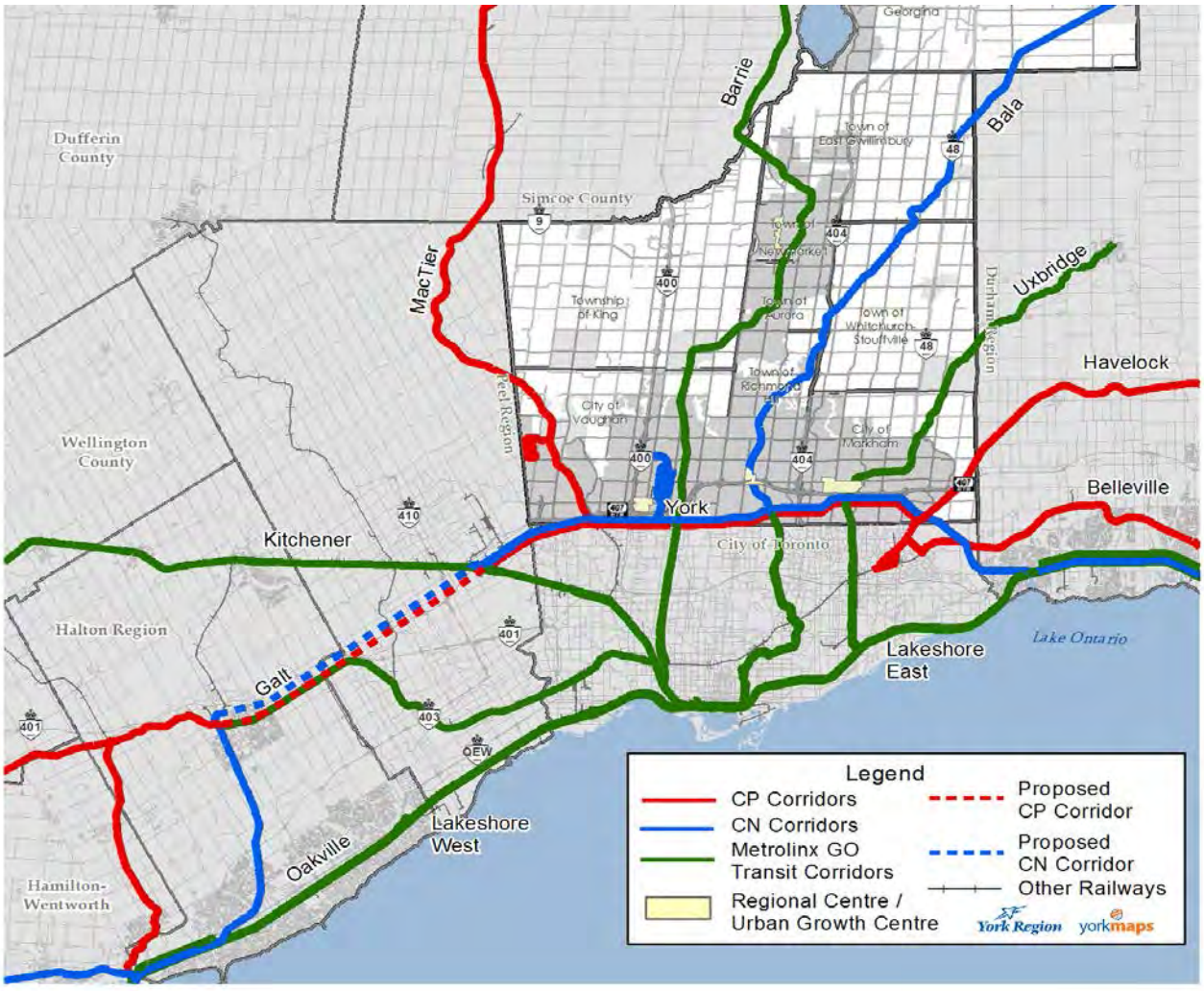

Figure i - Proposed rerouting of GTA Rail Network including proposed new GO Rail corridors

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Table of Contents

Introduction

This brief provides the Regional Municipality of York (the Region), the City of Markham, the City of Vaughan and the Town of Richmond Hill's understanding of the published "Feasibility Study and Business Case of Constructing the Missing [Freight Rail] Link" (IBI Group, August 2015) (the "IBI Report") and the position of Council of the affected municipalities of the Cities of Markham and Vaughan and the Regional Municipality of York regarding the potential of rerouting GTA freight rail traffic through York Region. A copy of the IBI Report is provided in Appendix B.

In July 2014, the Province of Ontario through Metrolinx announced a commitment to fund and implement Regional Express Rail (RER) within the Greater Toronto and Hamilton Area (GTHA) over the next 10 years. Metrolinx's vision for RER is to provide electrified rail service running every 15 minutes or better, all day in both directions, within the most heavily travelled sections of their commuter rail network.

Photo – Trains on the tracks just outside of Toronto

The IBI Report indicated that it is viable to build a new freight rail corridor linking the Canadian National Railway (CN) bypass line in Bramalea with the Canadian Pacific Railway (CP) line near the Milton-Mississauga border, to facilitate the Metrolinx RER concept to separate heavy rail (freight) traffic from passenger rail service corridors along the Kitchener and Milton GO Rail corridors. In addition to GO Rail improvements along the Kitchener and Milton GO Rail Corridors, the IBI Report further recommends that new GO Rail service endorsed in Metrolinx's the Big Move Transportation Plan to Bolton, Agincourt, north Pickering and midtown Toronto, could be implemented through rerouting CP's mainline freight to a dedicated rail corridor traversing southern York Region. However the feasibility study and business case was carried out only through consultation with the commissioning partners of the IBI Study: the City of Mississauga, the City of Toronto, the Town of Milton, and the City of Cambridge. To date, negatively affected jurisdictions, including the Region have been excluded from the process.

Background

In June 2015 the City of Mississauga, in partnership with the City of Toronto, the Town of Milton, and the City of Cambridge received Mississauga Council approval to retain IBI Group to undertake a study to investigate the feasibility, cost, and business case of separating freight rail traffic from passenger rail traffic on the Kitchener GO rail corridor and Milton GO Rail line. The initial RER program announced by the Province in July 2014 includes electrified two-way GO Rail all-day rail service to Bramalea GO Station, with Provincial commitments for electrified two-way service to Kitchener. Currently, a portion of the existing GO Rail service to Waterloo Region operates along CN Mainline between the Milton GO Line west of Trafalgar Road in Milton and the CN bypass Line at Bramalea. Milton GO Rail currently operates along CP's Galt Subdivision. A map of the ownership of existing rail corridors in the GTHA is showing in Figure 1 blow.

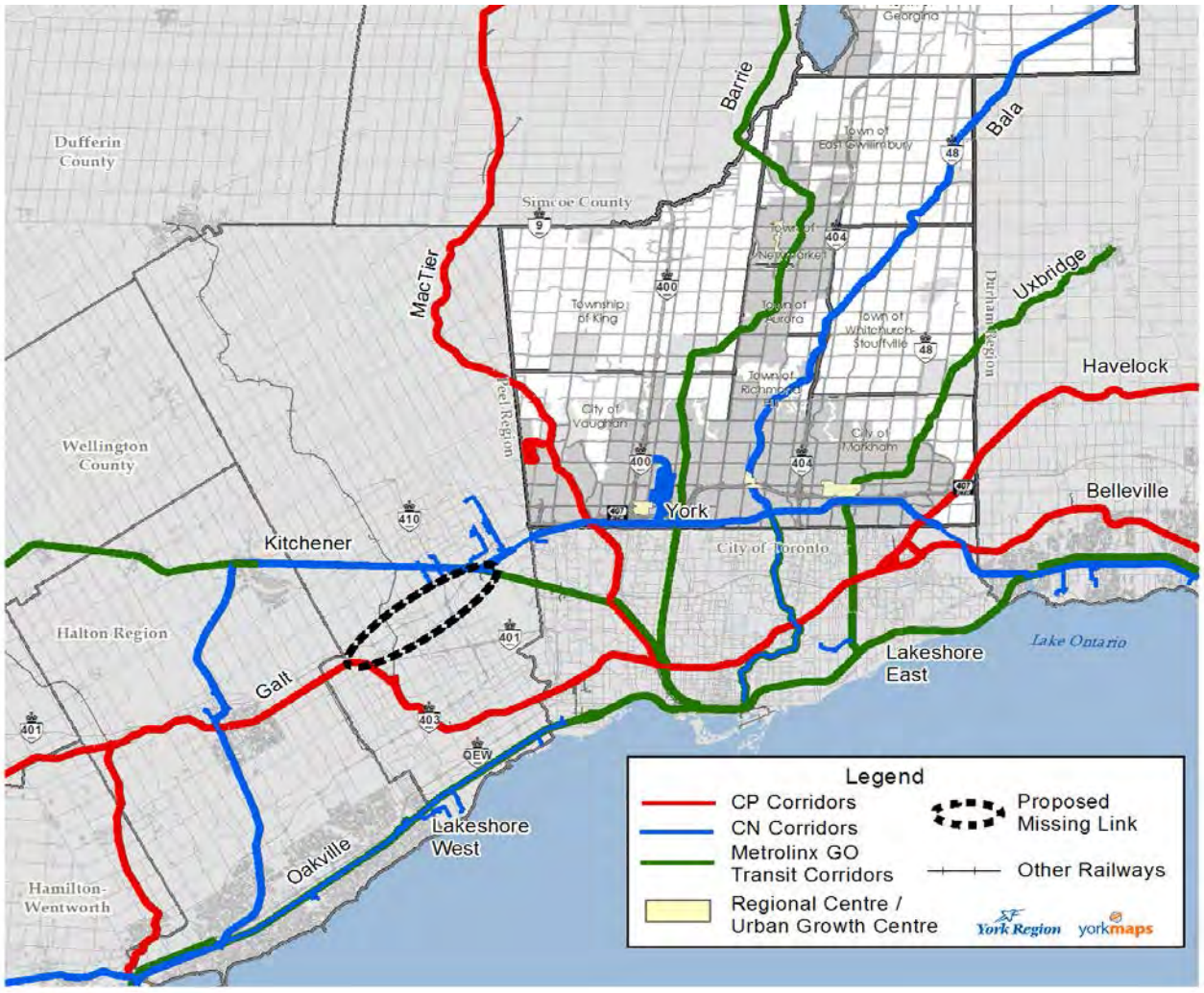

Figure 1- Ownership of Rail Lines

Published in August 2015, the IBI Report (see Appendix B) recommended a two stage plan to relocate heavy rail freight to a proposed new rail line [missing freight link] between Milton GO Line west of Trafalgar Road in Milton and the CN bypass Line at Bramalea to improve passenger rail service along the Kitchener GO Rail corridor.

Construction of the missing freight rail link through Peel and Halton Regions will facilitate a rerouting of CP Rail and increase the movement of dangerous goods through York Region.

The IBI Report also cited the new rail line would reduce the nuisance impacts of operating heavy freight services through high activity centres by rerouting heavy freight away from populated urban areas in the Cities of Toronto and Mississauga through the second stage of the business case. The second stage included the rerouting of CP main line freight from the Belleville, Galt, and southern portions of the MacTier subdivisions located through mid-Toronto and Mississauga to a shared or new rail corridor adjacent to the CN York and Halton subdivisions. The rerouting of CP Freight would enable dedicated GO Rail service along the Milton Corridor.

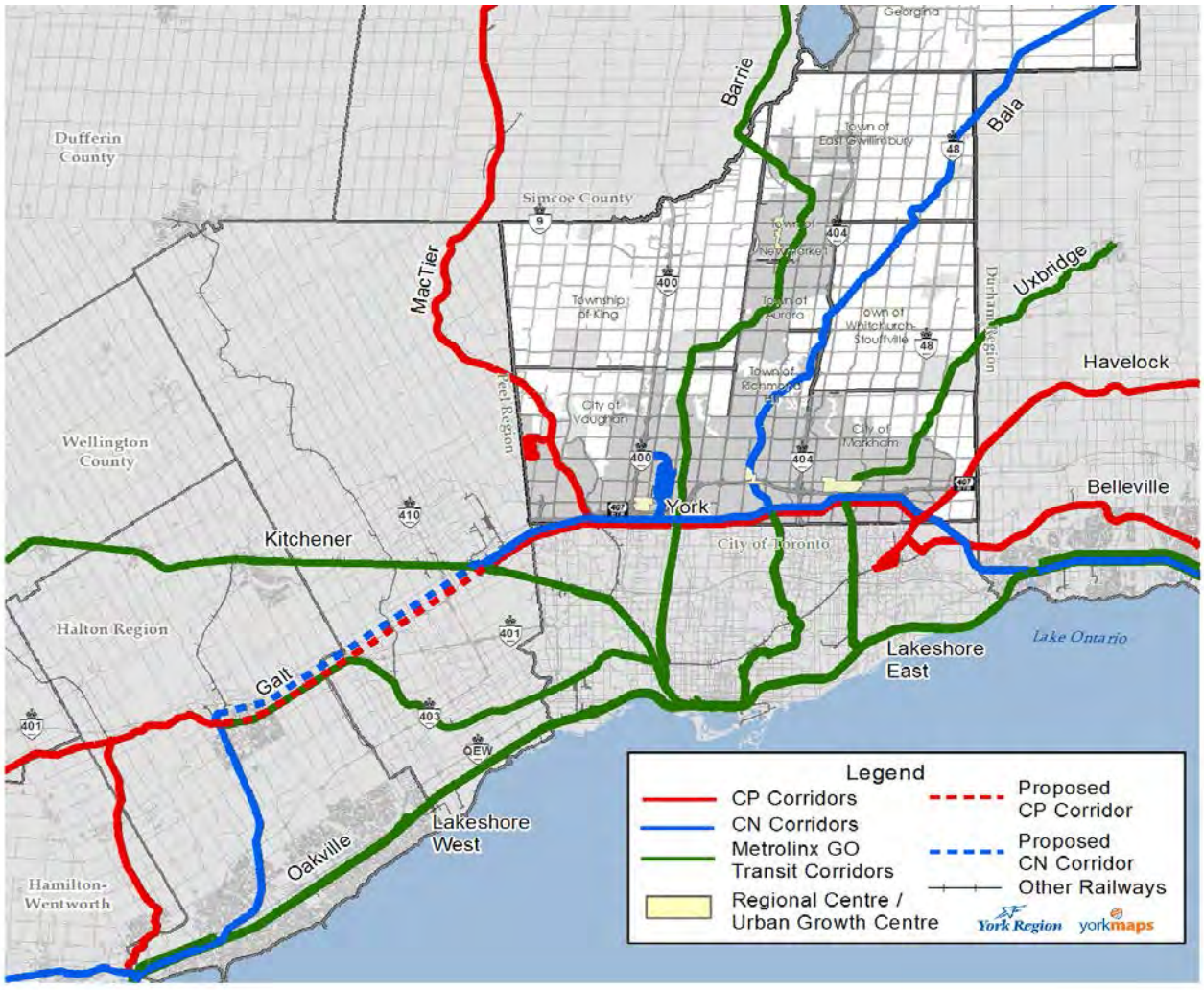

Figure 2- Proposed rerouting of GTA Rail Network including proposed new GO Rail corridors

The CN York and Halton subdivisions already carry a significant amount of freight traffic through or in close proximity of populated and growing urban areas of the Region's three southern municipalities of the Cities of Markham and Vaughan and the Town of Richmond Hill. These subdivisions travel approximately 34 KM across the Region from Highway 27 in the City of Vaughan to Ninth Line in the City of Markham. The proposed rerouting of the GTA Rail Network is shown in Figure 2, will result in increased freight traffic through York Region which will also increases the movement of dangerous goods.

With the exception of the funding partners, the feasibility study and business case was completed without consultation or inclusion of the affected jurisdictions, including the Region, the Cities of Markham and Vaughan, and the Town of Richmond Hill. The study also failed to evaluate the social, environmental, and safety impact to York Region communities if CP main line freight is to be rerouted.

Canadian National SD75M (GF-643b) CN 5743 & CN 5739 | CN Train 373 Montreal, QC-CN MacMillian Yd, Toronto, ON manifest freight | Keele St (CN York Sub), Vaughan, Ontario, Canada | November 5th, 2016 © 2016 Gareth Bayer <sd40@btinternet.com>

Photo – City of Vaughan near Keele Street

Metrolinx Actions and Progress to Date

The Office of the Premier announced on June 14, 2016 that Metrolinx had an agreement-in-principle with CN to enable, in the short term, integrated (GO Rail and Bus) two-way all-day rail and bus service to Waterloo Region, and in the long-term, incremental GO Rail service enhancements as diversion of CN freight traffic provide additional rail capacity on the Kitchener GO Rail corridor. This announcement will implement the first segment of rail infrastructure improvements that will support a broader reorganization of CN and CP freight traffic proposed in the Missing Link Report. The announcement was further echoed in a September 2016 Metrolinx Board presentation on "Regional Express Rail (RER) Update".

To date neither Metrolinx nor the Province has consulted with the Region on the project. However Metrolinx staff have commented that it is their opinion that the construction of the new freight corridor in Peel Region does not directly impact either GO Rail or rail freight traffic through York region. Further, Metrolinx suggests that the rerouting of rail traffic from the existing CP Rail corridor through York Region, as proposed in the IBI Report, would require further evaluation and agreement between CN and CP.

Photo – CN train

Regional and Local Council Response to Rerouting Freight Rail Traffic

Concerned with the lack of GTHA coordination, York Region Council at its meeting of January 21, 2016, adopted a resolution requesting Metrolinx to undertake consultation with the Region, the Cities of Markham and Vaughan and the Town of Richmond Hill before proceeding with additional detailed studies relating to the rerouting of freight rail. The resolution of Regional Council was echoed by resolutions from the City of Markham on March 1, 2016 and the City of Vaughan on April 19, 2016 advising that freight traffic rerouting through the local municipalities **was not supported** by their Councils. Copies of the Resolutions of Councils are included in Appendix A.

It was further resolved by Regional Council at its meeting of April 21, 2016:

1. That Metrolinx be advised that rerouting of freight rail traffic through York Region **is not supported** by the Council of the Regional Municipality of York.
2. That Council reiterate its previous request of January 2016 that Metrolinx undertake consultation with York Region, the Cities of Markham and Vaughan and the Town of Richmond Hill before proceeding with additional studies relating to the rerouting of freight rail traffic in York Region.
3. That the Regional Clerk forward this resolution to the Prime Minister, the Premier, Federal and Provincial Transportation Ministers, Local MPs and MPPs, the Cities of Markham, Vaughan, Cambridge, Mississauga and Toronto, the Towns of Richmond Hill and Milton, Metrolinx, CN Rail and CP Rail.

However on June 14, 2016, the Province of Ontario announced that they had secured an agreement-in-principle with the Canadian National Railway to construct a new 30 km freight corridor [the missing freight rail link] between Brampton and Milton.

Regional Chairman, Wayne Emmerson, and Chief of Staff, Lina Bigioni, further expressed the Region's concerns during their meeting with The Honourable Marc Garneau, Federal Minister of Transport on August 8th, 2016.

Photo – CN Train and GO Train just outside of Toronto

Impacts to York Region

Regional staff reviews the movement of dangerous and hazardous goods across the Region, their potential impacts to regional population and employment, and emergency management preparation and response with the local municipalities through the annual Hazard Inventory and Risk Assessment (HIRA). Since 2013, the Region has requested and received annual confidential aggregate Dangerous Goods information (type and volume) travelling through the Region from CN and CP as required under Transport Canada's Protective Directives 32 and 36. Based on 2015 reported data, volumes on the "missing link" proposal could double the amount of dangerous and hazardous goods transported through a densely populated and growing corridor in York Region. Current freight volumes published by Transport Canada[1] identify up to 40 freight trains travel through GTA along the CP mainline daily and 31 trains per day along CN's York Subdivision.

Photo – Train with freight tanks

The existing CN Rail corridor traverses the two of the most populated municipalities in York Region and within 2 km of three provincially designated urban growth centres: Markham Centre, Richmond Hill / Langstaff Gateway Centre, and Vaughan Metropolitan Centre. Adding more freight movements through these communities is a major concern.

[1] Transport Canada Grade Crossing Inventory (April 2016), http://open.canada.ca/data/en/dataset/d0f54727-6c0b-4e5a-aa04-ea1463cf9f4c

The following table and accompanying map summarizes the estimated number of York Region residents and employees within 1 KM and 2 KM of the proposed rail corridor today and by 2041.

		2016	2041	Growth
1 KM	Residents	207,000	273,000	66,000
	Employees	160,000	197,000	37,000
2 KM	Residents	326,000	427,000	101,000
	Employees	232,000	287,000	55,000

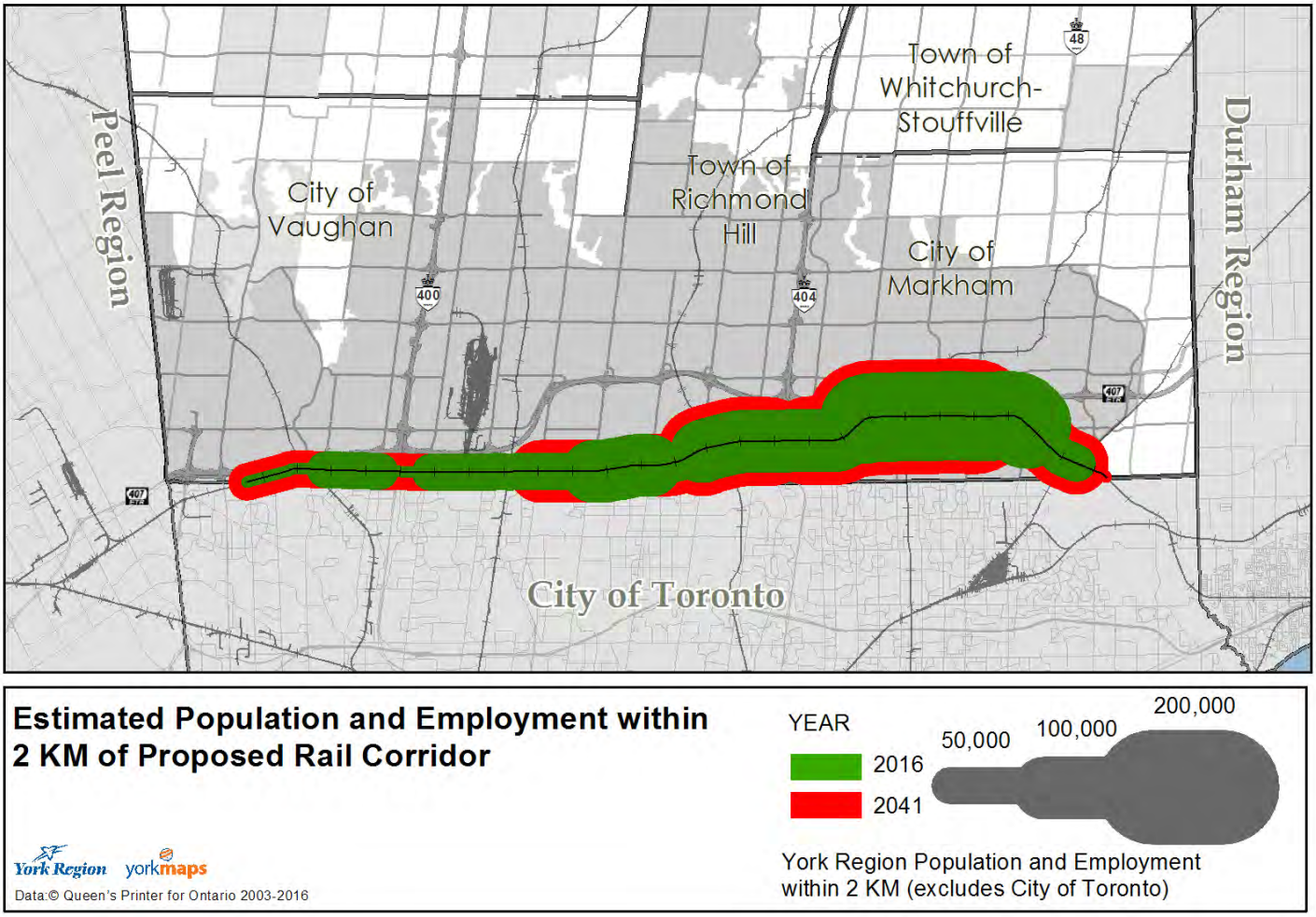

Figure 3- Population and Employment within 2KM of Rail Corridor

Emergency Management and Preparedness

Since 2003 the Region has undertaken an annual Hazard Inventory and Risk Assessment (HIRA). An incident involving the release of hazardous material has been one of the top ranking risks evaluated in the Region's HIRA and has led to including hazardous materials (hazmat) scenarios in simulated emergency exercises, and partnerships with CN to train first responders in their approach to Incident Command at rail incidents. However, the ability of York Region's first responders, including EMS, Fire and Police Services to effectively respond to a potential increase in risk associated with increased freight traffic through York Region has not been evaluated.

Photo – Train derailment example

Requirements of the Transport Canada Act

Under Section 98 of the *Canada Transportation Act*, the following provisions apply to the construction of railway lines, including main lines, branch lines, yard tracks, sidings, spurs or other track auxiliary to a railway line.

1. A railway company shall not construct a railway line without the Agency's approval.
2. If the railway company applies to construct a line, the Agency may approve the application if it considers the location of the railway line reasonable. The Agency must consider requirements for railway operations and services, and the interests of the localities that the line will affect.
3. No approval is needed to construct a railway line within the right-of-way of an existing line, or within 100 metres of the centre line of an existing railway line for a distance of no more than three kilometres.

The *Canadian Environmental Assessment Act, 2012* (CEAA 2012) came into force on July 6, 2012, replacing the Canadian Environmental Assessment Act and removing the requirement for an environmental assessment for certain railway line construction projects. Following the legislative changes, railway companies were consulted regarding the Agency's proposed approach to applications under section 98 of the Canada Transportation Act, resulting in an understanding that railway companies remain responsible for demonstrating to the Agency that the requirements of that provision are met, whether an environmental assessment is required or not.

The Agency adopted the following approach, indicating that railway companies will:

- Undertake consultations with the localities with a view to developing collaborative measures to address the relevant issues raised;
- Consult with municipalities, adjacent landowners and Aboriginal groups, when and as applicable;
- Provide information to allow an adequate understanding of the project and to ensure that consultations are meaningful;
- Provide the Agency with a detailed account of these consultations and any agreements put in place to address objections that may have been raised; and
- Identify issues where no agreement was reached and that must be dealt with by the Agency.

It is the position of the Region that the rerouting of CP main line freight to a shared or new rail corridor adjacent to the CN York and Halton subdivisions would meet subsection 98 (3) of the *Act* and would be subject to the *CEAA as* the project would require the construction of a new CP Rail right-of-way.

Conclusion

York Region, the Cities of Markham Vaughan and the Town of Richmond Hill are concerned with the social and environmental impacts any proposal that would increase rail freight and the movement of dangerous goods through the Region. The rerouting of CP Rail freight through York Region is not supported by Regional Council through an April 21, 2016 resolution of Council and echoed by resolutions by the City of Markham on March 1, 2016 and the City of Vaughan on April 19, 2016.

Photo – CN Train and GO Train side by side on tracks

List of Appendices

Appendix A Resolutions of Council

- Region of York, January 21, 2016, April 21, 2016
- City of Markham, March 1, 2016
- City of Vaughan, April 19, 2016

Appendix B Feasibly Study and Business Case of Constructing the Missing Link

IBI Group, August 20

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Appendix A

Resolutions of Council

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Clause 3 in Report No. 1 of Committee of the Whole was adopted, without amendment, by the Council of The Regional Municipality of York at its meeting held on January 21, 2016.

3

Feasibility Study for Proposed Rerouting of the Greater Toronto Rail Network

Committee of the Whole recommends:

1. Receipt of the presentation by Stephen Collins, Director, Infrastructure Management and Project Management Office.

2. Adoption of the following recommendations, as amended, in the report dated December 19, 2015 from Commissioner of Transportation Services:

    1. Council formally request Metrolinx to undertake consultation with York Region, the Cities of Markham and Vaughan and the Town of Richmond Hill before proceeding with additional detailed studies relating to the rerouting of a freight rail proposal.

    2. The Regional Clerk circulate a copy of this report to the Clerks of the Cities of Cambridge, Markham, Mississauga, Toronto, Vaughan, the Towns of Richmond Hill and Milton and Metrolinx.

1. Recommendation

It is recommended that:

1. Council formally request Metrolinx to undertake consultation with York Region and the Cities of Markham and Vaughan before proceeding with additional detailed studies relating to the rerouting of a freight rail proposal.

2. The Regional Clerk circulate a copy of this report to the Clerks of the Cities of Cambridge, Markham, Mississauga, Toronto, Vaughan, Town of Milton and Metrolinx.

2. Purpose

This report informs Council on the findings of a feasibility study commissioned by Cities of Cambridge, Mississauga, Toronto and Town of Milton to look at rerouting freight rail traffic to separate it from passenger rail services on the GO Transit Milton and Kitchener lines. The consequence of this proposal would significantly add to freight rail traffic on the east-west CN Line crossing York Region north of Steeles Avenue in the Cities of Markham and Vaughan.

3. Background

The feasibility study includes preliminary project feasibility and business case assessment

The "Feasibility Study and Business Case of Constructing the Missing Link" (Study) was prepared by IBI Group and published on August 18, 2015. The Study assessed the preliminary feasibility of constructing a new rail corridor linking the Canadian National Railway (CN) bypass line in Bramalea with the Canadian Pacific Railway (CP) through line near the Milton-Mississauga border.

Attachment 1 shows the proposed rail link within the Greater Toronto Area (GTA) context. The Study's Executive Summary is provided as Attachment 2.

GO Transit currently uses sections of track owned by CN and CP

Attachment 3 shows ownership of the rail lines in the GTA, including CP, CN and GO Transit. In York Region, Metrolinx currently owns all of the Stouffville and Barrie GO Transit lines.

For the Richmond Hill GO Transit line, Metrolinx owns the corridor south of the CN York Subdivision, near John Street in the City of Markham. CN owns the corridor north of the CN York Subdivision. GO Transit provides service on the CN track to the Richmond Hill Station with expanded service to Stouffville Road (Gormley) and Bloomington Road planned.

The Milton GO Transit service uses the CP Galt Subdivision for most of its length from Milton to west Toronto, transferring to a Metrolinx owned line at the junction located east of Keele Street between Bloor Street and St. Clair Avenue West.

The Kitchener GO Transit service uses the CN Halton Subdivision from Georgetown to Bramalea.

Full implementation of Regional Express Rail on the Kitchener and Milton corridors is challenging without separating freight and passenger rail traffic

In July 2014, the Province of Ontario announced a commitment to fund and implement Regional Express Rail (RER) within the Greater Toronto and Hamilton Area (GTHA) over the next 10 years. Metrolinx's vision for RER is to provide electrified rail service running every 15 minutes or better, all day and in both directions, within the most heavily travelled sections of their network. RER will provide service across the existing GO Transit network within the GTHA on the Stouffville, Barrie, Kitchener, Milton, Lakeshore East and Lakeshore West lines.

Metrolinx's plan is to introduce all day, two-way, full service on the Milton GO Transit Line and on at least the inner portion of the Kitchener GO Transit line. To do this, while still carrying through freight services, will require constructing at least two additional tracks, widening the Milton Line from two to four tracks and the Kitchener line from one and two tracks to three and four.

The concept to build a new freight rail link and reroute CP freight traffic assessed in the Study is intended to accommodate the Metrolinx RER concept and separate heavy freight rail traffic from passenger rail service corridors. With the planned implementation of RER's frequent service, separating through freight rail is an important issue for Metrolinx

4. Analysis and Options

The proposed new rail link on its own will not fully separate freight and passenger rail traffic

Constructing the proposed rail link will not fulfill all requirements to reroute through freight traffic from GO Transit service lines. Upgrading several other rail lines and providing new connections between CP and CN would also be required.

The following numbered improvements are also required and are shown on the location map provided as Attachment 4.

1. A new connection from the Staines connection to the Havelock Subdivision, adjacent to CP's Agincourt Yard. This will allow CP trains direct access from the Belleville Subdivision to the Havelock Subdivision.

2. Upgrades to the west end of CP's Havelock Subdivision including centralized train control and an additional track.

3. New double track connection between CP's Havelock and CN's York Subdivisions providing CP trains access to the CN York Subdivision in Markham.

4. Expansion of CN's York and Halton Subdivisions to a minimum of three main tracks between the new Havelock connection and the Bramalea start of the proposed freight rail link. This includes expansion of signal equipment, new grade separations of existing road/rail crossings and a new rail/rail grade separation with GO Transit's Richmond Hill line at Doncaster.

5. Construction of a new three-track rail corridor, the proposed new link, between CN's Halton Subdivision at Halwest and CP's Galt Subdivision west of the Lisgar GO Station. The rail link would start at CN's Malport Yard, include a rail/rail grade separation with GO Transit's Kitchener line and run between Highway 407 and the hydro transmission line to the Mississauga/Milton border.

6. Expansion of CP's Galt Subdivision. This would include a rail/rail grade separation allowing GO Transit trains to cross over the proposed rail link. It would include five tracks, three freight and two passenger rail tracks, between the Lisgar and Milton GO Stations. Three freight tracks are proposed to the new Milton Connection west of the Milton GO Station.

7. New connection from CP's Galt Subdivision to CN's Halton Subdivision allowing CN trains to return to the Halton Subdivision.

8. New east and west connections from CP's Mactier Subdivision to CN's Halton Subdivision. These would allow both eastbound and westbound CP trains to have access to the transcontinental route to western Canada and to the Vaughan Intermodal Facility.

This arrangement would effectively separate GO Transit's commuter operations from CN and CP's core freight operations with rail/rail grade separations. In addition, it would accommodate CN and CP's through freight operations by providing routes equivalent to those available with the existing rail network.

However, this proposal requires rerouting CP freight traffic from the City of Toronto through the Cities of Markham and Vaughan.

The freight rail link concept recommends rerouting CP freight traffic from the City of Toronto through the Cities of Markham and Vaughan

Of specific interest to York Region is that the Study identifies several benefits, including removal of heavy through freight traffic from central areas in the City of Toronto, central Mississauga and downtown Brampton. However, the study proposes that this heavy freight traffic be accommodated within the existing CN York Subdivision from approximately Highway 27 in the City of Vaughan to Ninth Line in the City of Markham.

The relocation of this heavy freight traffic into York Region will impact many communities. The types of impacts that need to be considered and addressed, should this project move forward, include noise, vibration, air quality, safety, constructability and the increase in volume of dangerous and hazardous goods travelling through York Region.

Staff will work with Metrolinx and others to ensure York Region's interests are considered before proceeding with more detailed study of the proposed rerouting of freight rail traffic

Although the Cities of Cambridge, Mississauga, Toronto and Town of Milton commissioned the Study, the findings of the Study propose that Metrolinx be the proponent of the rail link.

The Study compares the freight rail link proposal to Metrolinx's current plan to add additional tracks to both the Milton and Kitchener lines.

Before Metrolinx makes a decision to proceed with more detailed studies for the freight rail link proposal, York Region requests that Metrolinx consult affected municipalities directly, including York Region, Cities of Markham and Vaughan, so the full scope and impacts of the proposal are clearly understood.

Link to key Council-approved plans

Further consultations are required to confirm the Study concept supports the Regional Official Plan objective to promote a linked and efficient network for goods movement that supports the Region's economic vitality and minimizes conflicts with sensitive land uses.

5. Financial Implications

There was no cost to York Region for preparation of the Study.

The estimated cost of the proposed project is $5.3 billion. Financial implications to the Region, if any, as a result of the implementation of the proposed project have yet to be determined. Approximately one-third of the cost is to build the missing rail link. Two-thirds of the cost is to construct the other rail improvements, including adding a third track to the CN York Subdivision in Markham and Vaughan, necessary to reroute the CP freight traffic.

To provide a comparison with the costs of not implementing the rail link, a similar cost analysis was presented in the Study comparing Metrolinx's current plan to add additional tracks to the Milton and Kitchener lines to carry through freight traffic and expanded numbers of GO Transit trains. The estimated cost of this option is $5.0 billion.

6. Local Municipal Impact

While separation of through freight traffic from GO Transit services is positive, it would move more freight traffic through the Cities of Markham and Vaughan. Local communities would be impacted by additional rail traffic through nuisance impacts, in particular, noise and dust. The volume of dangerous and/or hazardous goods moving through York Region would also increase.

7. Conclusion

Cities of Cambridge, Mississauga and Toronto and Town of Milton commissioned a Study to look at reducing freight rail traffic along sections of the Milton and Kitchener GO Transit routes.

The key benefit of the rail link is the removal of heavy through freight traffic from central areas in the City of Toronto, central Mississauga and downtown Brampton. As a result, heavy freight traffic is proposed to be relocated within York Region, specifically the Cities of Markham and Vaughan.

The Study assesses the preliminary feasibility of constructing a new rail corridor linking the CN bypass line at Bramalea with the CP through line near the Milton-Mississauga border comparing it to Metrolinx's current plan to add additional tracks to both the Milton and Kitchener lines.

York Region requests that Metrolinx consult directly affected municipalities before deciding to proceed with any further detailed studies.

For more information on this report, please contact Stephen Collins, Director Infrastructure Management and PMO, at ext. 75949.

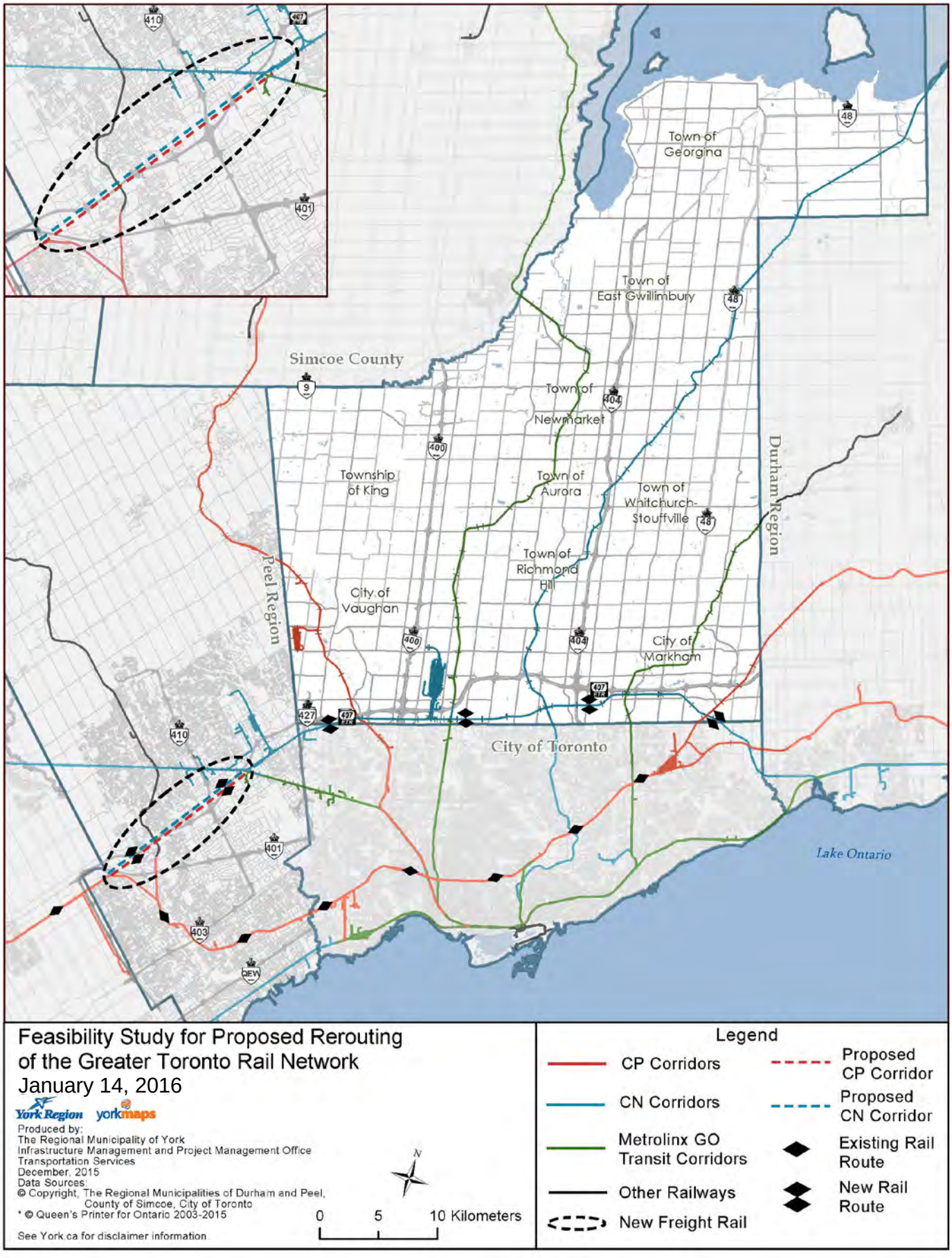
The Senior Management Group has reviewed this report.

December 19, 2015

Attachments (4)

6510932

Accessible formats or communication supports are available upon request


Town of Georgina
Town of East Gwillimbury
Simcoe County
Town of Newmarket
Township of King
Town of Aurora
Town of Whitchurch-Stouffville
Durham Region
Peel Region
Town of Richmond Hill
City of Vaughan
City of Markham
City of Toronto
Lake Ontario
Feasibility Study for Proposed Rerouting of the Greater Toronto Rail Network
January 14, 2016
York Region yorkmaps
Produced by:
The Regional Municipality of York
Infrastructure Management and Project Management Office
Transportation Services
December, 2015
Data Sources:
© Copyright, The Regional Municipalities of Durham and Peel, County of Simcoe, City of Toronto
* © Queen's Printer for Ontario 2003-2015
See York.ca for disclaimer information
N
0 5 10 Kilometers
Legend
CP Corridors
CN Corridors
Metrolinx GO Transit Corridors
Other Railways
New Freight Rail
Proposed CP Corridor
Proposed CN Corridor
Existing Rail Route
New Rail Route

6410661

Executive Summary

Attached is a report on the feasibility of adding the "Missing Link" to the Greater Toronto rail network. The Missing Link is a new rail corridor linking the CN bypass line at Bramalea with the CP through route near the Milton-Mississauga border. The purpose of the Missing Link is to separate major through rail freight flows from passenger services on the GO Transit Milton and Kitchener lines. Just constructing the Missing Link does not fulfil all the requirements for rerouting of through freight flows; this requires upgrading of several other lines and providing new connections between CP and CN.

Constructing the Missing Link and the other rail improvements has three major benefits:

- It eliminates the impacts of the widening of the Milton and Kitchener GO Transit routes. These will be considerable and will be felt in the centres of Mississauga and Brampton. In fact the impacts of widening may be so serious that the objective may not be achieved for many years. Constructing a major project of this nature in active rail corridors will incur significant risks and dangers that can be avoided through the construction of the Missing Link.
- By removing heavy through freight flows, electrification of these two lines can be achieved. Without the separation of through freight and regional passenger service, electrification may not be acceptable.
- By freeing up the inner parts of the Milton and Kitchener lines, it will permit additional two-way service on the outer ends of these lines including new services to Cambridge and two-way all day service to Kitchener.

The conclusion from this initial feasibility analysis is that the Missing Link can be constructed without major impacts on the urban fabric. A cost analysis indicates that, within the margin of error of a planning level study, adding the Missing Link would incur approximately the same cost as the present plan to add trackage and widen the Milton and Kitchener lines to implement the Regional Express Rail (RER) concept on these lines.

The Missing Link proposal has several other benefits:

- It will remove heavy through freight traffic from central areas in Toronto, Mississauga, Brampton and Georgetown with their nuisance impacts.
- It will make feasible several new GO Transit services which are included in the Big Move transportation plan for the Greater Toronto and Hamilton Area (GTHA) including new services to Bolton, Agincourt and north Pickering and a Midtown Toronto service on the existing CP North Toronto line.
- It makes feasible a shortening and acceleration of the Richmond Hill GO Transit service.
- By separating major freight and passenger flows and therefore limiting impacts of passenger services on freight it will contribute to the achievement of the objectives of the Continental Gateway strategy of the Federal, Ontario and Quebec governments by facilitating through freight traffic to and from the US border.
- By separating heavy freight traffic from regional passenger services it offers the possibility for a future high speed rail to enter the centre of the GTHA.

Therefore it is our conclusion that the Missing Link should be investigated in more detail with Metrolinx, CN, CP and senior levels of government.

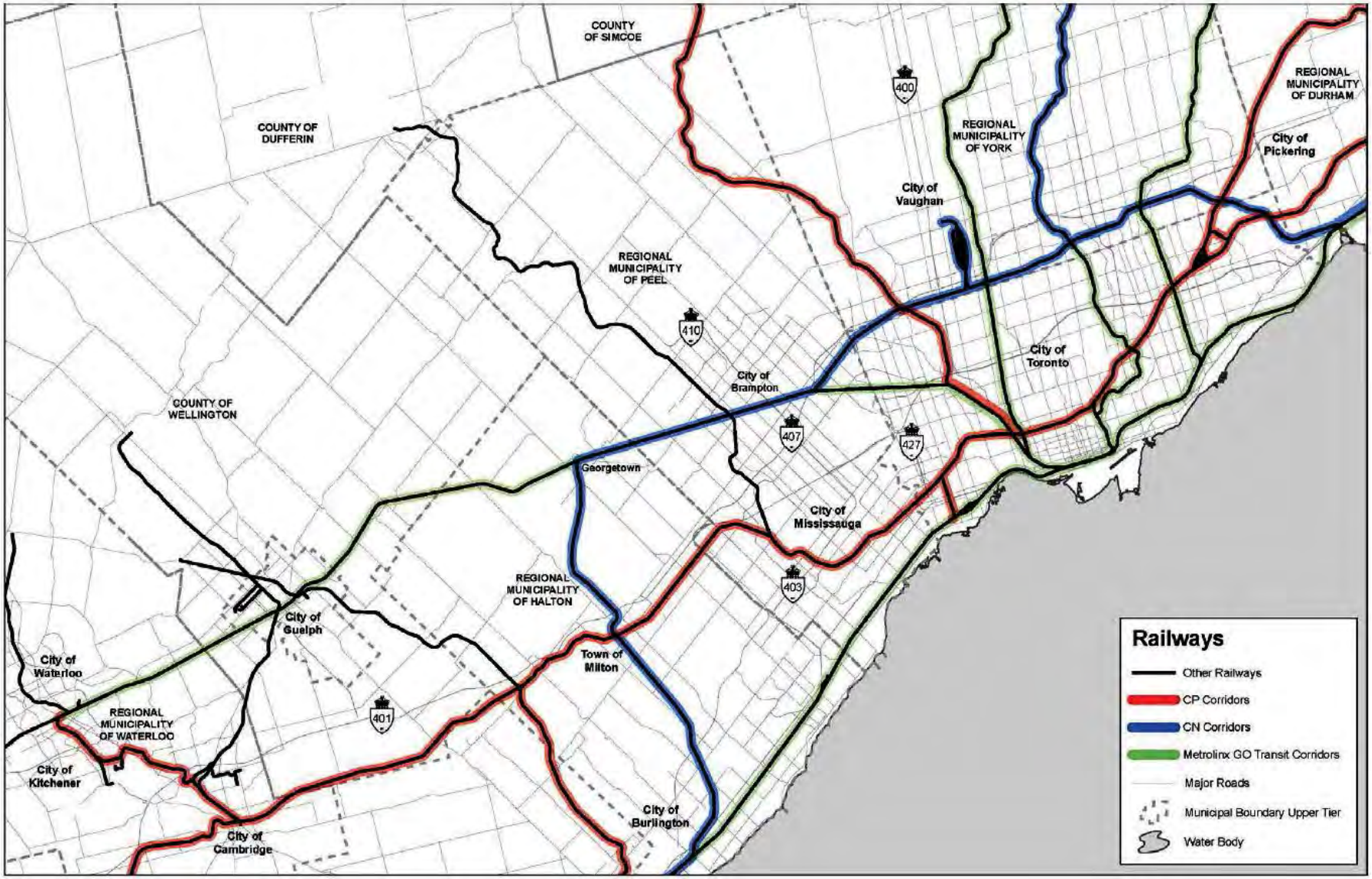
This strategy can best be achieved with the cooperation of the major freight railways.

As the study team sees it, the next steps in the process are:

- Engage Metrolinx in discussion of the feasibility and desirability of this project.
- Develop a process that will include Metrolinx, CN, CP and the concerned municipalities to develop the optimum solution.
- Apply to the Government of Canada for funding of additional studies and for funding of the project itself.

This study was sponsored by the City of Mississauga, City of Toronto, Town of Milton and City of Cambridge.

Existing Ownership of Rail Corridors

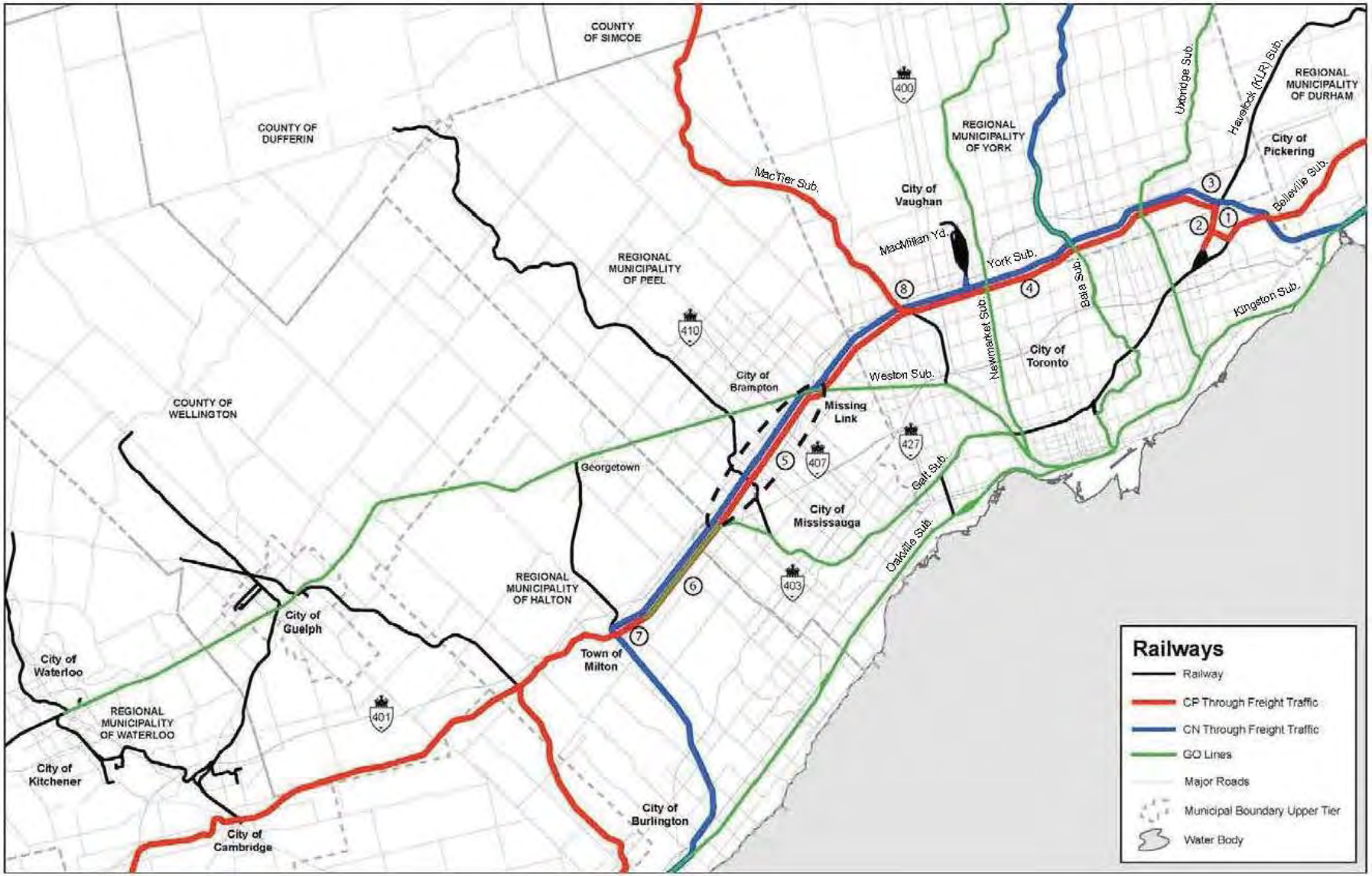


Feasibility Study for Proposed Rerouting of the Greater Toronto Rail Network
January 14, 2016

6410663

Attachment 3

Proposed Freight Rail Link



Feasibility Study for Proposed Rerouting of the Greater Toronto Rail Network
January 14, 2016

6410665

Attachment 4

York Region

Minute No. 57 as recorded in the Minutes of the meeting of the Council of The Regional Municipality of York held on April 21, 2016.

57 Proposed Rerouting of the Greater Toronto Rail Network Draft Resolution

It was moved by Regional Councillor Jones, seconded by Regional Councillor Di Biase that Council receive the communication from Daniel Kostopoulos, Commissioner of Transportation Services dated April 20, 2016 regarding "Proposed Rerouting of the Greater Toronto Rail Network Draft Resolution" and adopt the following:

Whereas the Cities of Cambridge, Mississauga and Toronto and the Town of Milton completed the "Feasibility and Business Case of Constructing the Missing Link" to assess the feasibility of separating freight rail and passenger rail traffic on the Milton and Kitchener GO rail corridors by constructing a new rail corridor and other improvements to link the Canadian National Railway bypass line in Bramalea with the Canadian Pacific Railway through line near the Milton-Mississauga border thereby facilitating a rerouting of freight rail traffic from the Cities of Toronto and Mississauga to southern York Region, in the Cities of Markham and Vaughan.

And Whereas Council at its meeting held on January 21, 2016, adopted Clause 3 in Report No. 1 of Committee of the Whole regarding Feasibility Study for Proposed Rerouting of the Greater Toronto Rail Network, including resolving that Council formally request Metrolinx to undertake consultation with York Region, the Cities of Markham and Vaughan and the Town of Richmond Hill before proceeding with additional studies relating to the rerouting of freight rail traffic in York Region.

And Whereas Council of the City of Markham at its meeting on March 1, 2016, adopted a number of resolutions, objecting to the recommendations of the Feasibility and Business Case of Constructing the Missing Link, including that the Prime Minister, the Premier, Federal and Provincial Transportation Ministers, the project proponents and others be advised that the City of Markham strongly objects to rerouting additional freight rail traffic through the City of Markham.

And Whereas Report No. 6 of the Committee of the Whole meeting held on April 7, 2016, recommended that staff prepare a similar resolution to that of the City of Markham dated March 1, 2016, for consideration by Council at its meeting to be held on April 21, 2016.

Now therefore be it resolved:

1. That Metrolinx be advised that rerouting of freight rail traffic through York Region is not supported by the Council of the Regional Municipality of York.

2. That Council reiterate its previous request of January 2016 that Metrolinx undertake consultation with York Region, the Cities of Markham and Vaughan and the Town of Richmond Hill before proceeding with additional studies relating to the rerouting of freight rail traffic in York Region.

3. That the Regional Clerk forward this resolution to the Prime Minister, the Premier, Federal and Provincial Transportation Ministers, Local MPs and MPPs, the Cities of Markham, Vaughan, Cambridge, Mississauga and Toronto, the Towns of Richmond Hill and Milton, Metrolinx, CN Rail and CP Rail.

Carried

(See Clause 2 in Report No. 6 of Committee of the Whole.)

ATTACHMENT 1

CW19-16

RECEIVED
MAR 09 2016
CLERK'S DEPT.

MARKHAM

March 4, 2016

The Honourable Prime Minister Justin Trudeau
House of Commons
Ottawa, Ontario K1A 0A6

RE: IBI GROUP FEASIBILITY STUDY ON REROUTING OF FREIGHT RAIL TRAFFIC IN THE GREATER TORONTO RAIL NETWORK (5.13)

Dear Mr. Trudeau:

This will confirm that at a meeting held on March 1, 2016, Council of the City of Markham adopted the following resolution:

"1) That Metrolinx be advised that rerouting of freight rail traffic through the City of Markham is not supported by Markham Council; and,

2) That Metrolinx be requested to consult directly with the City of Markham on the IBI Group Feasibility Study before any further detailed studies are carried out; and,

3) That staff report back to the Development Services Committee as any further information becomes available; and,

4) That the City of Markham strongly objects to the addition of rerouting additional *freight rail traffic through our community, and further, that the Prime Minister, The Premier,* Federal and Provincial Transportation Ministers, local MPs and MPPs, Region of York, the Cities of Cambridge, Mississauga, Toronto and Vaughan, the Towns of Milton and Richmond Hill, Metrolinx, CN Rail and CP Rail, be so advised; and further,

5) That staff be authorized and directed to do all things necessary to give effect to this resolution.

.....2/

If you have any questions, please contact, Brian Lee, Deputy Director, Engineering, at 905-477-7000 ext. 4838.

Yours sincerely,

Kimberley Kitteringham
City Clerk

Encl.

Copy to: The Honourable Marc Garneau, Minister of Transport – Federal
The Honourable Steven Del Duca, Minister of Transportation – Provincial
Local MP's and MPP's
Denis Kelly, Regional Clerk
Clerk, City of Cambridge
Clerk, City of Mississauga
Clerk, City of Toronto
Clerk, City of Vaughan
Clerk, Town of Milton
Clerk, Town of Richmond Hill
Bruce McCuaig, Metrolinx
CP Rail
CN Rail

ATTACHMENT 2

MARKHAM

Memo to Development Services Committee

RECEIVED
MAR 09 2016
CITY OF VAUGHAN
CLERKS DEPARTMENT

To: **Development Services Committee**

Copy to: Andy Taylor, CAO
Jim Baird, Commissioner, Development Services Commission
Alan Brown, Director of Engineering

Subject: **IBI Group Feasibility Study on Rerouting of Freight Rail Traffic in the Greater Toronto Rail Network**

Date: March 1, 2016

From: Brian Lee, Deputy Director, Engineering x4838

Recommendations

Staff recommend:

1. That Metrolinx be advised that rerouting of freight rail traffic through the City of Markham is not supported by Markham Council;
2. And that Metrolinx be requested to consult directly with the City of Markham on the IBI Group Feasibility Study before any further detailed studies are carried out;
3. And that staff report back to the Development Services Committee as any further information becomes available; and
4. And that Region of York, the Cities of Cambridge, Mississauga, Toronto and Vaughan, the Towns of Milton and Richmond Hill, Metrolinx, CN Rail and CP Rail, be so advised;
5. And that staff be authorized and directed to do all things necessary to give effect to this resolution.

Background

In August 2015, a report entitled "Feasibility Study and Business Case of Constructing the Missing link" (the "Feasibility Study") was completed by the IBI Group. The Feasibility Study was jointly commissioned by the Cities of Cambridge, Mississauga, Toronto and the Town of Milton. The purpose of the Feasibility Study is to investigate what is required to separate freight rail traffic from passenger rail services on the Milton GO Line and Kitchener GO Line.

The Feasibility Study by the IBI Group concluded that this separation of freight and passenger movement is possible if the freight traffic is re-routed to alternative freight rail

corridors, and a new rail connection in the City of Mississauga is built (the "Missing Link").

On January 21, 2016, York Region Council received a report and presentation from Regional staff on this subject and adopted the following recommendations:

1. Council formally request Metrolinx to undertake consultation with York Region, the Cities of Markham and Vaughan, and the Town of Richmond Hill before proceeding with additional detailed studies relating to the rerouting of a freight rail proposal.
2. The Regional Clerk circulates a copy of this report to the Clerks of the Cities of Cambridge, Markham, Mississauga, Toronto, Vaughan, the Towns of Richmond Hill and Milton, and Metrolinx.

Discussion

A. Reasons for the Feasibility Study

Currently, part of the Milton GO Line and the Kitchener GO Line use the CP Rail corridor and CN Rail corridor respectively. The mix of freight and passenger movement within the same rail corridor may pose a technical challenge and may be costly for Metrolinx to implement the Regional Express Rail. The IBI Group Feasibility Study was not commissioned by Metrolinx, and it is our understanding that Metrolinx has not taken any position on it.

B. Conclusion of the Feasibility Study

The Feasibility Study , by IBI Group, concluded that there is a business case to reroute the freight rail traffic from the CP Rail corridor through mid Toronto and Mississauga (see Map 1) to the CN Rail corridor in the southern part of York Region and northern part of Mississauga (see Map 2). The Feasibility Study also recommended the construction of the Missing Link which is a new rail corridor to connect the CN Rail Line at Bramalea with the CP Rail Line through route near the Milton-Mississauga border. This would then separate most of the freight traffic in the western part of the Greater Toronto Area from the Milton GO Line and the Kitchener GO Line. The Executive Summary of the IBI Group Feasibility Study is in Attachment 1. At this time, staff have not received any formal comments from Metrolinx regarding this study.

C. Rerouting Freight Traffic to the CN Rail corridor would impact Markham

The impact of rerouting freight traffic would add additional freight rail traffic on the CN York Subdivision which generally runs east-west between 14th Avenue and the Hydro One corridor between Highway 404 and Markham Road, and near

John Street west of Highway 404, see Map 3. Within the City of Markham, there is one at-grade road/rail crossing located at 14th Avenue just west of Warden Avenue. The increase in rail traffic would increase nuisance to residents and business because of noise, dust and vibration. There would also be an increasing amount of dangerous goods that will be carried through the City and southern part of York Region, increasing possible safety concerns.

Markham Council should go on record with Metrolinx and other stakeholders as not supporting any rerouting of freight rail traffic through the City of Markham.

Executive Summary

Attached is a report on the feasibility of adding the "Missing Link" to the Greater Toronto rail network. The Missing Link is a new rail corridor linking the CN bypass line at Bramalea with the CP through route near the Milton-Mississauga border. The purpose of the Missing Link is to separate major through rail freight flows from passenger services on the GO Transit Milton and Kitchener lines. Just constructing the Missing Link does not fulfil all the requirements for rerouting of through freight flows; this requires upgrading of several other lines and providing new connections between CP and CN.

Constructing the Missing Link and the other rail improvements has three major benefits:

- It eliminates the impacts of the widening of the Milton and Kitchener GO Transit routes. These will be considerable and will be felt in the centres of Mississauga and Brampton. In fact the impacts of widening may be so serious that the objective may not be achieved for many years. Constructing a major project of this nature in active rail corridors will incur significant risks and dangers that can be avoided through the construction of the Missing Link.
- By removing heavy through freight flows, electrification of these two lines can be achieved. Without the separation of through freight and regional passenger service, electrification may not be acceptable.
- By freeing up the inner parts of the Milton and Kitchener lines, it will permit additional two-way service on the outer ends of these lines including new services to Cambridge and two-way all day service to Kitchener.

The conclusion from this initial feasibility analysis is that the Missing Link can be constructed without major impacts on the urban fabric. A cost analysis indicates that, within the margin of error of a planning level study, adding the Missing Link would incur approximately the same cost as the present plan to add trackage and widen the Milton and Kitchener lines to implement the Regional Express Rail (RER) concept on these lines.

The Missing Link proposal has several other benefits:

- It will remove heavy through freight traffic from central areas in Toronto, Mississauga, Brampton and Georgetown with their nuisance impacts.
- It will make feasible several new GO Transit services which are included in the Big Move transportation plan for the Greater Toronto and Hamilton Area (GTHA) including new services to Bolton, Agincourt and north Pickering and a Midtown Toronto service on the existing CP North Toronto line.
- It makes feasible a shortening and acceleration of the Richmond Hill GO Transit service.
- By separating major freight and passenger flows and therefore limiting impacts of passenger services on freight it will contribute to the achievement of the objectives of the Continental Gateway strategy of the Federal, Ontario and Quebec governments by facilitating through freight traffic to and from the US border.
- By separating heavy freight traffic from regional passenger services it offers the possibility for a future high speed rail to enter the centre of the GTHA.

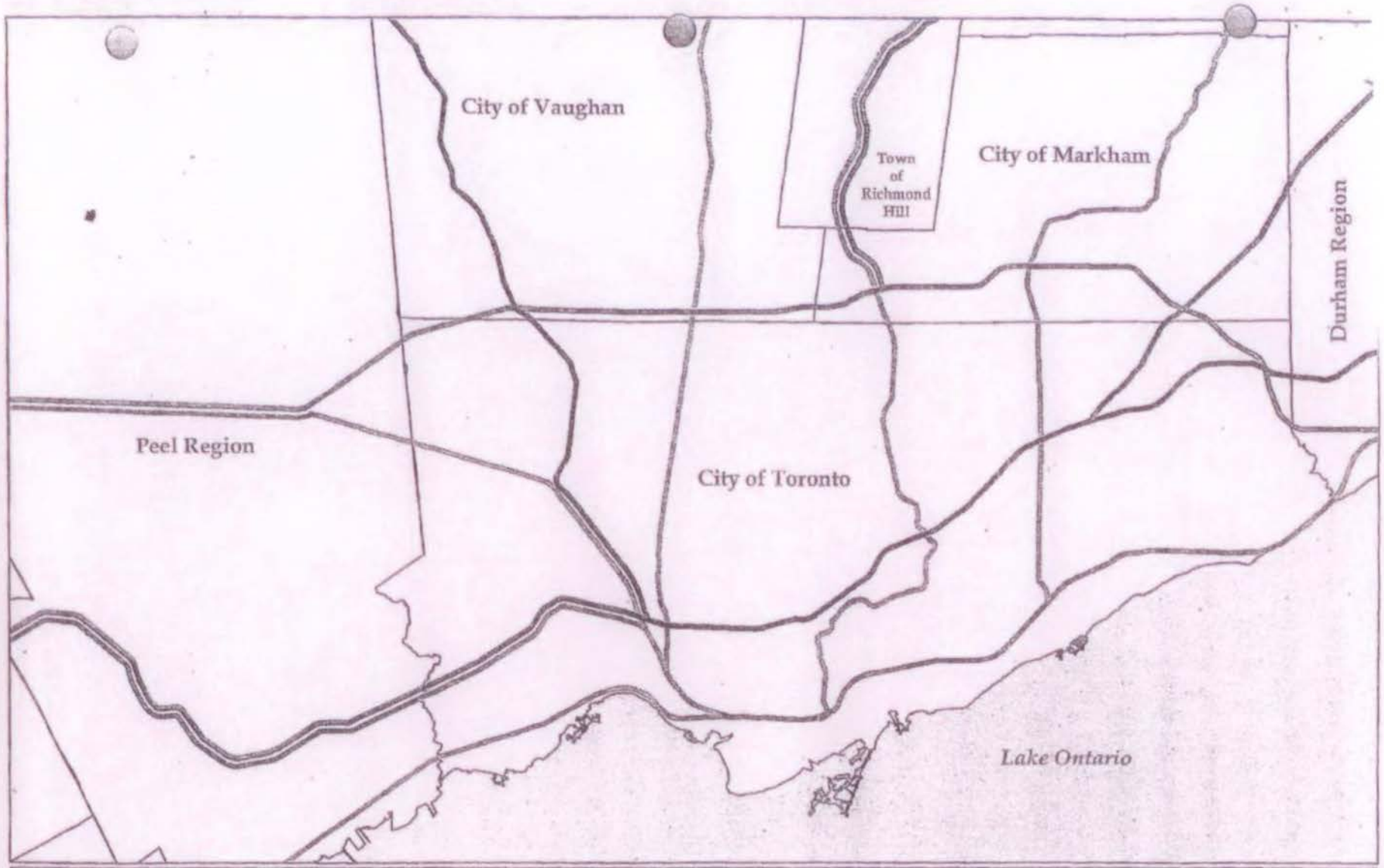
Therefore it is our conclusion that the Missing Link should be investigated in more detail with Metrolinx, CN, CP and senior levels of government.

This strategy can best be achieved with the cooperation of the major freight railways.

As the study team sees it, the next steps in the process are:

- Engage Metrolinx in discussion of the feasibility and desirability of this project.
- Develop a process that will include Metrolinx, CN, CP and the concerned municipalities to develop the optimum solution.
- Apply to the Government of Canada for funding of additional studies and for funding of the project itself.

This study was sponsored by the City of Mississauga, City of Toronto, Town of Milton and City of Cambridge.



Map 1

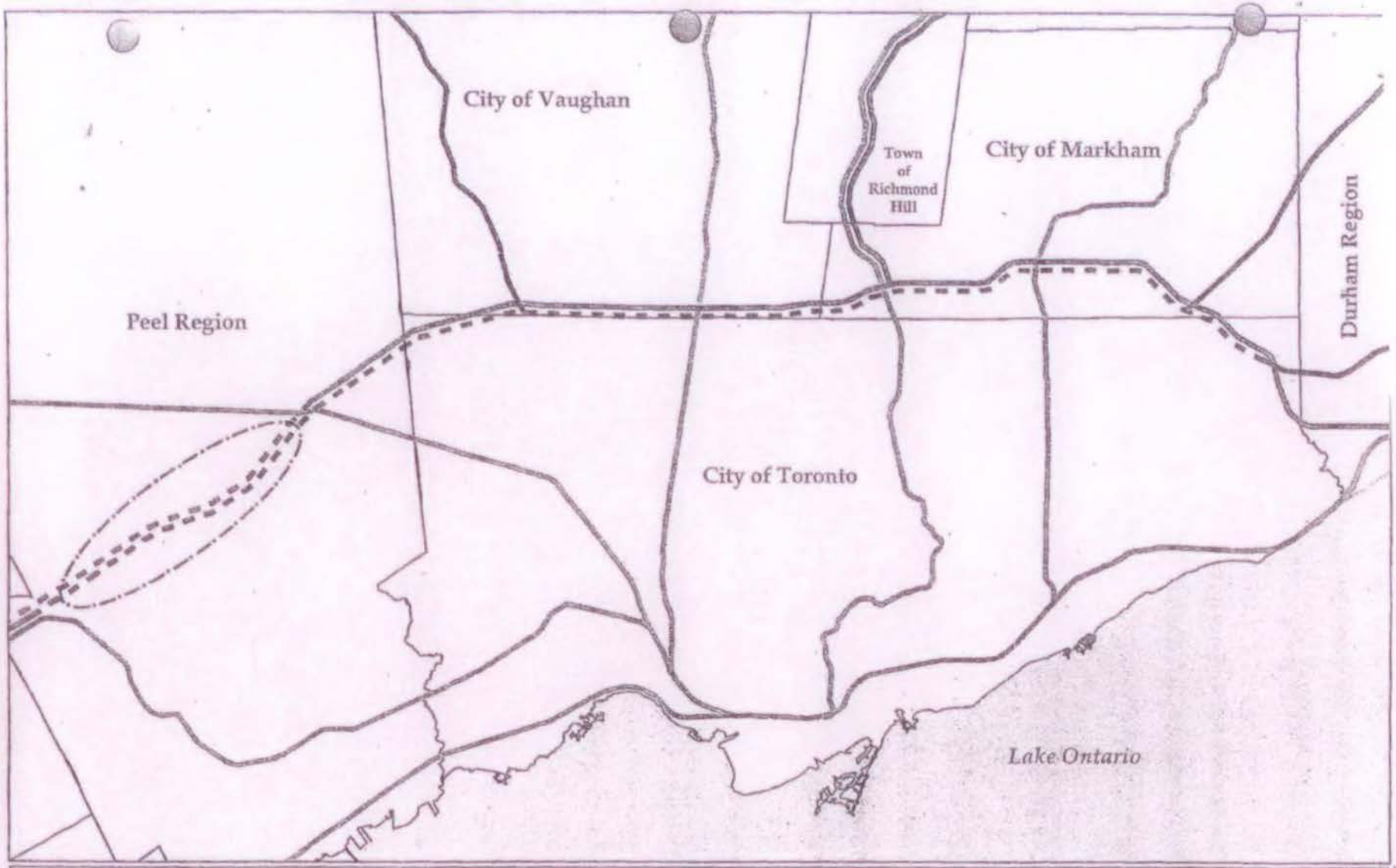
Current Freight & GO Rail Services

Legend

- CP Corridors
- CN Corridors
- Metrolinx Go Transit Service

0 5 10 Kilometers

Map 1 Current Freight and GO Rail Services



Map 2

Rerouted Freight & GO Rail Services

N

0 5 10 Kilometers

Legend

- CP Corridors
- Proposed CP Corridor
- CN Corridors
- Proposed CN Corridor
- Metrolinx GO Transit Service
- New Freight Rail

Map 2 Rerouted Freight and GO Rail Services

CITY OF VAUGHAN

EXTRACT FROM COUNCIL MEETING MINUTES OF APRIL 19, 2016

Item 21, Report No. 18, of the Committee of the Whole, which was adopted without amendment by the Council of the City of Vaughan on April 19, 2016.

21 INCREASED FREIGHT RAIL TRAFFIC THROUGH VAUGHAN

The Committee of the Whole recommends approval of the recommendation contained in the following resolution submitted by Councillor Shefman, dated April 5, 2016:

Member's Resolution

Submitted by Councillor Alan Shefman.

Whereas, a recent IBI Group Feasibility Study suggested that to facilitate the expansion of commuter rail as planned by Metrolinx, that freight rail traffic from the impacted lines be redirected through York Region and specifically the City of Vaughan; and

Whereas, this increased freight traffic would be diverted through heavily populated urban areas in our City; and

Whereas, the increased freight rail traffic will result in more noise and safety concerns by the residents of the City of Vaughan:

It is therefore recommended:

1. ***That,*** Metrolinx be advised that rerouting of freight rail traffic through the City of Vaughan is not supported by Vaughan Council; and
2. ***That,*** Metrolinx be requested to consult directly with the City of Vaughan on the IBI Group Feasibility Study before any further detailed studies are carried out; and
3. ***That,*** staff report back to Committee of the Whole as further information becomes available on this issue; and
4. ***That,*** the City of Vaughan strongly objects to the addition of rerouting additional freight rail traffic through our community; and
5. ***That,*** the Prime Minister, The Premier, Federal and Provincial Transportation Ministers, local M.P.'s and M.P.P.'s, Region of York, the Cities of Cambridge, Mississauga, Toronto and Markham, the Towns of Milton and Richmond Hill, Metrolinx, CN Rail and CP Rail, be so advised, and further;
6. ***That*** staff be authorized and directed to do all things necessary to give effect to this resolution.

Attachments

1. Resolution dated March 1, 2016, City of Markham Council
2. Memo dated March 1, 2016, from Deputy Director, Engineering, to Development Services Committee, City of Markham.

(A copy of the attachments referred to in the foregoing have been forwarded to each Member of Council and a copy thereof is also on file in the office of the City Clerk.)

MEMBER'S RESOLUTION

Meeting/Date:	**COMMITTEE OF THE WHOLE - APRIL 5, 2016**
Title:	**INCREASED FREIGHT RAIL TRAFFIC THROUGH VAUGHAN**
Submitted by:	**COUNCILLOR ALAN SHEFMAN**

Whereas, a recent IBI Group Feasibility Study suggested that to facilitate the expansion of commuter rail as planned by Metrolinx, that freight rail traffic from the impacted lines be redirected through York Region and specifically the City of Vaughan; and

Whereas, this increased freight traffic would be diverted through heavily populated urban areas in our City; and

Whereas, the increased freight rail traffic will result in more noise and safety concerns by the residents of the City of Vaughan:

It is therefore recommended:

1. ***That,*** Metrolinx be advised that rerouting of freight rail traffic through the City of Vaughan is not supported by Vaughan Council; and
2. ***That,*** Metrolinx be requested to consult directly with the City of Vaughan on the IBI Group Feasibility Study before any further detailed studies are carried out; and
3. ***That,*** staff report back to Committee of the Whole as further information becomes available on this issue; and
4. ***That,*** the City of Vaughan strongly objects to the addition of rerouting additional freight rail traffic through our community; and
5. ***That,*** the Prime Minister, The Premier, Federal and Provincial Transportation Ministers, local M.P.'s and M.P.P.'s, Region of York, the Cities of Cambridge, Mississauga, Toronto and Markham, the Towns of Milton and Richmond Hill, Metrolinx, CN Rail and CP Rail, be so advised, and further;
6. ***That*** staff be authorized and directed to do all things necessary to give effect to this resolution.

Respectfully submitted,

Councillor Alan Shefman

Attachments

1. Resolution dated March 1, 2016, City of Markham Council
2. Memo dated March 1, 2016, from Deputy Director, Engineering, to Development Services Committee, City of Markham.

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Appendix B

Feasibly Study and Business Case of Constructing the Missing Link, IBI Group, August 2015

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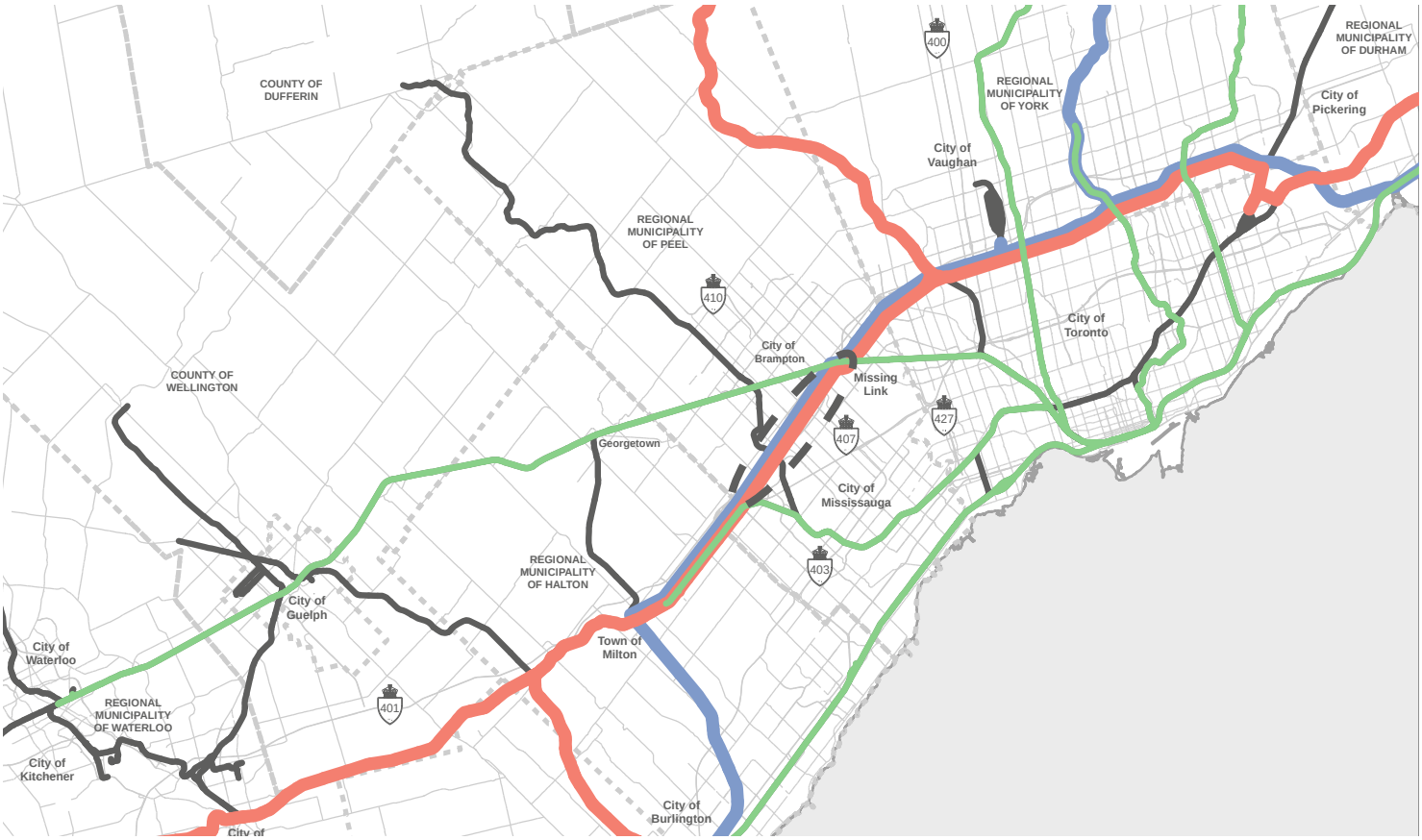
Appendix 1

Feasibility Study and Business Case of Constructing the Missing Link



By IBI Group
with Stantec
August 18, 2015

Executive Summary

Attached is a report on the feasibility of adding the "Missing Link" to the Greater Toronto rail network. The Missing Link is a new rail corridor linking the CN bypass line at Bramalea with the CP through route near the Milton-Mississauga border. The purpose of the Missing Link is to separate major through rail freight flows from passenger services on the GO Transit Milton and Kitchener lines. Just constructing the Missing Link does not fulfil all the requirements for rerouting of through freight flows; this requires upgrading of several other lines and providing new connections between CP and CN.

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- By separating heavy freight traffic from regional passenger services it offers the possibility for a future high speed rail to enter the centre of the GTHA.

Therefore it is our conclusion that the Missing Link should be investigated in more detail with Metrolinx, CN, CP and senior levels of government.

This strategy can best be achieved with the cooperation of the major freight railways.

As the study team sees it, the next steps in the process are:

- Engage Metrolinx in discussion of the feasibility and desirability of this project.
- Develop a process that will include Metrolinx, CN, CP and the concerned municipalities to develop the optimum solution.
- Apply to the Government of Canada for funding of additional studies and for funding of the project itself.

This study was sponsored by the City of Mississauga, City of Toronto, Town of Milton and City of Cambridge.

Table of Contents

Table of Contents (continued)

1 Introduction

The Greater Toronto and Hamilton Area (GTHA) and the adjacent Waterloo Region is the fastest growing area in Canada with over one-fifth of the national population and a much higher proportion of national economic activity. However, with growing population and employment, the area faces increasing problems of road congestion. While many transportation improvements have been made in individual communities, the expanded region needs much better passenger transportation.

Since the inauguration of the GO Transit commuter rail system in 1967 it has grown in extent and become more and more important to the region. Historically its function has been mainly to carry commuters to the central area of Toronto and home again at night. However, Metrolinx, which operates GO Transit, has developed the concept of a Regional Express Rail (RER) network, to be created by upgrading the service to be two-way, all-day on all of its regional rail lines in order to better serve employment lands throughout the GTHA. GO lines will be electrified to provide faster more frequent service.

The RER concept represents a new phase in providing convenient public transit services throughout the GTHA and beyond. By providing rapid, frequent transit services it can alleviate many of the problems created by road congestion which are being experience today and which can only get worse with increased development. By connecting workers, business travellers, students and other passengers across the many road centres included in the provincial plans, RER passenger rail would help to sustain and enhance a vibrant southern Ontario economy and encourage thriving urban growth centres. The region would then experience the economic and social benefits of a much bigger metropolis without all the other impacts that could be incurred. Metrolinx has been given a mandate to introduce RER service within ten years.

To do this, however, will require separating major freight flows from the regional passenger trains. GO has purchased much of the network but has not been able to purchase the major freight lines used by CN and CP. In particular, the Milton and Kitchener lines currently share track with substantial flows of CP and CN through freight trains and the lines continue to be owned by CP and CN. Implementing the RER concept to these lines is very difficult without expanding them to provide separate tracks for the passenger services. To overcome this problem the concept of a “Missing Link” was developed; it is described in this report along with an analysis of its impacts.

1.1 Outline of Report

The railway configuration of the Greater Toronto Area and the possible need for construction of the Missing Link is described in Section 2. Section 3 of this report describes the possible configuration of a future Missing Link in terms of alignment, number of tracks, connections, signalling, etc. Section 4 develops an order of magnitude cost estimate. Section 5 describes the potential impacts of the concept. In Section 6 possible implementation steps are outlined. Section 7 provides the study team’s recommendations.

1.2 Commissioning of Study

To investigate the feasibility and desirability of constructing the Missing Link, this study was commissioned by a consortium of four municipalities:

- City of Mississauga;
- City of Toronto;

- Town of Milton; and
- City of Cambridge.

2 The GTHA Railway Network

Map 1 at the end of the report shows the ownership of railway lines in the region. Metrolinx, the operator of GO Transit, has purchased many of the railway lines over which GO runs. In fact it has been successful in doing this for a major portion on all its lines except for the Milton and Kitchener services. This is because both of the lines are used by the strategic through freight services of CN and CP.

Map 2 highlights the through freight routes carrying traffic to, from and through the Greater Toronto and Hamilton Area (GTHA). This network was not planned in any comprehensive way but has evolved over the last 160 years as railway companies have come and gone, been amalgamated and new construction undertaken. Both CN and CP have constructed major suburban rail yards in the 1960s but the network shows many signs of its historic background with heavy freight trains going through the centres of Mississauga, Brampton and Toronto with the attendant impacts.

Map 3 shows the freight routes combined with the seven existing GO Transit regional rail lines. On most lines the GO Transit services are separated from the through freight flows. However, as shown on Map 3 the Milton and Kitchener GO lines share track and right-of-way with CP and CN through freight services for considerable distances.

The rail network is being asked to carry more and more regional rail and rapid transit passenger services. Metrolinx has announced a goal to implement all day, two way service on all GO lines. High speed intercity services have also been proposed. There is a potential to reshape the network in order to separate major freight and passenger flows.

2.1 The Evolving Network

Canadian rail geography and operating practises have evolved over the years. In general freight traffic has been concentrated onto main lines. Instead of mostly single car movements, rail traffic has been concentrated in more specialized trains. Bulk trains now move directly from origin to destination. Containers, either domestic or international, are used for most general freight shipments. Container trains operate on main lines between intermodal terminals located near major traffic generators, and the journeys are usually completed by trucks hauling the containers from the shipper or to the consignee or both. This means that today there is a lot less local rail traffic on the rail lines than in the past but heavier flows on through lines. In addition the railways are now running much longer trains which generally marshalled to minimize handling at intermediate terminals between origins and destinations. The railways have rationalized and consolidated their networks to take advantage of these trends.

In particular, both CN and CP have abandoned their Ottawa Valley routes which means that all traffic from both Western Canada and from the US Midwest and West must pass through the GTHA to reach any point east of Toronto and in fact to reach GTHA distribution points. There are only three rail routes through the GTHA from west to east (and from the northwest: Northern Ontario and Western Canada). These are:

- The CN Lakeshore line. However this goes right through the financial district as well as the highly populated Railway Lands. It also carries high volumes of GO Transit regional rail and VIA services as well as local freight assignments. It is not used for through freight traffic and is not a candidate for additional rail freight.

- The CP North Toronto route which goes through the centres of Toronto and Mississauga.
- The CN York and Halton Subdivisions, often called the CN Bypass Line, which runs from Pickering in the east on the historic route from Montreal, is located north of Steeles Avenue on the south edge of York Region and passes through central Brampton, Georgetown and Milton to regain the historic route in Burlington.

The main CN freight route from the southwest through to the east utilizes the CN Bypass Line incorporating sections of previous routes that were upgraded; the line was constructed in the 1960s from Burlington through Milton, Georgetown, Brampton, Bramalea and the York Subdivision north of Steeles Avenue to rejoin the original CN main line to Montreal in Pickering. It provides the access to CN's main Toronto Yard, the McMillan Yard, north of Highway 7 between Keele and Jane Streets. Construction of the CN Bypass Line moved heavy freight traffic away from the Lakeshore Line. Although built by CN for its own purposes (to connect with its new Toronto Yard in Vaughan, now called MacMillan Yard), it freed up the Lakeshore Line for GO Transit services; the first GO Transit service started on this line in 1967. Traffic from Western Canada links to this line in Thornhill. This line has almost complete double track and road/rail grade separations along it. Much of the line has berms separating it from adjacent residential areas.

CP, by contrast, still operates on its historic routing. It enters the GTHA from the west through Milton and then passes through Mississauga, Toronto, and Scarborough before connecting to the CPR main line to Montreal. Traffic from Western Canada comes from the north on a line that passes through Bolton, Kleinburg and Weston, connecting with the east-west main line at West Toronto. The main CP Yard is located in Agincourt in Scarborough. East of Toronto the CP follows its historic route through Pickering, Whitby and Oshawa.

It is notable that to get to this central Toronto route all three CP entries into the GTHA cross the main CN freight line, from the southwest at Milton, from the northwest close to Woodbridge and from the east close to the Pickering-Scarborough border.

2.2 Upgrading the GO Network

Metrolinx/GO Transit has implemented many upgrades to the railway network it uses. In particular it has purchased most of the lines on which it runs. In addition to new expanded track and signals constructed over major parts of the GO network, rail to rail grade separations have been constructed at the following locations:

- West Toronto Junction to separate GO Kitchener, VIA Rail Canada and Union Pearson Express trains from east-west rail freight on the CP North Toronto line;
- Snider in Vaughan to remove interference between GO Barrie trains and east-west freights on the CN Bypass line;
- A planned grade separation in Thornhill (Doncaster) to remove interference between GO Richmond Hill trains and east-west freights on the CN Bypass line; and
- Markham to remove interference between GO Stouffville trains and east-west freights on the CN Bypass line.

However, there is still major interference between freight and GO passenger services on the Kitchener and Milton GO lines and on several lines that could potentially be used for future passenger services. To increase GO traffic on these lines and provide all day service on these lines will require adding second, third and fourth tracks at huge cost and high impacts on the urban fabric.

A proposal to alleviate these problems is to implement the "Missing Link" as described in this report. The report describes the genesis of the proposal and then examines the feasibility and implications.

2.3 The Missing Link

A proposal has been made to construct the "Missing Link" between the CP main line near Trafalgar Road in Milton and the CN Bypass Line at Bramalea. All CP and CN through freight traffic including traffic to and from their major Toronto yards and intermodal facilities would use this route from Milton through Bramalea and along the CN bypass line. This would require new connections between CP and CN in Milton, south of Woodbridge and in the east near the Scarborough/Pickering boundary. The revised routings for freight trains are shown on Map 4. Map 4 also shows the existing GO Transit lines, showing how construction of the Missing Link will separate freight and passenger services on the Milton and Kitchener lines.

This new route is mostly located within the Parkway Belt adjacent to Highway 407. Such a new rail route will require many bridges and new connections between CN and CP.

As mentioned the CN freight bypass was constructed or rebuilt in the 1960s and therefore is mostly grade separated, has berms separating it from the newer residential developments and does not carry any GO Transit or VIA passenger traffic.

3 Feasibility of the Missing Link

To examine the feasibility of constructing the Missing Link, alternative alignments for the Missing Link itself and for new connections between the freight routes were examined.

Currently both CN and CP have mostly double track lines through the GTHA on the through east-west lines with single track on the connections to the north and western Canada. A like for like replacement of infrastructure would provide each of the railways with their own double track alignment. It is probable however, that by combining the traffic of the two railways as they have done in other parts of the country, a two or three track joint railway would suffice. To be acceptable to the railways there would have to be provisions made for some sort of joint authority to dispatch such a line and security for the railways in their long term access.

This would not be novel; there are many parts of the railway network in Canada where the railways share track. For example, CP has had running rights on the CN line between Hamilton and Toronto for over a century. In addition the railways are sharing infrastructure in other parts of the country, calling it co-production. Examples of this include sharing the lines between Sudbury and Parry Sound and between Kamloops and Vancouver.

A routing was developed to provide a shared freight train corridor from the east near CP's Agincourt Yard to the west side of Milton where CN's Halton Subdivision and CP's Galt Subdivision intersect. This 74 kilometre route would require upgrades to existing rail corridors and construction of a new corridor, the Missing Link, to accommodate both CN and CP freight trains.

The following numbered components of the new route are shown on Map 5. They include:

1. A new connection from the Staines connection to the Havelock Subdivision adjacent to CP's Agincourt Yard. This will allow CP trains direct access from the Belleville Subdivision to the Havelock Subdivision.
2. Upgrades to the west end of the CP's Havelock Subdivision including CTC and an additional track.

3. New double track connection between CP's Havelock and CN's York Subdivisions providing CP trains access to the York/Halton Subdivision rail corridor.
4. Expansion of CN's York and Halton Subdivisions to a minimum of three main tracks between the new Havelock connection and the Bramalea start of the Missing Link. This includes expansion of signal equipment, new grade separations of existing road/rail crossings, and a new rail/rail grade separation with GO Transit's Richmond Hill line at Doncaster. As mentioned the CN freight bypass was constructed or rebuilt in the 1960s and therefore has a wide right-of-way, is mostly grade separated, has berms separating it from the newer residential developments and does not carry any GO Transit or VIA passenger traffic.
5. Construction of a new three track rail corridor, the Missing Link, between CN's Halton Subdivision at Halwest and CP's Galt Subdivision west of the Lisgar GO Station. The Missing Link will start at CN's Malport Yard, include a rail/rail grade separation with GO Transit's Kitchener line and run between Highway 407 and the Hydro Transmission line to the Mississauga/Milton border. Many alignment variations are possible, some of which may require Hydro Line relocation. The entire route will be grade separated and will not create new road level crossings.
6. Expansion of CP's Galt Subdivision. This will include a rail/rail grade separation allowing GO Transit trains to cross over the Missing Link. It will include five tracks, three freight and two passenger, between the Lisgar GO Station and the Milton GO Station. West of the Milton GO Station three freight tracks are proposed to the new Milton Connection.
7. New connection from CP's Galt Subdivision to CN's Halton Subdivision allowing CN trains to return to the Halton Subdivision.
8. New east and west connections from CP's Mactier Subdivision to CN's Halton Subdivision. These will allow both east and westbound CP trains access to the transcontinental route to western Canada and to the Vaughan Intermodal Facility.

These routes, connections and upgrades are not necessarily the final configuration of the Missing Link but have been shown to be physically feasible.

This arrangement effectively separates GO Transit's commuter operations from CN and CP's core freight operations with rail/rail grade separations. In addition it accommodates CN and CP's through freight operations by providing routes equivalent to those available with the existing rail network.

4 Costing of Improvements

A planning level estimate of the costs of implementing the Missing Link along with connections to other lines and widening of existing lines was developed. Unit costs were based on those used by Metrolinx on other programs and include a 50% contingency allowance.

4.1 Capital Cost Estimates

The Missing Link estimate is based on a predominately three track corridor carrying traffic of both CN and CP with new and modified bridges sized to accommodate a fourth track. The estimated cost is $5.3 billion. Approximately 89 hectares of land will be required. Although much of this is in public ownership the estimate of the land cost includes these amounts.

Exhibit 1: Missing Link Capital Requirements

COMPONENT	ESTIMATED COST ($MILLION 2015)
New Connections	$526
Missing Link	$1,970
Widening Sections of York, Halton and Galt Subdivisions	$2,841
Total Construction Cost	$5,337
Property Requirements - 89 ha	$86-$173

To provide a comparison with the costs of not implementing the Missing Link, a similar cost analysis was done of Metrolinx's current plan to add additional tracks to both the Milton and Kitchener lines so that these can carry both the through freight traffic and the expanded numbers of GO Transit trains running with implementation of the RER concept. This might be called the Widening Option. The estimated costs of this plan are shown on Exhibit 2 and amount to $5.0 billion. Approximately 17 hectares of land are estimated to be needed; it is very difficult to estimate a price for these lands because much of it is in very built up areas. The land price could be considerably higher if full lots and buildings had to be acquired.

Exhibit 2: Kitchener/Milton Line Capital Improvements without the Missing Link (The Widening Option)

COMPONENT	ESTIMATED COST ($MILLION 2015)
Widening of Milton Line	$3,508
Widening of Kitchener Line	$1,507
Total Construction Cost	$5,015
Property Requirements - 17 ha	$56-$108

This case requires the construction of capital improvements in active and operating rail corridors implying that there is considerable additional risk associated with this capital cost estimate although the contingency allowance used is the same as for the Missing Link. Also the land costs for the widening option are probably low because they are for raw land only; they do not provide for expropriation of buildings and relocation of activities.

The improvements costed in Exhibits 1 and 2 allow extensive RER service to Milton and to Georgetown on the Milton and Kitchener lines respectively. They do not include upgrades to the extensions of these lines to Cambridge and Kitchener respectively. Thus they are directly comparable.

These estimates are at a planning level. They include a 50% contingency. Given this wide margin of error it can be said that the two proposals have approximately the same price tag.

4.2 Service to Cambridge

Providing two way service regional rail service to Cambridge would be an important upgrade to regional connectivity. This could be achieved in three ways, perhaps in a phased approach:

- As investigated by the City of Cambridge, provide a connecting shuttle service to Milton GO station on a pilot basis using Diesel Multiple Unit (DMU) technology.
- Extend some services on the Kitchener line via a former CN line from Guelph to Hespeler in Cambridge.

- Extend Milton services to Cambridge. This would almost certainly require the double tracking of the CP line from Guelph Junction to Cambridge which is now single track and extend electronic signalling on this line.

5 Impacts of Implementing the Missing Link

The implementation of the Missing Link will have a number of impacts. In this section these impacts are described.

To analyze of the potential benefits we have contrasted two cases as described in the previous section. The first case is to construct the Missing Link and to detour freight trains onto this line to eliminate or reduce freight/passenger interference. This is compared with the current plan which would widen the Milton and Kitchener corridors to handle all day, two-way service without the Missing Link.

5.1 Capital Costs

As indicated in the preceding section the difference in the capital costs of the two cases is well within the uncertainty area of the estimates. Given the greater degree of certainty of the costs of widening the lines, they can be said to be equivalent.

5.2 Operating Costs

The implementation of the proposals described previously will decrease train mileage for CN (by almost 11km for trains to and from the west) and not impose any additional train mileage for CP. There will be no interference between GO and through freight trains which will reduce delays to CN and CP. By sharing track there will be a lower length of track to maintain and signal. Track geometry (e.g. super-elevation on curves) and maintenance routines can be planned for freight-only operations, without having to deal with significant speed differences and passenger comfort issues on the freight lines. Also, the mitigation of train interference is a favourable factor. The nature of these changes are less evident in day-to-day savings as they are in the reduction of risks to disrupt normal operations and allow for speedier recovery to normal conditions after incidents of delay. One would not expect a near-term noticeable reduction in train starts or crew starts, or in the deployment of section gangs (track maintenance crews); these are the main cost-drivers for operations in a given territory.

On the other hand, there will likely be changes to local assignments to serve carload customers in the GTHA, especially for CP. In some cases, alternate scheduling might be required to avoid conflict with passenger trains; in other cases alternate routing and intermediate staging on side tracks might be the best approach. This aspect was outside the present scope, and would have to be include in a more detailed evaluation if the Missing Link concept is advanced. Similar to the situation for through traffic described above, the changes are important considerations to ensure undisrupted services; but, the cost impact is likely minor, and could be either positive or negative depending on the approach taken by CN, CP and GEXR.

Therefore, on balance, it is our opinion that there will be net operating cost savings to the two freight railways including a reduction in their ongoing infrastructure maintenance costs.

The operating costs savings for the GO rail lines with the freight trains moved off of the Milton and Kitchener GO lines should be similar or lower than the costs for the widening of the Milton and Kitchener lines as there will be less interference with the freight trains. For example, under the widening scenario, the Kitchener GO trains have to cross the CN freight flows between Bramalea and Brampton; with the Missing Link in place this interference would no longer occur.

5.3 Impacts of Widening of the Milton and Kitchener GO Transit Routes

The current plan of Metrolinx is to introduce all day, two way, full service on the Milton Line and on at least the inner portion of the Kitchener GO Transit lines. To do this while still carrying through freight services will require constructing at least two additional tracks, widening the Milton Line from two to four tracks and the Kitchener line from one and two tracks to three and four. This will have serious implications such as:

- Increasing the impact of rail services on the urban environment, including noise, and other impacts;
- While much of the additional trackage can be accommodated within the existing corridors, there will be additional land take required in some sections to accommodate retaining walls, drainage, etc. (There is also a report that CP is requiring a 9 metre separation between RER tracks and their tracks, increasing the land take and cost.) Construction on the widened lands will occur in built up urban areas with serious implications. In some cases entire properties will have to be obtained. In fact, the impacts on urban development will almost certainly delay the widening of these two corridors and perhaps even make them impossible to achieve.
- Both corridors have at-grade crossings with roads. While this may be acceptable under existing conditions, it would almost certainly not be acceptable when the corridors are four tracks wide and carrying both large numbers of through freights and very frequent GO RER services, requiring several grade separations to be constructed. The costs of these are included in the estimates but construction of the grade operations will also have impacts on the urban fabric, possibly including the removal of historic buildings.

5.4 Electrification of the GO Lines

Metrolinx has the long term intention to electrify all seven existing GO lines. Electrification of the Kitchener line as far as Bramalea has already been announced.

The freight railways, however, do not wish to have electrification on lines where they are carrying heavy volumes of freight. Overhead electrification could interfere with tall loads such as double stack containers, tri-level auto racks, oversized loads, etc. By removing these heavy freight flows these lines should be suitable for electrification. Otherwise electrification will not be acceptable on the Milton and Kitchener lines, the third and fourth busiest GO Transit routes.

Metrolinx has also expressed the intention of implementing some form of “Positive Train Control”, a supervisory system for train operations to improve safety on the RER lines. This would not be possible on lines that are shared with major flows of freight trains as through trains would not necessarily be properly equipped.

5.5 Removal of Heavy Freight Traffic from Central Areas

The Missing Link proposal will remove heavy freight traffic from central Toronto, downtown Brampton and central Mississauga. This will have beneficial impacts in terms by reducing the nuisance impacts of running heavy freight services through these high activity areas. It must be realized, however, that there will still be some freight services on the Milton and Kitchener lines to serve local industries. These will be infrequent and typically involve only short trains.

The new lines will be constructed in such a way as to minimize problems with adjacent development. The CN Bypass Line already has a wide alignment with berms in most locations.

5.6 Other Benefits

In addition to the main aim of freeing up the Milton and Kitchener GO lines from through freight traffic, there are other potential benefits of rationalizing the railway network in the GTHA by constructing the Missing Link. These are discussed below.

5.6.1 Additional Service to Cambridge and Kitchener

The Missing Link facilitates not only improved freight movement in the GTHA, but also the connection of communities west of the GTHA. By freeing up the inner parts of the Milton and Kitchener lines (from Union Station to Milton in case of the Milton Line and from Union Station to Georgetown in the case of the Kitchener line), additional, two-way service on the outer ends of these two lines can be put in place thus strengthening the overall economic vitality of the entire region.

Cambridge has already developed a proposal to provide a two way shuttle service between Milton and Cambridge. While extending GO rail service to Cambridge is not contingent upon the Missing Link, it would help to facilitate it. In the longer term RER service could also be extended to Cambridge.

The extension to Cambridge and the expansion of service to Kitchener would greatly contribute to the achievement of the Province's Places to Grow strategy, achieve a significant reduction in vehicular greenhouse gas emissions and unlock the economic potential of the region by facilitating significant economic development activity, the interchange of skills between urban areas and providing broader opportunities to work, study and live.

Similarly freeing up the Bramalea to Georgetown portion of the Kitchener line will allow additional service to be operated to Guelph and Kitchener. Removal of the CN freight traffic from all of the Kitchener line would also permit service to Cambridge via the Kitchener line to Guelph and a relatively lightly used CN line to Cambridge..

5.6.2 Enabling New GO Transit Services

By taking the freight traffic off of the central lines, several new lines will be available for adding GO Transit service. These include the North Toronto Line to connect with the TTC subway at Dupont and/or Summerhill stations, the Agincourt (north Pickering) Line, and the lower portion of the Bolton Line. All of these future lines are in Metrolinx's GTHA transportation plan (The Big Move). Map 6 shows these lines.

5.6.3 Acceleration of the Richmond Hill Line

The Richmond Hill Line follows a winding path through the Don Valley which causes low speeds and is susceptible to flooding. An alternative routing for these trains is using the CP line through the Don Valley and then a new connection between the CP North Toronto subdivision and the Richmond Hill Line where the CP to Agincourt line intersects with the Don Valley Parkway. This connection would not be possible with heavy freight traffic on the CP line as the Richmond Hill trains would have to cross the heavy through freight train flows. It would be feasible with the rerouting of the heavy through CP Rail traffic. This is also shown on Map 6.

5.6.4 Encouraging Coproduction by the Two Major Freight Railways

Over the last couple of decades the two major railways have improved their efficiency by joint use of trackage, called "coproduction" in the railway industry. The first major implementation of this was in the Fraser Canyon area of British Columbia. Both CN and CP have single track lines from Kamloops to Vancouver. A double track railway provides much greater capacity than the sum of two single lines and offers faster transit times. CN and CP made an agreement whereby

the CN line is used by westbound trains and the CP by eastbound trains between Vancouver and Kamloops. Such coproduction agreements are in place in other parts of Canada including between Parry Sound and Sudbury.

The new connections envisaged in this report would also prepare the way for coproduction to be extended from Toronto to Sudbury on the transcontinental lines of the two railways and perhaps eventually eastward to Montreal.

5.6.5 Implementing the Continental Gateway Initiatives

The Ontario-Quebec Continental Gateway is an initiative promoted by the federal government with the assistance of the two provinces to improve trade flows in the Quebec Windsor Corridor in order to facilitate international trade and to improve productivity. The CN and CP lines lead to the two most important rail border crossing points in Canada, the Sarnia and Windsor tunnels respectively. By separating freight and passenger train services and removing that interference in the GTHA, freight movements will be facilitated and the objectives of the Continental Gateway strategy facilitated.

Although CP train running distances remain the same, CN through trains from the west realize a saving of almost 11 kilometres, resulting in decreased transit times and substantial fuel savings. As mentioned in the previous section, by providing new connections between the two railways coproduction with its efficiency improvements is also encourage.

5.6.6 High Speed Rail

By removing the heavy freight traffic from the central lines in Toronto it offers the possibility for high speed rail to enter either by the Milton Corridor or the Kitchener Corridor from the west and the CP Agincourt corridor from the east.

6 Implementation

The impetus for the implementation of a major scheme such as the one described in this paper is the intent of the Ontario government, through the agency of Metrolinx, to implement the Regional Express Rail (RER) concept on the Milton and Kitchener GO Transit lines and throughout the Greater Toronto and Hamilton Area (GTHA). RER will bring very large improvements to the transit connectivity of the GTHA by providing fast, frequent, all day, two way rapid transit services. The major responsibility for implementing this scheme, if approved, therefore belongs to Metrolinx.

The question arises as to what role the municipalities and regions should embrace throughout the planning and implementation process. The status quo scenario would have Metrolinx working with the senior levels of government, CN and CP developing their plans to a certain point and then sharing the results in some advanced stage of definition with the municipalities. This interpretation is consistent with feedback both from Metrolinx and from the Minister of Transportation, according to senior municipal officials. This approach is susceptible to improvement.

The preceding discussion of impacts and accommodations necessary for implementation of RER with or without completion of the "Missing Link" suggests that the municipalities are significant stakeholders, such that their participation sooner rather than later in the planning process could result in better overall solutions.

The text that follows outlines the interests of the different types of stakeholder and offers suggestions regarding next steps based on a consolidated view of these interests.

6.1 Interest of the Federal Government

The federal government has a vital interest in the project as well because of:

- Its vital interest in the effective functioning of the GTHA, the most important economic region of Canada;
- Its objective to improve international trade through the Continental Gateway initiative;
- Its constitutional responsibility for railways;
- The New Canada Building Fund of Infrastructure Canada is a $14 billion component of the $53 billion New Building Canada Plan for which a project of the nature of the Missing Link might qualify under three of the four categories of funding assistance offered.

The federal government will have to be involved, for funding and because of the potential use of two acts that have been federally legislated.

The first of these acts is the *Canada Transportation Act* (hereinafter referred to as the Act). Sections 138 and 139 of the Act allow the federal government (i.e. the Canada Transportation Agency – CTA), on application from a municipal government, to request joint usage by two or more railways of a common right-of-way. In doing this the CTA must also provide for fair compensation to the railways for property and any impacts on operating costs.

The *Railway Relocation and Crossing Act* (RRCA) also allows the CTA to promote the relocation of railways upon request from a municipal government. The federal funding for such a venture would be established separate from granting the authority to proceed. The web site of the CTA states:

> "If provincial or municipal authorities cannot reach an agreement with a railway company on the relocation of railway lines, subsection 3(1) of the RRCA permits an application to the Agency for an order to carry out an accepted plan. The accepted plan will facilitate the relocation of specific railway lines or operations around and away from an urban area in order to promote urban development. The Minister of Transport, Infrastructure and Communities may authorize the payment, out of funds set aside by Parliament, of not more than 50% of the cost of preparing the urban development plan or the transportation plan or both."

The RRCA also permits the federal government to pay up to 50% of the costs of studies and of implementation of railway relocation. At the present time there is no budget available allocated to the RRCA which would permit the actualization a project of the scale of the Missing Link but this would only require an appropriation of funds, not new legislation.

Federal funds could also flow through the use of the New Building Canada Fund. A New Building Canada grant of up to $2.6 billion was recently announced for the implementation of SmartTrack which essentially is the upgrading of GO Transit routes to an RER standard.

6.2 The Interest of the Freight Railways

The property involved, however, belongs to the two major Canadian railways, Canadian Pacific Railway and Canadian National Railways. These are owned by a wide cross-section of shareholders. Therefore, if the necessary cooperation of the freight railways is to be obtained, they must either be in the same or a better position at the end of the project than they were before or be compensated accordingly in a manner acceptable to them.

In the past GO Transit/Metrolinx has had a problem in making infrastructure improvements on railway property. The railways have insisted that they retain title to all assets located on their

property. Even if Metrolinx pays for an additional track or a station, it is owned by the railway; this is usually mitigated by an agreement that the railways will not charge for the use of such assets but it does constrain the operating flexibility of GO. Metrolinx has purchased much of its network to overcome this problem; but, the major freight railways have refused to sell strategic through routes including: the Milton line which is the CP main east-west line, and the section of the Kitchener line between Bramalea and Georgetown which is part of the CN Bypass freight route.

It is very important to keep in mind that the long-term success of the railway companies depends on their ability to continuously provide reliable and efficient service to their clients. The Missing Link concept is designed to maintain and perhaps enhance the service to customers using these through routes. However, some customers are located along the lines that would be affected by expanded commuter rail service with or without coproduction and the Missing Link. An important follow-up investigation, if the concept advances to a more detailed level of consideration, would require developing operating plans for serving local customers of both CN and CP in the GTHA, and accommodating Goderich and Exeter Railway (GEXR) connections with MacMillan Yard.

6.3 Possible Mode of Implementation

These considerations lead to a possible implementation process:

- Refinement of the proposals in this paper, sponsored by Metrolinx with the participation of municipalities, the railways and the federal government;
- Application for any federal and provincial environmental approvals. The provincial approvals could probably be sought under the Transit Project Assessment Process (TPAP) which was implemented to expedite public transit projects;
- Application for funding assistance under the New Canada Building Fund, possibly in conjunction with the Province, depending on the scale of the request(s).
- Actual implementation by Metrolinx with the cooperation of the railways and possibly financial assistance from the federal government.

Experience elsewhere has shown that negotiations based on commercial principles carried out in a spirit of good faith among all participants produces the best results. The legal measures that are available in the background such as Sections 138 and 139 of the Act or the RRCA and other related measures are useful in providing a base point. If there is a failure to reach a commercial and fair agreement, then the provisions of transportation legislation can be helpful in establishing a process of mitigation, arbitration, or adversarial proceedings as a last resort.

The strategy for funding requests is a matter for the sponsors of this study to consider. The overall system has national, provincial and regional significance which would qualify it for one of the larger funding allotments. There are also elements of the system that occur entirely within one municipality, especially grade separations which would qualify under the RRCA for authorization and the New Canada Building Fund regional projects.

Clearly, there are significant advantages for a concerted approach that could be led by Metrolinx, involving all of the significant stakeholders, including the municipalities that would be served by RER and its connecting services.

The additional work to be undertaken is straightforward:

- Work together to decide on the final concept for expansion of RER.
- Through consultations and negotiations with various stakeholders, identify the accommodations necessary for the concept to be viable and establish Heads of Agreement or Memoranda of Understanding with the guiding principles for

participation of each stakeholder. This is especially important for determining a final route selection and ensuring that sufficient property can be acquired.

- Initiate planning and funding activities including environmental assessment, preliminary design, and funding applications.
- Determine the funding mechanism that will be employed, e.g. will there be a P3 element, or strictly public funding?
- Establish a governance regime for following through with implementation.

7 Conclusions and Next Steps

This planning level analysis indicated that implementing the Missing Link is feasible, has a similar cost to those that will be incurred for widening the current Milton and Kitchener lines and has many other advantages. We suggest that these are the next steps that should be undertaken:

- Engage Metrolinx in discussion of the feasibility and desirability of this project.
- Develop a process that will include Metrolinx, CN, CP and the concerned municipalities to develop the optimum solution.
- Apply to the Government of Canada for funding of additional studies and for funding of the project itself.

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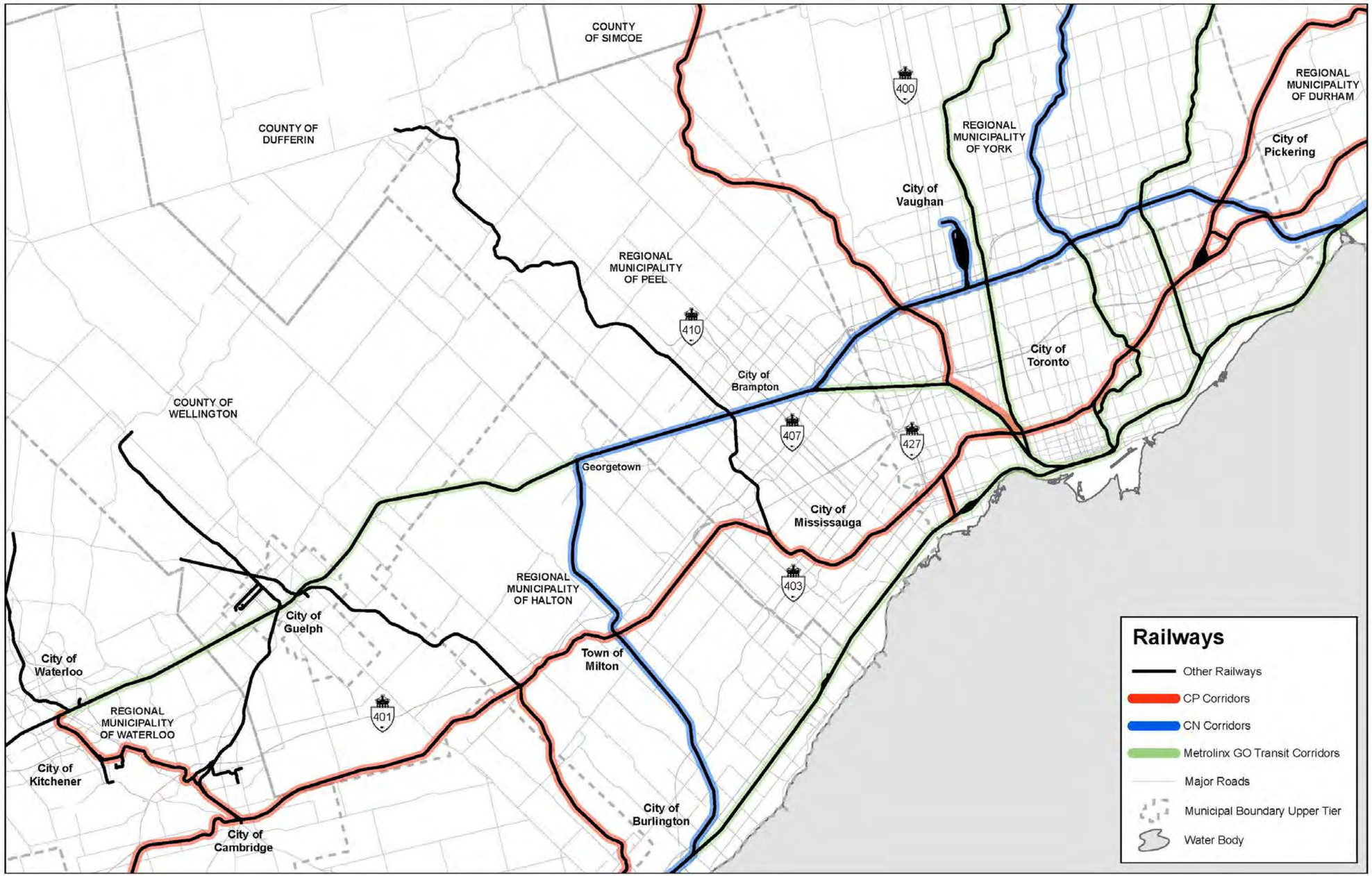
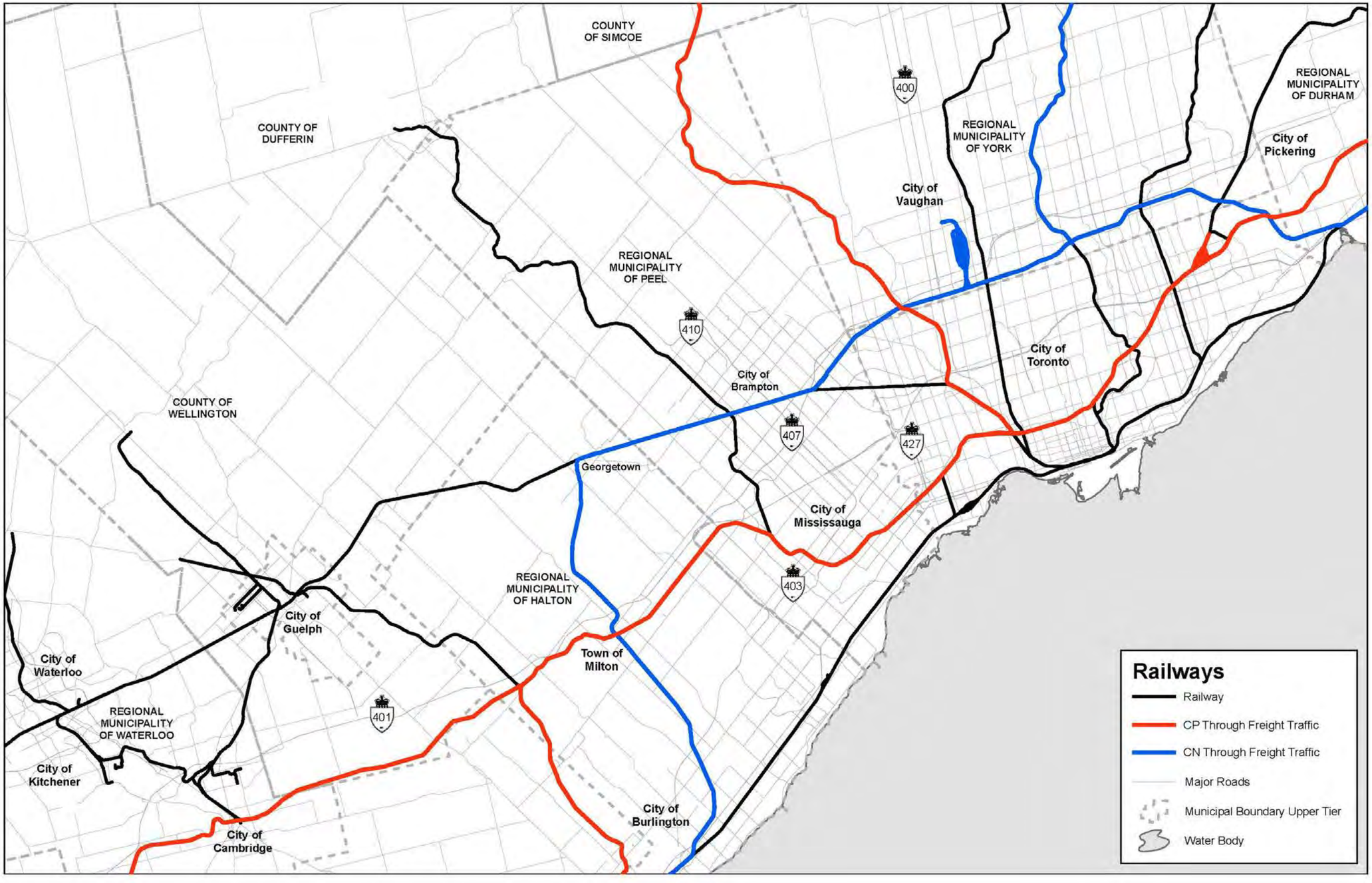
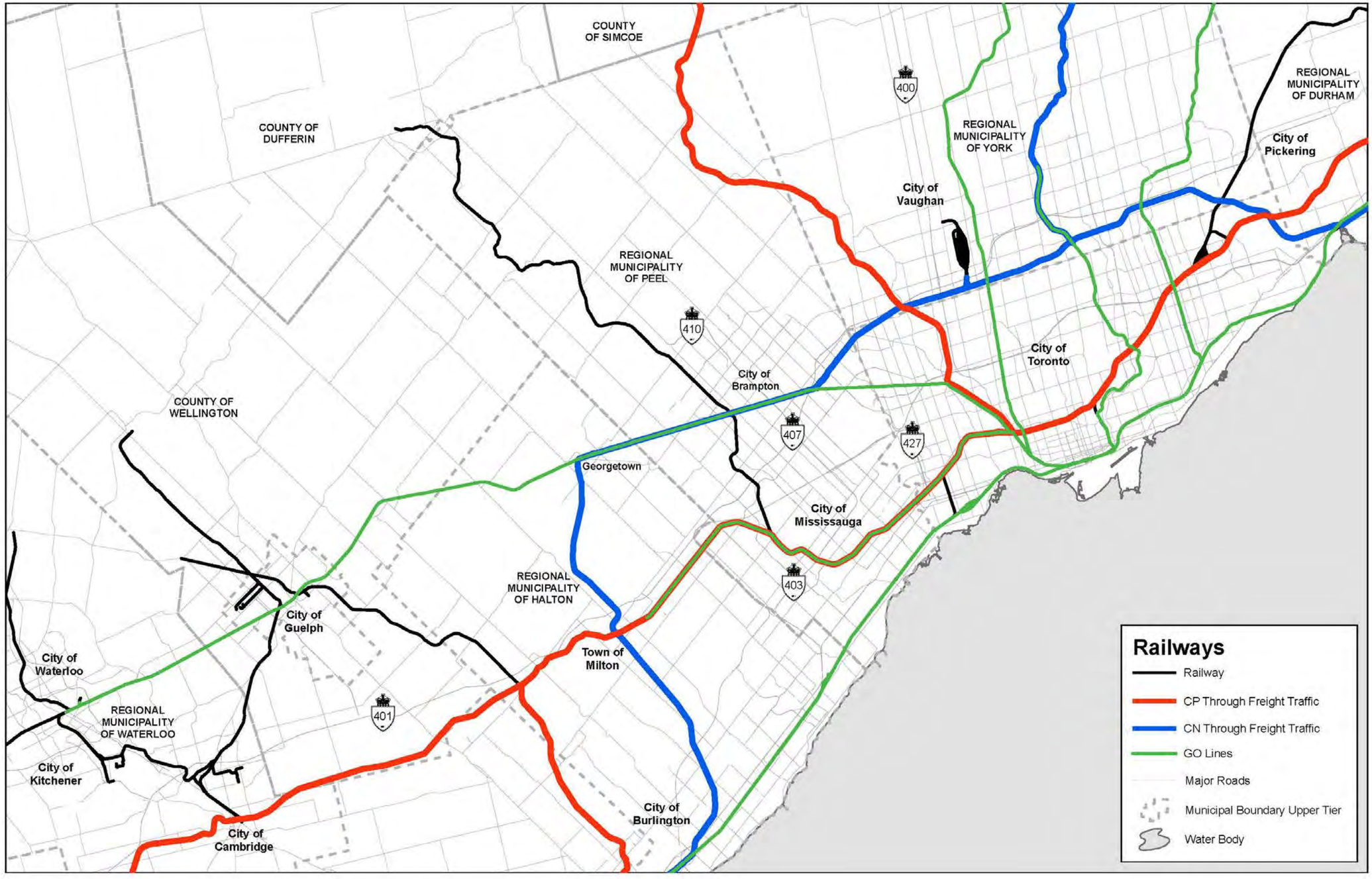
Map 1 – Ownership of Rail Lines



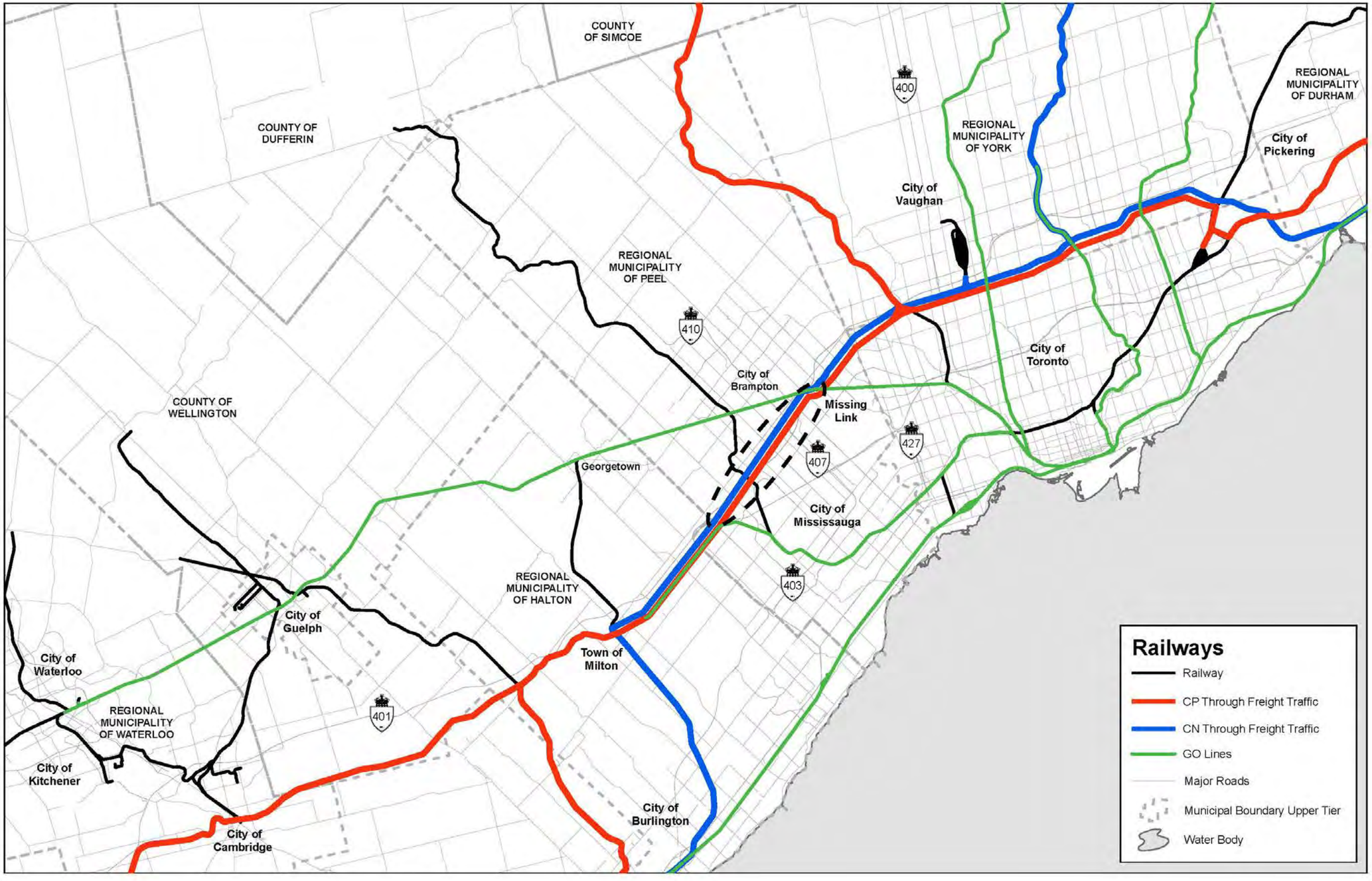
Map 2 – Existing Through Freight Routes



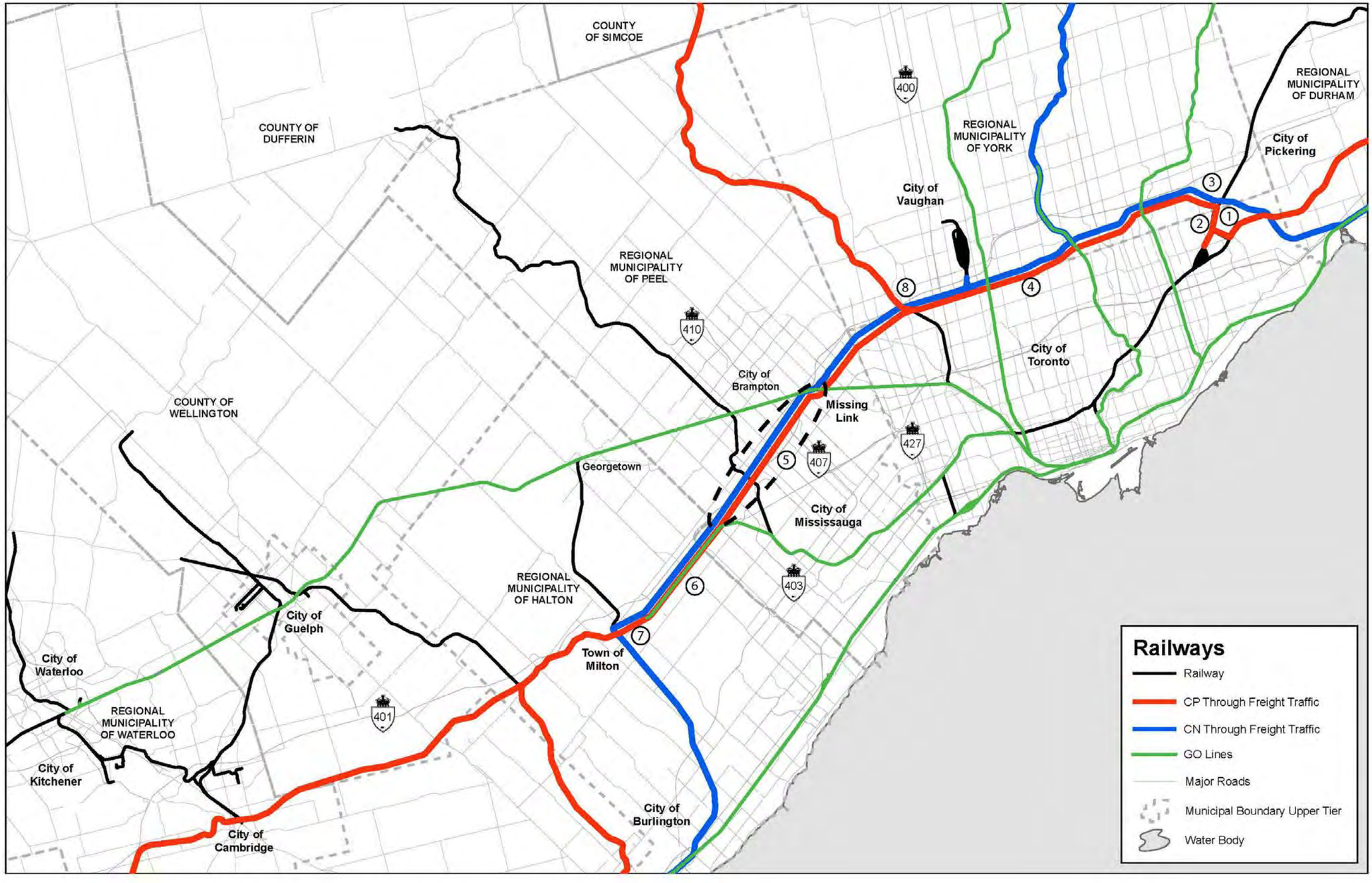
Map 3 – Freight Routes with GO Transit Services



Map 4 – GO Transit Services with the Missing Link in Place



Map 5 – Components of the Missing Link



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