

## **Davenport Rail Grade Separation Project**

<b>Date:</b>	December 3, 2015
<b>To:</b>	City Council
<b>From:</b>	Deputy City Manager and Chief Planner and Executive Director
<b>Wards:</b>	Ward 17 and 18
<b>Reference Number:</b>	P:\2015\ClusterB\PLN\CC15146

### **SUMMARY**

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At its meeting of November 16, 2015, the Planning and Growth Management Committee, in considering item PG8.13, directed the Chief Planner and Executive Director, City Planning, to further engage Metrolinx representatives to seek clarification with respect to the commencement of the Davenport Rail Grade Separation TPAP process in January, 2016, and report directly to the December meeting of City Council on the outcome of those discussions and any further action as may be appropriate. This report responds to that direction.

The Davenport Rail Grade Separation initiative on the Barrie GO rail corridor is part of the Metrolinx Regional Express Rail (RER) program, which envisions the expansion of GO Transit rail service across all seven corridors. RER will provide two-way, all day, GO service as frequent as every 15 minutes through electrification of provincially owned GO rail corridors. The RER program is expected to be delivered over the next ten years by Metrolinx. The City of Toronto supports this overall commitment to transit expansion in the Greater Toronto and Hamilton Area (GTHA). Map 1 defines the study area for this project.

Planned expansion of train activity on the Barrie corridor is in response to growth anticipated along the corridor and especially in Barrie where the population is expected to increase from 135,700 residents (2011) to 210,000 by 2031.

The current weekday rush hour service between Barrie and Union Station comprises 5 trains southbound in the morning and 7 trains northbound in the evening for a daily total of 12 trains. This translates to approximately 4 million boardings annually. In the future, rush hour trains increase to approximately 50, in addition to new midday, evening and weekend services. In total, future activity translates to 22 million boardings annually, representing a more than five fold increase in GO activity on the corridor.

In the spring of 2015, Metrolinx advised of their intention to conduct an Environmental Assessment under the streamlined Transit Project Assessment Process (TPAP) for the grade separation of the Barrie GO rail corridor and the CP North Toronto Subdivision rail line north of Dupont Street, and that the option under consideration is to elevate the GO corridor on an overpass structure above the CP rail line. Metrolinx indicates the grade separation is needed to accommodate the increase in GO service, to minimize potential delays and ensure safety as GO trains are currently required to wait if a freight train on the CP line is crossing the Barrie corridor at the level interchange point.

The preliminary design for the overpass structure is approximately 1.4 km in length, beginning just north of Bloor Street West, rising to a height of approximately 8.4 m above the CP corridor, and returning back to the existing grade just south of Davenport Road. In addition to the structure height, there will be noise mitigation walls (with suggested height of 5 m) with diesel operation, and overhead catenary with eventual electrification, that would add to the structure's vertical dimension. By comparison, the total height (13.4 m) at the highest point is similar to a 4+ storey residential building. A rendering of the potential structure is shown in Exhibit 1 attached.

In considering this initiative, City Council adopted motions in March (MM5.33) and July (MM8.40) of this year, supporting a list of issues that Metrolinx needs to address regarding the proposed Davenport Rail Grade Separation, and also requesting that Metrolinx extend its project schedule by two to three months to provide more time to address City staff and community comments.

City staff has subsequently reviewed a number of documents submitted by Metrolinx for the elevated option, and also requested additional work on the assessment of other solutions including a trench and a tunnel option. On September 30, 2015 Metrolinx released updated information to City staff and the general public, which includes further assessment of the options.

Any one of these options will bring long lasting change to the surrounding communities, potentially affecting thousands of residents and future generations for decades to come. City staff reviewed the available information including a draft policy evaluation of the options, and found that the tunnel option, on balance, provides greater long term City building benefits compared to the overpass option. The key benefit of the tunnel option is the removal of long term visual and noise impacts compared to the overpass option, as well as the opportunity to potentially achieve greater open space and neighbourhood connection benefits. The advantage of the overpass option according to the information presented is reduced capital cost of infrastructure (\$140 million vs. \$626 million for the tunnel option) and shortened delivery time (1.5-2 years vs. 5-6 years for the tunnel option).

Concurrent with the Davenport grade separation initiative, earlier this year the City of Mississauga, in partnership with City of Toronto, Milton and Cambridge, retained IBI Group consultants to undertake a study to determine the feasibility, costs and business case of constructing the "Missing Link" rail connection between the CP line (Milton GO Rail corridor) in Milton and the CN Bypass line in Bramalea, via the Parkway Belt/Highway 407 corridor (see Map 2 - "The Missing Link"). Provision of this rail connection would permit the diversion of

regional and national freight rail traffic from the CP North Toronto Subdivision line to a new continuous rail link north of the City, thereby minimizing the existing conflict between freight and commuter rail traffic at the Davenport interchange. The "Missing Link" has a number of key advantages, including separation of freight and passenger traffic on the rail network within the GTA which in turn benefits GO rail safety and expansion. Notwithstanding these potential benefits, it is a long term network solution with an estimated cost in excess of \$5 billion. Given the long term timing of this initiative, there is a need to commence work now by engaging Metrolinx, CN, CP and the concerned municipalities in further discussion of this initiative.

The Transit Project Assessment Process (Ontario Regulation 231/08) sets out the process that is expected to be followed for this study including completion of an environmental project report containing a description of all studies undertaken in relation to the project, and consultation on those studies. The process expressly removes the requirement to consider need, alternatives, and many local impacts typically considered in environmental assessments. Significant preparatory analysis is required to develop the project concept, examine the potential environmental impacts of the option(s), consult and consider input, and identify measures to mitigate any impacts. This is the current status of this project. The formal TPAP process is launched following this phase and officially begins with an announcement of the Notice of Commencement by the proponent. Once started, there is very limited opportunity to effect change in this final review period.

Once the TPAP process is complete, there is little opportunity to request reconsideration of the project recommendations. The Minister may only require further consideration or conditions where a matter is of provincial importance in relation to the natural environment or cultural or heritage values, or where a constitutionally protected aboriginal interest is involved.

Metrolinx has reaffirmed its decision to issue the TPAP Notice of Commencement in January 2016, following which as noted above, there will be limited opportunity and time to undertake due diligence and possibly influence the study direction. Based on the significant planning issues and community impacts that have been identified to-date for the overpass option, City staff have concluded that this option should be opposed, in favour of supporting a tunnel option.

## **RECOMMENDATIONS**

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### **The Deputy City Manager recommends that:**

1. City Council communicate to Metrolinx that it opposes the overpass grade separation option within the Davenport Rail Grade Separation Transit Project Assessment Process (TPAP), and supports a tunnel option for this rail grade separation;
2. The Chief Planner and Executive Director, City Planning Division submit the City's position to the Provincial Minister of Environment and Climate Change, with copy to the Environmental Commissioner for Ontario, and;

3. City Council direct the Chief Planner and Executive Director, City Planning Division, to report in early 2016 on the "Missing Link" initiative and its merits as a key element of the freight rail network serving the City and GTA.

## **Financial Impact**

There are no financial implications resulting from the adoption of the recommendations of this report.

## **DECISION HISTORY**

On March 31, April 1 and 2, 2015, City Council adopted Motion MM5.33, "Metrolinx GO Train Bridge Plan", directing the Chief Planner and Executive Director, City Planning, to ensure that land use planning and urban design considerations are part of the EA process being carried out by Metrolinx for the rail grade separation project at Dupont St. and Lansdowne Avenue.

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2015.MM5.33>

On July 7, 8 and 9, 2015, City Council adopted Motion MM8.40, "Metrolinx Davenport Community Rail Overpass", endorsing the list of issues that Metrolinx needs to address and properly fund as part of this initiative, as identified in the letter (June 16, 2015) from the Chief Planner and Executive Director, City Planning to Metrolinx; and requesting Metrolinx to extend its project schedule by two to three months to provide more time to address City staff and community comments prior to the Notice of Commencement for the Transit Project Assessment Process.

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2015.MM8.40>

At its meeting of November 16, 2015, the Planning and Growth Management Committee, in considering item PG8.13, directed the Chief Planner and Executive Director, City Planning, to further engage Metrolinx representatives to seek clarification with respect to the commencement of the Davenport Rail Grade Separation TPAP process in January, 2016, and report directly to the December meeting of City Council on the outcome of those discussions and any further action as may be appropriate. This report responds to that direction.

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2015.PG8.13>

## **ISSUE BACKGROUND**

### **Project History**

In 2009, Metrolinx initiated an Environmental Assessment study to consider options for separating the Barrie GO Rail Corridor and the CP North Toronto Subdivision, which currently operate as a level interchange crossing just north of Dupont Street.

The Barrie GO corridor is a single track north-south rail line situated in a 20 m wide corridor between Symington Avenue and Lansdowne Avenue. It crosses a double track east-west CP rail line, situated in a 26 m wide corridor just north of Dupont Street. The Barrie corridor requires a second track to meet anticipated increases in GO service levels. The proposed grade separation

of the existing Davenport Diamond level crossing of the CP line and Barrie corridor will help to increase the reliability, efficiency and safety of the crossing, as passenger trains will no longer need to stop to let an oncoming freight train cross the interchange.

In the 2009 work, Metrolinx proposed a plan to elevate the Barrie corridor on a closed retaining wall (i.e. berm) structure over the CP line. The elevation would begin just north of Bloor Street and end just south of Davenport Road. The proposed plan received critical comment from the public and the City regarding visual impacts, noise and air quality related to diesel trains, impacts on neighbourhood connectivity, property values, redevelopment opportunities, public realm impacts, construction pile driving methods, lack of opportunity for new stations, and other concerns.

As a result of the concerns raised with the plan, the Environmental Assessment study was suspended and the work was continued as an internal Metrolinx feasibility study. This study was finalized in 2010 but the findings were not publicly released for comment/input, and upon completion the document was not circulated to the City for review.

In 2014, the Province made a commitment to deliver Regional Express Rail (RER) which envisions expanding GO Transit rail service across all of its corridors. RER will provide two-way, all-day, GO service as frequent as every 15 minutes. The improved service frequency will ultimately require electrification of provincially owned GO rail corridors. The RER program will be delivered over the next ten years by the Province's regional transportation agency, Metrolinx. In the 2015 Budget, the Province committed \$13.5 billion of the \$16 billion to Greater Toronto and Hamilton Area (GTHA) transit infrastructure funding over the next ten years for GO RER

In the Spring of 2015, City staff were advised by the local Councillor of a Metrolinx initiative underway to consider a grade separation of the Davenport Diamond. Inquiries to Metrolinx resulted in meetings with City staff in April 2015. At that time, Metrolinx advised of their intention to conduct an Environmental Assessment under the streamlined Transit Project Assessment Process (TPAP), with a focus on a rail overpass option. Further information regarding the TPAP process is provided below under the heading Environmental Assessment Process.

### **Barrie GO Rail Corridor**

Barrie GO train service commenced in 1982 and now spans 101 km of rail line with 10 existing stations outside of Toronto. The service is provided between Union Station and Barrie and operates in the weekday rush hour periods. The corridor is wholly owned by Metrolinx, which facilitates conversion to rail electrification, a key tenet of the RER program. Electrification of the Barrie corridor is estimated to reduce journey times by up to 20 percent compared to existing conditions.

The Barrie Corridor service expansion requires a range of infrastructure improvements in order to implement the RER program, including:

- Provision for additional track/s along the corridor;
- Upgrades at existing stations to accommodate additional tracks;
- Potential new GO Transit stations;
- Upgrades to existing structures within the corridor (e.g. bridges, culverts);
- New grade separation structures (e.g. rail-rail, road-rail); and
- New train storage facilities.

The current weekday rush hour service between Barrie and Union Station comprises 5 trains southbound in the morning and 7 trains northbound in the evening for a daily total of 12 trains. This generates approximately 4 million boardings annually, which represents approximately 7 percent of total Metrolinx weekday rush hour ridership on all seven rail corridors. In the future, rush hour trains increase to approximately 50, in addition to new midday, evening and weekend services. Taken together, these service increases are expected to generate 22 million boardings annually representing a more than five-fold increase in GO activity on the corridor.

Planned expansion of train activity on the Barrie Corridor is in response to anticipated growth along the corridor and especially in Barrie where the population is expected to increase from 135,700 residents (2011) to 210,000 by 2031. Assuming these population projections are realized, the rate of ridership growth will likely be dependent on the incremental introduction of new train service and, as is the case with service on many of the GO corridors, some latent demand is likely to exist in the absence of timely service increases.

### **Environmental Assessment Process**

The Davenport Rail Grade Separation project will require approvals under the Environmental Assessment (EA) Act and this is proceeding through the Transit Project Assessment Process (TPAP) by Metrolinx. TPAP is a focused, streamlined, proponent-driven, impact assessment EA process for assessing transit projects in Ontario. Significant preparatory analysis is required to develop the project concept, examine the potential environmental impacts of the option(s), consult and consider input, and identify measures to mitigate any impacts. This is also known as the Project Assessment stage, and it is the current status of this project. The formal TPAP process and additional public consultation is launched once the technical analysis is complete and public input has been received. Consultation may be conducted "in the way the proponent considers appropriate". The process officially begins with an announcement of the Notice of Commencement by the proponent and takes approximately 6 months to complete the final review period and receive approval of the Environmental Project Report from the Ministry of the Environment and Climate Change. There is a very limited opportunity to effect change during this final review period.

An objection to a project must be made within thirty days of its formal completion. The Minister may require further study, or may impose conditions on the approval. These steps are only available if, in the Minister's opinion, the project has a negative impact on a matter of provincial importance that relates to the natural environment or cultural or heritage values, or constitutionally protected aboriginal rights. Following review, the project can proceed to implementation.

The new Environmental Commissioner for Ontario noted in commenting on the regulation when first introduced that it contains "few of the classic elements of environmental assessment, and seems to sacrifice all competing values to the single objective of speed. This 'brute force' approach could be self-defeating, as it may elicit more outrage and opposition than acceptance". Comments went on to suggest that proponents may be wise to do "far more public consultation than the regulation requires". A copy of City Council's decision will be sent to the Commissioner for her information.

## **COMMENTS**

### **Davenport Community**

#### Existing Conditions

The Existing Davenport Community has a complex land use pattern, reflecting its diverse and changing character. The industrial and manufacturing operations are located generally along the rail corridors, while the mixed commercial and residential uses are along major streets as well as directly adjacent to the rail corridor.

Some industrial sites have been re-designated to permit commercial, office, and live/work studio spaces. Former heavy employment uses, such as General Electric manufacturing factory and the Solway metal recycling facility are changing to lighter employment uses, such as IT firms, galleries and event spaces, as well as mixed commercial and residential developments.

The existing neighbourhoods have a mix of 2 to 3-storey detached, semi-detached and townhouses with narrow lots and small front setbacks. Several low-rise residential buildings are located adjacent to the Metrolinx rail corridor, with a minimum separation distance of 20 metres.

Higher density apartment buildings are interspersed throughout the area, with a number of new high density mixed use developments located around the Dupont Street and Lansdowne Avenue intersection. The area also includes three local parks that abut the rail corridor between Bloor Street and Davenport Road: Erwin Krickhahn Park, Campbell Avenue Playground and Davenport Village Park.

Given the moderately high population densities in the area, the opportunity to increase open space in the community would improve overall conditions and quality of life for residents.

The noise study provided by Metrolinx contains existing ambient noise level data. In all cases, existing levels were deemed "insignificant" in relation to recognized guidelines. In terms of air quality, the study area has been found to be typical of an urban setting, characterized by elevated pollutant concentrations, with periodic exceedances of applicable air quality criteria.

## Development Activity

Lands located east of the rail corridor along both sides of Dupont Street have large-scale developments and mixed use infill projects. The property at the northwest corner of Dupont Street and Lansdowne Avenue is being redeveloped with 558 residential units in 23 and 27-storey apartment buildings. On the south side of Dupont Street, on the former American Standard site, 3 former industrial buildings have been converted to live/work, rental apartments and grade-related retail use, and two 14-storey condominium apartment buildings have been developed on the west portion of the site by the rail corridor. The newer apartment buildings along the rail corridor have been stepped back to provide additional space along the corridor, which is used for parking, vehicular access and open space.

On the west side of the rail corridor and south side of Dupont Street, a 12-storey apartment building with a public library on the ground floor is proposed.

In Davenport Village, north of the CP corridor and east of the Metrolinx corridor, the lands are being redeveloped into a mixed-use area with townhouses, live/work units, office space and a new public park.

## **Policy Context**

The City of Toronto supports the Province of Ontario's overall commitment to transit expansion in the Greater Toronto and Hamilton Area (GTHA). This direction is supported by the City's Official Plan, Section 2.2 Policy 3(g), which states that:

*3. The City's transportation network will be maintained and developed to support the growth management objectives of this Plan by:*

*g) supporting the increase use of existing rail corridors within the City for enhanced local and inter-regional passenger service;*

The RER plan provides a comprehensive framework for regional transit expansion, but it also presents significant City building challenges where major infrastructure incursions, such as the Davenport rail grade separation, impacts established communities.

As noted, the Davenport Rail Grade Separation TPAP focuses on one solution, namely the overpass option. However, in considering the planning policy implications of the proposed grade separation, the City is obliged consider all options. At the City's insistence and with community support, Metrolinx agreed to provide information on other alternatives, namely the trench and tunnel options which had been the subject of previous in-house review.

As part of that effort, a policy review was also conducted by Metrolinx consultants for the tunnel, trench and overpass options using the City's Feeling Congested criteria for the evaluation of rapid transit projects. The eight criteria which have been established as part of the City's update of the Official Plan transportation policies include Experience, Public Health & Environment, Healthy Neighbourhoods, Affordability, Choice, Social Equity, Shaping the City,



and Supporting Growth. The draft policy evaluation (dated September 29, 2015) prepared by Urban Strategies Inc. indicates the degree to which each option adheres to the evaluation criteria.

Based on the staff review of the grade separation options which follows, the tunnel option, on balance, provides greater long term City building benefits compared to the overpass option. The key benefit of the tunnel option is the removal of long term visual and noise impacts compared to the overpass option, as well as the opportunity to potentially achieve greater open space and neighbourhood connection benefits. These are critical elements which will influence neighbourhood character over the next 50-100 years. The key advantage of the overpass option is reduced capital cost of infrastructure and shortened delivery time.

### **Metrolinx Technical Reports**

In total, 11 technical reports have been prepared for the Davenport Rail Grade Separation project. In addition to the Feasibility Study, these reports include noise and vibration assessment, air quality assessment, urban planning and transportation studies, socioeconomic analysis, and other reports on heritage and archaeological assessment. At this point, some reports are still in draft form including the Policy Evaluation report and an Active Transportation Opportunities report. Yet others are marked final but are being revised to include more information. Several of the aforementioned technical reports lack a comparative review of the overpass, tunnel and trench options.

### **Staff Review of the Grade Separation Options**

City staff have indicated to Metrolinx an inability to comment on the information and issues with appropriate due diligence given the extremely compressed schedule and lack of resources to do so. The need for additional resources, committed by Metrolinx but yet to be secured to assist City staff in the review of the technical documents, is expected to be addressed by late January at the earliest.

Nevertheless, since being engaged in this process City staff have provided comment on a variety of study issues, input and suggested actions in an attempt to complete the City's due diligence:

- June 16, 2015, correspondence identifying pertinent planning policy, key issues and other relevant items, a concern with timing of this project, a suggested process for success, and City staff roles and responsibilities in this work;
- July 14, 2015 correspondence commenting on communication, the issue of community impacts, and resources and timing;
- August 21, 2015 correspondence providing City comments on the 89 recommendations of the Metrolinx Resident's Reference Panel;
- September 15, 2015 correspondence citing proposed performance measures and a key design direction for this project;
- November 4, 2015 correspondence outlining a framework for next steps, for discussion.
- November 18, 2015 correspondence providing a summary of correspondence and summary comments on the Metrolinx draft policy evaluation document;

- November 24, 2015 correspondence commenting on issues of project schedule, further assessment and public engagement.

The following summarizes the City review of each option in terms of addressing planning policy, and key findings of the feasibility study and technical reports where available.

### The Overpass Option

As noted previously, the design of the overpass is an open column or guideway structure, approximately 8.4 m in height (to the rail elevation) at the highest point. The final design will include noise walls along with supporting infrastructure for future electrification, adding to the height as detailed later in this section. The length of the structure is approximately 1.4 km, beginning just north of Bloor Street West and ending just south of Davenport Road. The estimated cost of the overpass option is \$140 million and construction duration is estimated to be 1.5 to 2 years.

City staff raised concerns with the overpass option early in the process, including visual, noise and vibration impact, planning for a future GO Station at Bloor Street West, the potential stacking of new bridge structure onto the existing rail bridge crossing over Dupont Street, impact on future development, and other issues regarding the integrated plan for the neighbourhood public realm.

The Metrolinx draft policy evaluation concludes that the overpass option supports the creation of healthy neighbourhoods, creates a range of new opportunities for active transportation, and supports new east/west connections to link the local community. It identifies the main disadvantages of this option as being the potential to impose long term visual and noise impacts associated with train operations. It suggests that these impacts would be most significant immediately adjacent to the overpass, but may be offset by improved connectivity and active transportation throughout the broader neighbourhood.

The noise study considered a number of future scenarios for the overpass option including one which assumes two-way all day service comprising up to 60 trains/day, intended to reflect Regional Express Rail operation. In this case, daytime noise levels were forecast to range between 53.6 and 68.1 dBA Leq (16 hour). Of the 82 receptor points considered, 11 had noticeable change compared to the base case, and 19 had “significant” change in the range of 5-8.9 dBA. Night-time levels ranged between 44.4 and 61.8 dBA Leq (8 hour). In this case, of the 72 receptor points considered, 11 had noticeable change compared to the base case, and 10 had “significant” change in the range of 5.3-8.4 dBA. In considering these levels of impact, the consultant has indicated "a typical 5.0 m high noise wall was considered for the purpose of noise mitigation". The proposed noise barrier would be installed on both sides along the entire length of the overpass structure. The proposed 5.0 m high noise wall is reported to “significantly decrease the noise levels across the study area, with the exception of the upper floors for high-rise residential buildings (i.e. above the height of the noise barrier). Little or no change was predicted as a result of including mitigation in these areas”.

The land use and socio-economic report notes the use of “transparent noise barriers could help reduce the perceived scale of the structure”. The feasibility of shorter noise walls was assessed in a separate study that considers the impact of electric trains, however, this information has not been made available to the City.

The air quality study notes for future conditions with RER frequency of trains and assumed improved train and automobile engine technologies, there will be a relatively small increase in contaminant concentrations immediately adjacent to the Barrie corridor, although greenhouse gas (GHG) within the study area is expected to increase for the interim (diesel) condition as a result of increased rail traffic. The study states increased GO service within the rail corridor will remove cars from other roads, resulting in an expected decrease in regional emissions which, taken with electrification of the rail corridor by 2024, will result in an overall improvement in air quality as a result of the project.

Having considered this information, staff have concluded the scale of the overpass option and its anticipated level of impact on the existing and future residents and employers in the communities affected is not consistent with area planning objectives and Official Plan policy. Staff oppose this option as a grade separation solution on the basis of the significant planning issues and community impacts that it presents.

### The Trench Option

The length of the trench is 1.5 km beginning south of Dupont Street and ending just north of St. Clair Avenue. The estimated cost of the trench is \$406 million and construction would take 6 to 7 years for completion.

Noise, vibration and air quality assessment has not been made available for the trench option, however, Metrolinx officials have indicated further noise and vibration details are being prepared for both the trench and tunnel options. The draft policy review document notes that following the construction period, there will be reduced noise impacts for areas of the trench that are 5 metres or lower, and that the trench option could free up some of the adjacent lands for redevelopment.

However, the rail corridor would continue to have active rail operations along its length and there is no opportunity for increased open space or neighbourhood connections within the corridor with this option. Davenport Road would have to be elevated to clear the trench, raising issues of the relationship of street grade to adjacent properties. The trench option provides limited community benefits, and on balance it is a substandard solution compared to the tunnel option.

### The Tunnel Option

The design of the tunnel requires a combination of a 0.5 km trench beginning north of Bloor Street, a 2.0 km tunnel from south of Dupont Street to north of St. Clair Avenue, and a 1.5 km trench to Eglinton Avenue, for a total combined length of 4 km. The estimated cost of this solution is \$626 million with a 5 to 6 year construction time line.

The Metrolinx draft policy evaluation concludes that this option has limited impact on structures with potential heritage value, and offers the potential to repurpose some sections of the rail corridor for at-grade public space or active transportation infrastructure. It also found that the tunnel option has the least visual impacts associated with train operations, and has limited impact on planned land uses and redevelopment. Its evaluation suggests that the tunnel option also supports neighbourhood connectivity and travel choice, as some of the barrier impacts of an overpass or trench are mitigated in areas where the tunnel is fully underground. It further states that new at-grade east/west connections will be possible where the corridor is fully tunneled although the trenches at the north and south ends of the tunnel structure hinder the ability to improve east/west connectivity in those areas. The most significant impact of the tunnel option is the required reconfiguration of Rogers Road, which will impact the street network and local transit service during construction.

Similar to the Trench Option, there is no current noise, vibration and air quality assessment for this option. Nevertheless, the draft policy review indicates “visual impacts from train operations would be minimal. Noise impacts from train operations would be localized at the north and south portals and where the structure is in a trench”.

The consultant information notes tunneling could take place below the existing rail track, and would not be expected to impact GO service during construction. It is also noted this option has the potential to free up some of the lands adjacent to the corridor for redevelopment, and normalizing Dupont Street with new street-related development.

The tunnel option is the only option of the three that would appear to eliminate the majority of train corridor impacts between Bloor Street West and Davenport Road and meet the rail operations objectives. The key benefit of the tunnel option is the minimized long term visual and noise impacts compared to the other options. As well, the City-building opportunity to repurpose the 2.0 km corridor above the tunnel for public spaces, park extensions and multi-use path purposes in an area of the City that would benefit from increased open space opportunities is significant. The extent of open space created is likely to be greater than the overpass option, and unencumbered by elevated rail structure.

## **Public Consultation**

Metrolinx has led a number of public consultation meetings in 2015, including a Resident's Reference Panel that met 5 times to consider this project. The Chief Planner and Executive Director, City Planning, was requested to attend one of these sessions and did so.

The Resident's Reference Panel discussions were structured by Metrolinx to focus on the overpass option only. Other options that the City has sought information on including the trench and tunnel options were not presented for comment or consideration. Accordingly, recommendations from the Panel only considered how to mitigate the overpass option.

In addition to the Reference Panel sessions, public meetings have been organized as well as stakeholder briefings with local community organizations to focus on the overpass option. The most recent public consultation was hosted by Christina Martins, the Member of Provincial

Parliament for Davenport, on October 13, 2015. The overall response from the community was that the overpass is unacceptable and the tunnel was preferred, and further evaluation of the options is required.

### **The "Missing Link"**

Earlier this year, the City of Mississauga, in partnership with the City of Toronto, Milton and Cambridge retained IBI Group consultants to undertake a study to determine the feasibility, costs and business case of constructing the "Missing Link" rail connection between the CP line (Milton GO Rail corridor) in Milton and the CN Bypass line in Bramalea via the Parkway Belt/Highway 407 corridor (see Map 2 - "The Missing Link"). Construction of this line has the potential to divert the vast majority of freight traffic from the existing CP North Toronto Subdivision line through Toronto, and make this line available for additional GO/RER rail service. This is consistent with Map 4 of the Official Plan which identifies this line as a future transit corridor, with interchange stations with the Line 1 subway, on both the Yonge and University sections.

The "Missing Link" has many advantages to the GTA and municipalities from a planning and transportation servicing perspective. In the case of Toronto, it has the potential to benefit communities, freight operators, and GO Transit service in the following ways:

- concentrating of freight rail activities on key corridors outside of the city which frees up capacity of rail lines within the city for additional passenger rail service that can benefit Toronto residents. This is consistent with Official Plan policy and strengthens the transit "network" planning approach, to create greater connectivity to increase mobility choices for residents of Toronto;
- removal of heavy through freight traffic from the central areas in Toronto thereby improving public safety in one of Canada's most densely populated urban areas; and
- reducing the existing conflict at the Davenport interchange between freight rail traffic on the CP North Toronto Subdivision line and GO trains on the Barrie Corridor.

In addition to these benefits, the "Missing Link" also has major regional benefits resulting from the elimination of impacts due to rail corridor widenings otherwise required for RER through the centres of Mississauga and Brampton, as well as enabling electrification on lines currently used by freight and enabling new passenger services to Cambridge and Kitchener. The recently completed IBI report also identifies potential operational benefits to freight rail operators.

Much work is still required to move this initiative forward, however, the IBI report notes from the initial feasibility analysis that the "Missing Link" can be constructed without major impacts on the urban fabric. The report provides a preliminary capital cost estimate of \$5.3 billion. It further notes the estimate is within the margin of error of a planning level study, adding the "Missing Link" would incur approximately the same cost as the present Metrolinx plan to add tracks and widen corridors to implement the Regional Express Rail (RER) concept on these lines.

The "Missing Link" is a long term initiative which is likely to take several decades to implement given the need for financial and operating agreements between CN and CP, planning approvals, design, permitting, and construction. Nevertheless, the numerous rail network and community benefits identified in the consultant's report has led to the conclusion that the "Missing Link" should be investigated in more detail with Metrolinx, CN, CP and senior levels of government. Given the long term timing of this initiative, there is a need to commence work now by engaging Metrolinx in discussion of the feasibility and desirability of this project, developing a process of ongoing dialogue that will include Metrolinx, CN, CP and the concerned municipalities to develop the optimum solution and, applying to the Government of Canada for funding of additional studies and for funding of the project itself.

## **Other Considerations**

### Rail-Rail Grade Separations

As part of the RER program, specific infrastructure is required to deliver the proposed service expansion, including four rail-rail grade separations:

- Davenport (CP North Toronto Subdivision) on the Barrie Corridor;
- Scarborough Junction (Lake Shore East/Stouffville corridors);
- Near Langstaff on the Richmond Hill corridor; and,
- Near Mt. Pleasant on the Kitchener Rail corridor.

There is no specific prioritization of these projects in information publicly available and at this time, only the Davenport rail grade separation has advanced to the planning stages with the public. Notwithstanding this, the Scarborough Junction rail-rail grade separation which would improve service at the junction of the Lake Shore East/Stouffville lines has not been initiated. This infrastructure improvement would benefit RER and SmartTrack train services in the city, and consequently could be a more immediate priority from the perspective of delivering SmartTrack.

### Bloor Street GO Station

Map 4 of the City's Official Plan identifies a future GO station on the Barrie corridor at Bloor Street West, to connect to the City's subway system (Line 2 Bloor-Danforth subway) and bus network with the potential for a direct connection through future redevelopment along Bloor Street West.

It is essential to achieve an interchange station at this location as part of the RER program, to provide the highest degree of transit network connectivity, and hence mobility choice, in a way that encourages maximum benefit for the level of transit investment that is planned.

The opportunity to access the Barrie rail corridor with an interchange station on the Bloor-Danforth subway line has the benefit of providing additional trip choice for transit riders travelling to/from points north in the City, including York University. In addressing this ridership demand, the new station provides an opportunity to relieve existing and future demand

on north-south bus routes including the busy Jane Street bus route #35. The proposed Jane Street LRT would serve a similar objective and has consistently scored high in the City's ongoing review of transit priorities through the Official Plan update ("Feeling Congested"), however, the design of such a facility within the limited street right-of-way is expected to present challenges. A new interchange station in this location has the potential to positively influence transit trip distribution and improve overall transit network connectivity in the City.

At this point in time, Metrolinx has not committed to a station at this location, and is separating the station analysis, which is being undertaken as part of the overall RER program, from the grade separation analysis, making it very difficult to gauge the full scope of community benefit and impact under consideration.

## **CONCLUSION**

Metrolinx is advancing a rail overpass as the grade separation solution for the Davenport Diamond using the streamlined Transit Project Assessment Process (TPAP). The overpass option includes a structure 8.4 metres above ground at its highest point and 5.0 m noise mitigation walls for a total structure height of 13.4 m. It is currently in the preliminary planning phase. Once the formal TPAP process is launched with an announcement of the Notice of Commencement, there will be very limited opportunity to undertake due diligence and effect change in this final review period. Metrolinx has reaffirmed its decision to issue the TPAP Notice of Commencement in January, 2016. Based on the significant planning issues and community impacts that have been identified to-date for the overpass option, City staff have concluded that this option should be opposed, in favour of supporting a tunnel option.

## **CONTACTS**

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## **SIGNATURE**

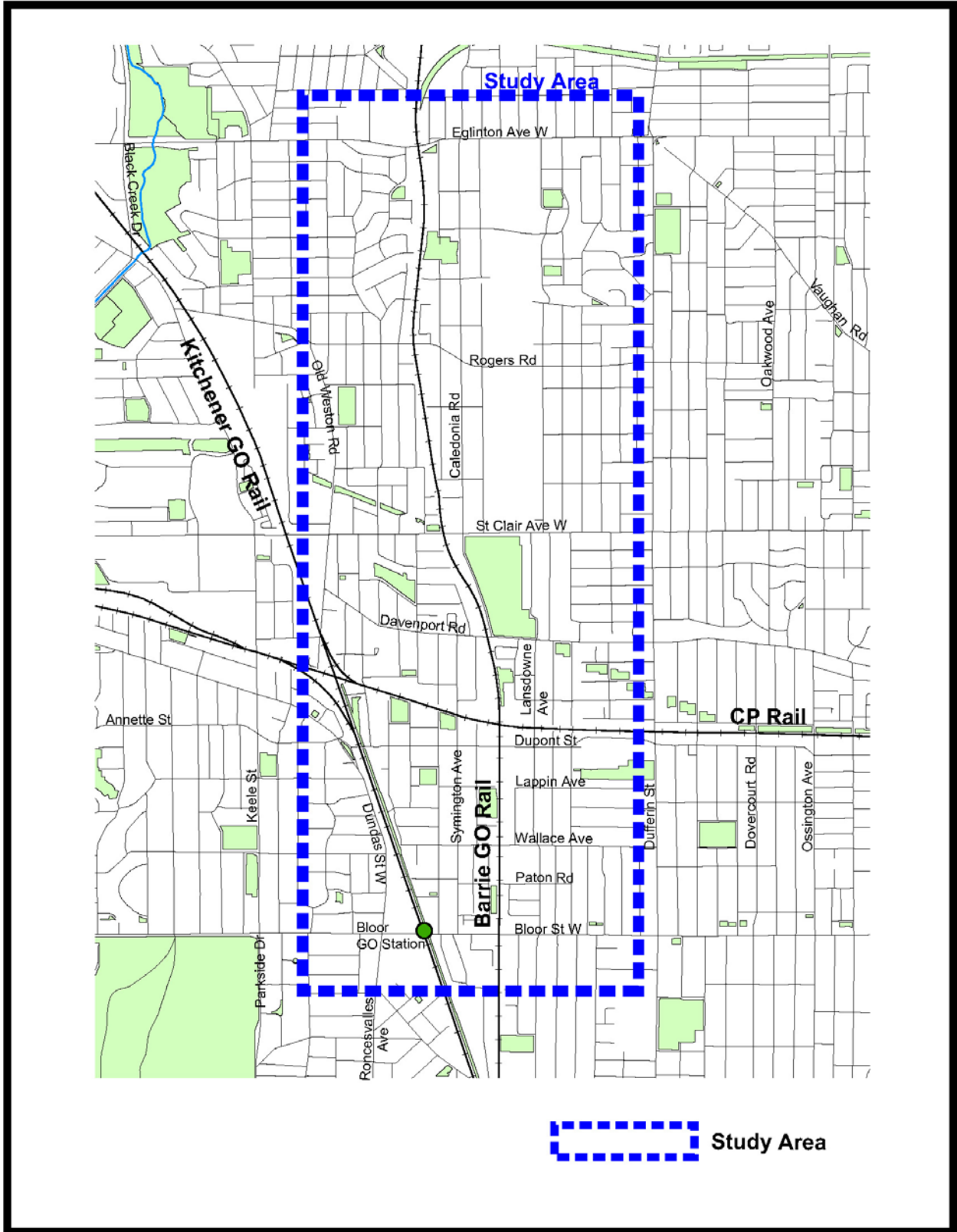
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John Livey, FCIP  
Deputy City Manager  
Citizen Focused Services B

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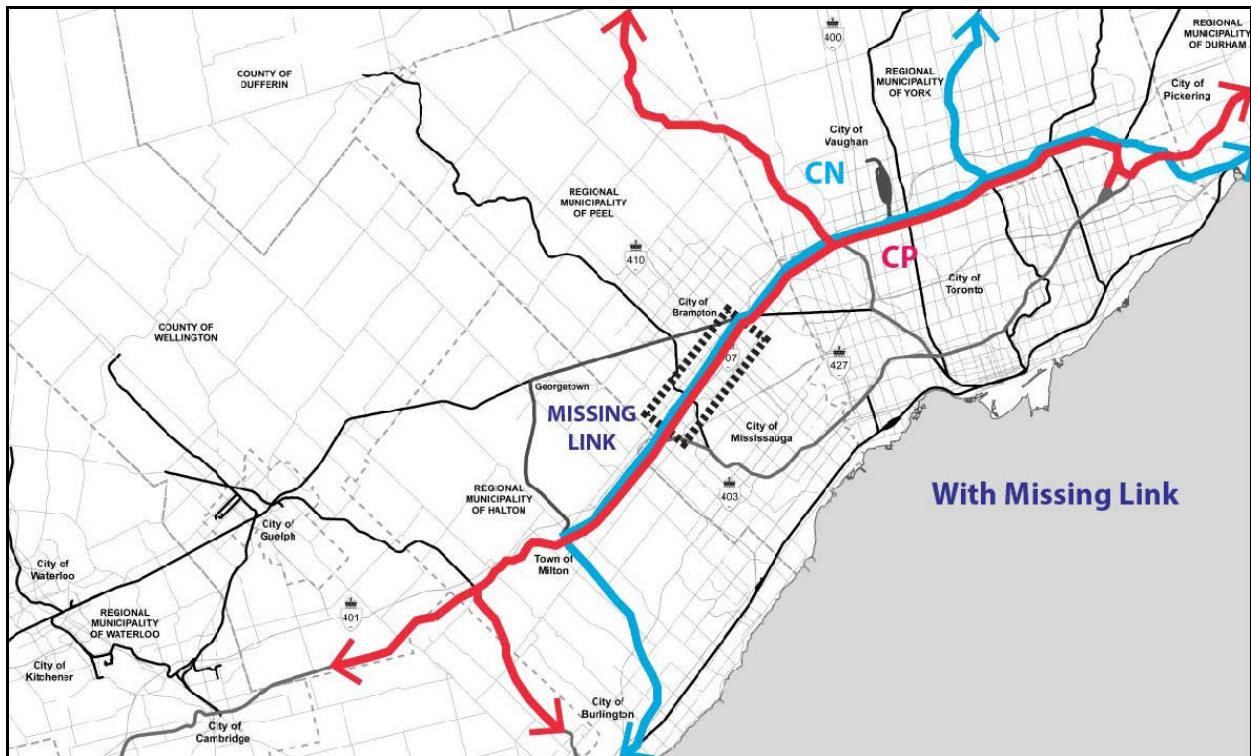
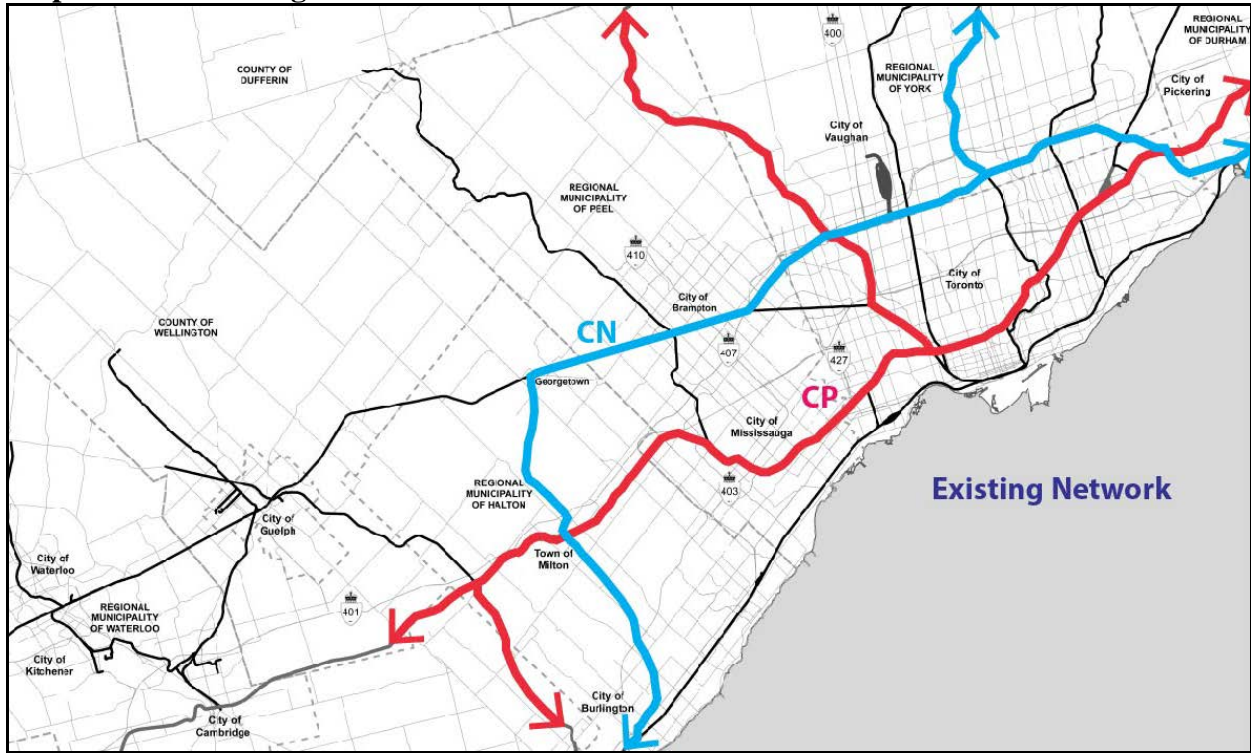
Jennifer Keesmaat, MES, MCIP, RPP  
Chief Planner and Executive Director  
City Planning Division

# Map 1 – Study Area





## Map 2 - The "Missing Link"



Base Map Source: IBI Group Report, Feasibility Study and Business Case of Constructing the Missing Link, August 19, 2015, Map 2 – Existing Through Freight Routes



Dupont Street looking east



Ward Avenue looking west

(Base Images Source: Davenport Diamond Grade Separation Feasibility Study Update (2015))

## **EXHIBIT 1**