

Appendix 6

Relief Line Project Assessment

APPENDIX 6 – RELIEF LINE PROJECT ASSESSMENT

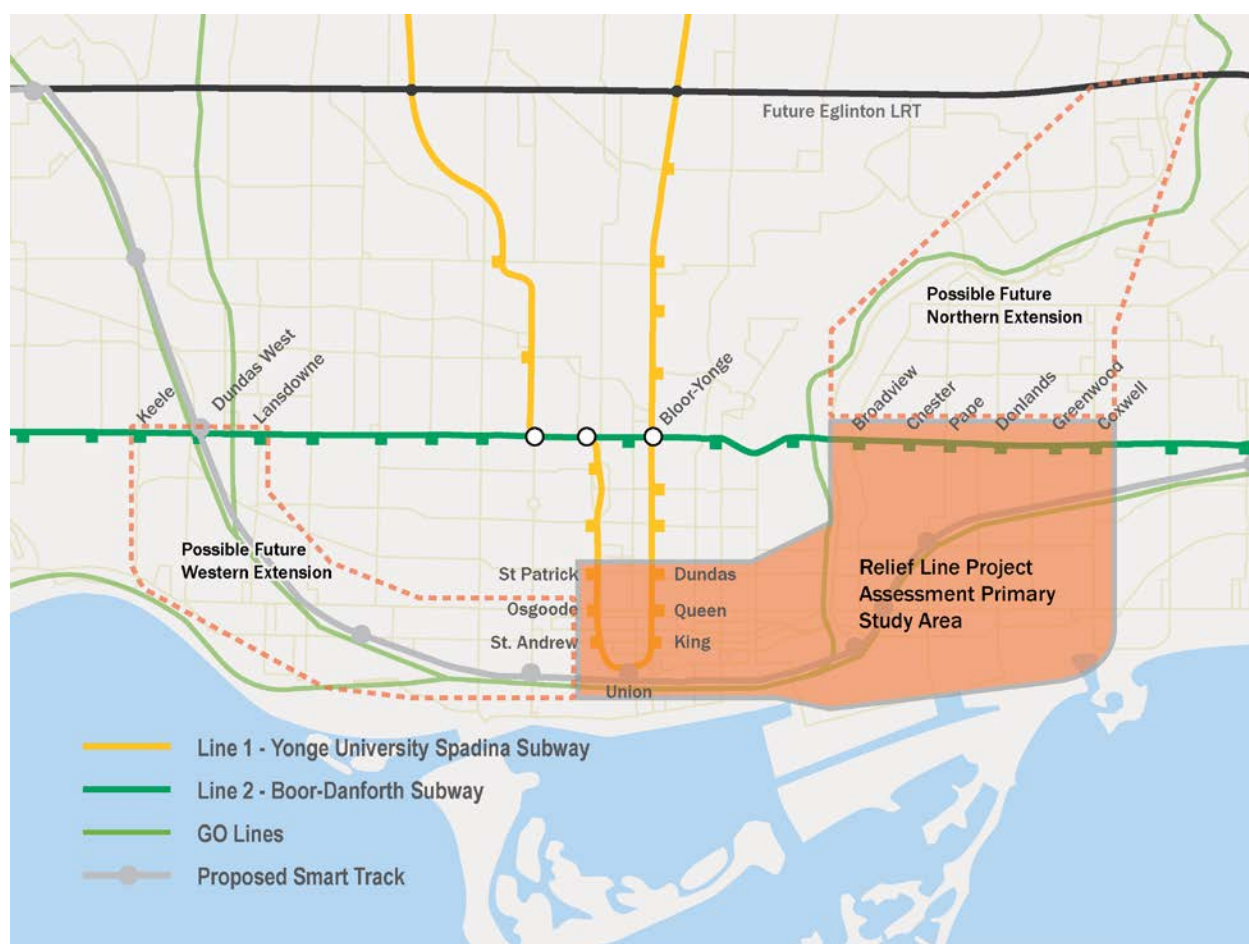
1. INTRODUCTION

This appendix provides information on progress on the Relief Line Project Assessment, including the identification of a preferred corridor, and potential alignment options within the preferred corridor.

In 2014, City Council approved the Terms of Reference and Public Consultation Plan for the Relief Line Project Assessment. The study will determine the preferred alignment and stations for a new rapid transit line (subway) that would connect downtown to the Bloor-Danforth Subway (Line 2) east of the Don River (see Figure 1 for the study area).

Following the identification of the preferred alignment/stations, the project will be ready to advance to the formal Transit Project Assessment Process (TPAP).

Figure 1: Relief Line Project Assessment Study Area



Appendix 6: Relief Line Project Assessment

The Relief Line is required to accommodate current and future ridership demands on the Yonge subway (Line 1), relieve crowding and congestion at the Bloor-Yonge interchange station, and provide new transit capacity to relieve overcrowding on the surface transit network.

The need for the Relief Line was confirmed in 2015 by Metrolinx in the Yonge Relief Network Study. That study affirmed that even with GO Regional Express Rail and the increase in Line 1 capacity from automatic train control, the Relief Line would be needed by about 2031. The critical role of the Relief Line as part of the future transit network has been further supported through the recently completed ridership analyses conducted by the University of Toronto for City Planning.

2. BACKGROUND

The Relief Line is a vital component of the city's future transit network. Parts of the transit network are over capacity today and struggling to meet demand. There are billions of dollars of investment committed, new vehicles entering service, and construction underway to expand the rapid transit network and add capacity to the subways, streetcars and SmartTrack/ GO RER. Even with these improvements, and in many cases because of them, the Relief Line will still be needed by 2031.

The Relief Line is required to accommodate current and future ridership demands on Line 1, increase capacity and relieve crowding at the Bloor-Yonge interchange station and, provide new transit capacity to relieve overcrowding on the surface transit network.

Without having the Relief Line in place, the planned expansion of the Yonge subway into York Region will lead to unmitigated crowding and congestion on the subway system.

Recent History

- | | |
|-------------|--|
| 2009 | Council approved the North Yonge Extension contingent on the Relief Line and the City/TTC commenced study to determine the need for the Relief Line. |
| 2012 | The City/TTC conducted the Downtown Rapid Transit Expansion Study (DRTES) to assess the need for additional rapid transit capacity into downtown. DRTES concluded that the first phase of the Relief Line, between downtown and the Bloor-Danforth Subway (Line 2) east of the Don River, would provide the greatest and most immediate benefit to relieving overcrowding on the Yonge Subway line. The study also recommended future extensions of the Relief Line to the north and west. |
| 2012 | The Relief Line was identified as part of the “Next Wave” of transit projects in the Metrolinx Big Move plan and identified by Metrolinx as a priority for future transit investment. |
| 2014 | The Relief Line Project Assessment was launched. Based on City Council's approval of the draft study Terms of Reference and Public Consultation Plan in December 2013, City/TTC commenced the planning for the preferred alignment and station locations. |
| 2014 | In April 2014, public consultations were held to gather feedback on the study process (proposed Terms of Reference and draft Public Consultation Plan) (Phase 1A see Figure 2). Input received assisted in finalizing the study process. |
| 2015 | Public consultations were held in March 2015 (Phases 1B and 2) to present draft evaluation criteria and preliminary considerations for potential station locations. The first Stakeholder Advisory Group meeting was also held at this time. The comments received provided |

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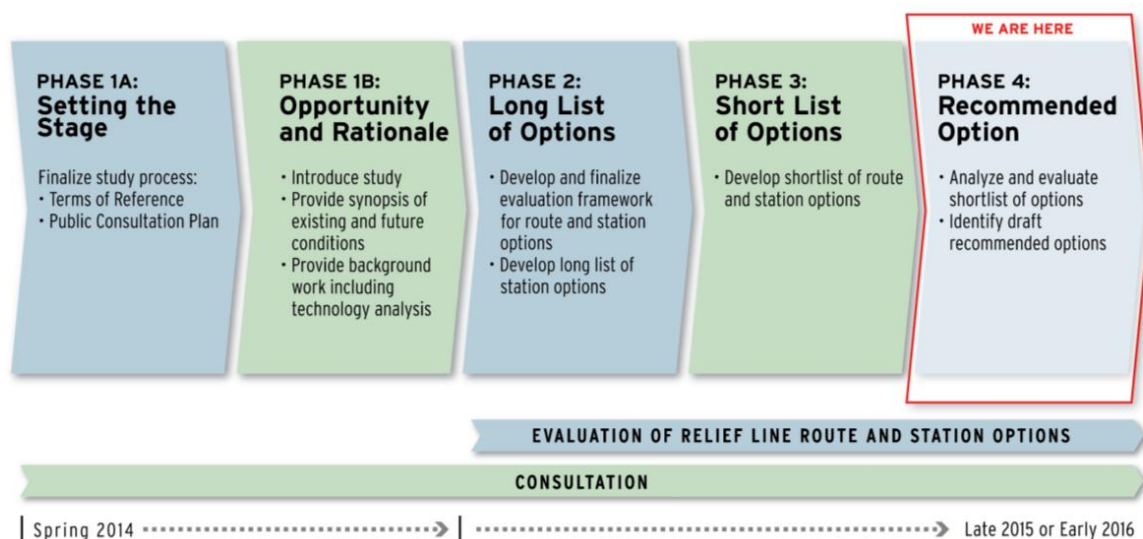
guidance for moving forward into the next phase of technical work.

- 2015** The third series of public and stakeholder consultations was held in June 2015 (Phase 3) to present findings from the technical evaluation of potential station areas. Consultation feedback indicated general agreement with the results of the technical evaluation. As part of this round of consultations, preliminary consideration for potential corridors was also presented. There was overwhelming support for advancing further analysis of both Corridors B and D (connecting from Pape Station to downtown).
- 2015** The Yonge Relief Network Study findings were approved by Metrolinx Board in June 2015. The Study affirmed that the Relief Line Project Assessment should continue, to ensure that a project is ready for when it is needed (estimated to be ~~in~~ about 2031). The Board decision also supported the development of the Yonge North Subway Extension (to 15% design).
- 2016** Public and stakeholder consultations were held in February 2016 on the recommended Preferred Corridor. The potential alignments within the Preferred Corridor were also introduced to the public for consideration. There was strong support for continuing to move forward with identifying a Relief Line alignment to connect from Pape Station to downtown via an alignment following along either Queen or Richmond.

3. STUDY PROCESS

The study is being led by City Planning, in partnership with the TTC, and in coordination with Metrolinx. The process has advanced significantly towards identifying a preferred route and is now in Phase 4, as illustrated in Figure 2.

Figure 2: Relief Line Project Assessment Process



The study team is supported by a Technical Advisory Committee (TAC) comprised of staff from relevant City Divisions, TTC, and other interested agencies such as Toronto Region Conservation Authority (TRCA) and Metrolinx.

Public and stakeholder consultation plays an integral role in the study and is being held at key milestones. A Stakeholder Advisory Group (SAG) was formed at the early stages of the study. The SAG includes representatives from various local and city-wide interests, to ensure that a broad range of community ideas and concerns are heard.

The following sections provide an overview of progress on the Relief Line Project Assessment.

4. EVALUATION PROCESS AND CRITERIA

Evaluation Criteria

The evaluation criteria being used in the Relief Line Project Assessment is based on the framework developed as part of *Feeling Congested?*, the review of the City's Official Plan transportation policies. The evaluation framework captures the many aspects of city-building, all of which are important to the future of Toronto (see Figure 3).

Figure 3: *Feeling Congested?* Evaluation Framework

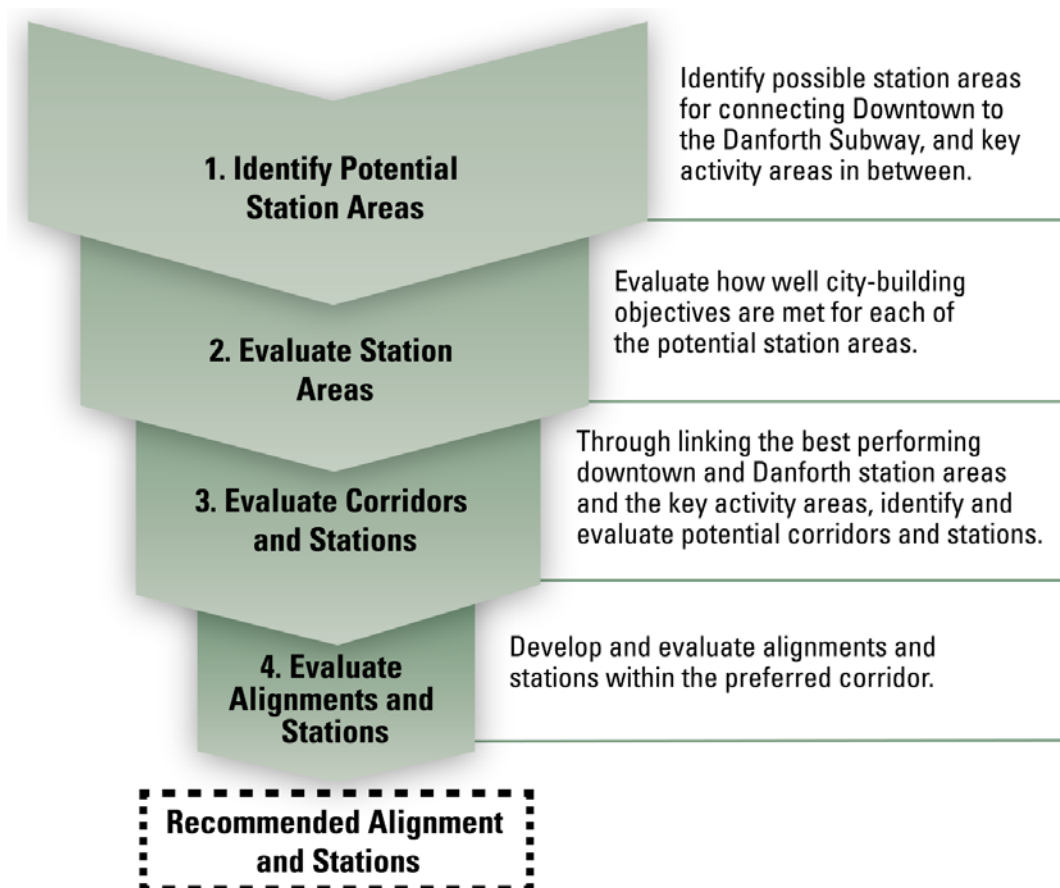
Principles		Objectives
Serving People	Choice	Develop an integrated network that connects different modes to provide for more travel options
	Experience	Capacity to ease crowding / congestion; reduce travel times; make travel more reliable, safe and enjoyable
	Social Equity	Do not favour any group or community over others; allow everyone good access to work, school and other activities
Strengthening Places	Shaping the City	Use the transportation network as a tool to shape the residential development of the City
	Healthy Neighbourhoods	Changes in the transportation network should strengthen and enhance existing neighbourhoods; promote safe walking and cycling within and between neighbourhoods
	Public Health and Environment	Support and enhance natural areas; encourage people to reduce how far they drive; mitigate negative impacts
Supporting Prosperity	Affordability	Improvements to the transportation system should be affordable to build, maintain and operate
	Supports Growth	Investment in public transportation should support economic development: allow workers to get to jobs more easily; allow goods to get to markets more efficiently

The detailed evaluation criteria for the Relief Line Project Assessment are available at reliefline.ca.

Evaluation Process

The evaluation process for the Relief Line Project Assessment has four main steps as illustrated in Figure 4.

Figure 4: Evaluation Process



Step 1 - Identify Potential Station Areas

A long list of potential station area options was identified within the study area, with three areas of focus: within downtown, along the Danforth, and key activity areas within the rest of the study area.

Primary considerations for potential station locations within downtown and along the Danforth are the ability to support future connections of the Relief Line west and north and to provide connections to the existing and planned transit system.

The full range of city building criteria were also taken into account, including the ability to support the planning policy framework as set out in the City's Official Plan, the potential to serve existing and future population and employment, and consideration of opportunities for redevelopment and intensification.

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Step 2 – Assess Potential Station Areas

Each of the potential station areas was assessed for its ability to meet the evaluation criteria. The results of this evaluation informed the development of potential corridors.

Step 3 - Develop and Evaluate Potential Corridors

Following evaluation of potential station areas, potential corridors were identified to connect the downtown station areas and the Danforth station areas having the greatest potential to address the project objectives and evaluation criteria.

The potential corridors were evaluated based on both characteristics of the corridor (such as the ability to reduce crowding and congestion within the existing transit system and the crossing of the Don River) and characteristics of the station areas within the corridor (based on the findings of the assessment of potential station areas complete in Step 2).

The outcome of this step is a preferred corridor.

Step 4 - Develop and Evaluate Potential Alignments and Stations

Alternative alignments and station locations within the preferred corridor have been developed. These will be refined a finer level of detail to consider both physical and operational constraints and/or features. The criteria evaluated in earlier steps will be considered in greater detail and precision as the alignments and station locations become more refined.

The outcome of this step is a preferred alignment and station locations for the Relief Line.

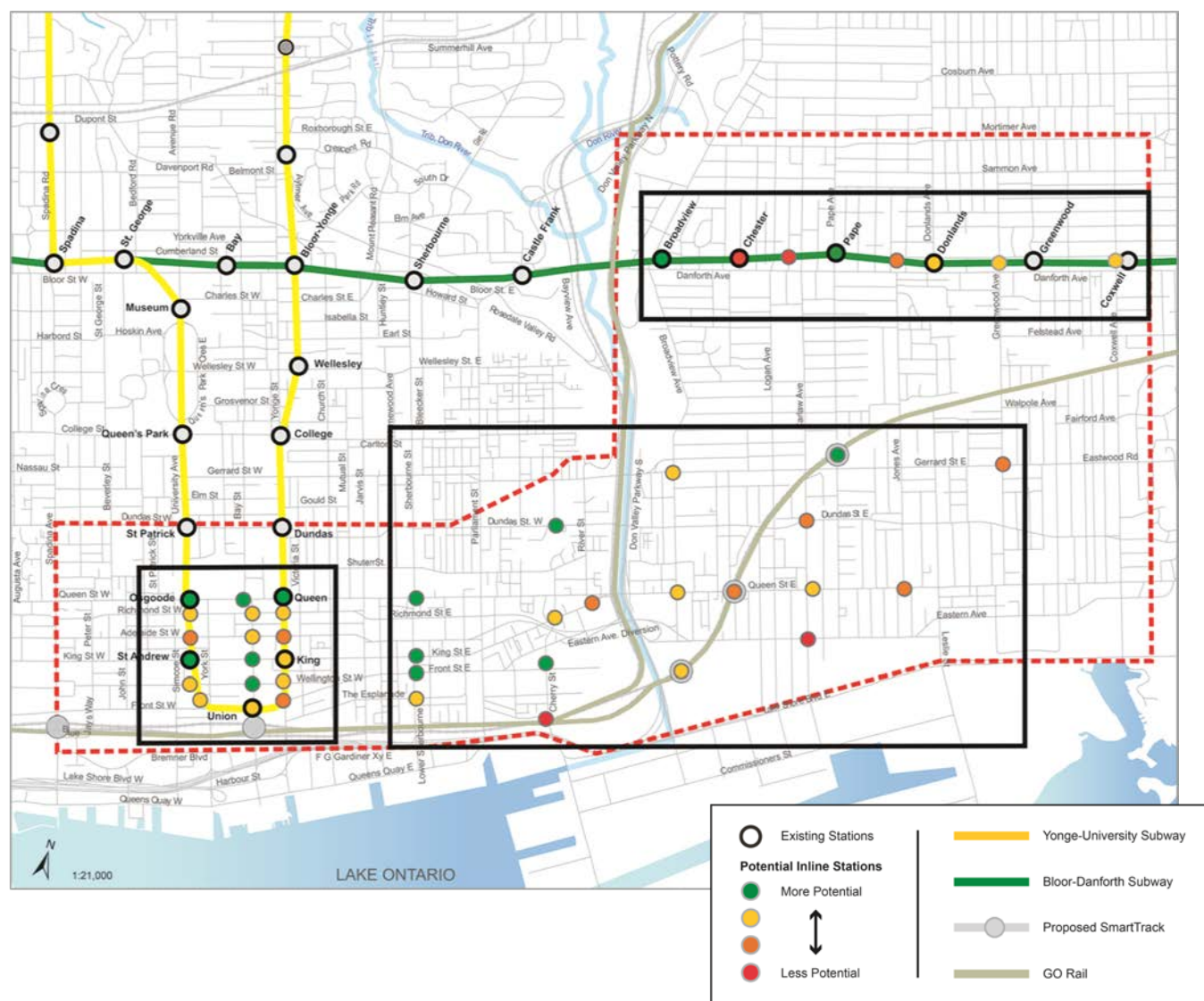
5. SUMMARY OF RESULTS OF POTENTIAL STATION AREA

With input from the public, a total of 45 potential station locations were identified in downtown and along the Bloor-Danforth. In addition, key activity areas, which have potential as inline stations, were considered.

Potential station areas and preliminary evaluation of potential station areas were presented for public input in June 2015 (Public Information Centre PIC #2).

The results of the evaluation are presented in Figure 5 and discussed below.

Figure 5: Potential Station Areas



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Potential Downtown Stations

Eighteen potential station locations in downtown at intersections with Yonge, Bay and University were evaluated.

Key Findings:

- Bay Street – close to area of high employment density
- King and Wellington Streets stand out:
 - Proximity to highest employment density
 - Ability to extend west along existing public right-of-way
- Queen Street serves key destinations such as the Eaton Centre, St. Michael's Hospital and City Hall
- Front Street / Union Station has high existing pedestrian volumes
- Adelaide and Richmond are more challenging to extend to the west

Summary of Results:

	Yonge Street						Bay Street						University Avenue					
	Front	Wellington	King	Adelaide	Richmond	Queen	Front	Wellington	King	Adelaide	Richmond	Queen	Front	Wellington	King	Adelaide	Richmond	Queen
Choice																		
Experience																		
Social Equity																		
Shaping the City																		
Healthy Neighbourhoods																		
Public Health and Environment																		
Affordability																		
Supports Growth																		
Overall Station Summary																		
Project Team Assessment of Public Comments Received During PIC 2																		

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Potential Station Locations to Connect with Bloor-Danforth Subway

A total of eight potential connections to the Bloor-Danforth Subway were evaluated.

Key Findings:

- Pape and Broadview emerged as the preferred station connections due to:
 - High surface transit and walk-in passenger volumes
 - Identification in the City's Official Plan as 'Avenues'
 - Ability to extend north following existing public rights-of-way
 - Ability to reach key northern extension destinations such as Thorncliffe Park
- The other potential connections were found to have greater limitations:
 - The public right-of-way north of Greenwood would not allow for a straight alignment following public rights-of-way for a future northern extension
 - Donlands and Chester have limited ability to use existing public rights-of-way
 - Carlaw and Jones would require lengthier connections between the existing subway station and the Relief Line
 - Coxwell cannot directly reach Thorncliffe Park along a future northern extension

Summary of Results:

	Broadview	Chester	Carlaw	Pape	Jones	Donlands	Greenwood	Coxwell
Choice								
Experience								
Social Equity								
Shaping the City								
Healthy Neighbourhoods								
Public Health and Environment								
Affordability								
Supports Growth								
Overall Station Summary								

Project Team Assessment of Public Comments Received During PIC 2								
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Potential Inline Stations to Serve Key Activity Areas

A total of 19 key activity areas were assessed as to their potential as station locations.

Key Findings:

- West of the Don River
 - Stations along Sherbourne have more potential because of higher population and employment densities
 - A station at Regent Park addresses social equity and could support redevelopment
 - Front / Cherry serves areas of new development and can provide surface transit connections to the Portlands
 - King / Cherry is physically constrained with less redevelopment potential
 - Lakeshore / Cherry and River / Queen would be challenging to construct and would have flooding risks
- East of the Don River
 - Pape / Gerrard has good redevelopment potential and offers opportunities for multiple connections to existing and future transit
 - Queen / Broadview has connections with multiple streetcar routes and supports redevelopment opportunities
 - Unilever site has good redevelopment potential and opportunities to connect to future transit; however, there are technical challenges (such as flood protection and soil contamination)
 - Queen / Degrassi and Queen / Jones are physically constrained

Summary of Results:

	Sherbourne				Cherry/Sumach				River	Eastern		Queen				Dundas	Gerrard		
	Esplanade	Front	King	Queen	Lakeshore	Front	King	Regent Park	King	First Gulf	Carlaw	Broadview	Degrassi	Carlaw	Jones	Carlaw	Broadview	Pape	Greenwood
Choice																			
Experience																			
Social Equity																			
Shaping the City																			
Healthy Neighbourhoods																			
Public Health and Environment																			
Affordability																			
Supports Growth																			
Overall Station Summary																			
Project Team Assessment of Public Comments Received During PIC 2																			

6. EVALUATION OF POTENTIAL CORRIDORS

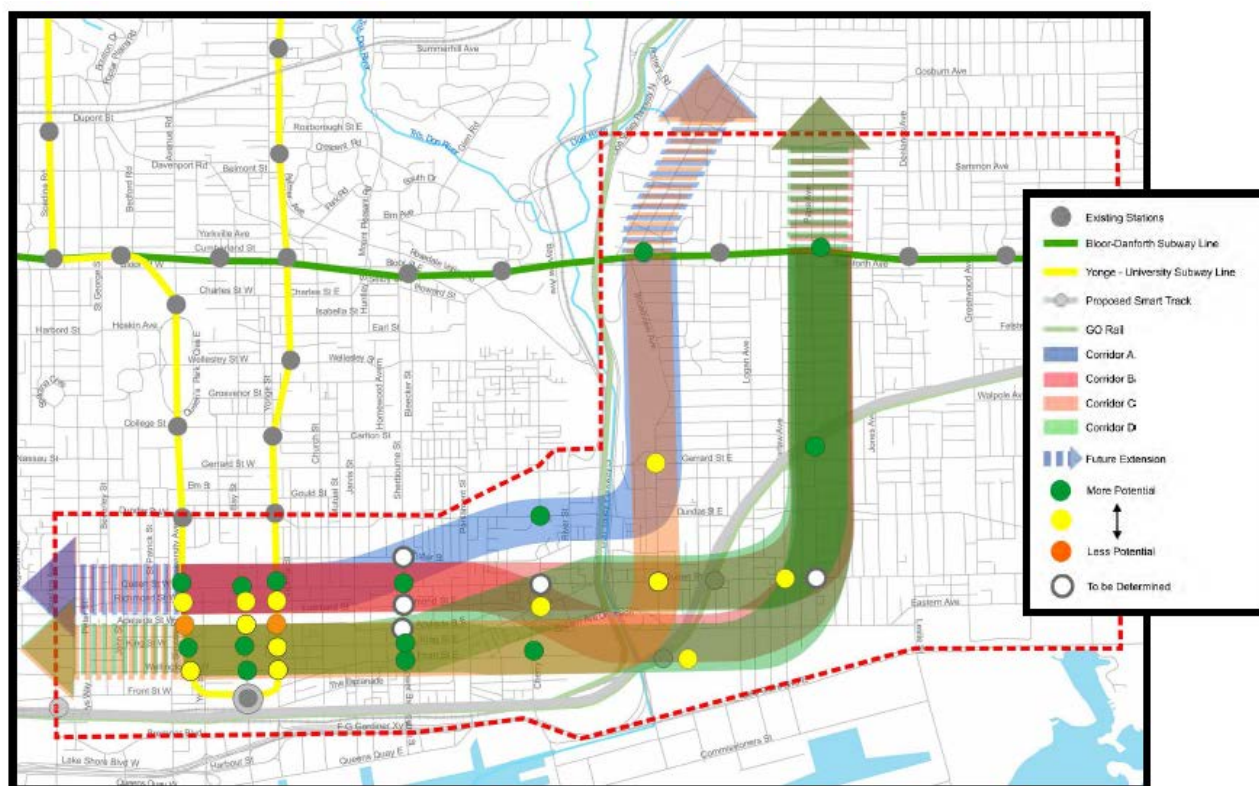
Potential corridors within the study area were identified for detailed evaluation to identify a preferred corridor. The corridors that were carried forward have the highest potential to address the full range of project objectives and city-building criteria.

These corridors were identified based on the results of the evaluation of potential station options:

- The best connecting stations to the Yonge-University (Line 1) Subway Downtown and to the Danforth Subway (Line 2)
- The best opportunities for future extension of the Relief Line to the west and north
- Linking key activity areas with highest potential, based on city-building criteria

The four corridors were further refined for the purposes of analysis, and two of the corridors (B and D) were each split in two to allow for more detailed and specific evaluation. The resulting six potential corridors each connect from the Bloor-Danforth subway (Line 2) to downtown, along either Queen/Richmond or King/Adelaide/Wellington. Figure 6 illustrates the corridors which were carried forward for detailed evaluation.

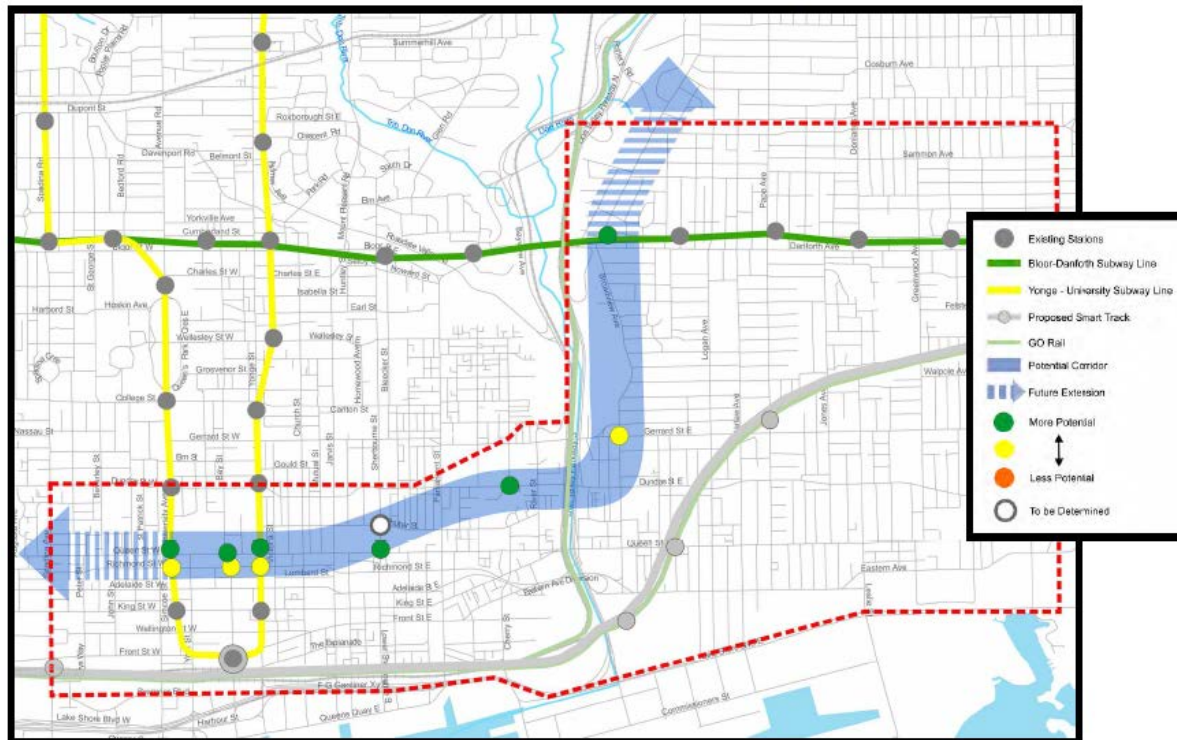
Figure 6: Six Potential Corridors



The following provides an overview of the advantages and disadvantages of each corridor.

Corridor A (Broadview to Queen via Regent Park)

Figure 7: Corridor A Broadview to Queen via Regent Park



Advantages

- Best option to advance Social Equity goals, with a potential station in heart of Regent Park
- Improves access to a large number of key destinations in the downtown, including hospitals, universities and public institutions
- Has the highest population density (existing and future) within 500m walking distance
- Supports planned population and employment growth at Regent Park
- Outside flood regulation limit
- Least expensive corridor to construct (fewest new stations and shortest length)
- Opportunity to avoid major utility conflicts on some Queen-Richmond alignments – Queen Street planned to accommodate below-grade streetcar, may reduce utility relocation costs
- Least overlap with existing and planned rapid transit, expanding service to a larger area overall

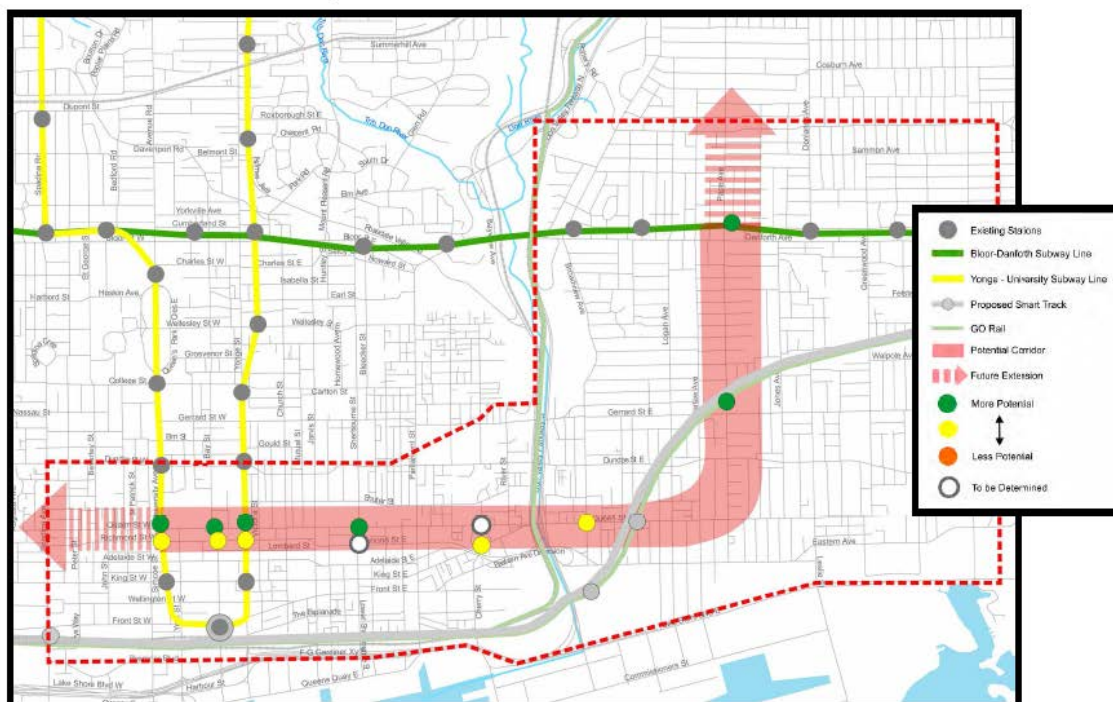
Disadvantages

- No potential for inline interchange station with SmartTrack/GO RER
- Serves the fewest jobs (existing and future) within a 500m walking distance
- Provides least support for planned population or employment growth at the Unilever site, West Don Lands, Distillery District, East Bayfront, the Keating Channel District or the Port Lands
- Development potential on future western extension may be limited by Heritage District along Queen Street west of downtown
- Greater potential environmental impact and cost anticipated for future northern extension (longest Don crossing)
- Walking catchment at potential stations would be limited by the Don Valley to the west, including stations on the future northern extension
- Broadview station has fewer inbound surface transit route transfers than Pape

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Corridor B1 (Pape to Queen via Queen-Broadview)

Figure 8: Corridor B1 Pape to Queen via Queen-Broadview



Advantages

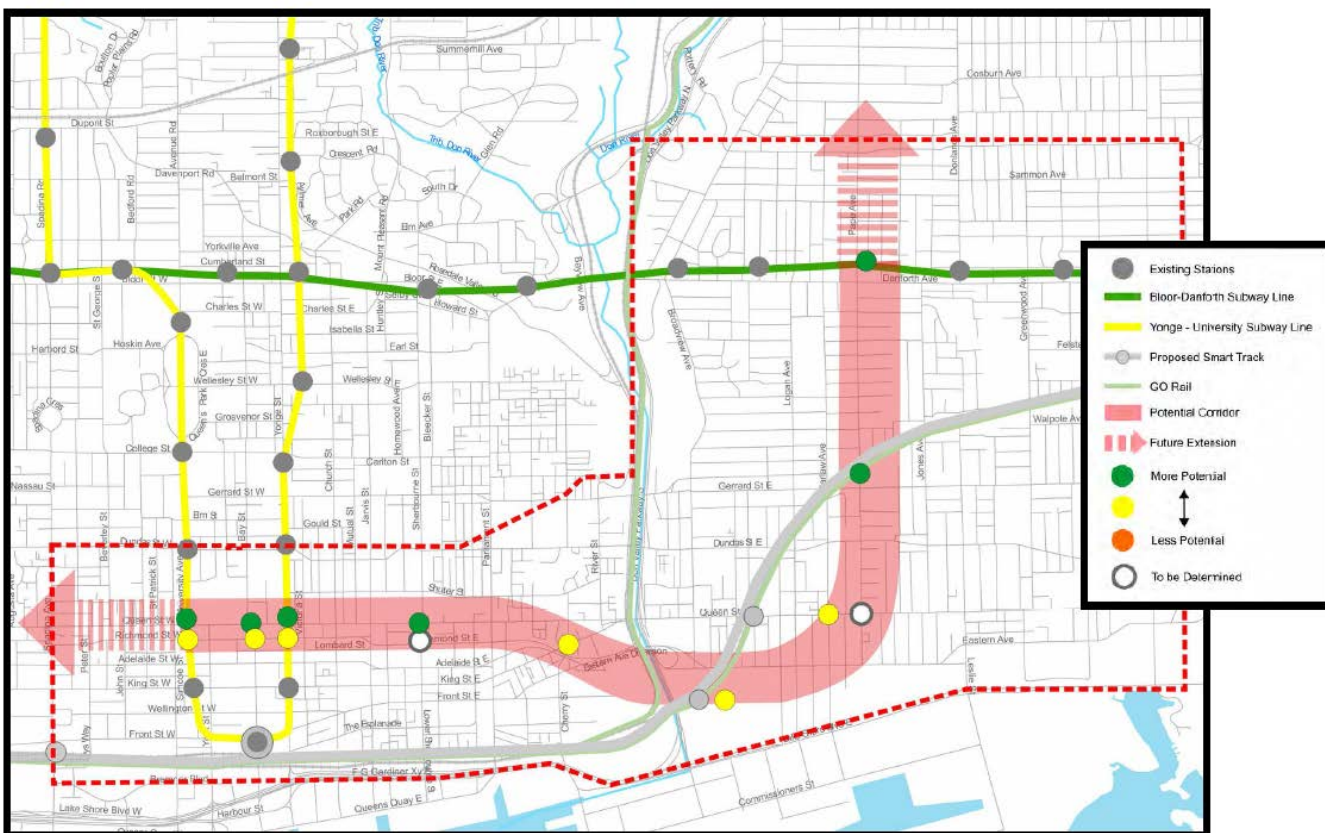
- Passenger transfer opportunities to SmartTrack/GO RER at Pape/Gerrard
- High population within a 500m walking distance of corridor
- Station at Queen/Broadview within 5-10 minute walk of Unilever site
- Connects to proposed Waterfront LRT network via future Broadview streetcar extension
- Supports social equity goals – 5 minute walk from centre of Regent Park
- Improves access to a large number of key destinations in the downtown, including hospitals, universities and public institutions
- Shorter crossing of Don River will reduce costs
- Opportunity to avoid major utility conflicts on some Queen-Richmond alignments– Queen Street planned to accommodate below-grade streetcar, may reduce utility relocation costs
- Lower environmental impact and cost for future northern extension (shortest Don crossing)
- Less overlap with existing and planned rapid transit, expanding service to a larger area overall

Corridor B2 (Pape to Queen via Unilever)

Disadvantages

- Serves fewer jobs and has lower employment density (existing and future) within a 500m walking distance compared to King corridors
- Development potential on future western extension may be limited by Heritage District along Queen Street west of downtown

Figure 9: Corridor B2 Pape to Queen via Unilever



Advantages

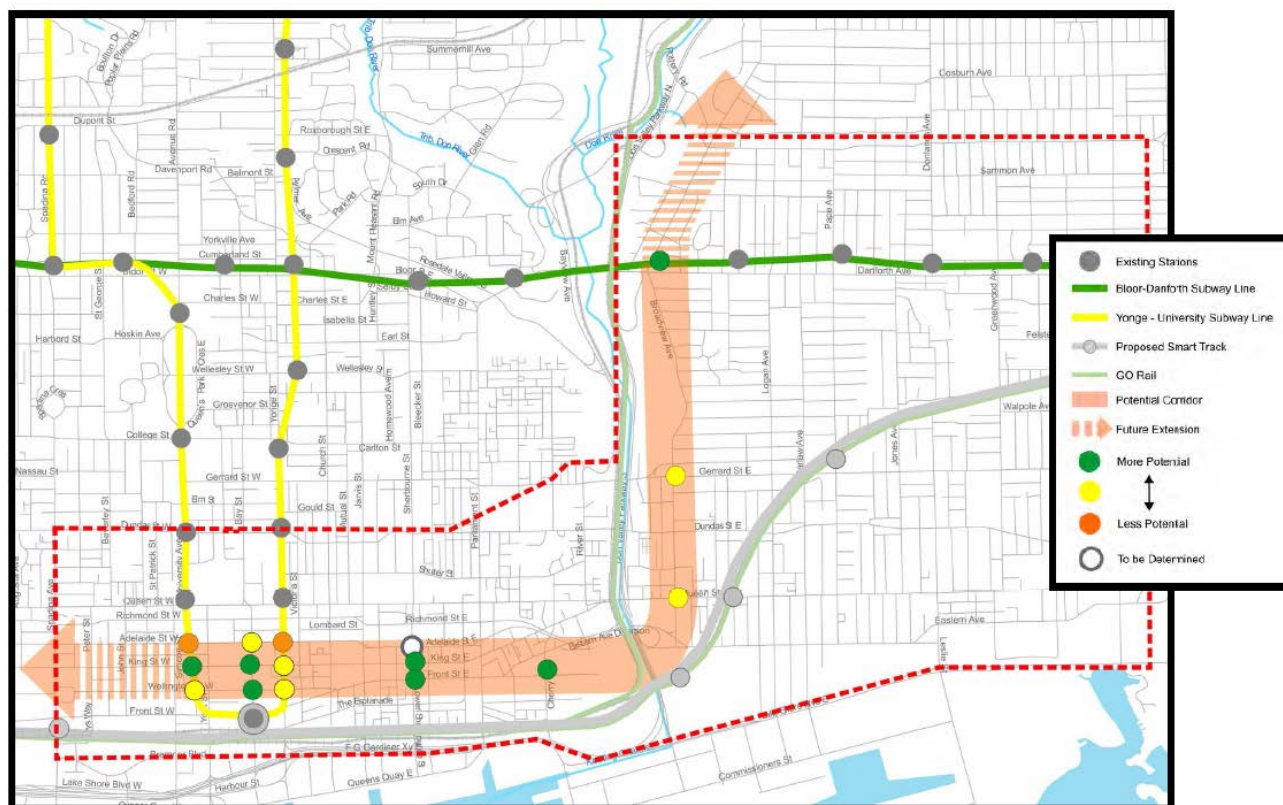
- Passenger transfer opportunities to SmartTrack/GO RER at Pape/Gerrard and Unilever
- Connects to the Waterfront LRT network via future Cherry and Broadview streetcar extensions
- Highest population (existing and future) within a 500m walking distance among all corridors
- Improves access to a large number of key destinations in the downtown, including hospitals, universities and public institutions
- Provides a significant reduction in passenger volumes on the Queen streetcar
- Opportunity to avoid major utility conflicts on some Queen-Richmond alignments– Queen Street planned to accommodate below-grade streetcar, may reduce utility relocation costs
- Lower environmental impacts for future northern extension (shortest Don crossing)
- Less overlap with existing and planned rapid transit, expanding service to a larger area overall

Corridor C (Broadview to King via Queen-Broadview)

Disadvantages

- Serves fewer jobs and has lower employment density (existing and future) within a 500m walking distance compared to King corridors
- Longest tunnel length and greater number of stations on corridor will increase costs and travel time
- Development potential on future western extension may be limited by Heritage District along Queen Street west of downtown
- Unilever options offer the smallest travel time savings from the Danforth to downtown

Figure 10: Corridor C Broadview to King via Queen-Broadview



Advantages

- Serves a relatively high number of jobs and areas with high employment density (existing and future) within a 500m walking distance
- Connects to the Waterfront LRT network via future Cherry and Broadview streetcar extensions
- Provides the greatest reduction in passenger volumes on the King streetcar
- Potential to serve a large number of key destinations and future population along future western extension
- Station at Queen/Broadview within 5-10 minute walk of Unilever site

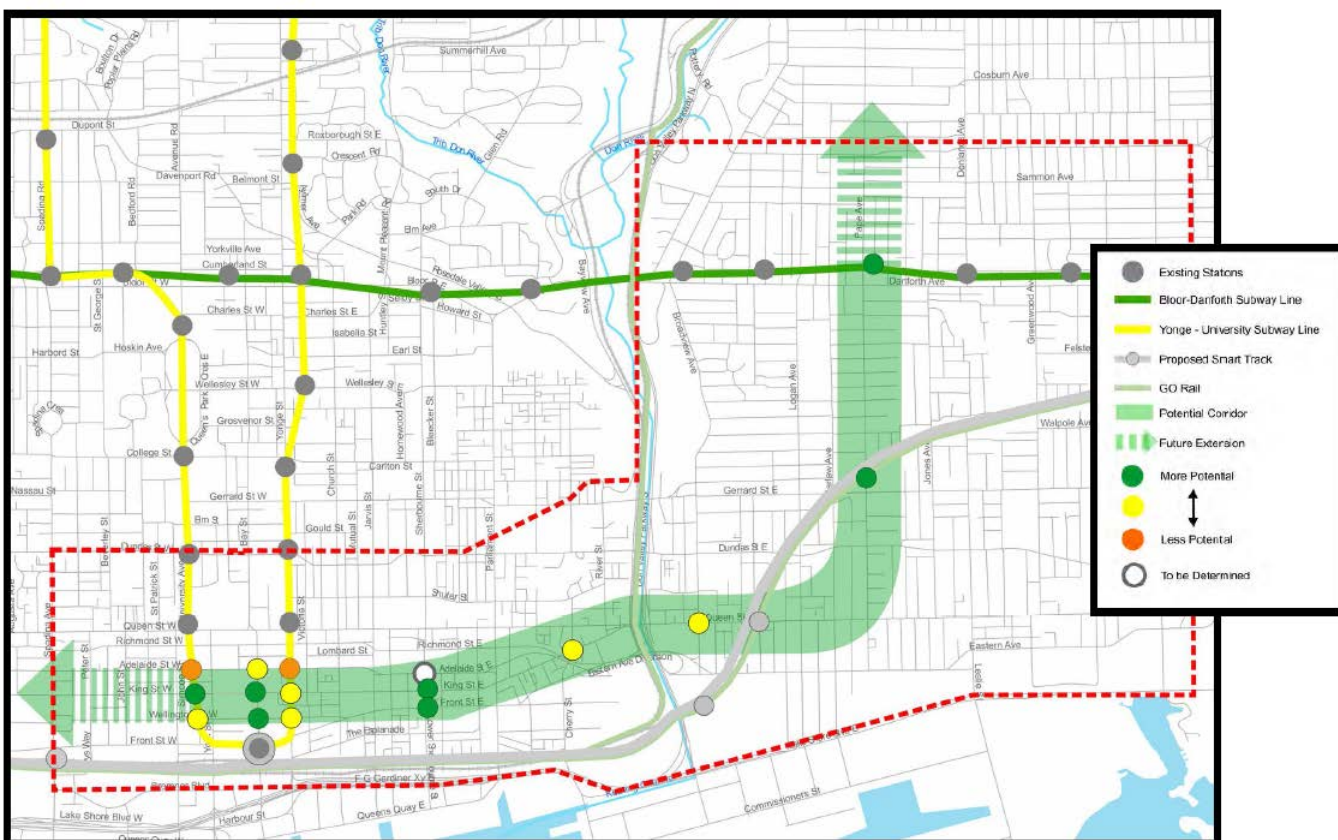
Disadvantages

- No potential for inline interchange station with SmartTrack/GO RER
- Lowest population (existing and future) within a 500m walking distance
- Stations on corridor located furthest from Neighbourhood Improvement Areas
- King and Wellington Streets present greater utility conflicts through the downtown core
- Greater potential environmental impact and cost anticipated for northern extension (longest Don crossing)
- Walking catchment at potential stations would be limited by the Don Valley to the west, including stations on the future northern extension
- Broadview station has fewer inbound surface transit route transfers than Pape
- Serves fewer key destinations downtown
- Greatest impact to streetcar network during construction

Corridor D1 (Pape to King via Queen-Broadview)

Figure 11: Corridor D1 Pape to King via Queen-Broadview

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Advantages

- Passenger transfer opportunities to SmartTrack/GO RER at Pape/Gerrard
- Serves a relatively high number of jobs and areas with high employment density (existing and future) within walking distance
- Shorter crossing of Don River will reduce costs
- Connects to the Waterfront LRT network via future Cherry and Broadview streetcar extensions
- Provides a significant reduction in passenger volumes on the King streetcar
- Potential to serve a large number of key destinations and future population along future western extension
- Station at Queen/Broadview within 5-10 minute walk of Unilever site
- Lower environmental impact and cost for future northern extension (shortest Don crossing)

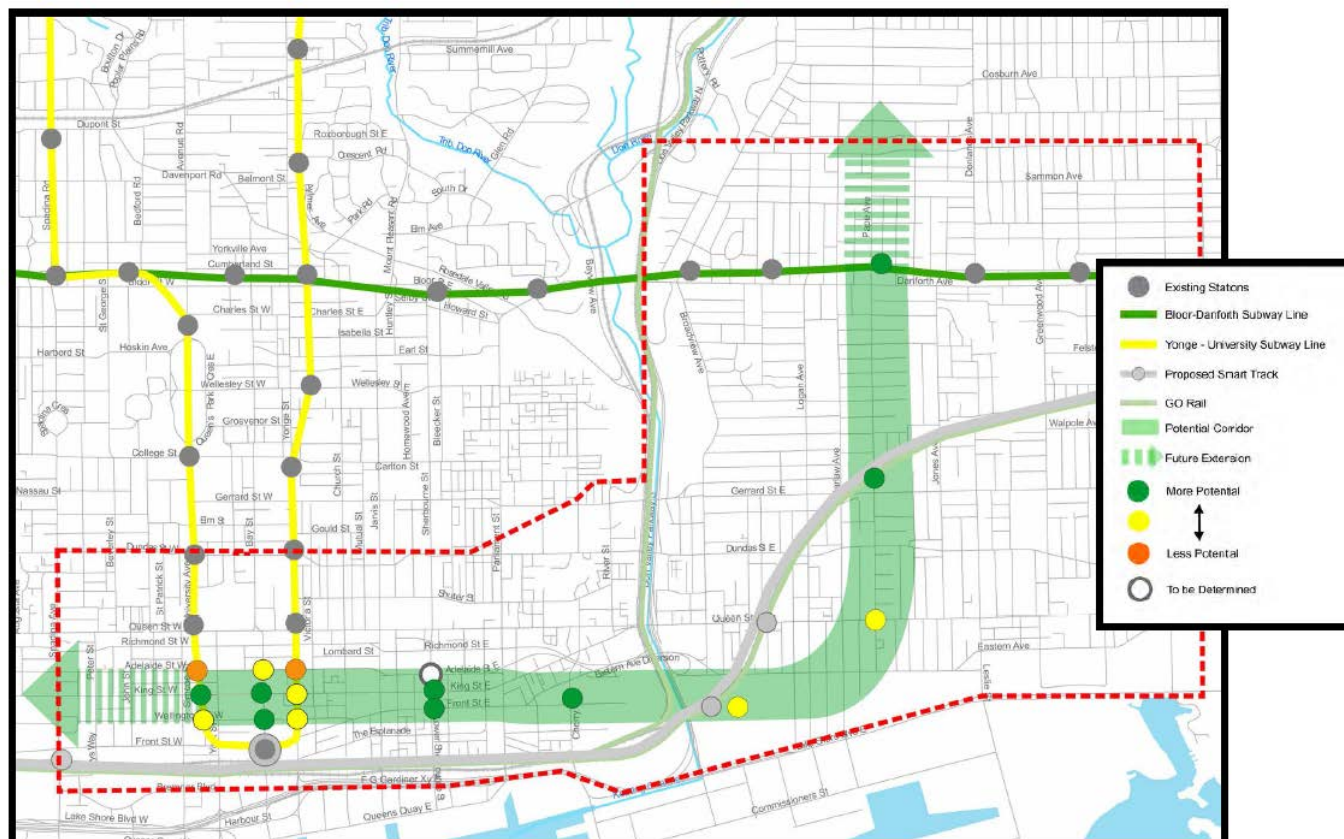
Disadvantages

- Stations on corridor located farther from Neighbourhood Improvement Areas
- Serves a lower population (existing and future) within walking distance
- King and Wellington Streets present greater utility conflicts through the downtown core
- Serves fewer key destinations downtown
- Greatest impact to streetcar network during construction

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Corridor D2 (Pape to King via Unilever)

Figure 12: Corridor D2 Pape to King via Unilever



Advantages

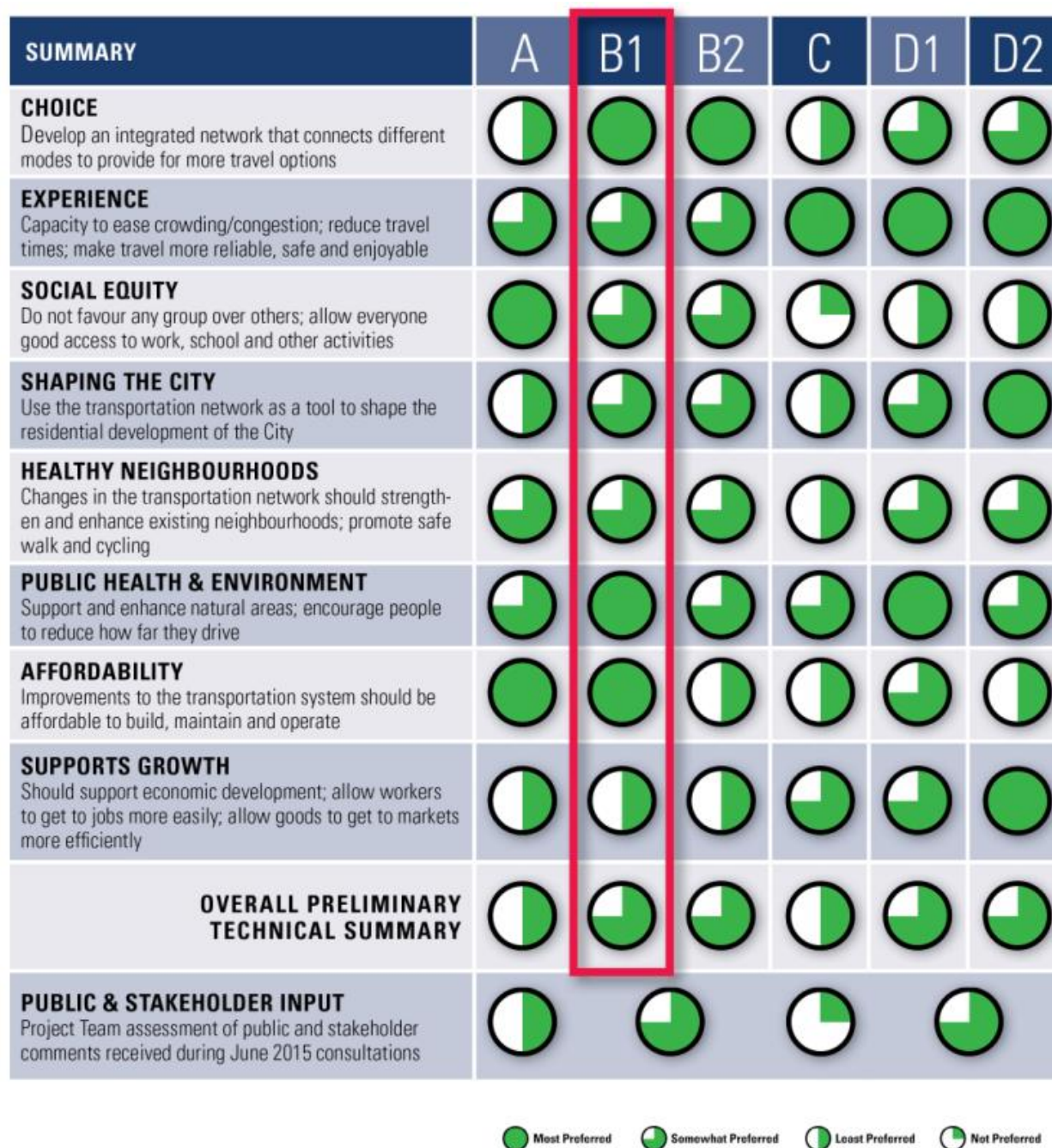
- Passenger transfer opportunities to SmartTrack/GO RER at Pape/Gerrard and Unilever
- Serves the greatest number of jobs and area with highest employment density (existing and future) within walking distance
- Provides stations in areas with planned growth such as West Don Lands and Unilever site
- Connects to the planned Waterfront LRT network via future Cherry and Broadview streetcars
- Provides a significant reduction in passenger volumes on the King streetcar, and greatest reduction in volumes on the Queen streetcar
- Potential to serve a large number of key destinations and future population along future western extension
- Lower environmental impact and cost for future northern extension (shortest Don crossing)

Disadvantages

- Lower population density (existing and future) within walking distance
- Stations on corridor located furthest from Neighbourhood Improvement Areas
- King and Wellington Streets present greater utility conflicts through the downtown
- Longer tunnel length and greater number of stations on corridor will increase costs
- Serves fewer key destinations downtown
- Greatest impact during construction to the busiest streetcar route
- Unilever options offer the smallest travel time savings from the Danforth to downtown

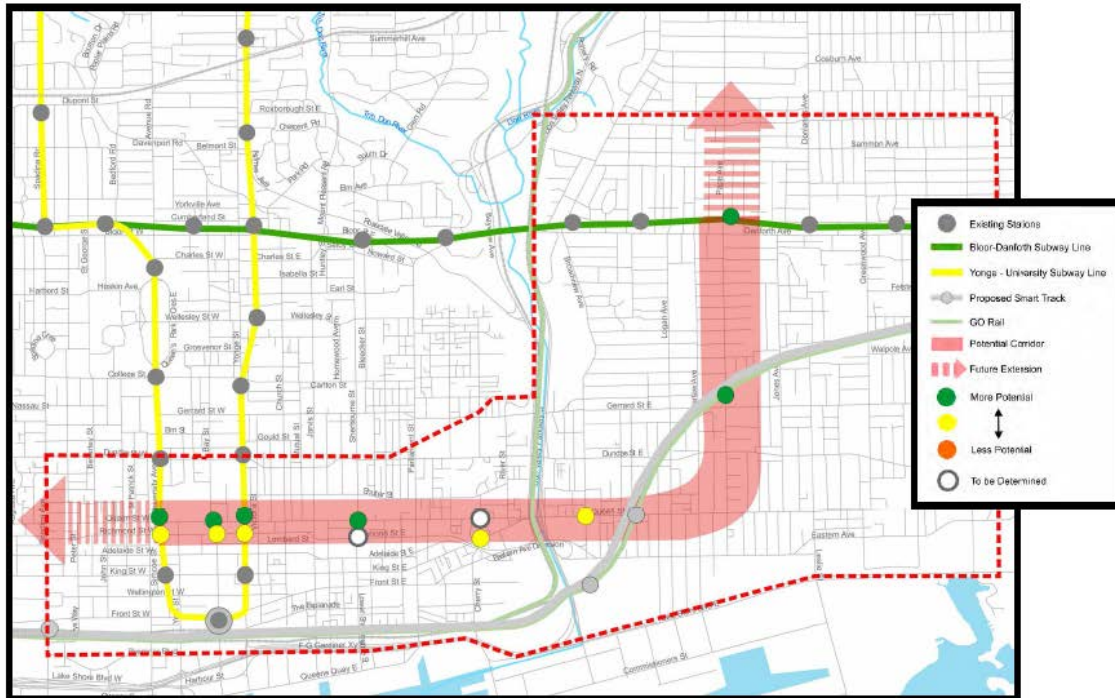
The results of the evaluation of potential corridors are summarized in Figure 13.

Figure 13: Summary of Corridor Evaluation Results



7. PREFERRED CORRIDOR

As a result of the technical evaluation of potential corridor options, and consideration of public and stakeholder input, Corridor B1 has emerged as the Preferred Corridor. Corridor B1 connects from Pape Station along the Bloor-Danforth subway to downtown via Queen/Richmond.



While Corridors B2, D1 and D2 also scored very well, the main advantages of Corridor B1 are that it:

- Creates a dynamic multi-modal hub in the core
 - Opportunity to create interchange station in the psychological centre of the city (Nathan Phillips Square at City Hall)
 - Supported with strong pedestrian connections to Queen and Osgoode stations on Line 1 and to the Financial District via PATH network
- Fills a rapid transit void in the core
 - Improves rapid transit connections to northerly areas of the core (between Union Station and Yonge-Bloor Station)
- Recognizes that downtown is not just 9-5
 - Provides alternative route for people to access jobs in the Financial District
 - Best for full array of daily travel needs and destinations, such as universities, hospitals and public institutions
- Spreads out pedestrians
 - Does not add more pedestrian congestion to Union Station area

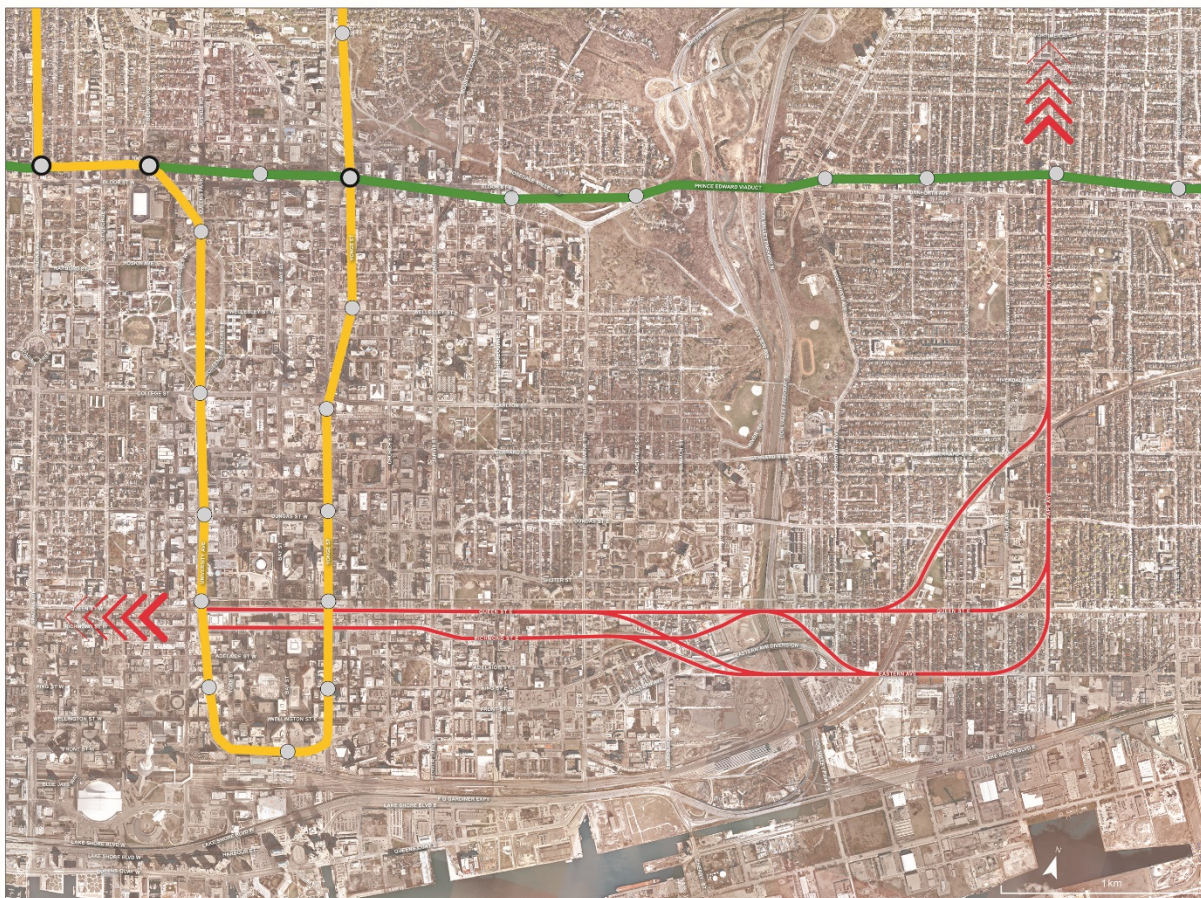
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- Supports more options for people to access jobs throughout the downtown
- Performs well with other transit initiatives
 - Complements SmartTrack / GO RER connections into Union Station
 - Complements planned transit priority corridor along King Street
 - Connects to #6 Bay bus and bus lanes for onward connections north and south
 - Bike Station under Nathan Phillips Square to open soon
- Supports social equity
 - Closest to Regent Park Neighbourhood Improvement Area (5 minute walk)
 - Closest to Moss Park at Queen & Sherbourne
- Lowest projected cost
 - Minimizes costly soil stabilization needs for crossing Don River south of Queen
 - Requires a shorter crossing of the Don River

8.0 SELECTING A PREFERRED ALIGNMENT

Alignment options within the recommended Preferred Corridor have been identified as shown in Figure 14.

Figure 14: Potential Alignments within the Preferred Corridor



Guiding principles in determining the Preferred Alignment are as follows:

- Utilize public rights-of-way as much as possible to minimize impacts to private property
- Identify property requirements
- Take into account needs of subway operations (e.g. curves, grades, trackwork, speed, etc.)
- Develop station concepts (e.g. station box placement, entrances, connections to surface transit, ventilation shafts, emergency exits, electrical substations, etc.)
- Geotechnical consideration for tunnelling and crossing the Don River
- Identify mitigation strategies for construction and operations

The potential alignments shown in Figure 14 have been assessed at a high level. Table 1 provides the preliminary assessment.

Table 1: Preliminary Assessment of Alignment Options

Alignment Segments	Advantages	Disadvantages
GO Corridor	<ul style="list-style-type: none"> Follows existing GO corridor to turn onto Queen Street from Pape avoiding property impacts associated with the south to west turn Shortest tunnelling distance Station possible at Queen/Broadview 	<ul style="list-style-type: none"> Gerrard Square station configuration may not allow for a direct connection to proposed SmartTrack/GO RER station and may require significant property taking No station possible at Pape/Queen Station at Queen/Broadview could have operational impacts to streetcars during construction May be difficult to locate crossovers at/near Broadview Station
Pape to Queen Curve	<ul style="list-style-type: none"> Direct transfer possible to proposed SmartTrack/GO RER station at Gerrard Square Station possible at Queen/Broadview 	<ul style="list-style-type: none"> Potential residential property impacts possible where alignment turns westward from Pape to Queen (depending on curve radius) No station possible at Pape/Queen Station at Queen/Broadview may require mining approach to avoid operational impacts to streetcars during construction
Eastern Avenue	<ul style="list-style-type: none"> Direct transfer possible to proposed SmartTrack/GO RER station at Gerrard Square Station possible closer to the Unilever Site Allows for a station at Pape and Queen, depending on tunnel configuration and track curvature 	<ul style="list-style-type: none"> Longer travel time, potentially reducing attractiveness of the line Potential residential property impacts possible where alignment turns westward from Pape to Eastern (300m radius required to allow for Queen/Pape Station) Longer crossing of the Don, depending on alignment, increasing soil stabilization costs Additional station at Pape/Queen is necessary to connect with Queen Streetcar, increasing costs
Queen, West of the Don Valley	<ul style="list-style-type: none"> Steam pipes below 12m along Queen, potentially minimizing need/cost of relocation Potential for a Nathan Phillips Square station Future western extension could more easily continue along Queen (in contrast to Richmond) 	<ul style="list-style-type: none"> Could have wide-ranging operational impacts to streetcars during construction Connection to Cherry Street Streetcar requires a northern extension to Queen Street (or a 150m pedestrian tunnel)
Richmond	<ul style="list-style-type: none"> Would avoid some of the streetcar disruptions associated with a Queen alignment Allows for direct connection to the Cherry Streetcar 	<ul style="list-style-type: none"> Steam pipes along Richmond run less than 12 m from the surface, presenting greater constructability challenges and costs Will require tunnelling under private property in order to extend westward Station box at Cherry/Sumach may require mining approach

More detailed evaluation of the alignment options is underway and will be provided in the report to Executive Committee in June 2016. The emerging recommended Preferred Alignment will be provided at that time.

9. PUBLIC CONSULTATION SUMMARY

Appendix 6: Relief Line Project Assessment

Public and stakeholder consultation is an integral part of the Relief Line Project Assessment. Consultation is being coordinated so that meeting participants are able to consider each of the current transit projects in planning stages as part of the overall transit network, including SmartTrack/GO RER and the Scarborough Subway Extension. Public meetings are being coordinated with Metrolinx participation.

The outcomes of the consultations undertaken to-date are summarized below.

April 2014 (Phase 1A)

Public consultation in April 2014 provided input to the development of the Terms of Reference and Public Consultation Plan to be used to guide and govern the study. More detail can be found online at relieffline.ca.

Phase 1B/2 (March 2015)

In March 2015, the rationale for the Relief Line was presented to the public and stakeholders. Comments were received on the evaluation criteria and key activity areas that could be potential inline station areas.

Key themes:

- Relief Line needs to be part of an integrated transit network, including connections to subway lines, the streetcar system, SmartTrack, and GO Transit
- It is important to plan for future extensions of the Relief Line to the north and west
- Don't tear up Queen and King Street during construction
- Protect neighbourhoods, parks and cultural heritage
- Look for ways that the Relief Line can provide opportunities for city building and redevelopment around stations
- Link important destinations, including Financial District, St. Lawrence Market, City Hall, the Distillery District and George Brown College

Phase 3 (June 2015)

Stakeholders and public were invited to provide feedback in June 2015 on the results of the potential station location evaluation.

Key themes:

- General agreement with the results of the potential station location evaluation.
- Potential station areas downtown:
 - Support for both King and Queen as potential stations connecting to the Yonge line; however, it was noted that both stations are currently overcrowded.
 - Concerns with existing congestion at Union.
 - Support for a station at Bay Street with a tunnel connection existing station(s) on the Yonge-University line.
 - Consideration of future west subway expansion is a priority.

Appendix 6: Relief Line Project Assessment

- Increasing points of access to stations at street level is important.
- Bloor-Danforth subway connection:
 - General consensus that a station at Pape is preferred, as it accommodates future northern transit expansion and access to the Greenwood TTC yard, has a large catchment area of riders, and accommodates a potential station at Gerrard Square.
- Potential station areas east and west of the Don Valley:
 - Support for connections to existing and future transit lines to create an integrated transit network.
 - Support for stations serving Gerrard Square, Regent Park, St. Lawrence Market, the Distillery District, West Don Lands, the Unilever site and the Port Lands.
 - Support for stations that serve residential and commercial development.
- With respect to the corridor options, there was strong interest in a route that connects from Pape Station to downtown (Corridors B and D). In addition:
 - Strong support for timely completion of the Relief Line Project.
 - Support long-term growth of the city and consider future planning and development needs.
 - Consider the Relief Line in the context of an integrated transit network.
 - Minimize disruption to existing streetcar service during construction.

More detail on the stations evaluations can be found online at reliefline.ca.

Phase 4 (February/March 2016)

Five public meetings were held at various locations across the city in February. At the time of writing this report, two future meetings are scheduled for later in March. A Stakeholder Advisory Group (SAG) meeting was held on February 22, 2016.

Key themes:

- High degree of support for Corridor B1 proceeding as the Preferred Corridor.

10. NEXT STEPS

The Preferred Alignment and Stations within the Preferred Corridor will be further developed and brought forward for further consultation in April 2016. City Staff will report to the Executive Committee in June 2016 and Council in July 2016 on the emerging preferred alignment.

The timeline for next steps is as follows:

- | | |
|--------------------|--|
| April 2016 | <ul style="list-style-type: none">• Complete evaluation of alignment options and identify recommended Preferred Alignment and Preferred Stations• Consultations to seek input on recommended Preferred Alignment and Preferred Stations |
| June 2016 | <ul style="list-style-type: none">• Finalize selection of Preferred Alignment and Stations• Report to Executive Committee:<ul style="list-style-type: none">○ Results of April consultations○ Preferred Alignment and Stations |
| Summer 2016 | <ul style="list-style-type: none">• Develop Conceptual Design for Preferred Alignment• Identify and assess potential impacts and develop mitigation strategies• Station area planning and design (technical work and community workshops)• Prepare Draft Environmental Project Report (EPR) |
| Fall 2016 | <ul style="list-style-type: none">• Seek Council direction to commence formal TPAP process |
| 2017 | <ul style="list-style-type: none">• Complete TPAP (six months after TPAP is commenced)• Complete EPR and submit to MOE for approval• Planning Approvals in Place |
| Beyond 2017 | <ul style="list-style-type: none">• Design and construction (8+ years) |