



Queens Quay Revitalization Environmental Assessment Stakeholder Advisory Committee Meeting #4

***Wednesday March 11, 2009 – 6:00 p.m. – 8:00 p.m.
Waterfront Toronto, Main Boardroom***

Meeting Summary

1. Welcome and Introductions

Chris Glaisek, Waterfront Toronto, introduced himself and welcomed participants to the fourth Stakeholder Advisory Committee (SAC) meeting convened as part of the Queens Quay Revitalization Environmental Assessment (EA) process. Mr. Glaisek indicated that the purpose of this SAC meeting was to share with the committee detailed information developed by the Queens Quay EA Project Team that will provide the basis for the presentation at Public Forum #3 in late March. He added that public input will be sought in two different ways at the upcoming Public Forum: 1.) a public information centre will be held on Wednesday March 25th, which will include a formal presentation and a general question and answer period, and 2.) a drop-in centre on Saturday March 28th, which will provide an opportunity for more detailed feedback from the public through one-on-one discussions with the Project Team.

Mr. Glaisek noted that the preferred alternative for the East Bayfront Transit EA will also be presented at Public Forum #3, and added that members of the Community Liaison Committee for that EA had been invited to tonight's meeting.

David Dilks (Lura Consulting) re-introduced himself as the Neutral Facilitator for the SAC.

2. Walkthrough of Project Team's Preferred Alternative Presentation for Upcoming Public Forum

Chris Glaisek walked through the major elements of the preferred alternative for Queens Quay that will be presented at Public Forum #3. These elements included the:

- Bus Plan;
- Servicing Plan;
- Parking Plan;
- Transit Plan;
- Site Access Plan, including site specific drawings of property access plans for:
 - 401 Queens Quay
 - Fire/EMS
 - Radisson Hotel
 - Harbourfront Centre
 - Queens Quay Terminal
 - Harbour Square

- Westin Harbour Castle
- Pier 27
- Redpath Sugar

David Pratt, ARUP, provided background on the traffic analysis and transportation planning work for Queens Quay.

Pina Mallozzi, Waterfront Toronto, briefly reviewed the evaluation criteria and related measures that the Project Team had used to identify the preferred alternative for Queens Quay.

Bill Dawson, Toronto Transit Commission, presented a brief overview of the East Bayfront Transit EA and the preferred alternative.

3. Discussion and Feedback

The following is a summary of committee comments on the various presentations. Mr. Dilks requested that committee members provide feedback both on the content and on how the information should be presented as part of the upcoming Public Forum.

SAC members provided comments throughout the presentations. This feedback has been organized by topic below:

Bus Plan

- A committee member commented about the Portland Pier, noting that the driveway to that pier enables access to a number of private and commercial vessels on the east side of the slip. The committee member stated that there will be four commercial vessels using that pier in the near future, and that it is only accessible from eastbound Queens Quay, not westbound due to the streetcar right-of-way. The mouth of the driveway is not wide enough and there is a TTC shelter that is an obstacle. The committee member suggested that the area about 100m east might be a better access point for buses. A member of the Project Team indicated that this is the kind of feedback they are looking for, and the Project Team will consider the suggestion.
- A committee member commented on the proposed closure and bus turn around at Robertson Square. The committee member stated that space can be created but the management of that site with respect to getting vehicles in and out at a busy time of year will be difficult. The committee member noted that the police boat needs to access the site and cannot be blocked. A member of the Project Team stated that this will be considered as part of the Access Plan.
- A committee member asked how many bus lay-bys were being proposed. The committee member noted that coach buses need to be able to access the east end of Queens Quay in order to provide door-to-door service for clients. A member of the Project Team replied that seventeen drop off and pick up areas were being proposed for the Queens Quay study area, based on bus demand.
- One committee member asked who will enforce the bus plan, since the aim is to discourage illegal bus parking on Queens Quay. The committee member asked where the Project Team intends to put vehicles, and if there will be a plan for shuttles. The committee member noted that the Harbour Castle is one of the biggest hotels in the area, and a call back system such

as the one used in Niagara Falls is a great tool that could be implemented here. It was noted that the Harbourfront Centre was looking at the call back option. The committee member also explained that there is a significant difference between school buses versus coach buses and leisure travel. The committee member commented that taxi drivers are the biggest problem on Queens Quay since they park and wait. A Project Team member explained that a bus management plan for the waterfront will be developed, and Waterfront Toronto has committed to do this with the City of Toronto but it will be outside the scope of the Queens Quay Revitalization EA.

- Another committee member asked if the bus plan will extend over to the east. A member of the Project Team replied that it currently ends at Jarvis Street.
- A committee member asked if there is anything in place that might prevent people from exiting the buses on the north side and walking across the street to the south side. A Project Team member noted that this would be discussed as part of the site-specific analysis.
- One committee member suggested that when the Project Team presents this to the public, the public might have a hard time understanding how the bus plan will work if Queens Quay becomes a one-way street. The committee member suggested that the Project Team first explain how the street will function before showing this detail. A member of the Project Team indicated that the team will have a preamble for the public to explain the context.

Servicing Plan

- A committee member commented that delivery trucks cannot enter the driveway at the location of the Chinese restaurant. A member of the Project Team noted that most buildings have servicing off the street, such as Rabba Fine Foods.

Transit Plan

- A committee member asked if streetcar shelters on the platforms will have walls. A Project Team member replied that the plan is to use the standard three-sided style shelters used by the City, a design that is better than what is present today but not fully enclosed. Another committee member commented that bus shelters are currently being designed for Cherry Street, and suggested that the Queens Quay Revitalization EA Project Team consider those designs.
- A committee member noted that the Simcoe slip is a high intensity use area, and it would be beneficial to add a transit stop in that area since the walk from Simcoe to Rees is very long. A member of the Project Team noted that additional stops and the distance between stops was discussed, and that the Project Team wanted to avoid stops in places that are not signalized to avoid jaywalking.
- One committee member noted that the Project Team should be looking at the site from a seasonal perspective, including consideration of busy summer days when people will be running across the street. The committee member noted that priority should be given to pedestrians.
- A committee member asked if additional transit stops are not possible at Lower Simcoe because the buildings in the area are very close to the street and there isn't enough space to

add in a streetcar stop. A member of the Project Team explained that a high level of consideration has gone into the plan, and Simcoe and York are both problem areas.

- Another committee member asked if the platforms and shelters will be accessible to people with disabilities. A Project Team member replied that they will be accessible since this is will be a requirement under the *Accessibility for Ontarians with Disabilities Act*.

Site Specific Drawings of Property Access

John Quay (Radisson Hotel)

- A committee member asked how much of the sidewalk will be taken away in the area of the Radisson Hotel. The committee member noted that after a Jays' baseball game or any event at the Rogers Centre, the Radisson parking lot is full and there is a lot of congestion. The committee member stated that there a lot of venues in the area that draw big crowds, and the solution being proposed by the Project Team for this area might not be the best answer. The committee member suggested possibly restricting buses from exiting on the east side.
- Another committee member noted that this is the area where the EMS and police pick up people who are injured on the water.
- One committee member commented that the fumes that are released from the buses will be excessive, which would not be pleasant for those using a sidewalk café. A member of the Project Team noted that the Radisson feels that people need to get off a bus in view of the entrance to the hotel. Buses currently use the area, and the plan does not add more buses.
- Another committee member noted that people keep bringing up concerns about site access and parking, but it is possible there will be lower levels of private traffic due to the economic situation, and people will change their transportation habits. Thus, the Project Team should plan and build for the future rather than the last few years. The committee member noted that more people will be using public transit.
- A committee member stated that a new venue in the area will hold 500 people, and this venue will be serviced by buses. In order to transport 500 people the coach company will need to send ten buses to the site.
- One committee member stated that the goal should be to plan for greater visitation levels not lower visitation levels, given that Harbourfront will increase retail and activity in the area. The committee member also commented that if the design doesn't make it practical to do a u-turn or park, people will do it themselves, hence, there needs to be workable solutions.
- Another committee member asked if it is possible to cut into the police basin. A member of the Project Team noted that the issue still needs to be discussed with Toronto Police in order to establish how much space can be utilized.
- One committee member commented that the current car park has a limited capacity.

Harbour Square

- A committee member asked if bikes will be able to use the proposed laneway in front of Harbour Square. A member of the Project Team stated that legally a cyclist can use any paved roadway.
- Another committee member raised concern about cyclists racing through the area to get to the Martin Goodman Trail. The committee member indicated that any interaction between pedestrians and cyclists is a safety issue. A Project Team member replied that the team recognizes the need for a good signalling system for areas where the Martin Goodman Trail crosses the street and interfaces with pedestrian routes. The Project Team member noted that signalized lights for cyclists will likely be installed.
- One committee member asked if barricades will be constructed to stop cyclists from moving across the street. A member of the Project Team noted that the Martin Goodman Trail will be at the same level as the sidewalk in this area, and that along the remainder of Queens Quay, the Martin Goodman Trail will be removed more from the street.
- A committee member suggested measures should be looked at to reduce the conflict between turning cars and cyclists.
- Another committee member noted for the public meeting, cross-sections would help the public to understand the plans being presented.
- A committee member expressed his concern with cyclists, stating that cyclists ride very fast and can pose danger to pedestrians. A member of the Project Team indicated that the team is trying to create a beautiful and safe environment along the Queens Quay for all users.

Harbour Castle

- A committee member suggested that a crossing guard or a traffic attendant would be useful in front of the Harbour Castle during busy times, since this might ease conflicts.
- Another committee member suggested that the Project Team include the transit stops on site maps being presented at the public meeting.
- One committee member noted that every summer there is incredible congestion in front of the hotel because people crowd the area when trying to get to the island ferries.
- Another committee member stated that there is not enough space in front of the hotel for taxis and buses, and suggested that more spaces can be added to the area. A member of the Project Team replied that by law the area 30 metres from an intersection is a non-parking area, but it can be a pick-up or drop-off area.
- A committee member commented that some of the lay-by users that are servicing tourists actually sell tickets on site; hence these are not strictly drop and go. A Project Team member replied that there is sufficient curbside space available today, but a site management plan is needed.

Bathurst Street

- One committee member asked if the Project Team could speak about Bathurst Street to the west. A member of the Project Team stated that the study was extended further west to Bathurst, however additional funding will be required to implement major streetscape changes between Spadina and Bathurst.
- A committee member noted that currently there is a turn around for cars at the pier at Bathurst, which tightens up at the east side, but if the Project Team were to open it up it, this would allow coaches to get in, drop off and get out. A Project Team member indicated that the team will investigate the site some more, and the area that will change is from Yo-Yo Ma Lane to Spadina Avenue.
- Another committee member commented that many cars go straight across Queens Quay at Bathurst, and it is dangerous for cyclists.
- One committee member asked if the direction of traffic on Bathurst will be changing as a result of another project. A member of the Project Team replied that the team is not familiar with that proposal, but can look into it.

Traffic Feasibility Study

- A committee member asked for an explanation of the delay in deciding on one-way versus two-way operations along Queens Quay. A member of the Project Team explained that one-way traffic on Queens Quay going westbound would provide a very good level of service. The issue is that if eastbound traffic moves up to Lake Shore, traffic volumes there would be impacted. The team is still considering the pros and cons of one-way versus two-way.
- Another committee member asked what is meant by V/C. A Project Team member explained that it refers to volume ratio/capacity.
- One committee member suggested that it would be beneficial to explain these concepts and tables to the public in plain English, so they know what all these terms mean.
- A committee member asked if the Project Team feels that this study will have any lingering effects west of Bathurst Street on Queens Quay, since this area currently experiences bottlenecks. A Project Team member replied that the team has not looked at that since it is outside of the study area.
- Another committee member asked if the Project Team has a slide that shows the metrics based on the status quo. A member of the Project Team replied that an existing slide shows the existing baseline conditions.
- A committee member asked if the Project Team factored in the impact of island airport traffic. A Project Team member noted that the team factored in a modest growth factor of 5%, but can't be certain how much the traffic will increase if airport operations continue to grow beyond that.
- Another committee member questioned whether the reason the Project Team did not plan for a growth spike in terms of Porter operations at the airport was due to their use of studies with 2007 data; these studies were conducted prior to Porter opening, which is a concern.

- A committee member commented that Porter is trying to increase business, which in turn will increase traffic. The committee member also asked if the Project Team has considered marathons and other events that would occur in the area, which may shut down the street to vehicular traffic. A Project Team member stated that such events would fall under the City's jurisdiction, and an event-specific plan would be developed. The Project Team member noted that with the new design, the City will have the opportunity to use the public right-of-way rather than closing the whole street.
- One committee member asked what is meant by "typical busy urban conditions". A member of the Project Team explained that it referred to level of service D or better.
- One committee member was concerned that the traffic flow models did not include pedestrians. A member of the Project Team explained that the team is working on presentation materials that will include pedestrian and cyclist data for the public forum, and that pedestrians and cyclists have taken those into consideration when preparing the proposed plans. The Project Team member stated that counts were done for pedestrians and cyclists, and more details will be provided shortly.
- A committee member commented that the presentation seems to have no link with the EA plan. The committee member suggested that the Project Team show the larger context for the EA study.
- Another committee member suggested that it might be useful for people to know that the traffic levels being displayed are for peak times, and to indicate whether this is over an hour or a whole day. A member of the Project Team explained that the traffic models were based on the peak hour in the morning, and the afternoon peak hour. The committee member noted that it might be useful for the public to see that levels are significantly lower in the middle of the day.
- One committee member asked if the traffic study includes the Spadina bottleneck. A Project Team member explained that this is a problem spot the team is aware of, as it causes a delay in transit from Spadina onto Queens Quay.

Evaluation Criteria

- A committee member suggested that the Project Team may want to add the effect of future development based on a one-way or two-way street to the cost criteria.

East Bayfront Transit EA

- A committee member noted that although the presentation concludes that Solution #3 works best for the portal, it is important to let the public and stakeholders know that they can provide additional comments on the East Bayfront Transit EA process.
- One committee member noted that if the Project Team doesn't get it right on Queens Quay West, then this will cause people to give up on the west end and move east. The committee member suggested a balanced approach to planning.

Additional Comments

- One committee member commented that in the case of a two-way street with one lane in each direction, a tour bus parked in the eastbound or westbound lane will cause serious backups. A member of the Project Team noted that the decision has not yet been made with respect to making Queens Quay a one-way or a two-way street. Another Project Team member explained that an EA process is not required to decide whether to make an existing street one-way or two-way.
- Another committee member noted that not every coach that comes into Toronto is a tour bus. The committee member mentioned liability concerns with respect to dropping off tourists at the door to a hotel or venue. The committee member indicated that the coach industry specifically avoids dropping patrons off on the opposite side of the street, and from an industry perspective a two-way Queens Quay is preferred.
- A committee member questioned how the cycling lanes will work west of Spadina.
- A number of committee members commented that the maps displayed on the walls were missing details. The committee members suggested that the Project Team provide close up maps, as well as detailed plans of intersections and cross-sections.
- One committee member commented that not all cyclists travel at the same speed, and the only place a bike can pass another bike is at an intersection.
- Another committee member brought up the concept of ecotourism, noting that tourists come to do cycling tours of Toronto, which is another aspect of the tourism market to consider.
- A committee member noted that not everyone understands the EA process and the steps forward. A member of the Project Team explained that March 25th will be the final public forum, but the Project Team is still expected to respond to all public comments and resolve concerns before the project gets filed with the Ministry of the Environment (MOE). The Environmental Study Report (ESR) will need to be approved by City Council before it goes to the MOE at the end of August. There will be a 30-day period for comments once it gets filed. The MOE will then review the EA. The Project Team will continue to work with landowners throughout the process. Detailed design will not be done until the EA is approved. The Project Team will prepare the final designs with input from stakeholders and the technical advisory committee. There is still a lot to do before construction can begin.
- Another member of the Project Team noted that it is best to provide comments in writing. The final ESR goes to Council in June / July, after which point it will be hard to get comments considered before filing with MOE.

Mr. Dilks thanked the committee members for their feedback.

4. Review and Approval of November 27th 2008 SAC Meeting Summary

Mr. Dilks noted there was one change to the previous SAC Meeting Summary, based on a written correction by a committee member. Mr. Dilks suggested that should SAC members have any other comments on the minutes, they should send their comments to Andrea Kelemen at Waterfront Toronto.

5. Next Steps and Wrap-Up

Mr. Dilks indicated that the public forum will be held on Wednesday March 25th at the Westin Harbour Castle, and the open house on Saturday March 28th at Harbourfront Centre. Mr. Glaisek indicated that Waterfront Toronto can make the maps and diagrams available to SAC members before the public forum on request.

Mr. Dilks thanked committee members for their feedback and patience, and adjourned the meeting at 8:30 pm.

Appendix A: Attendance List

Name	Organization
Committee Members	
Malcolm King	55 Harbour Square
Julie Beddoes	West Don Lands Committee
Sylvia Pellman	St. Lawrence Neighbourhood Association
Tom Davidson	Councillor Pam McConnell's Office
David Fisher	Transit Advocate
Braz Menezes	York Quay Neighbourhood Association (YQNA)
Jennifer Chan	Councillor Adam Vaughan's Office
Michael Gerecht	Toronto Passenger Vessel Association (TPVA)
Jill Hicks	Toronto Passenger Vessel Association (TPVA)
Ian Goodwin	Bathurst Quay Neighbourhood Association
Corrie Galloway	Bathurst Quay Neighbourhood Association
Clay McFayden	Cycling Advocate
Kelly Gorman	York Quay Neighbourhood Association (YQNA)
Ulla Colgrass	York Quay Neighbourhood Association (YQNA)
Bob Rasmussen	York Quay Neighbourhood Association (YQNA)
Ann Corbitt	Premier Conference and Events
Bob Traver	Gooderham Worts Neighbourhood Association
Robert Sherrin	St. Lawrence Neighbourhood Association
Stefan Seles	Mariposa Cruise Lines
Carl Carter	QQHBIA
Robert Zeidler	Brookfield Properties
Jeff Orlans	Brookfield Properties
Steve Munro	Transit Advocate
David White	Waterfront Action
Waterfront Toronto	
Pina Mallozzi	Waterfront Toronto
Chris Glaisek	Waterfront Toronto
Michelle Noble	Waterfront Toronto
Amanda Flude	Waterfront Toronto
Samantha Gileno	Waterfront Toronto
City of Toronto and TTC Staff	
John Kelly	City of Toronto, Transportation

Eddy Lam	City of Toronto, Planning
Bill Dawson	Toronto Transit Commission
John Piper	Mayor's Office
Consultants	
David Pratt	ARUP
John Hillier	DTAH
Brent Raymond	DTAH
Adam Nicklin	DTAH
Facilitators	
David Dilks	Lura Consulting
Patricia Halajski	Lura Consulting

TORONTO CENTRAL WATERFRONT STAKEHOLDER ADVISORY COMMITTEE

Queens Quay Revitalization EA | East Bayfront Transit EA
Bathurst Street to Parliament Street

March 11, 2009



System Plans

- Diagrams to illustrate the level of detail embedded within the preferred alternative
 - Bus Management
 - Servicing
 - Parking
 - Transit
 - Access
 - To Follow:
 - Pedestrian Movement
 - Bicycles



BUS PLAN

DRAFT

Existing Conditions
1 Dedicated
Drop-Off/Pick-Up Zone

Potential Improvements
29 Dedicated
Drop-Off/Pick-Up Zones

- Bus Drop-Off/Pickup & Hop-On/Hop-Off
- Bus Parking
- School Bus Drop-Off/Pickup
- 29 Bus Drop-Off/Pickup Lay-Bys
- 22 Bus Parking



Existing Bus Inventory: Summer Peak
11 May 2009

Route	Frequency	Peak	Off-Peak	Notes
Amperia Direct	2-4 buses, 1-2 days/week			Min 10-15 min lay-by period
Marine Bus (Seasonal)	2-4 buses, 1-2 days/week			May increase to 10 buses, when Toronto program - 1 bus
Harbour	7-12 bus			Current 4 buses loading
Bus and Boat Company	every 30 minutes, stopping at Robertson Crescent and York Quay			2 buses in fleet, loading route
Plan 1 Harbour	15 buses per peak			
Harbour	1	2	3	Average based on greatest volume of traffic per weekday
WPC School Buses	10	20		From Harbourfront Transit
Queens Quay Terminal	50 per day in peak summer			June 1st, July 1st, August 1st
Great Lakes Schooner	60/month during peak, 3-15 buses at any one time, 10% day, 40% evening			Best weekly operating schedule
Harbour Square	On Not Load on Q2			4 bus fleet, east of Q2
Western Harbour Castle	Outstanding, Call into General Manager's Office			Currently load on Q2 between driveway and ferry service lane
Island School	On Not Load on Q2			Use Ferry Lane east of Western Harbour Castle
Island Ferry Camps	8	8		
Corvus George Brown College	season 0			
Grey Line/Shop and Q2	1 each 30 minutes peak summer			Stop at Piers/Robertson and York Quay
Toronto Tours	On/Off 100 loading on Queens Quay			
Random Bus Tours - No Specific Destination	10 day in peak summer			To be confirmed with DMCA
Trade Show Shuttle Buses	10-20/day, No stopping on Queens Quay, Pick up at WPC/Cherry Parking Lot			For example, Auto Show, Canada Museum

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SERVICING PLAN

DRAFT

Existing Conditions
No Loading Zones
on Queens Quay between
Spadina and Jarvis

Potential Improvements
In all shortlisted options:
On-Street Loading Zones at
208, 250/260 Q2
Robertson Crescent

- Servicing/Loading Point
- Loading Zone/Service Route
- Dockside Access



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PARKING PLAN

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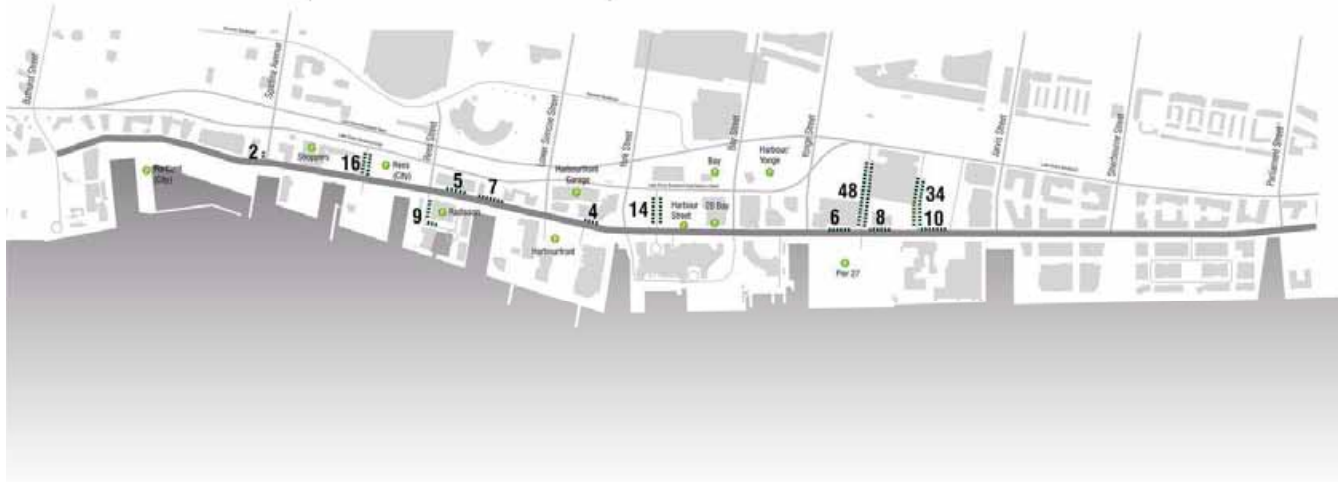
Existing Conditions
No designated vehicle parking on Queens Quay

Paid permit parking on Robertson Crescent

Potential Improvements
Queens Quay West:
New Designated Parking - Curbside (approx. 58)

Queens Quay East:
New Designated Parking - Curbside (approx. 100)

Public Parking: Lots or Garages
 Curbside Paid Parking (approx. 158)



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TRANSIT PLAN

DRAFT

Existing Conditions
Queens Quay West:
510 Union Station/Spadina Station
509 Union Station/Exhibition

Queens Quay East:
No Complete Routes, Buses Only

Platforms (Typical):
1.5m width
30m length
45 square metres

Do not meet current accessibility standards

Potential Improvements
Queens Quay West:
510 Union Station/Spadina Station
509 Union Station/Exhibition

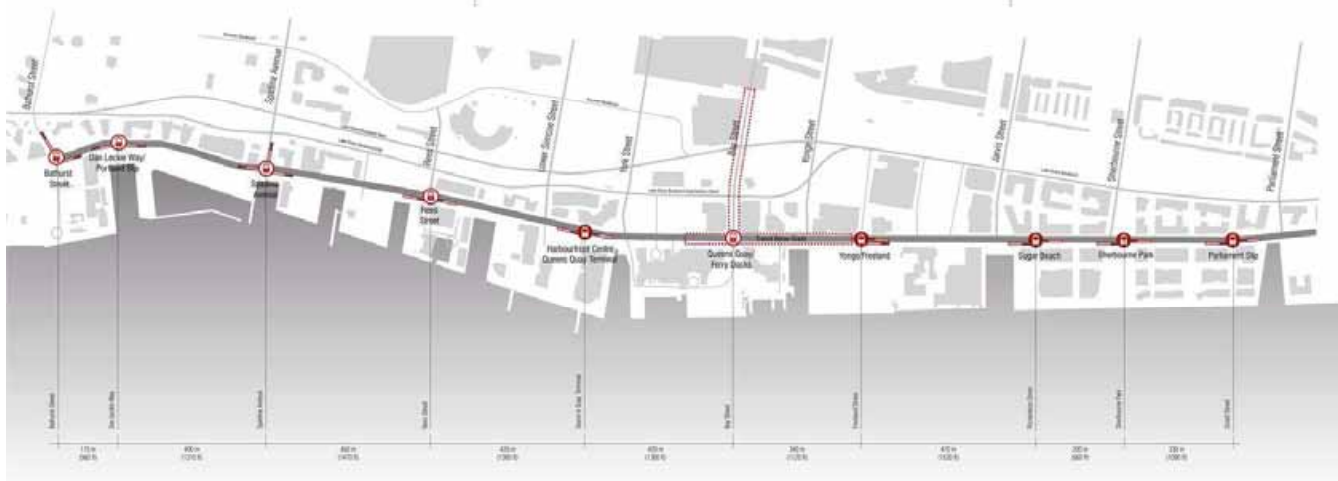
Queens Quay East:
New Light Rail Route
Union Station/Parliament Loop

Platforms (Typical):
2.4m to 3.0m width
60m length
144 to 180 square metres

Satisfies current accessibility standards

Platform Spacing
Average: 360m
Median: 400m
Minimum: 170 m
Maximum: 470 m

TTC Stop: Existing (5)
 TTC Stop: Proposed New (5)
 Transit Platform w/ Shelter



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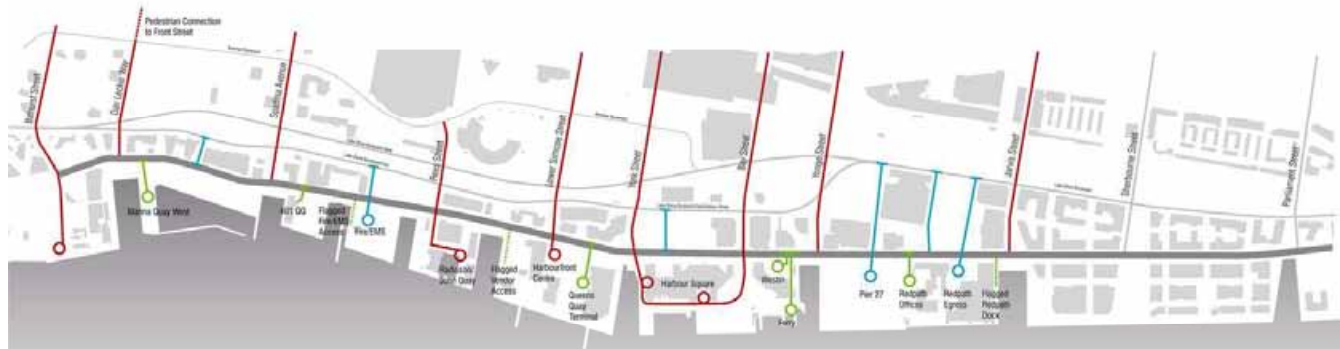


ACCESS PLAN - OVERALL

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Existing Conditions
Direct Downtown Access (7)
Direct Lake Shore Access (4)
Queens Quay Access Only (8)

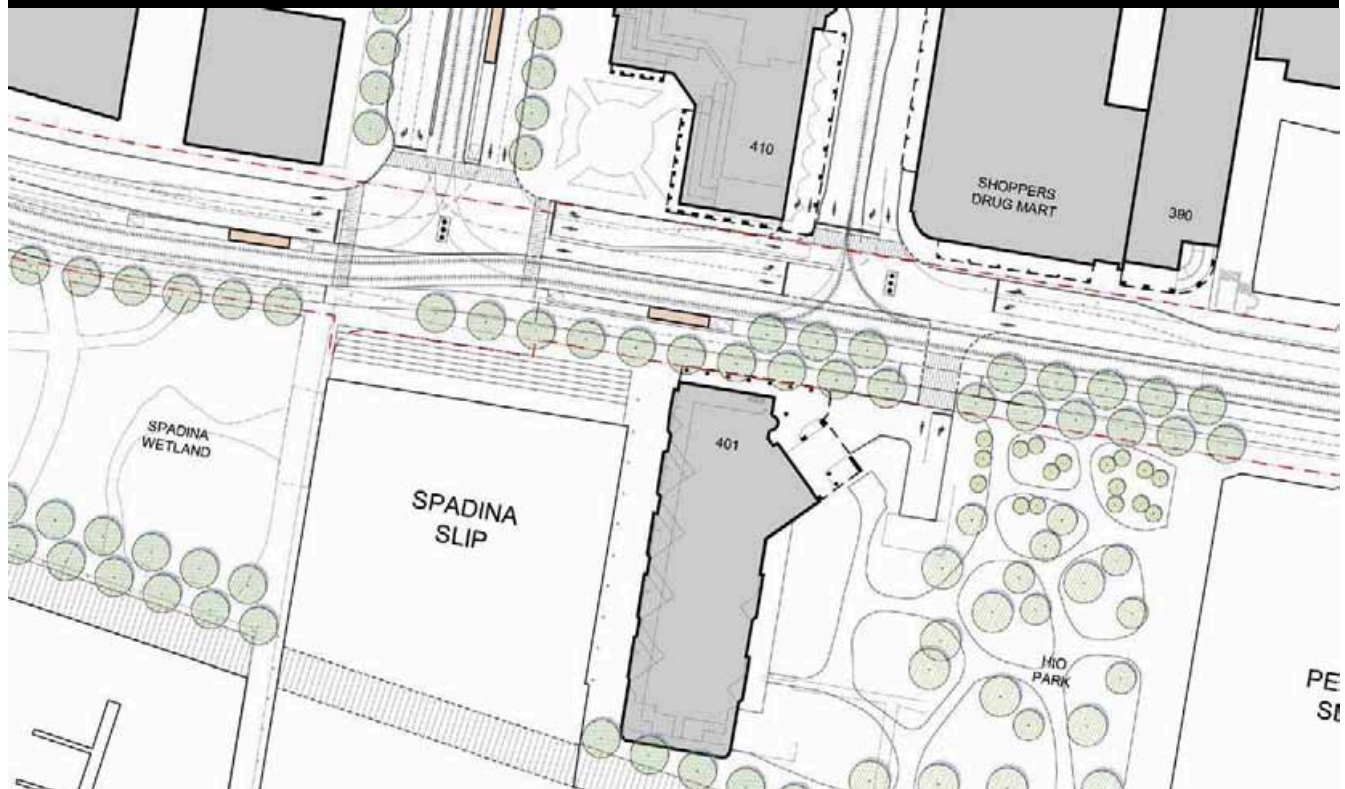
Potential Improvements
Direct Downtown Access (9)
Direct Lake Shore Access (6)
Queens Quay Access Only (6)
Flagged Access from Queens Quay (3)



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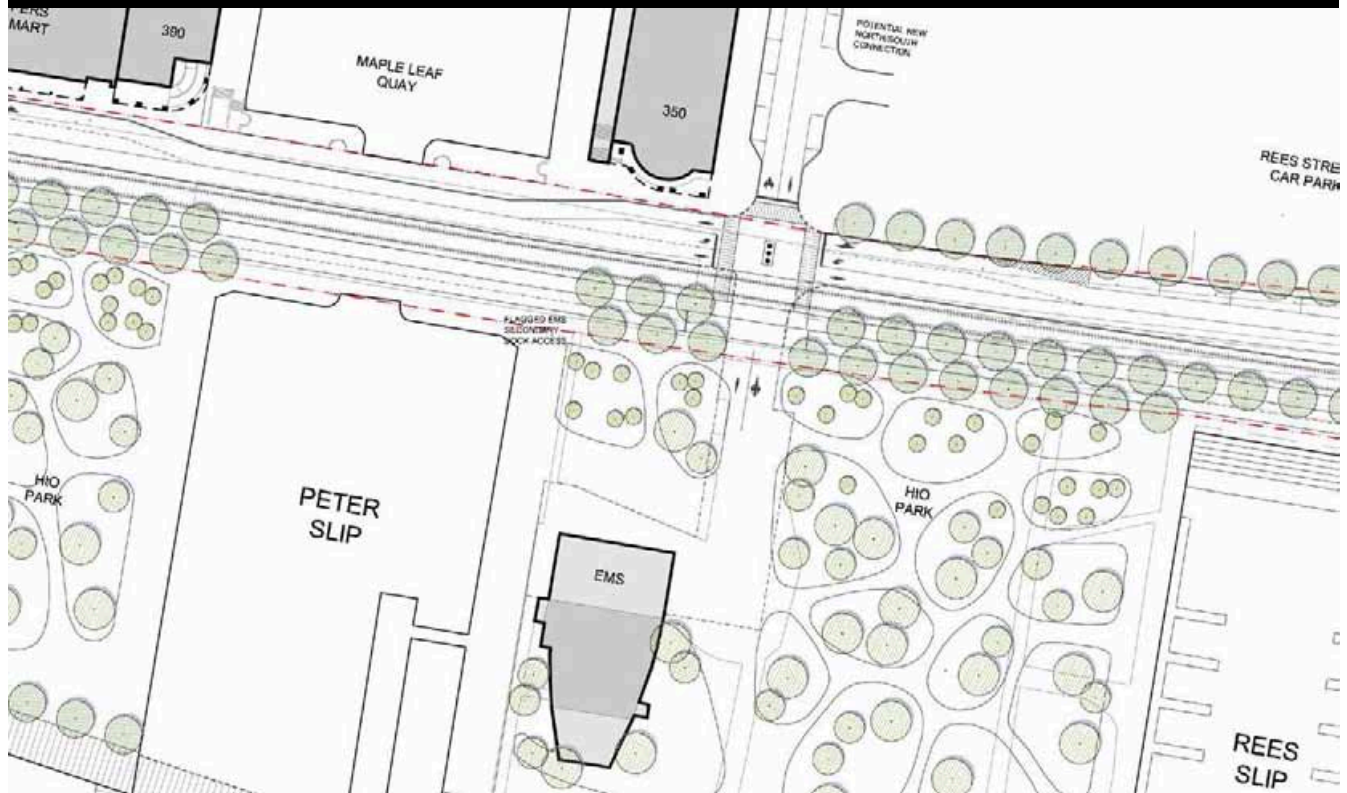
Access Plan – 401 Queens Quay



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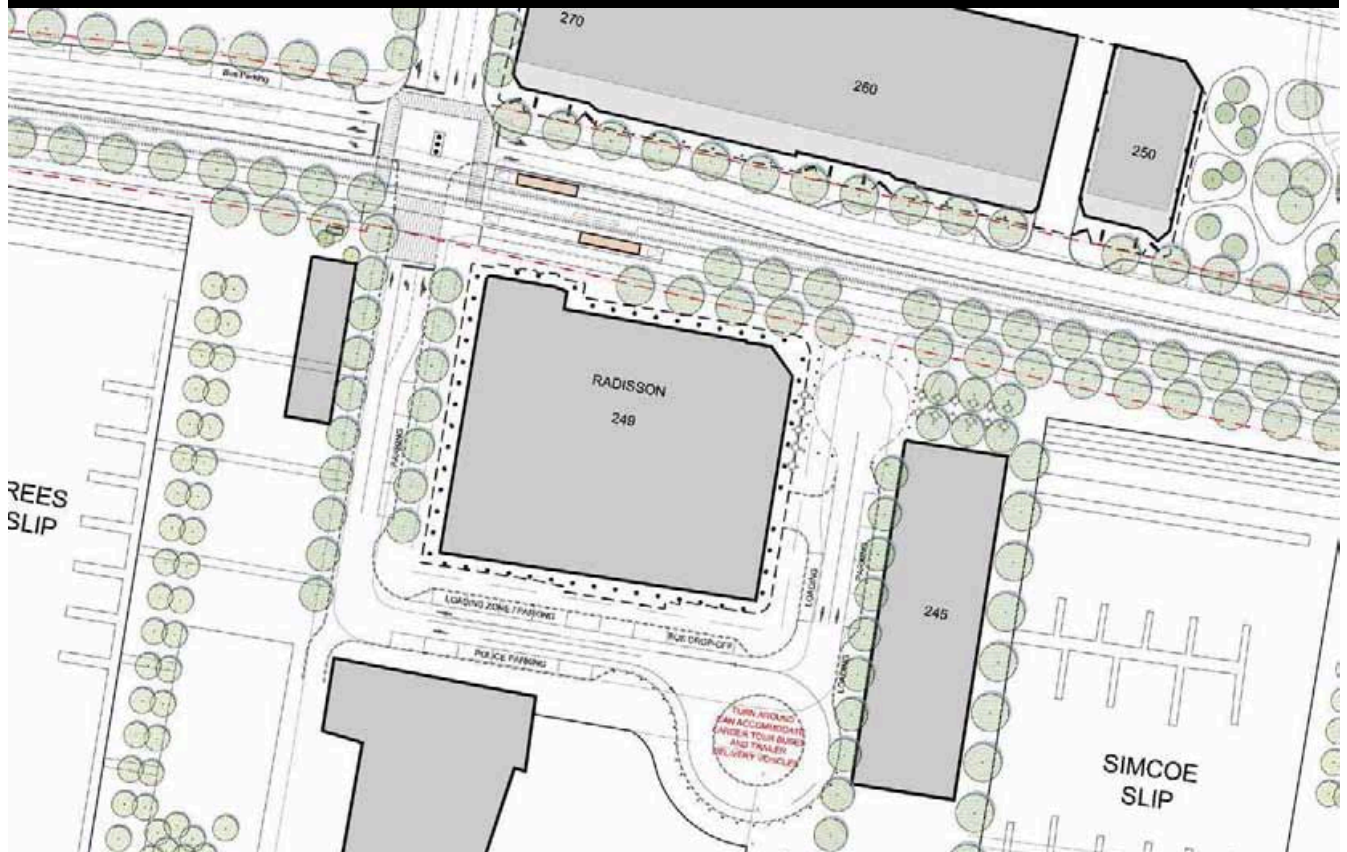
Access Plan – Fire/EMS



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Access Plan – John Quay





Access Plan – Harbourfront Centre

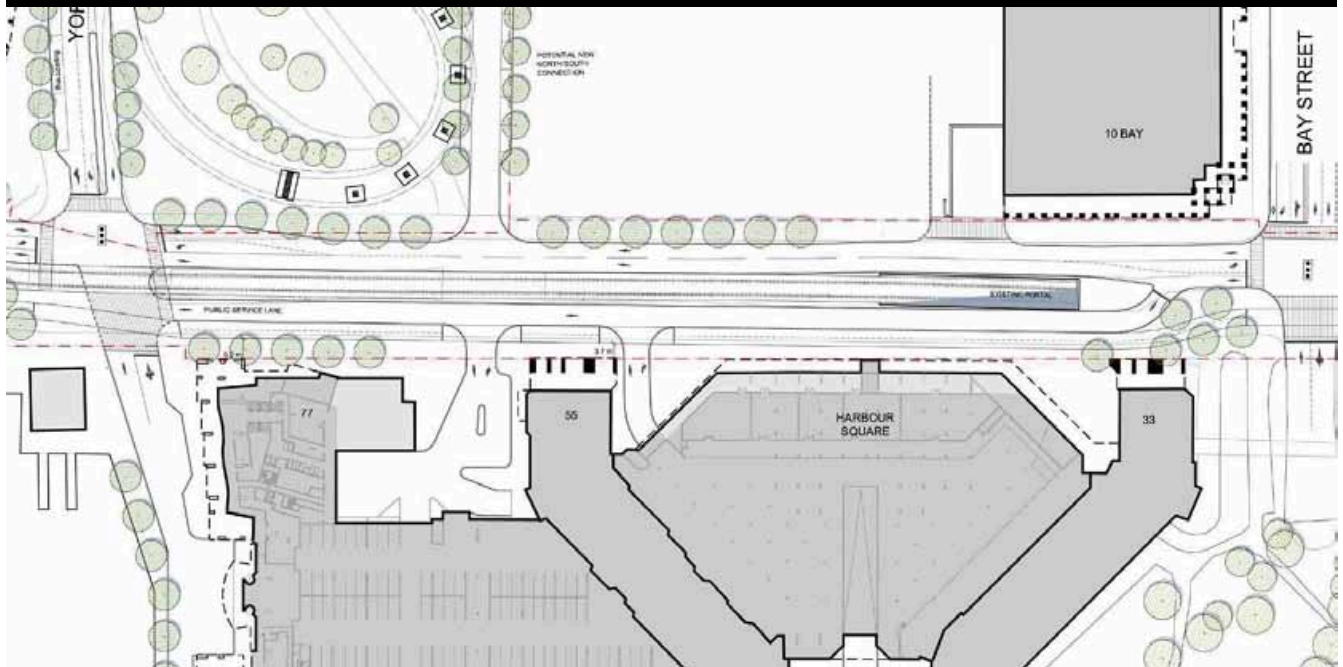


Access Plan – Queens Quay Terminal





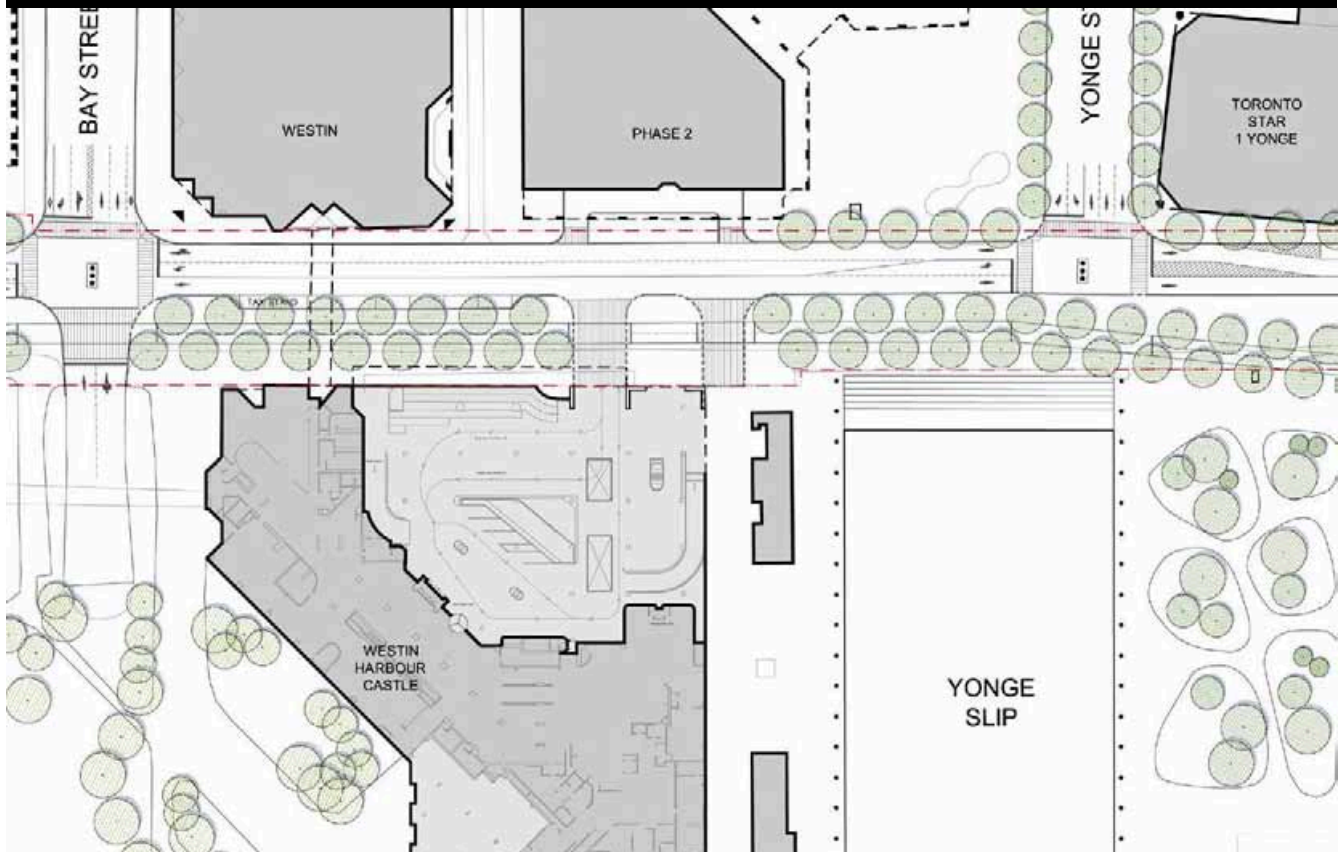
Access Plan – Harbour Square



25



Access Plan – Westin Harbour Castle





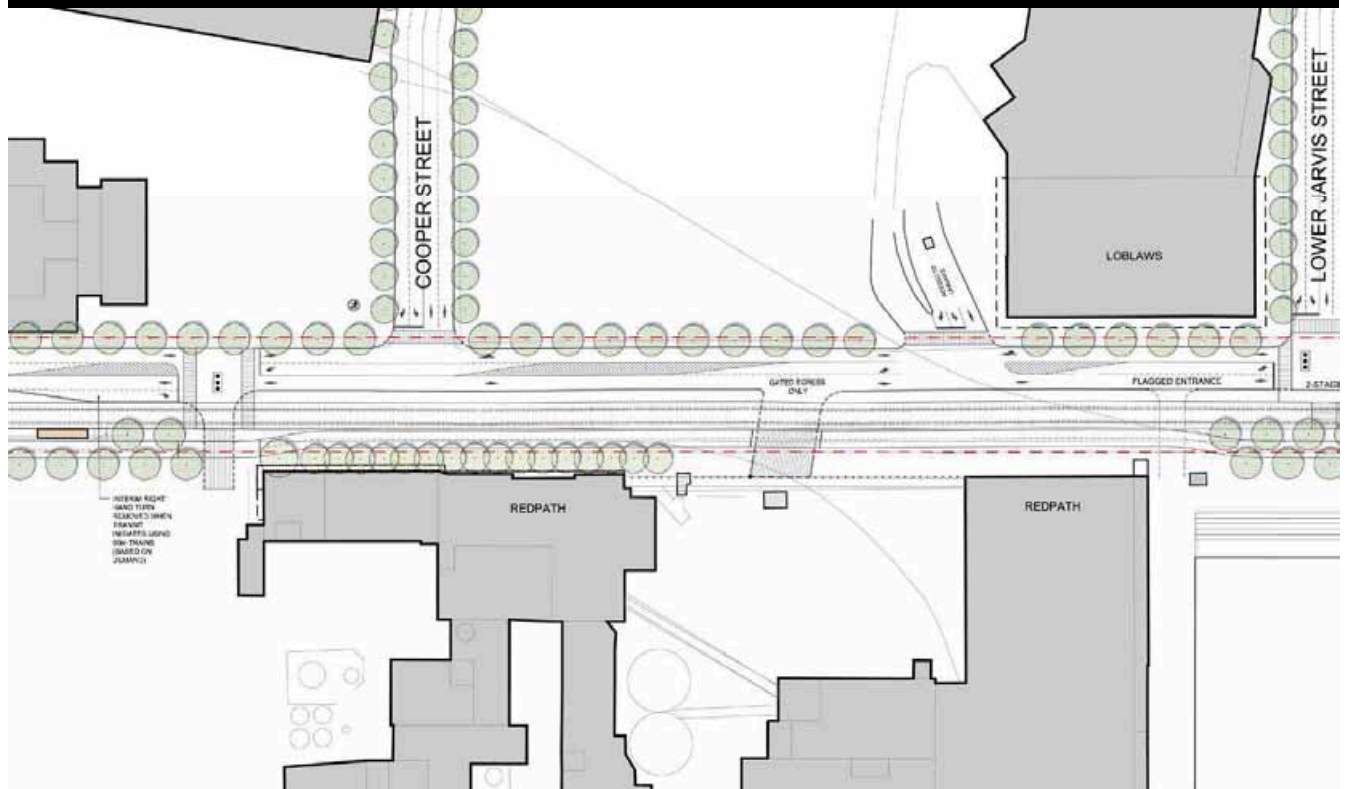
Access Plan – Pier 27



7



Access Plan – Redpath Sugar



Transportation Planning

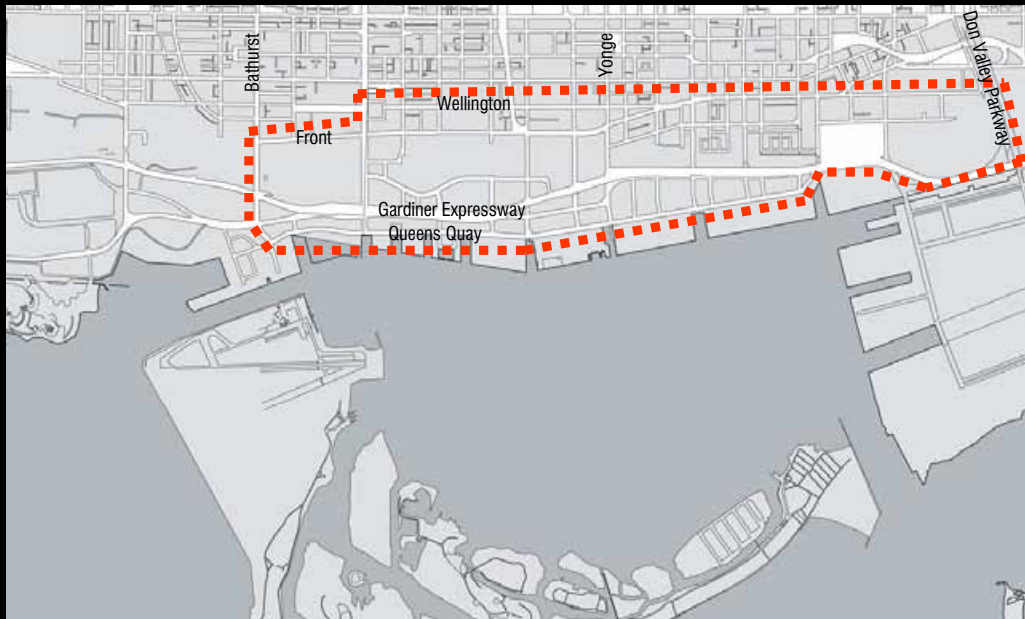
Stages

- Traffic Feasibility Study
- EA Phase 1 – Traffic Data Collection
- EA Phase 2 – Planning Solutions
- EA Phase 3 – Design Concepts

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Traffic Feasibility Study (TFS)

- PURPOSE: Determine if the network capacity to accommodate existing and future traffic with Queens Quay reconfigured (i.e. 2-way traffic located on north side of TTC R.O.W).
- STUDY AREA



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Traffic Feasibility Study (TFS)

- TRAFFIC SIMULATIONS + ANALYSIS
 - Base volumes based on City EMME/2 model, historical counts and 2001 and 2006 population and employment data ;
 - Synchro: Intersection and corridor traffic analysis software used to optimize traffic signal operations;
 - Paramics: Network analysis software used to determine impacts
- RESULTS
 - 2-lane roadway (1 lane in each direction) could accommodate existing and future demand on Queens Quay
- RECOMMENDATION
 - Move forward with Class Environmental Assessment

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Traffic Feasibility Study



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EA Phase 1 – Traffic Data Collection

- 18 days of Automatic Traffic Recorder (ATR) counts
 - August 10th to 27th
- One Saturday, one Sunday Turning Movement Counts (TMC)
 - All signalized intersections
 - All driveways (Saturday only)

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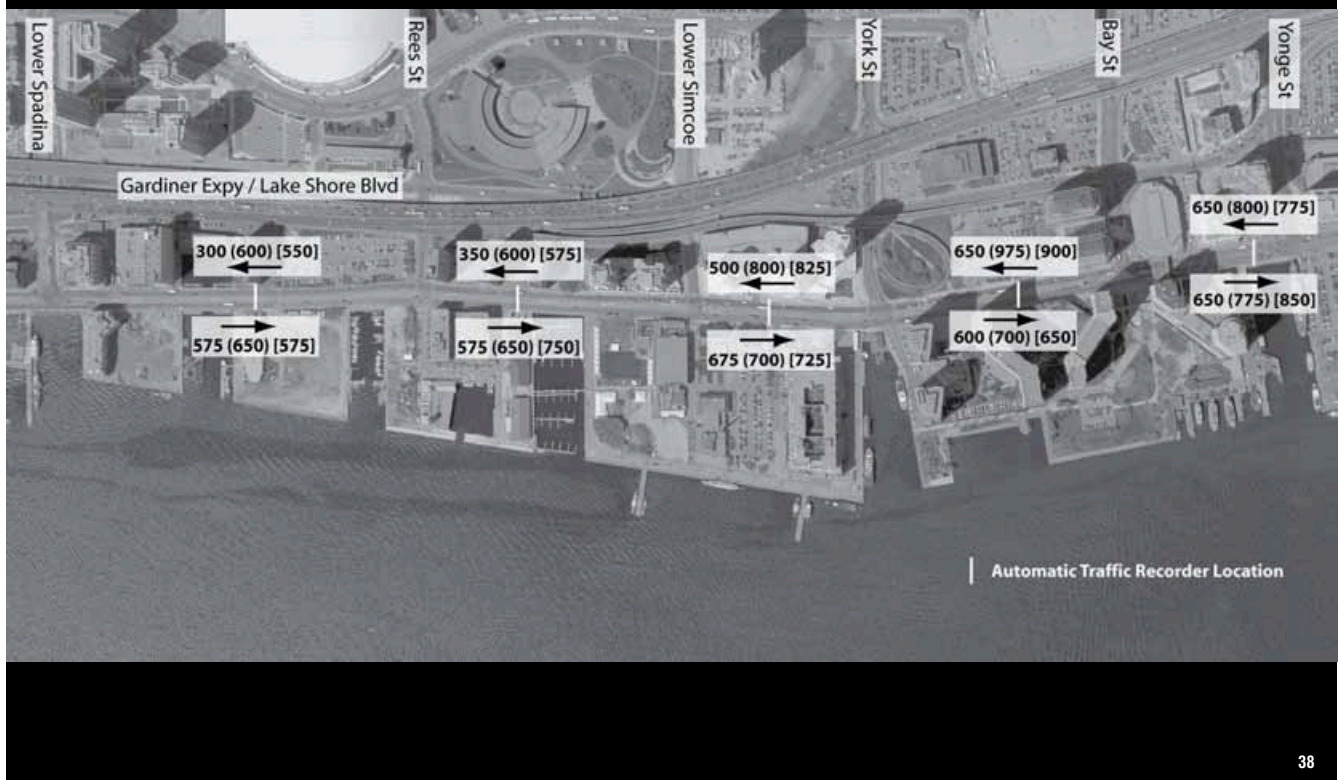
EA Phase 1 – Traffic Data Collection (cont.)

- Large Summer Event
 - Hot & Spicy Food Festival – Saturday August 11th
- Medium Summer Event
 - Ilha Formosa Festival – Sunday August 26th (during CNE)
- Typical Conditions
 - Autumn Weekday

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Traffic Data Collection: 2007

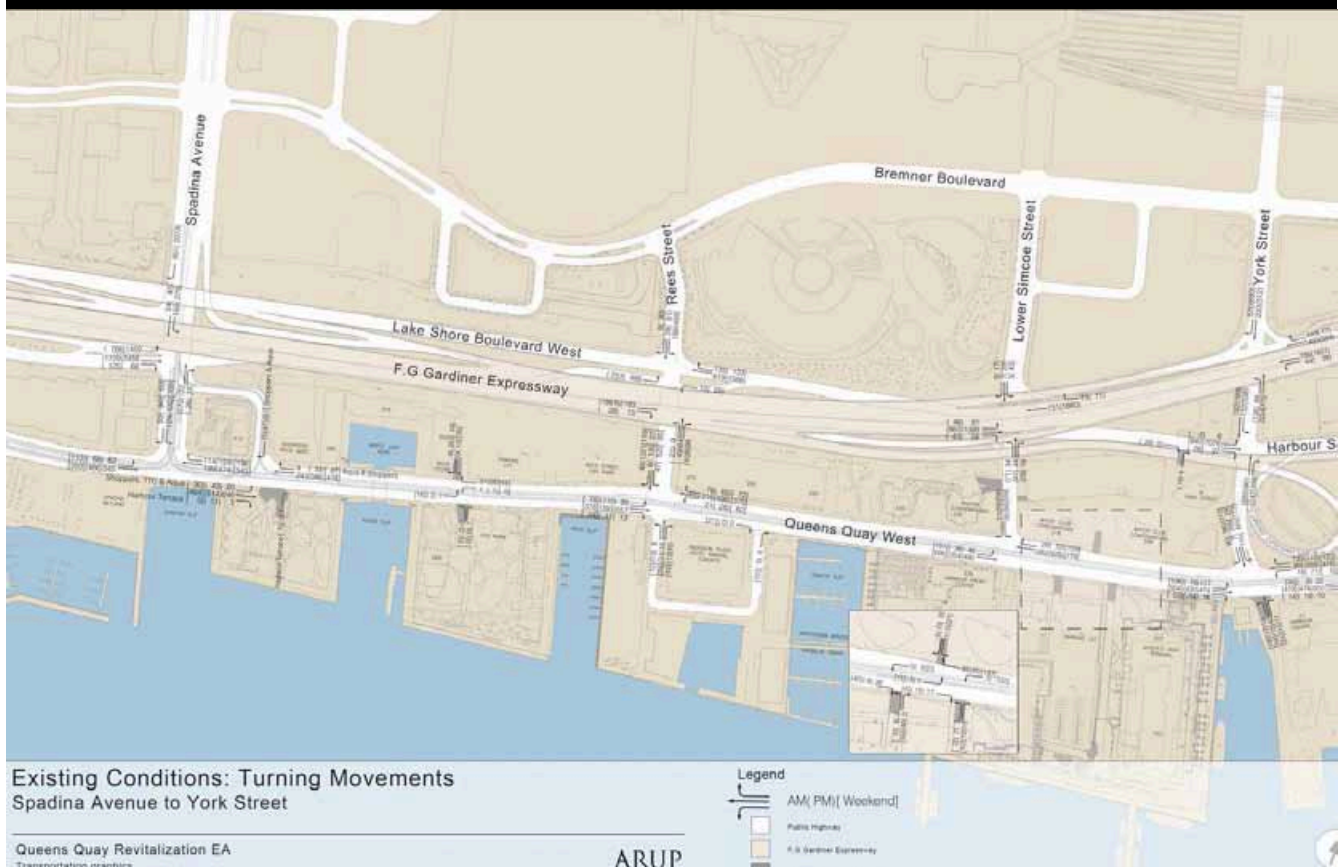
AM Peak (PM Peak) [Weekend Peak]



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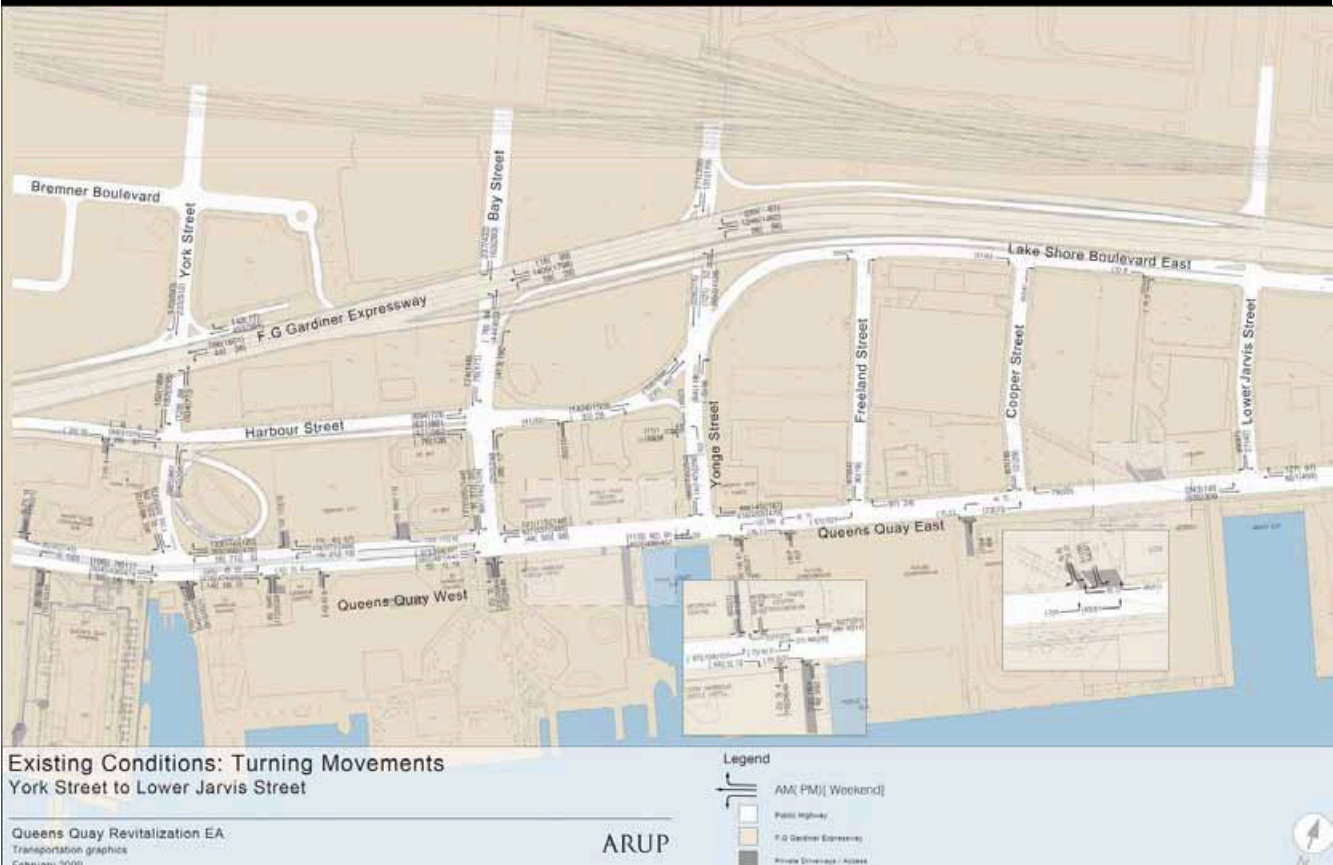
EA Phase 1 –Traffic Data Collection: 2007

AM Peak (PM Peak) [Weekend Peak]



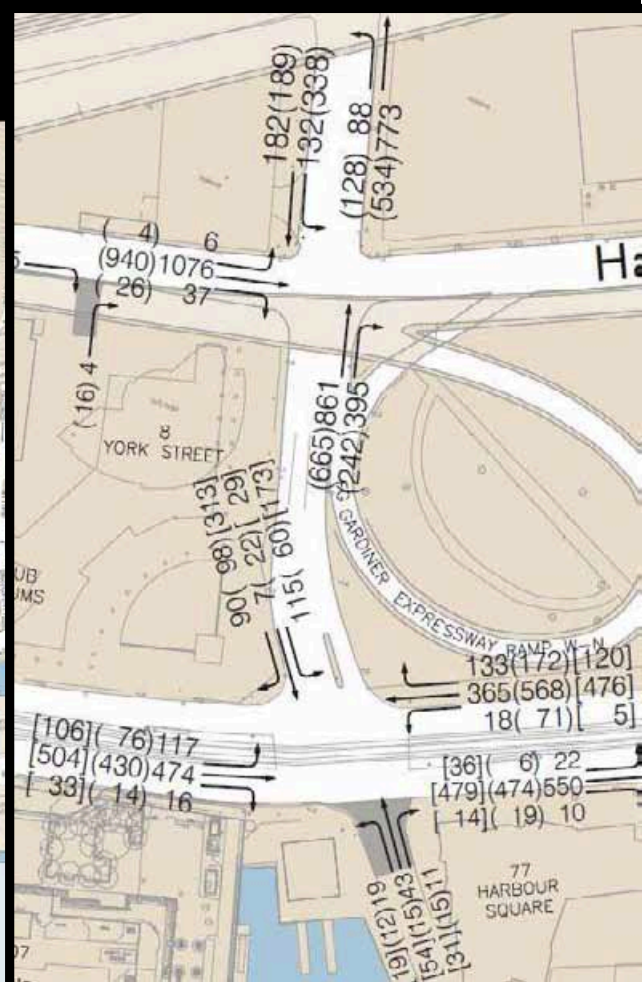
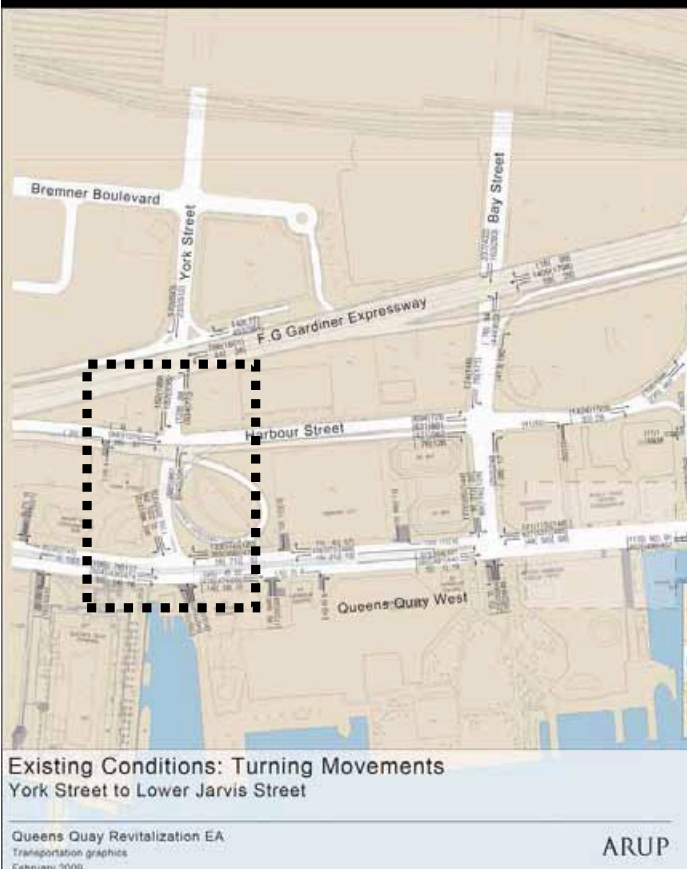
EA Phase 1 – Traffic Data Collection: 2007

AM Peak (PM Peak) [Weekend Peak]



EA Phase 1 – Traffic Data Collection:

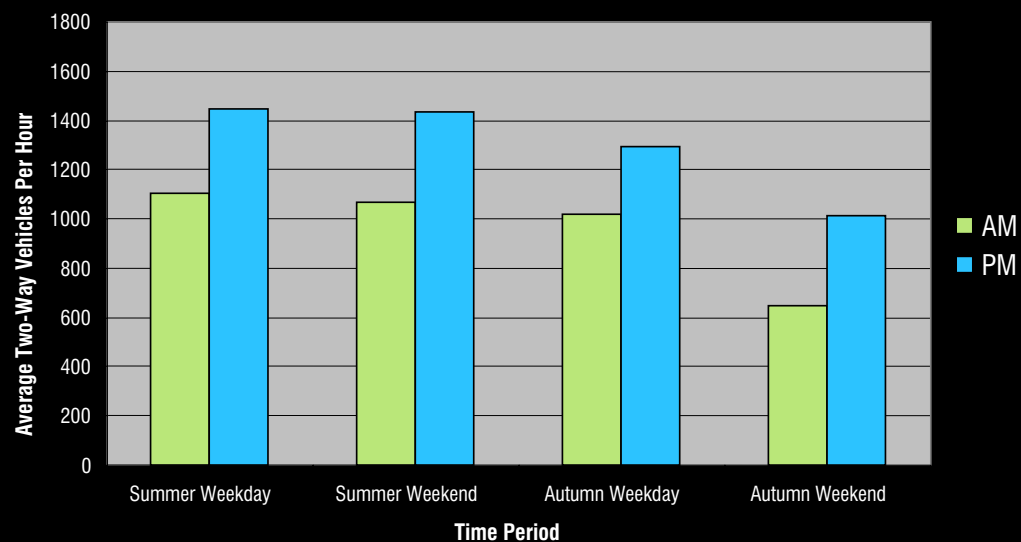
AM Peak (PM Peak) [Weekend Peak]



EA Phase 1 – Traffic Data Collection: 2007

Automatic Traffic Recorder Count Comparison

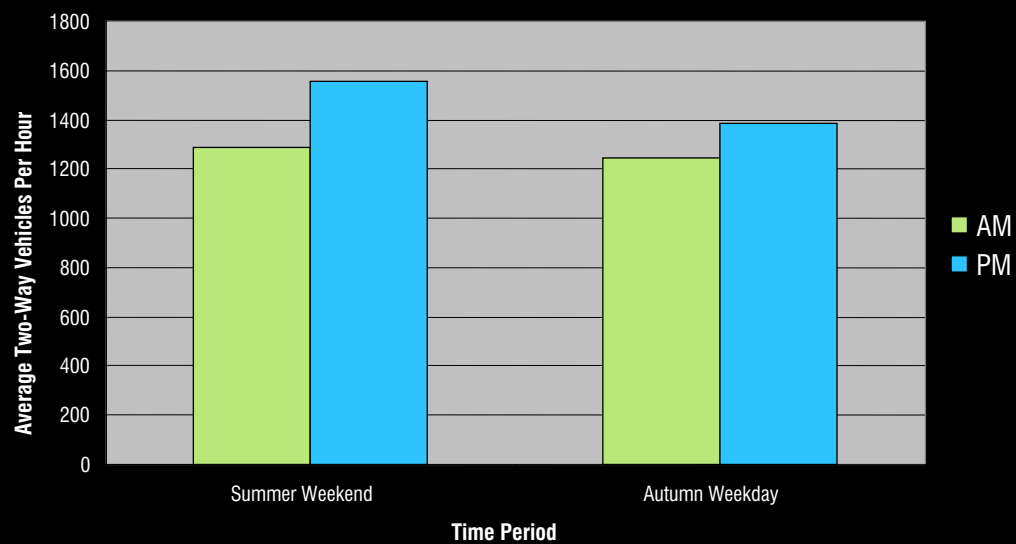
Queens Quay Overall Average ATR
2007 Weekday vs. Weekend Peaks



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Turning Movement Count Comparison

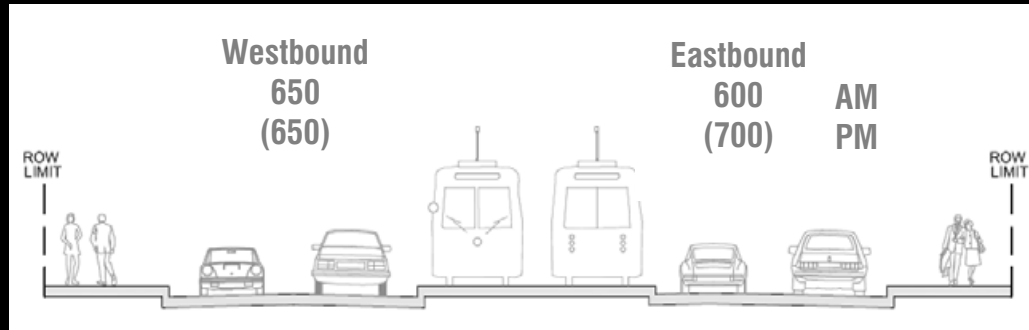
Queens Quay Overall Average TMC
2007 Summer Weekend vs. Autumn Weekday Peaks



43

EA Phase 2 – Planning Solutions Traffic Analysis 4 vs. 2 lanes on Queens Quay

- Existing Traffic Capacity – West of Bay
= 1400 vehicles per hour per direction



- Busiest section volumes
- Approximately 15% percent cut-through traffic

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EA Phase 2 – Planning Solutions Traffic Analysis 4 vs. 2 lanes on Queens Quay

Spadina EB (1) To Yonge EB (3)			
Daily Summary	Cars Matched	% Match	Total Cars
AM	160	21.00%	762
PM	175	19.64%	891
<u>Total:</u>	<u>335</u>	<u>20.27%</u>	<u>1653</u>

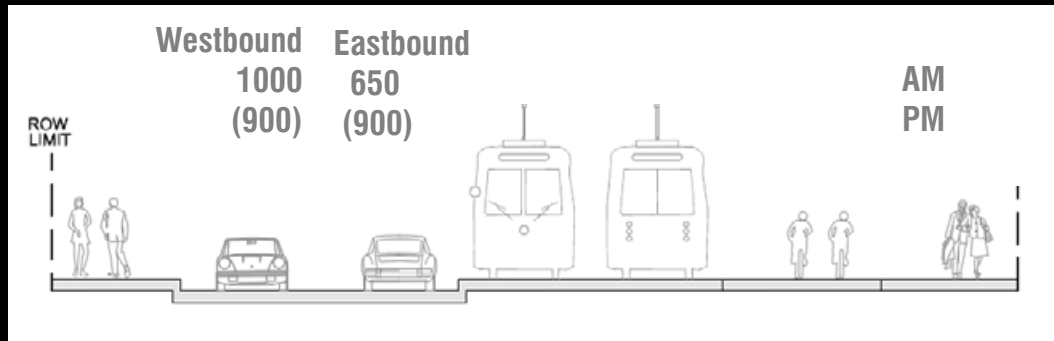
Yonge WB (4) to Spadina WB (2)			
Daily Summary	Cars Matched	% Match	Total Cars
AM	45	8.32%	541
PM	99	10.52%	941
<u>Total:</u>	<u>144</u>	<u>9.72%</u>	<u>1482</u>

10 to 20 percent “cut-through” traffic

56

EA Phase 2 – Planning Solutions Traffic Analysis 4 vs. 2 lanes on Queens Quay

- Future Traffic – West of Bay
Capacity = 1000 vehicles per hour per direction



- Busiest section volumes with new development
- Reduced cut-through traffic (15 percent)
- More east-west green time for traffic
- Better transit; bike lanes; pedestrian environment

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EA Phase 2 – Planning Solutions Traffic Analysis 4 vs. 2 lanes on Queens Quay

- Supports Recommended Planning Solution



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EA Phase 3 – Design Concepts

Alternatives

- Centre Transit
- South Side Transit with 2-way Traffic
- South Side Transit with 1-way Traffic

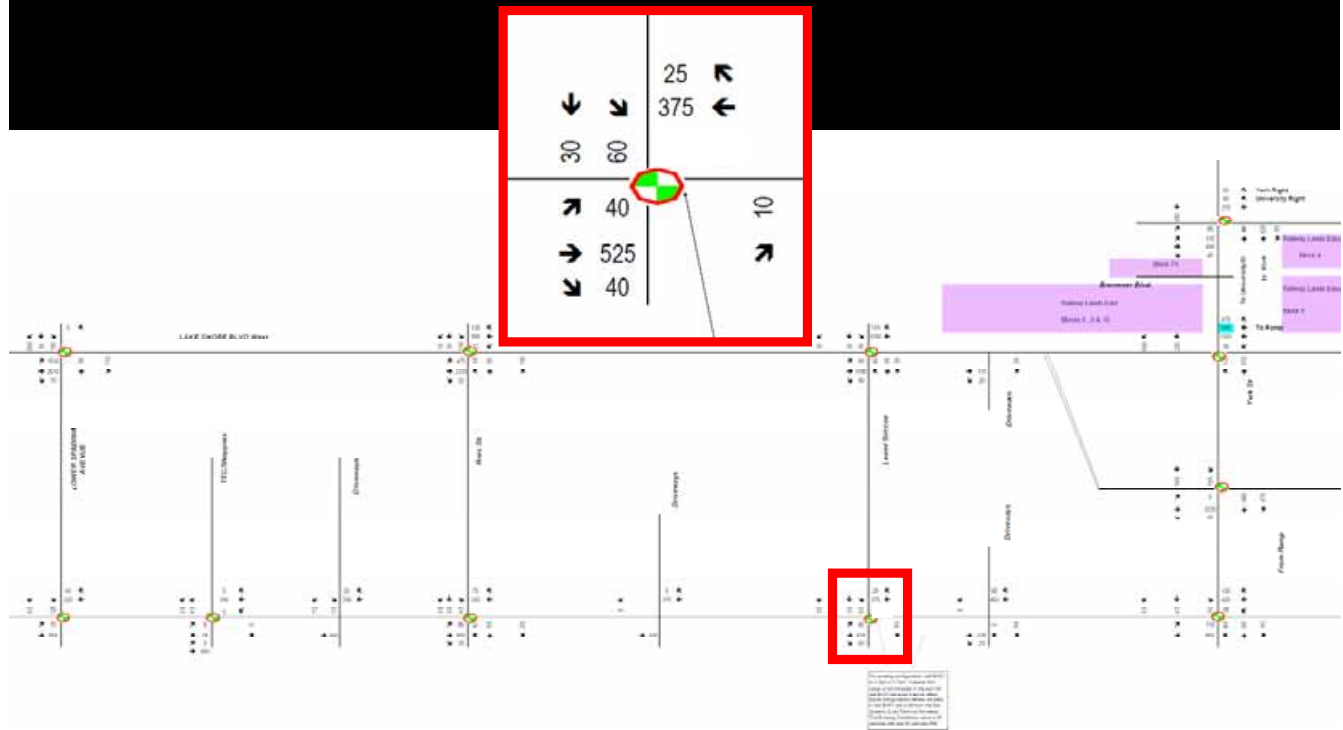
EA Phase 3 – Design Concepts Traffic / Transit Analysis Future Operations

Future Volumes Analysis

- Based on 2007 counts plus future traffic:
 - East Bayfront
 - West Don Lands
 - Lower Don Lands
 - Railway Lands East (Pinnacle, Waterpark)
- Rerouting traffic based on capacity constraints and Trace Survey results

EA Phase 3 – Design Concepts Traffic / Transit Analysis Future Volumes

- South Side 2-way, AM Turning Movements



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EA Phase 3 – Design Concepts Traffic / Transit Analysis Measures of Effectiveness for Autos

- Capacity
 - Flow rate = 1 car every 2 seconds or 1800 cars/hour
 - Green ratio = green time / cycle length
 - Capacity = flow rate * green ratio
- Delay
 - Control delay: caused by signals and coordination
 - Queue delay: caused by spillback and starvation
 - Total delay: control delay + queue delay
 - Averages are calculated for approach and intersection

Level of Service

- Letter grade based on delay

Letter Grade Delay Range (s)

A	0 - 10
B	>10 - 25
C	>25 - 35
D	>35 - 55
E	>55 - 80
F	>80

Acceptable Limit ■■■▶
Mitigate if Possible ■■■▶

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EA Phase 3 – Design Concepts Traffic / Transit Analysis Measures of Effectiveness for Transit

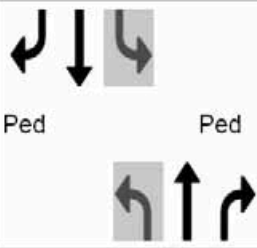
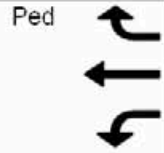
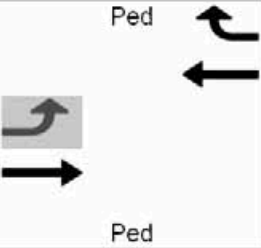
- Travel Speed
 - Average travel speed including signal and stop delay from Bay Street to Spadina Avenue.
- Headway Adherence
 - Deviations from average headway
 - Level of Service (LOS)

LOS	Comments
A	Service provided like clockwork
B	Vehicles slightly off headway
C	Vehicles often off headway
D	Irregular headways, with some bunching
E	Frequent bunching
F	Most vehicles bunched

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EA Phase 3 – Design Concepts Traffic / Transit Analysis Intersection Control

- Simcoe Street, South Side 2-Way

Clearance		1. North-South Main	2. Westbound Advance	3. East-West Main
				
N/S FDW 19m / 1.2m/s = 16s		Recall	Actuated	Recall
E/W FDW 19m / 1.2m/s = 16s	Min 120	Green: 23 Amber: 4 All Red: 3 Split: 30	Green: 7 Amber: 4 All Red: 3 Split: 14	Green: 70 Amber: 4 All Red: 2 Split: 76
Above + 7s min walk.				

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Alternative Design Concepts Transportation Planning

- Traffic Modelling – Centre Transit Alternative

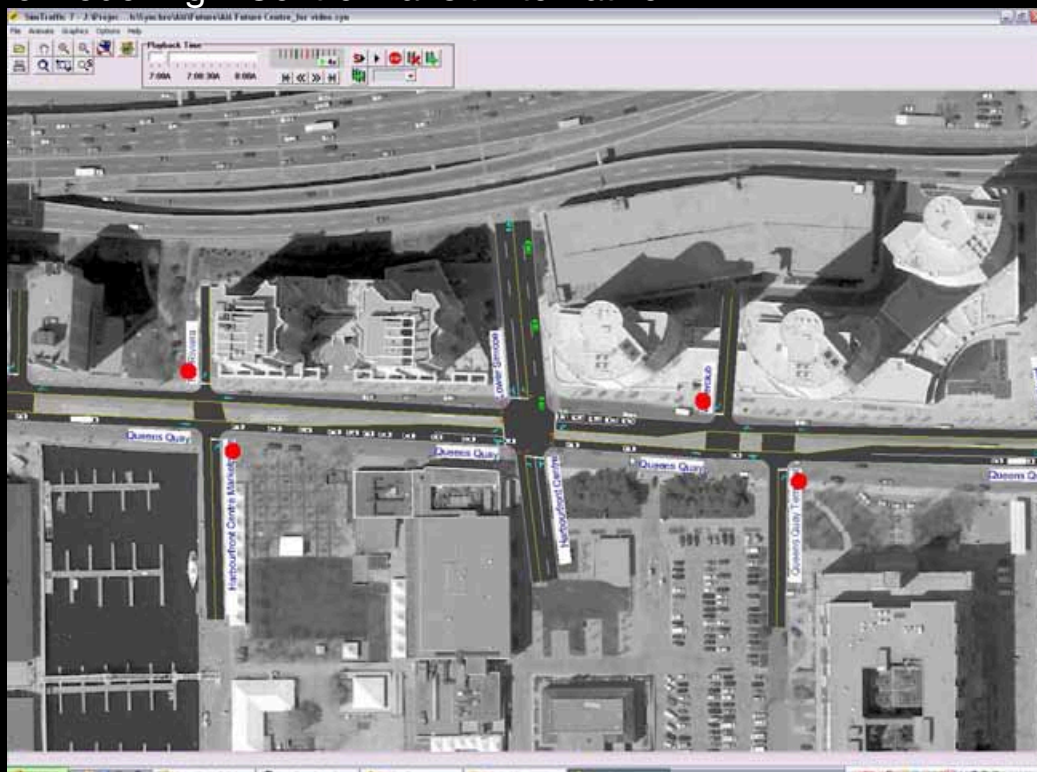


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Alternative Design Concepts

Transportation Planning

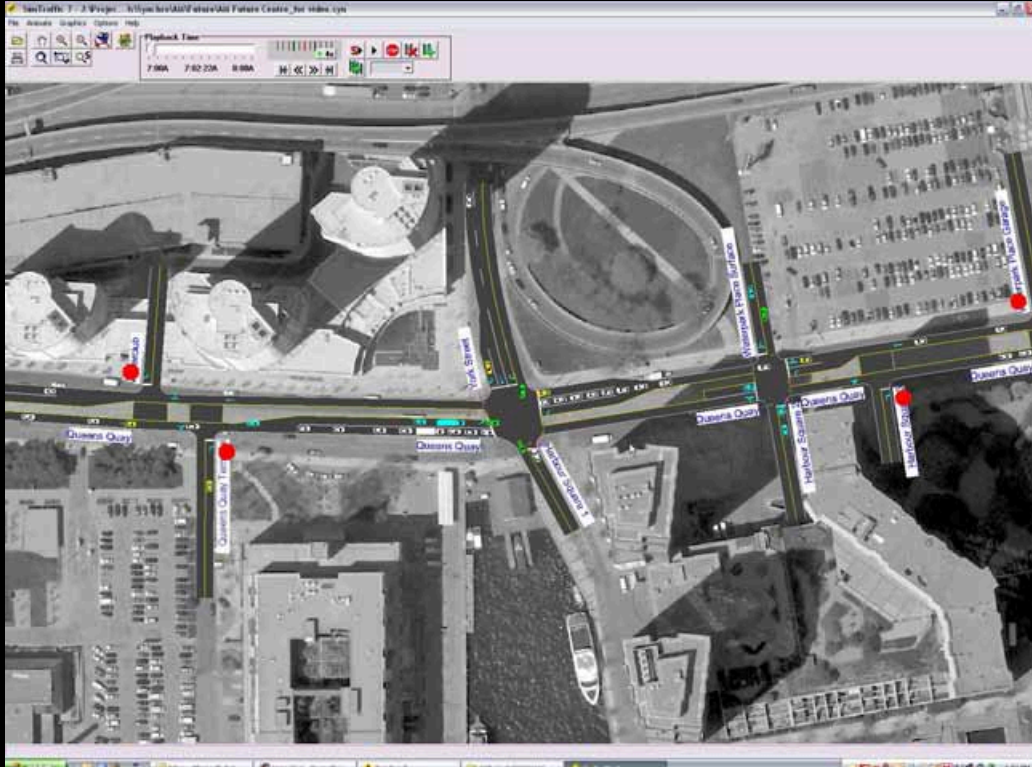
- Traffic Modelling – Centre Transit Alternative



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Alternative Design Concepts Transportation Planning

- Traffic Modelling – Centre Transit Alternative



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Alternative Design Concepts Transportation Planning

- Traffic Modelling – South Side Transit Alternative (Two-way Traffic)



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Alternative Design Concepts Transportation Planning

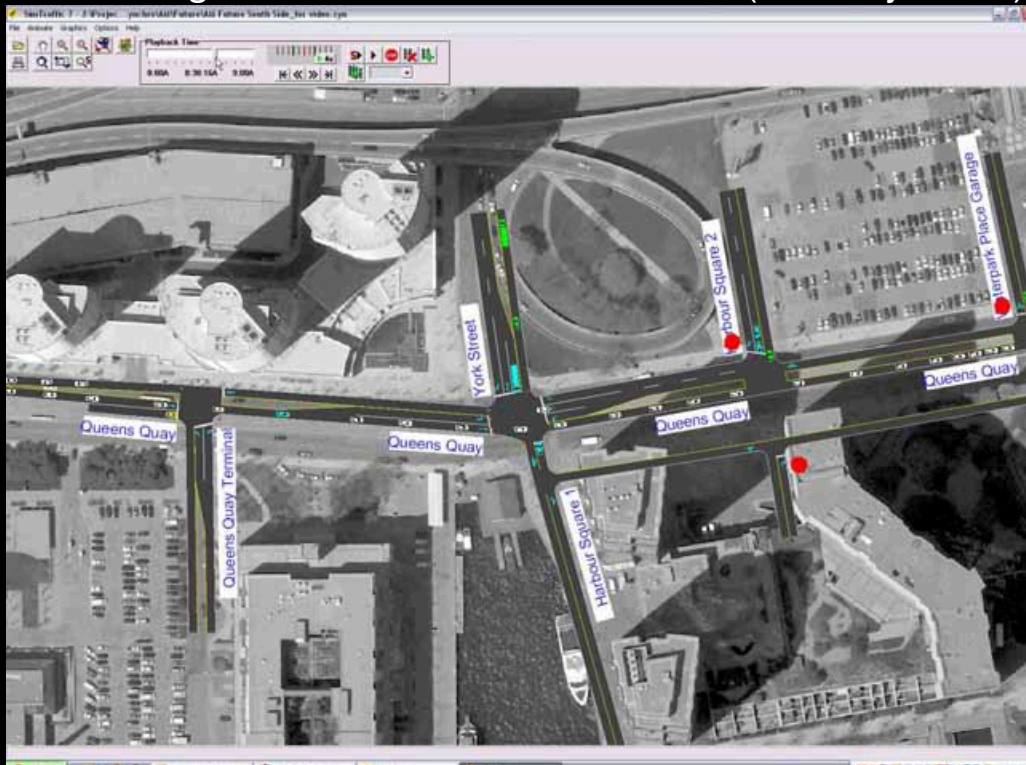
- Traffic Modelling – South Side Transit Alternative (Two-way Traffic)



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Alternative Design Concepts Transportation Planning

- Traffic Modelling – South Side Transit Alternative (Two-way Traffic)



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Alternative Design Concepts Transportation Planning

- Traffic Modelling – South Side Transit Alternative (One-way Traffic)



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EA Phase 3 – Design Concepts Traffic Analysis Existing vs. Future Operations (AM)

- Intersections Operations Summary
 - Two-way and One-way intersections operate at LOS D or better
 - Rees and Lake Shore Blvd reaches capacity for One-way
 - Several Centre intersections operate at LOS E during PM (but will improve with longer cycle length)
 - Intersections along Queens Quay for all alternatives will operate under typical busy urban conditions

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EA Phase 3 – Design Concepts Traffic Analysis Existing vs. Future Operations (AM)

Queens Quay @	Existing			Centre Transit			South Side Transit 2-way Traffic			South Side Transit 1-way Traffic		
	V/C	Delay	LOS	V/C	Delay	LOS	V/C	Delay	LOS	V/C	Delay	LOS
Spadina Avenue	0.60	37	D	0.62	41	D	0.64	25	C	0.30	18	B
TTC Loop	0.51	6	A	0.50	4	A	0.52	9	A	0.18	8	A
EMS/Beer Store	-	-	-	0.55	6	A	0.52	5	A	-	-	-
Rees Street	0.40	20	B	0.67	45	D	0.63	15	B	0.22	13	B
Lower Simcoe Street	0.35	20	C	0.61	38	D	0.55	12	B	0.21	7	A
Queens Quay Terminal	-	-	-	-	-	-	0.43	6	A	0.22	2.6	A
York Street	0.62	32	C	0.73	33	C	0.64	19	B	0.93	49	D
Harbour Square	0.56	39	D	0.93	42	D	-	-	-	-	-	-
Bay Street	0.51	21	C	0.89	32	C	0.99	50	D	0.80	26	C
Yonge Street	0.39	15	B	0.60	19	B	0.75	20	C	0.56	14	B

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EA Phase 3 – Design Concepts Traffic Analysis Lake Shore Future Operations (AM)

Lake Shore @	South Side Transit 1-way Traffic		
	V/C	Delay	LOS
Spadina Avenue	0.91	41	D
Rees Street	0.90	87	F
Lower Simcoe Street	0.77	28	C
Gardiner WB On-Ramp & York Street	0.98	18	B
York Street	0.83	37	D
Bay Street (at Harbour Street)	0.80	26	C
Bay Street	0.77	40	D
Yonge Street (at Harbour Street)	0.58	12	B
Yonge Street	1.07	116	F

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EA Phase 3 – Design Concepts Traffic Analysis Existing vs. Future Operations (PM)

Queens Quay @	Existing			Centre Transit			South Side Transit 2-way Traffic			South Side Transit 1-way Traffic		
	V/C	Delay	LOS	V/C	Delay	LOS	V/C	Delay	LOS	V/C	Delay	LOS
Spadina Avenue	0.57	39	D	0.73	0.63	E	0.68	32	C			
TTC Loop	0.36	7	A	0.77	12	B	0.63	7	A			
EMS/Beer Store	-	-	-	0.68	13	B	0.64	10	A			
Rees Street	0.50	34	C	0.76	76	E	0.70	20	C			
Lower Simcoe Street	0.37	27	C	0.76	64	E	0.71	16	B			
Queens Quay Terminal	-	-	-	-	-	-	0.51	14	B			
York Street	0.62	48	D	0.81	42	D	0.62	17	B			
Harbour Square	0.57	38	D	1.01	65	E	-	-	-			
Bay Street	0.52	20	C	0.87	34	C	0.90	49	D			
Yonge Street	0.38	15	B	0.81	24	C	0.84	27	C			

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EA Phase 3 – Design Concepts Transit Analysis

- VISSIM Modelling – Assess difference in Centre and South Side Transit Operations.
 - 5 South Side Transit Scenarios
 - 2 Centre Transit Scenarios
 - Scenario Variables: Signal Cycle Length; Train Length; Headway; # of stops; # of signals.



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EA Phase 3 – Design Concepts Transit Analysis

- VISSIM Modelling
 - 5 South Side Transit Scenarios
 - Base Case: 30 m trains
 - 1A_1: 100 % build-out transit headways with 30m trains
 - 1A_2: 100 % build-out transit headways with 60m trains
 - 1B: One stop and 4 ped signals removed with 30 m trains
 - 1C: 120” cycle length; disregards traffic queuing; 30 m trains
 - 2 Centre Transit Scenarios
 - 30 metre trains
 - 60 metre trains

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EA Phase 3 – Design Concepts Transit Analysis

- VISSIM Modelling Results
 - Centre and South operations are comparable in terms of Speed and Dependability

	Existing	Centre Transit	South Side Transit
Transit (Spadina to Bay)			
Travel Speed (WB/EB)		17 to 21 / 20 to 21	16 to 18 / 14 to 18
Dependability (WB/EB)		A-B / A-C	A-C / A-D

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EA Phase 3 – Design Concepts Transit Analysis

• VISSIM Modelling Results

Average Travel Speed

	South Side Transit Scenarios					Centre Transit Scenarios	
	Base 30m Trains	1A1 30m Trains	1A2 60m Trains	1B 30m Trains	1C 30m Trains	30m Trains	60m Trains
Westbound							
509 Harbourfront	15.5	15.0	15.1	17.5	15.2	20.6	20.6
510 Spadina	14.5	16.5	17.0	16.0	15.5	21.0	20.7
East Bayfront	16.6	15.9	16.9	17.2	17.3	20.1	20.6
Eastbound							
509 Harbourfront	16.1	16.7	17.3	17.5	16.9	21.3	20.9
510 Spadina	13.9	12.9	13.2	14.3	13.4	17.2	17.2
East Bayfront	18.2	19.1	19.3	18.3	20.8	21.7	23.1

EA Phase 3 – Design Concepts Transit Analysis

• VISSIM Modelling Results

Level of Service (LOS) (Service Reliability)

	South Side Transit Scenarios										Centre Transit Scenarios			
	Base		1A1		1A2		1B		1C		30m Trains		60m Trains	
	Arr.	Dep.	Arr.	Dep.	Arr.	Dep.	Arr.	Dep.	Arr.	Dep.	Arr.	Dep.	Arr.	Dep.
Westbound														
509 Harbourfront	A	D	A	C	A	C	A	C	A	D	A	B	A	B
510 Spadina	A	A	A	A	A	A	A	A	A	A	A	A	A	A
East Bayfront	D	E	D	E	B	C	D	E	D	F	C	D	A	B
Eastbound														
509 Harbourfront	C	D	C	D	B	C	C	D	C	D	C	C	B	C
510 Spadina	A	A	A	A	A	A	A	A	A	A	A	A	A	A
East Bayfront	E	E	E	E	B	C	E	E	E	E	E	E	B	C
Range	A to E		A to E		A to C		A to E		A to F		A to E		A to C	

EA Phase 3 – Design Concepts Traffic/Transit Analysis

- Corridor Operations Summary
 - Auto Level of Service comparable between Centre and Two-way
 - Auto Level of Service is dependant on Lake Shore Blvd for One-way
 - Auto Speed comparable for all alternatives (Centre operations will improve with 120" signal cycle length)
 - Transit operations are comparable between all alternatives

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EA Phase 3 – Design Concepts Traffic/Transit Analysis

- Operations Summary

	Existing	Centre Transit	South Side Transit Two-way Traffic	South Side Transit One-way Traffic
Autos (Spadina to Yonge)				
Corridor Level of Service (AM WB/EB)	E/E	E/D	D/D	D/ Relies on LSB
Avg Travel Speed (AM WB/EB)	18/21	15/15	22/21	21/ Relies on LSB
Transit (Spadina to Bay)				
Travel Speed (WB/EB)		17 to 21 / 20 to 21	16 to 18 / 14 to 18	Similar to Two-way
Dependability (WB/EB)		A-B / A-C	A-C / A-D	Similar to Two-way

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REVIEW OF EAST BAYFRONT TRANSIT EA

Bill Dawson, Toronto Transit Commission

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Integrated Transit Network in the Eastern Waterfront



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East Bayfront Transit EA: Process to Date

- March 2007 – PIC 1: Corridor Selection
Queens Quay to Union Station via Bay Street
- June 2007 – PIC 2: Technology Selection
Light Rail Transit in Exclusive Right-of-Way
- June 2007 – PIC 2: Shortlisted Portal Locations
Bay Street (2 options)
Queens Quay (3 options)
- Schedule delay to coordinate with
Queens Quay Revitalization EA
- March 2009 – Joint Public Forum:
Recommended Portal Location
Queens Quay between Yonge Street and Freeland Street
Union Station Platform
Parliament Temporary Transit Loop

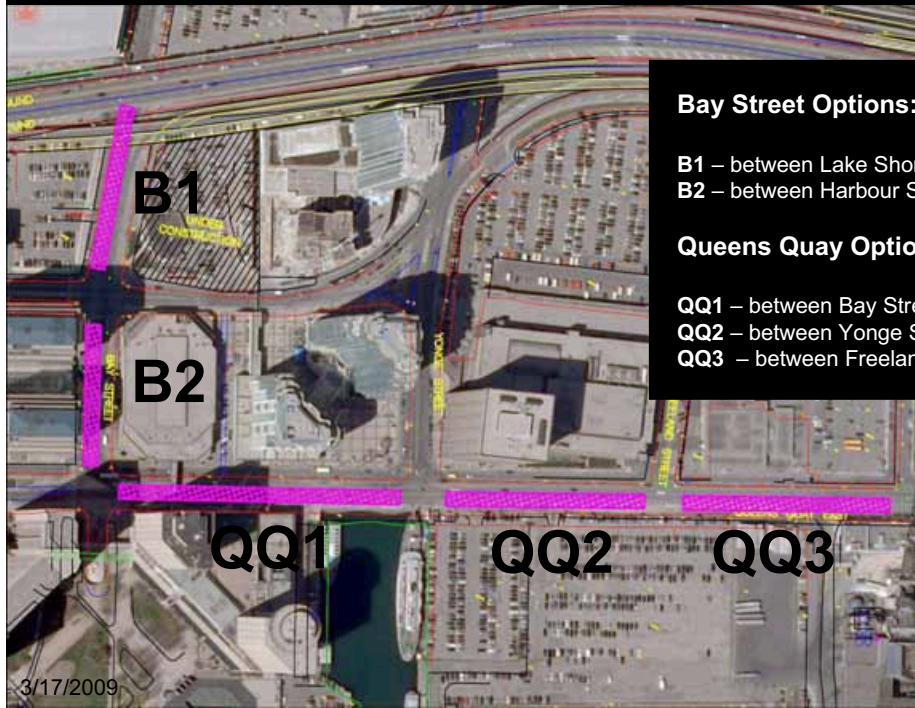
120

East Bayfront Transit EA Transit-specific Elements

- Portal options
- Eastern terminus of the Queens Quay East
Streetcar line
- Expansion of the Union Station streetcar loop

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Portal Options Considered



Bay Street Options:

- B1 – between Lake Shore Boulevard and Harbour Street
- B2 – between Harbour Street and Queens Quay

Queens Quay Options:

- QQ1 – between Bay Street and Yonge Street
- QQ2 – between Yonge Street and Freeland Street
- QQ3 – between Freeland Street and Cooper Street

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Bay Street Options

- Close/fill existing portal on Queens Quay and existing underground station
- Streetcars turn east and west through the Queens Quay/Bay intersection **at grade**, mixed with surface traffic and pedestrian movements
- Results in only 1 portal to serve Queens Quay West and Queens Quay East streetcars

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Queens Quay Options

- Extend existing Bay Street tunnel easterly from Queens Quay/Bay Street to a new portal on Queens Quay
- Streetcars would turn east and west **under** the Queens Quay/Bay intersection, grade-separated from traffic and pedestrian movements
- Existing portal would serve Queens Quay West streetcars; new portal would serve Queens Quay East streetcars

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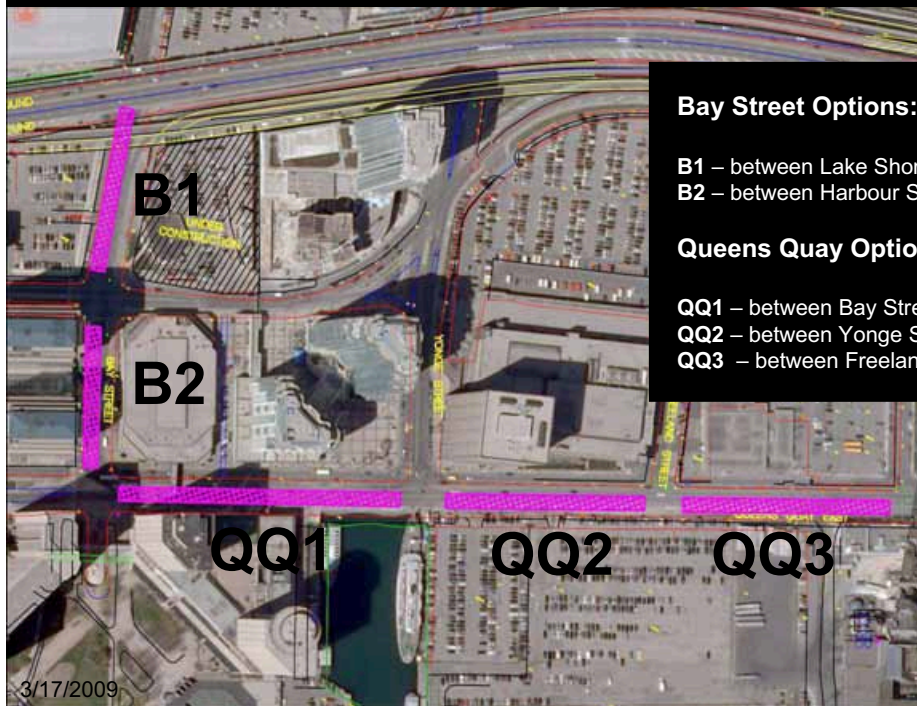
Analysis Approach

- Complete assessment of factors pre-determined during development of the EA Terms of Reference:
 - Planning Policies
 - Urban Design
 - Transportation
 - Socio-Economic Environment
 - Natural Environment
 - Cultural Environment
 - Cost
- Evaluation based on key decision relevant factors

Objectives	Criteria	Indicators (The degree to which the alternative...)	Measure
A) Planning Policies	A1) Local population / employment growth in the study area	A1.1) Supports future transit and road capacity requirements for forecast development.	
	A2) City, TWRC, and Provincial Policies	A 2.1) Supports the City's Central Waterfront Secondary Plan, East Bayfront Class EA Master Plan, and standards for transportation planning and design	Provides all ROW amenities as per Master Plan
		A 2.2) Supports Goals and Intentions of Central Waterfront Design Competition	Compatible with streetcar ROW on the south side of Queens Quay?
		A 2.3) Supports Waterfront Toronto's East Bayfront Precinct Plan and Sustainability Framework.	Minimize car use, increase walking, cycling, and public transit use Vibrant, diverse, and economically strong community (qualitative)

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Portal Options Considered



Bay Street Options:

- B1 – between Lake Shore Boulevard and Harbour Street
- B2 – between Harbour Street and Queens Quay

Queens Quay Options:

- QQ1 – between Bay Street and Yonge Street
- QQ2 – between Yonge Street and Freeland Street
- QQ3 – between Freeland Street and Cooper Street

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Portal Evaluation Overall Summary

SUMMARY

Planning Policies

B1 Lake Shore-Harbour

Supports City of Toronto policies and Waterfront Toronto goals

Q1 Bay-Yonge

Supports City of Toronto policies. Does not support results Waterfront Toronto's Central Waterfront Design Competition

Q2 Yonge-Freeland

Supports City of Toronto policies and Waterfront Toronto goals. Portal location consistent with Central Waterfront Secondary Plan

Q3 Freeland-Cooper

Supports City of Toronto policies and Waterfront Toronto goals

Summary







Meets criteria

Challenging - may meet criteria

Cannot meet criteria





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Portal Evaluation Overall Summary

SUMMARY	B1 Lake Shore-Harbour	Q1 Bay-Yonge	Q2 Yonge-Freeland	Q3 Freeland-Cooper
Urban Design	Improves streetscaping on Queens Quay between Bay and Yonge	Reduces streetscaping on Queens Quay between Bay and Yonge	Improves streetscaping on Queens Quay between Bay and Yonge	Improves streetscaping on Queens Quay between Bay and Yonge
	One portal on Bay Street	Two portals on Queen's Quay	Two portals on Queen's Quay	Two portals on Queen's Quay
	Some potential to enhance public spaces and improve public realm	Minimal potential to enhance public spaces and improve public realm	Fits within ROW - high potential to enhance public spaces and improve public realm	Fits within ROW - high potential to enhance public spaces and improve public realm
	Limits a continuous Martin Goodman Trail	Interferes with a continuous Martin Goodman Trail	Fits full width of Martin Goodman Trail	Fits full width of Martin Goodman Trail
Summary				

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Portal Evaluation Overall Summary

SUMMARY	B1 Lake Shore-Harbour	Q1 Bay-Yonge	Q2 Yonge-Freeland	Q3 Freeland-Cooper
Transportation	Provides poor transit service and operation - delays at Harbour, Bay, and Yonge intersections result in longer travel time and lower service reliability	Provides adequate transit service and operation	Provides better transit service and operation - grade-separated operation through Harbour, Bay, and Yonge intersections results in shorter delay, shorter travel time, and better service reliability	Provides better transit service and operation - grade-separated operation through Harbour, Bay, and Yonge intersections results in shorter delay, shorter travel time, and better service reliability
	Reduces north-south roadway capacity and ability for motorists to travel in and around the study area	Complex intersection operation at QQ/Yonge as a result of need for eastbound traffic to weave across streetcar ROW	No major impact on roadway operation	No major impact on roadway operation
Summary				

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Portal Evaluation Overall Summary

SUMMARY

B1

Lake Shore-Harbour

Q1

Bay-Yonge

Q2

Yonge-Freeland

Q3

Freeland-Cooper

Socio-Economic

Potential future redevelopment site on west side of Bay Street - access limited to SB right-in/right-out only as a result of the portal; streetcar tracks in conflict with Westin Harbour Castle Hotel driveway, Ferry Docks east driveway

Westin Harbour Castle Hotel and Ferry Docks east driveway - access limited to eastbound right-in/right-out only as a result of the portal

No impact on access to existing commercial properties

Redpath Sugar – end of streetcar ramp in conflict with main driveway - likely requires modification of driveway

Harbour Square Condominium – requires driveway modification

World Trade Centre Condominium - access on QQ reduced to right-in/right-out only

Portal will be located just west of Freeland Street - main access to MT 27 residential development; however, it is anticipated that full access can be maintained

No impact on access to existing residential properties

Lowest potential to minimize perceived noise and vibration effects on **existing** residents - streetcars will operate at-grade between Harbour Street and Yonge Street and through the QQ/Bay intersection

Lower potential to minimize perceived noise and vibration effects on **existing** residents - streetcars will reach surface between Bay Street and Yonge Street

Higher potential to minimize perceived noise and vibration effects on **existing** residents - streetcars will be underground between Harbour Street and Yonge Street

Higher potential to minimize perceived noise and vibration effects on **existing** residents - streetcars will be underground between Harbour Street and Yonge Street

Summary



Portal Evaluation Overall Summary

SUMMARY

B1

Lake Shore-Harbour

QQ1

Bay-Yonge

QQ2

Yonge-Freeland

QQ3

Freeland-Cooper

Cost

Medium potential to minimize construction cost

Highest potential to minimize construction cost

Medium potential to minimize construction cost

Lowest potential to minimize construction cost

Lower potential to minimize vehicle acquisition cost

Higher potential to minimize vehicle acquisition cost

Higher potential to minimize vehicle acquisition cost

Higher potential to minimize vehicle acquisition cost

Potentially costly measure for mitigating access issues at Westin Harbour Castle Hotel

Potentially costly measure for mitigating access issues at Westin Harbour Castle Hotel

No major property acquisition anticipated

No major property acquisition anticipated

Lower potential to minimize transit operating cost during and after construction

Higher potential to minimize transit operating cost during and after construction

Higher potential to minimize transit operating cost during and after construction

Higher potential to minimize transit operating cost during and after construction

Summary



Portal Evaluation Overall Summary

	B1 Lake Shore-Harbour	Q1 Bay-Yonge	Q2 Yonge-Freeland	Q3 Freeland-Cooper
Planning Policies	✓	○	✓	✓
Urban Design	○	✗	✓	✓
Transportation	✗	✗	✓	✓
Socio-Economic	✗	✗	✓	○
Natural	Not Decision Relevant			
Cultural	Not Decision Relevant			
Costs	✗	✓	○	✗
SUMMARY	Not Carried	Not Carried	Carried	Not Carried

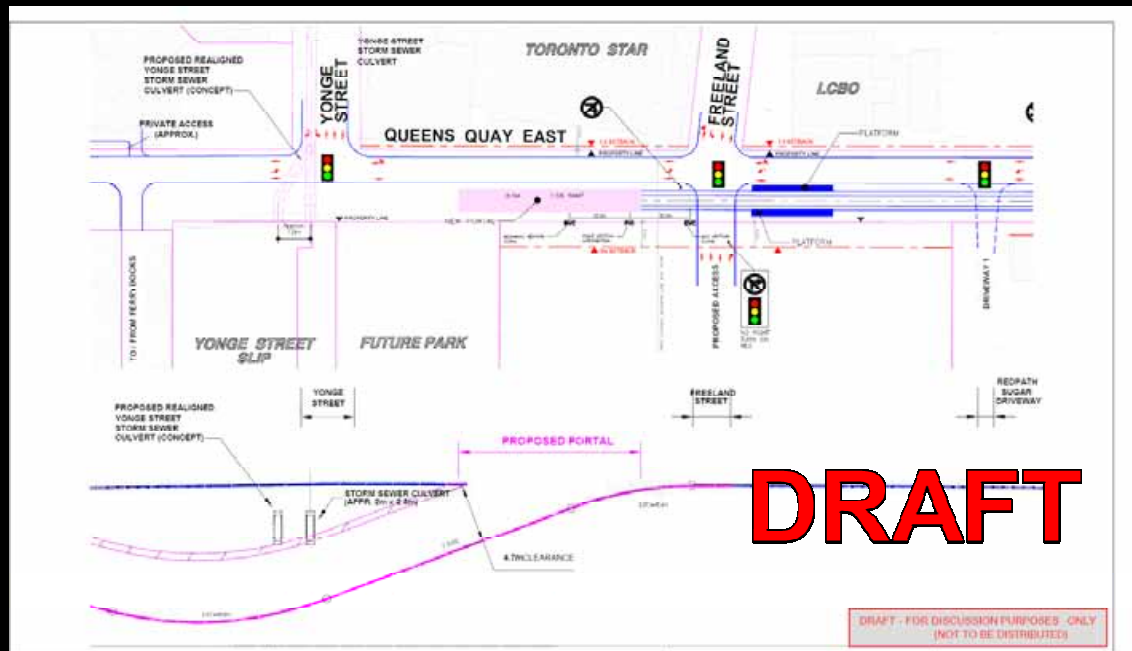
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Preferred Portal Location

- **Option Q2** between Yonge Street and Freeland selected as the **preferred portal location**
 - Transit – better quality of service as a result of shorter delay at intersections, shorter travel time, and better service reliability; no impact on roadway capacity
 - Portal fits within ROW – extra width available on the south side of Queens Quay between Bay and Yonge for public realm improvement
 - Lowest impact on existing commercial and residential properties

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Queens Quay Portal Option Q2 between Yonge Street and Freeland Street



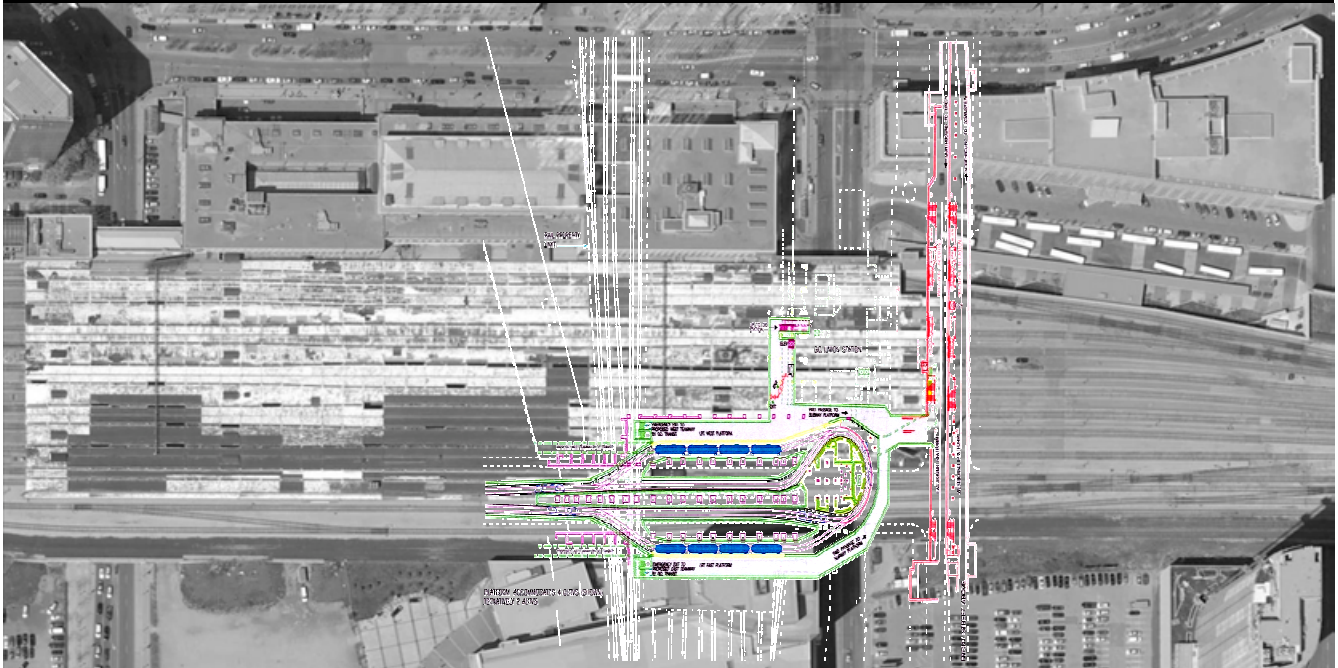
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Queens Quay East Streetcar Connection to Cherry Street

- Alignment of Queens Quay Blvd. east of Parliament to be confirmed by Lower Don Lands Class EA Master Plan
- Interim terminus loop at Small/Parliament until Queens Quay Blvd. extended to Cherry Street
 - minimise interim affect on developable property
 - maintain operation during construction of extension
- EBF Transit EA will show location of interim loop and conceptual connections:
 - with approved West Don Land streetcar on Cherry Street
 - connection with future streetcar network in the Port Lands via Cherry Street

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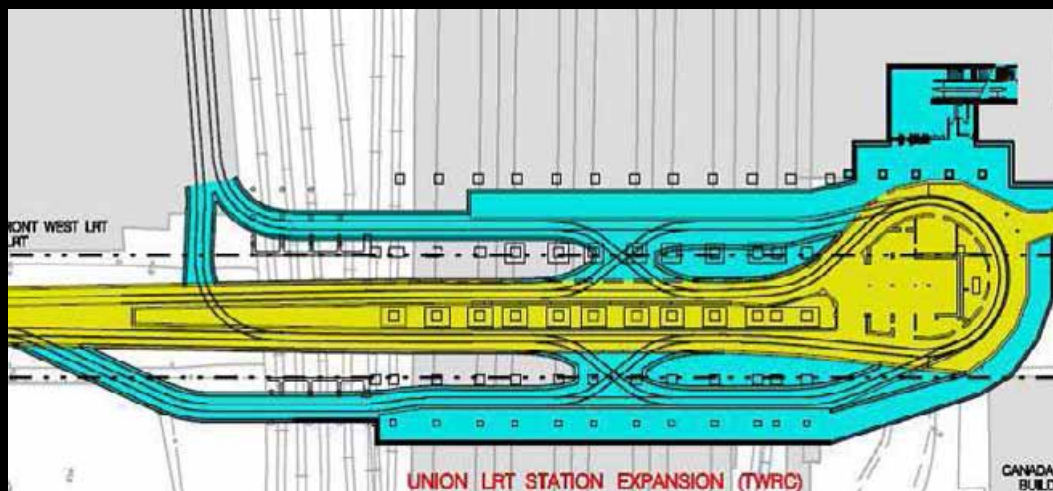
Union Station Loop Expansion



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Union Station Platform Expansion

- Significant platform expansion required to carry high transit volumes from east and west of Union Station



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Ongoing Efforts/Next Steps

- Technical Work Underway
 - Intersection Design: Martin Goodman Trail, Crosswalks, Accessibility
 - Sign System (Directional, Traffic Control, Information, etc.)
 - Optimize Transit Signal Priority
- Complete System Plans for Queens Quay
 - School and Tour Buses
 - Taxis
 - Servicing/Loading Zones
 - On-Street Parking
- Continue Working with Impacted...
 - Fire/Emergency Services
 - Residential Properties
 - Commercial Properties
 - Planned Development
 - Harbourfront Centre/other cultural facilities
- Coordinate with Central Waterfront Master Plan
- Upon MOE Approval, Begin Detailed Design

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Street Design: Southside Transit – Two-Way/One-Way Operations



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Transit Portal Location – Q2: Between Yonge Street and Freeland Street

