TORONTO CENTRAL WATERFRONT JOINT EA TECHNICAL ADVISORY COMMITTEE

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

March 05, 2009





Presentation Overview

- Announcement of Recommended Preferred Alternatives
 - Transit EA: Portal Location, Union Station
 Platform Expansion, Parliament Loop
 - Street Design
- Street Design
 - Review of Process to Date
 - Evaluation Leading to Recommended Preferred Alternative
- Transit EA: Portal, Platform, Loop
 - Review of Process to Date
 - Evaluation Leading to Recommended Preferred Alternative
- Next Steps

RECOMMENDED PREFERRED ALTERNATIVES

At Simcoe+Harbourfront Centre: Existing





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





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At Simcoe Slip: Existing



At Simcoe Slip: Future







Street - Recommended Preferred Alternative: Key Features

- 1. Dedicated transit south side of street
- 2. Continuous off-street Martin Goodman Trail, completing the Lake Ontario Trail
- 3. Improved pedestrian boulevards
- 4. Vastly improved street tree canopy: "a linear park"

- 5. Superior urban design benefit
- 6. Provides greatest opportunity for a world-class waterfront street
- 7. Satisfies transit and traffic operations



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

Transit Portal - Recommended Preferred Alternative: Key Features

- 1. Transit below grade from Union Station to Freeland Street
- 2. All transit platforms at-grade on Queens Quay
- 3. Works equally well with any street configuration
- 4. Fewer conflicts between transit, traffic, and pedestrian movement at Bay Street Intersection

- Successfully balances property impacts against capital cost of longer tunnel
- 6. Avoids challenging access issues to Westin Harbour Castle Hotel
- 7. Avoids costly Yonge Street below-grade transit station

System Plans

- Diagrams to illustrate the level of detail embedded within the preferred alternative
 - Bus Management
 - Vehicle Parking
 - Servicing/Loading
 - Site Access
 - Pedestrian Movement
 - Bicycles
 - Transit
 - Winter Activities







Purpose of this EA

- To create a plan that successfully accommodates various users:
 - Recreational
 - Transit
 - Bicycle
 - Pedestrian
 - Vehicular
- Enhances landscape and the public realm within the Queens Quay corridor.
- To develop, examine and evaluate a number of alternative solutions and design options for vehicular, transit and pedestrian routes along Queens Quay.

Problem Statement

- Queens Quay is Toronto's main waterfront street, yet in its current configuration acts as a barrier rather than a gateway to the waterfront.
- North-south connections to the water's edge are limited, unwelcoming, and difficult for pedestrians to cross between the north and south sides of Queens Quay.
- East-west connections between individual destinations, including the Martin Goodman Trail, are constrained or absent, creating an unpleasant experience for commuter and recreational cyclists, in-line skaters, joggers, residents and visitors moving along the lake front.

Problem Statement (cont'd)

- Aesthetically it fails to provide the kind of atmosphere conducive to economic vitality, ground floor retail activity, and urban vibrancy.
- Operationally it suffers from sub-standard streetcar platforms, conflicting and illegal parking activities, and major points of conflict at intersections.
- Civically it fails to provide a grand and beautiful public realm befitting its role as the primary address for Toronto's waterfront.

Problem Statement (cont'd)

- A revitalized Queens Quay presents the opportunity to implement long-standing City of Toronto policy objectives while more effectively balancing the needs of its residential, business, recreational and visitor users.
- Strategically there is an opportunity to coordinate Queens Quay revitalization with other planned waterfront projects and infrastructure renewal by the TTC.

Data Collection

- Walking Tour with Community Stakeholder Committee
- Traffic Feasibility
- Aerial photography
- Ground photography/Observations
- Vehicular and pedestrian volume data
- Time Lapse Photography



Public Consultation

Stakeholders Advisory Committee

- Councillor Pam McConnell's Office
 Brookfield Properties
- Councillor Adam Vaughan's Office
- Waterfront Regeneration Trust
- Central Waterfront Neighbourhood Association
- York Quay Neighbourhood Association
- QQHBIA
- Residents-at-large
- Toronto Island
- Loblaw Properties Ltd.
- Redpath Sugar
- Radisson

- Harbourfront Centre
- Cruise Toronto
- Premier Conference & Events
- West Don Lands Committee
- St. Lawrence Neighbourhood Association
- Port Lands Action Committee/Waterfront Action
- Rocket Riders
- Cycling Advocate
- · Feet on the Street

Traffic Feasibility (2007)

- Waterfront Toronto and City carried out traffic study prior to beginning of EA process
- Determined that 2-lane roadway (1 lane in each direction) could accommodate existing and future demand on Queens Quay
- Provided basis for Queens Quay **Revitalization EA**

Traffic Volume Data

- 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)







Transit Patronage Count Comparison



Vehicle and Ped Queens Quay Weekend PM P	estrian V	olumes				
	Ilha Formo	sa Festival 2007-08	-06	Sunday	TTC: 2002-2005	
Intersection	Vehicles Entering	Pedestrians Crossing	ĺ	Cyclists Entering	Transit Patronage	
Lower Simcoe	1475	2415		65	835	
York	1625	3540		55	925	
Вау	1665	4365		25	1065	
						55





Cut-Through Traffic

Spadi	lina EB (1) To Yonge EB (3)				
Dally Summary	Cars Matched	% Match	Total Cars		
AM	160	21.00%	762		
PM	175	19.64%	891		
Total:	335	20.27%	1653		

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

10 to 20 percent "cut-through" traffic

Exis	Comparison of Netwo sting 4-Lane Queens Quay Spadina Avenue to	ork Traffic Operations versus 2-Lane Queens Qu Parliament Street	ay
Scenario	2006 Existing Condition (4-lane Queens Quay)	Opening Day Condition (2-lane Queens Quay)	Percent Change (Opening Day vs. Existing)
Network Wide Statistics	(All streets in the study an	rea)	
Total Travel Time (hrs)	2600	2650	2%
Avg. Travel Time / Veh. (min)	6.6	6.7	2%
Veh. Speed (km/hr)	35.3	34.4	-2%
Key Route Statistics	Travel Ti	me (min.)	Percent Change
Queens Quay EB	7.6	7.8	3%
Queens Quay WB	7.1	7.8	3%
Lake Shore EB	9.8	10.1	3%
Lake Shore WB	12.0	11.8	-2%
Gardiner EB	7.4	7.6	2%
Gardiner WB	7.3	7.3	0%

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



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



• Better transit; bike lanes; pedestrian environment













A Solution will Rebalance Six Systems

- 1. Landscape
- 2. Pedestrian Realm
- Cycle Ways and the Martin Goodman / Trans Canada Trail
- 4. Transit Ways
- 5. Vehicle Lanes
- 6. Bus and Vehicle Parking









Alternative Design Concepts: Long List

Centre Transit

Alternative 1.	Do Nothing
Alternative 2.	with On-Street Bike Lanes
Alternative 3.	with Martin Goodman Trail

Southside Transit

Alternative 4.	Two-Way Traffic w/ Martin Goodman Trail
Alternative 4b.	One-Way Traffic w/ Martin Goodman Trail

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Alternative 1: Do Nothing - Queens Quay at Simcoe Today



Alternative 2: Centre Transit at Simcoe Slip





Alternative 4b: Southside Transit with One-Way Operations



Public Consultation

Affected Landowner Meetings

- Queens Quay BIA
- 401 Queens Quay
- Fire/EMS
- Radisson
- Marine Police Unit
- 250 Queens Quay
- Bus and Boat Company
- Harbourfront Centre
- Queens Quay Terminal

- Brookfield Properties
- 201 Queens Quay
- 55, 33, 77 Harbour Square
- Westin Harbour Castle
- Pier 27
- Ossmington/Toronto Star
- Redpath Sugar
- LCBO

PHASE 3B: EVALUATION OF SHORTLISTED ALTERNATIVES

Evaluation Criteria for Shortlisted Alternatives

Over 120 criteria under 7 main headings

- 1. Land Use/Planning and Policy Context
- 2. Urban Design and Public Realm
 - Unique Waterfront Setting
 - World-Class Public Realm
- 3. Transportation
 - Transit Operations
 - Traffic Operations

- 4. Socio-Economic Environment
 - 5. Natural Environment
 - 6. Cultural Environment
 - 7. Cost

Does it Respond to Planning and Policy Context?

- Plan in 'next generation' terms to make transit, cycling and walking increasingly attractive alternatives to using the car and to move towards a more sustainable transportation system.
- Queens Quay will become a scenic water view drive
- The Martin Goodman/Waterfront Trail will be completed and connected to the citywide trail or pathway system
- walking supports community health, vitality and safety. It will increase use of public transit; decrease car dependence; reduce conflict between vehicles and pedestrians;
- Discourage single-occupancy automobile use

- Encourage cycling as a clean air alternative
- Encourage public transit as a clean air alternative
- Encourage walking as a clean air alternative
- Make alternative transportation options such as walking, cycling, and public transit the natural choice for residents and visitors to the waterfront area.
- · Continuous public promenade
- Create major points of arrival where the heads of slips meet Queens Quay
- Improve Queens Quay

Does it Respond to Planning and Policy Context?

1. Centre Transit

Challenging.

Provides transit to support planned land uses.

Provides access that affects future land use.

Does not provide a comfortable and generously landscaped bike facility.

Does not satisfy Waterfront Toronto Innovative Competition Objectives.

2a/b. Southside Transit - Two & One-Way

Exceptional.

Provides transit to support planned land uses.

Provides access that supports planned land uses.

Provides a comfortable and generously landscaped bike facility (Central Waterfront Secondary Plan, p.21).

Better responds to Waterfront Toronto Innovative Competition Objectives

Does it Provide a Unique Waterfront Setting? East Bayfront Precinct





















1. Centre Transit

No.

Although the design concept would improve pedestrian amenities and offer dedicated bike facilities, the arrangement of elements is common throughout Toronto and North America.

2/3. Southside Transit: Two & One-Way

Exceptional.

The arrangement of the Martin Goodman Trail and improved pedestrian boulevards with an allee of canopy trees and southside dedicated transit is specific and unique to Toronto's waterfront, making it a destination in its own right.





Does it Satisfy the Need for a World Class Public Realm?

1. Centre Transit

NO.

Provides an upgraded public realm that satisfies minimum expectations. Does not provide a world-class defining waterfront street.

Provides improved pedestrian and cyclist environment over existing condition:

- Ratio of pedestrian/non-pedestrian space: 0.4:1
- Change in perceived non-auto space: 381 m2
- Average north-south crossing distance: 24m
- Length of continuous Martin Goodman Trail: 0 km.

Typical transit platform in centre of street arrangement.

Provides improved pedestrian and cyclist environment over existing condition. No additional north-south pedestrian crossing opportunities. 2a/b. Southside Transit: Two & One-Way

Exceptional.

Coherent linkage to other new waterfront improvements.

Provides superior pedestrian and cyclist environment:

- Ratio of pedestrian to non-pedestrian space: 2.3:1
- Change in perceived non-auto realm: 2658 m2
- Average north-south crossing distance:17.5 m;
- Length of continuous Martin Goodman Trail: 3 km.

Improved transit passenger experience. Platforms as public realm improvements.

Provides superior pedestrian and cyclist environment. Greater north-south pedestrian crossing opportunities.



Does it Provide an Attractive Transit Service?



Does it Provide an Attractive Transit Service?

1. Centre Transit

Exceptional.

Provides improved transit over existing condition.

- Travel Speed: 17 to 21 km/h;
 Dependability (Bunching): LOS A to C

Compares well with other downtown transit services in North America.

Satisfies projected East Bayfront-Portlands demand.

2a/b. Southside Transit: Two & One-Way

Exceptional.

Provides improved transit over existing condition

Travel Speed: 16 to 21 km/h;
Dependability (Bunching): LOS A to D

Compares well with other downtown transit services in North America.

Satisfies projected East Bayfront-Portlands demand.

Does it Provide Acceptable Traffic Operations?



Does it Provide Acceptable Traffic Operations?

1. Centre Transit

Yes.

- Provides acceptable performance:
- Intersection LOS A to E;
- Corridor LOS D to F;
- Corridor travel time: 9.5 minutes (westbound)

Accomodates forecasted eastbound/westbound two-way traffic on Queens Quay

More conventional traffic/transit operations.

2a. Southside Transit: Two-Way

Yes.

- Provides acceptable performance:
- Intersection LOS A to E;
- Corridor LOS D to F;
- Corridor travel time: 7.5 minutes (westbound)

Accomodates forecasted eastbound/westbound two-way traffic on Queens Quay

Potential cheating on restricted and signalized eastbound right hand turn over transit must be monitored.

2b. Southside Transit: One-Way

Challenging. Provides acceptable performance:

- Intersection LOS _ to _;
- Corridor LOS _ to _;
- Corridor travel time: x minutes (westbound)

Accomodates WB one-way traffic on Queens Quay; requires local EB traffic to use Lake Shore.

More conventional traffic/transit operations.

Alternative Design Concepts Transportation Planning

• Functional Planning / Site Access





Alternative Design Concepts Transportation Planning

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



Alternative Design Concepts Transportation Planning

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





Alternative Design Concepts Transportation Planning Preliminary Findings

Comparison of Traffic and Transit Operations

Alternative	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/D	D/D	D/F (LSB Spadina to Simcoe)
Avg Travel Speed (AM WB/EB) Transit (Spadina to Bay)	15/15	22/21	21/13
Travel Speed (WB/EB) Dependability (WB/EB)	17 to 21 / 20 to 21 A-B / A-C	16 to 18 / 14 to 18 A-C / A-D	Similar to Two-way Similar to Two-way

Estimating Future Traffic Queens Quay / York Street – East Leg	

Existing Traffic		505
Plus New Development (includes 5% increase in transit mode split)		250
East Bayfront	175	
Pier 27	50	
Pinnacle	10	
Railway Lands West	10	
Waterpark Place	5	
Less Existing Development Removed		-55
East Bayfront	-45	
Captain John's Parking	-10	
Less Queens Quay cut-through (15%)		-75
Future Traffic		625



Future Traffic Sample; South Side Transit





Preliminary AM Level of Service Summary

	Exist	ting Condi	tions	Fut	ure Condit	ions
Queens Quay @	V/C	Delay	LOS	V/C	Delay	LOS
Spadina Avenue	0.54	34	С		TBD	
TTC Loop	0.42	5	А	0.55	26	С
EMS/Beer Store				0.47	8	А
Rees Street	0.37	26	С	0.57	21	С
Robertson Crescent E.				0.48	9	А
Lower Simcoe Street	0.31	26	С	0.60	24	С
Queens Quay Terminal				0.61	20	В
York Street	0.53	29	С	0.58	17	В
Harbour Square	0.50	35	С	0.71	18	В
Bay Street	0.46	20	В	0.80	28	С
Yonge Street	0.35	14	В	0.70	26	С
Freeland Street				0.71	17	В
New Cooper Street				0.56	10	А
LOS Range			A to C			A to C

Does it Support Active Transportation?



Does it Support Active Transportation?

1. Centre Transit

Yes. Cyclists provided with a marked on-street bike lane. Supports City initiatives to enhance bike connections throughout the downtown and greater city.

Concern regarding illegal parking and vehicle standing on south curb.

2a/b. Southside Transit: Two & One-Way

Exceptional.

Cyclists, in-line skating and other active transportation modes are removed from other vehicles on a separate, more familyfriendly trail system. Connects the Central Waterfront to the current Martin Goodman Trail to the east and west.

Winter conditions far more appealing (no splashing or competing for roadway with cars).



Does it Improve the Natural Environment?

1. Centre Transit

Yes.

Enhanced tree canopy: potential 195 trees from Spadina to Jarvis (existing 95)

Improved growing environment for street trees (yet constrained compared to other options)

Trees subject to higher roadway contamination (e.g. road salt spray).

2a/b. Southside Transit: Two & One-Way **Exceptional.**

More extensive tree canopy.Potential 283 trees from Spadina to Jarvis (existing 95)

Improved growing environment for street trees.

High percentage of trees removed from roadway contaminants (e.g., road salt spray)

2b. Southside Transit: One-Way

Exceptional.

More extensive tree canopy.Potential 283 trees from Spadina to Jarvis (existing 95)

Improved growing environment for street trees.

Higher percentage of trees removed from roadway contaminants than Option 1, fewer than Option 2a.



Can it Encourage a Dynamic Socio-Economic Environment?

1. Centre Transit

Yes.

Vehicular access to all properties. Does not require consolidation of any entrances or driveways. Most properties--unless at signalized intersection--restricted to right in/right out in either westbound or eastbound direction where U-turns not permitted.

Limited access to larger Redpath vehicles.

Remains a corridor; does not become a destination.

2a. Southside Transit: Two-Way

Exceptional.

Vehicle access to all properties. Requires consolidation/closing of some entrances (3 total). Most southside properties limited to either westbound left or eastbound right. northside have westbound right and eastbound left. No uturns permitted.

Provides superior opportunity as tourism destination.

Provides a more positive reimaging of the waterfront.

2b. Southside Transit: One-Way

Exceptional.

Same as above, except southside properties provided with westbound left. Northside have westbound right. No uturns permitted.



Can it Support a Rich Cultural Environment?

1. Centre Transit

2a/b. Southside Transit: Two & One-Way

Yes.

Does not impact existing cultural environment.

Exceptional. Does not impact existing cultural environment.

Provides more space for locating public art, cultural programming, gatherings, events, etc. than Option 2.

Creates a stronger dialogue with other public space improvements (wavedecks, bridges, parks, etc)

How Much Does it Cost?

1. Centre Transit

Least Expensive.

Transit and road construction similar. Lower cost due to fewer property access/localized right-of-way widening issues and fewer public realm improvements.

2a. Southside Transit: Two-Way

More Expensive.

Transit and road construction similar. Additional cost related to greater public realm improvements, mitigating property access issues, localized right-of-way widening.

2b. Southside Transit: One-Way

More Expensive.

Transit and road construction similar. Additional cost related to greater public realm improvements, mitigating property access issues and localized right-of-way widening, but not as much as Option 2a.

EVALUATION SUMMARY			
DRAFT REVISED: ANNOT	ATED		
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Evaluation Summa	ʻY	Centre Transit	Southside Transit: Two-Way Operations	Southside Transit: One-Way Operations
 Meets criteria exceptionally well 	Planning and Policy Context	•	$/ \star \setminus$	$/ \star \setminus$
	Unique Waterfront Setting	×	*	*
Yes. Meets Criteria Challenging. May meet criteria	World Class Public Realm	×	*	*
	Attractive Transit Service	\star	*	*
	Acceptable Traffic Operations	\checkmark	\checkmark	•
	Support Active Transportation	\checkmark	*	*
No. Cannot meet criteria: Critical fail	Improve Natural Environment	\checkmark	*	*
	Encourage Soci-Economic Environment	\checkmark	*	\star
	Support Cultural Environment	\checkmark	* /	*/
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Street - Recommended Preferred Alternative: Key Features

- 1. Dedicated transit south side of street
- 2. Continuous off-street Martin Goodman Trail, completing the Lake Ontario Trail
- 3. Improved pedestrian boulevards
- 4. Vastly improved street tree canopy: "a linear park"

- 5. Superior urban design benefit
- 6. Provides greatest opportunity for a world-class waterfront street
- 7. Satisfies transit and traffic operations



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Integrated Transit Network in the Eastern Waterfront



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

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



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

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

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
() Manning Olicies	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 Flan, and standards for transportation planning and design	Provides all ROW amenties 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	Minimite car use, increase waiking, cycling, and public transit use
		Plan and Sustainability Framework	Vibrant, diverse, and economically strong community (qualitative)



Portal Evaluation Overall Summary



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	Ο	×	✓	✓	
				158	

Portal Evaluation Overall Summary



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Portai Evalu	lation overall Su	Immary		
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	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
	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	×	×	\checkmark	0





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



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





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



TORONTO CENTRAL WATERFRONT JOINT EA TECHNICAL ADVISORY COMMITTEE

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

March 05, 2009



Data Collection: Periods

- 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