## TORONTO CENTRAL WATERFRONT PUBLIC FORUM #2

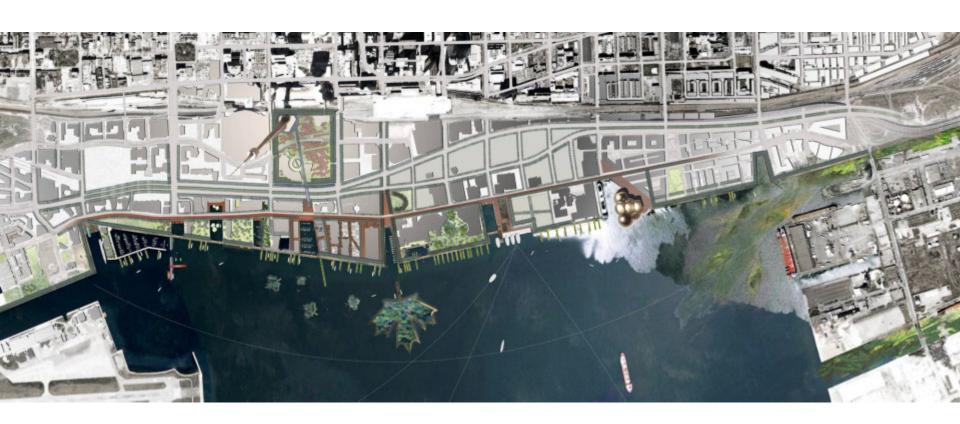
Queens Quay Revitalization EA
Bathurst Street to Lower Jarvis Street
Municipal Class Environmental Assessment (Schedule C)

December 08, 2008



## WATERFRONT TORONTO UPDATE

## **Central Waterfront International Design Competition**



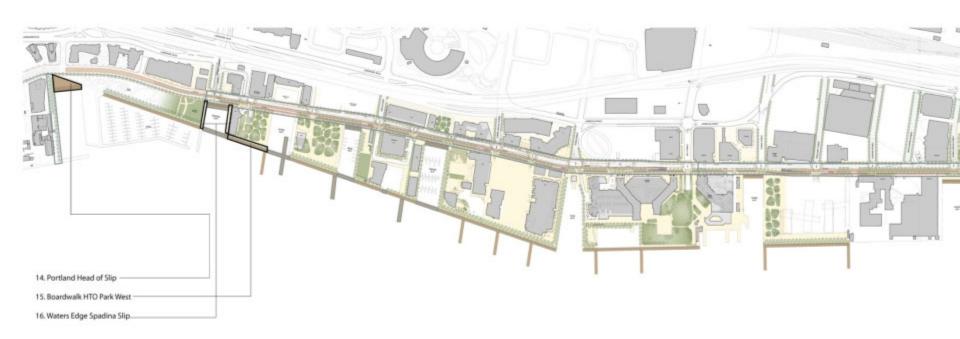
### CENTRAL WATERFRONT #1: High Priority

Provides access that does not exist between existing destinations



### **CENTRAL WATERFRONT #2: Priority**

Enhances access or creates new destinations



### **CENTRAL WATERFRONT #3: Low Priority**

Restores deteriorated access or adds access of limited connectivity value

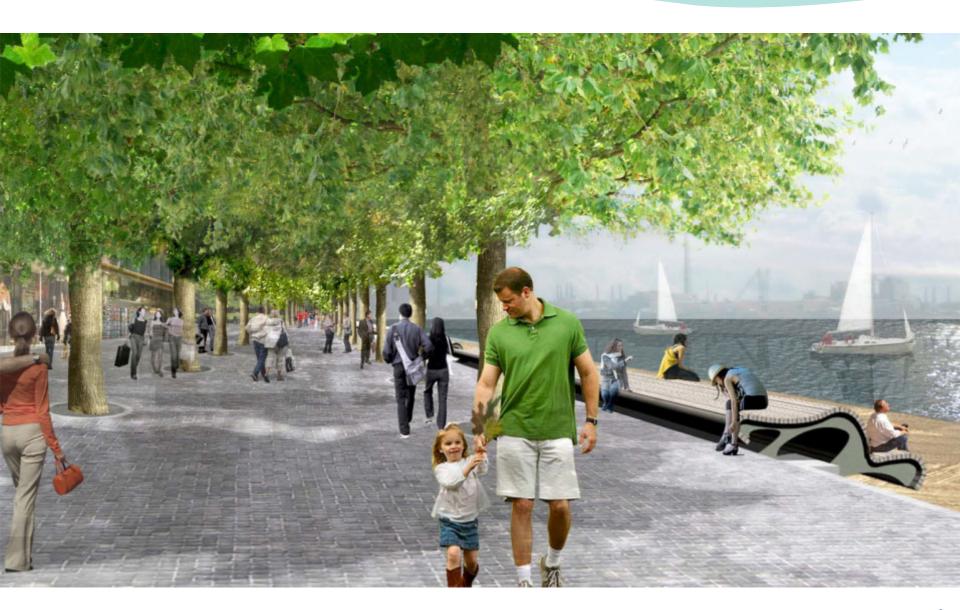


### **CENTRAL WATERFRONT #4: Not Priority**

Achieves design excellence but not critical to achieving other corporate objectives



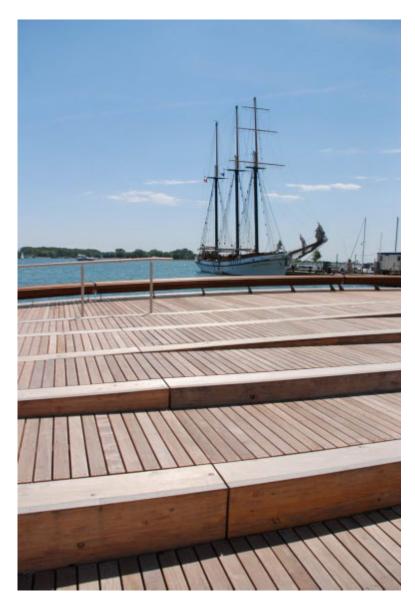
## East Bayfront Waters Edge Promenade: Design Underway

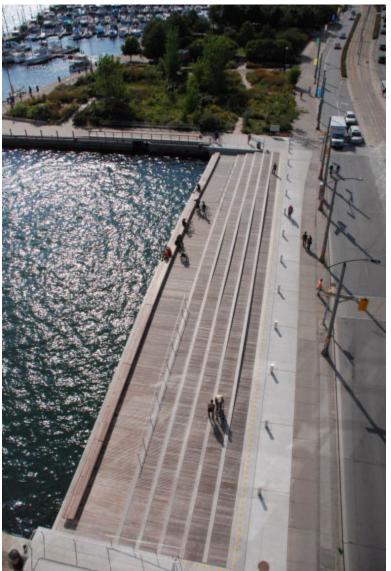


## Spadina Wavedeck: Opened September 2008



## Spadina Wavedeck: Opened September 2008





## Spadina Wavedeck: Opened September 2008

**Metropolis Article** 

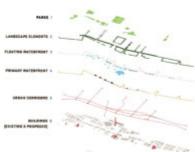


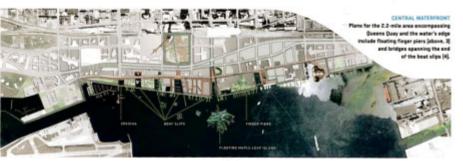


## "You build great cities by building a great public realm," John Campbell says.

summer). Some will rise more than others, one will morph into a children's playgound, and another will resemble a powerful wave. "The others are similarly detailed," Geune says, "but they all have a different span and a different curve."

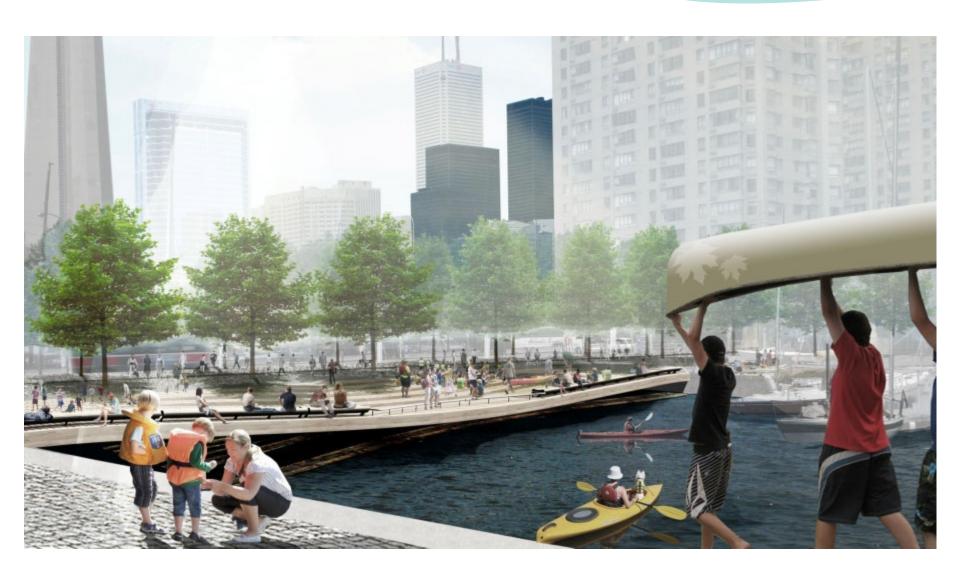
"You build great cities by building a great public realm," says John Campbell, the president and CEO of Waterfrost Tosonos. If he's right, then Canada's largest city-which is not merely retrofiting existing spaces but sortably adding surface area—is well on its way. "We want to make sure as we march along and revitalize the waterfront," Campbell says, "that the water's edge in recentured by the people, legally, physically, and psychologically." Accordingly, Genze wanted to define Canada's newfound amenity by referencing a collective national memory: the beautiful view, large trees on the shore, and a restit wooden eabin and dock perched on the edge of the lake. "This is what Canadians share," he says, "this perception of the landscape, of looking out from a shortline or dock across the water." "Adars Rings Accident





APPROXICE TO A STATE OF THE STA

## **Rees Wavedeck: Construction Underway**



## **Simcoe Wavedeck: Construction Underway**



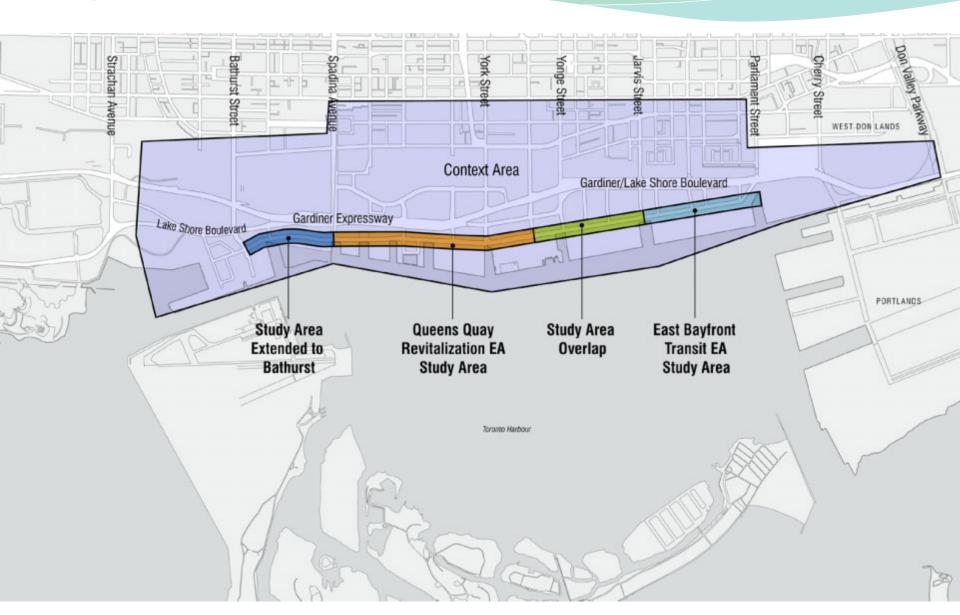
## **Spadina Bridge: Construction Early-2009**



## What Have We Been Doing for the Past 11 Months?

- Consider and follow up on comments from Public Forum 1
- Assess baseline technical feasibility of design alternatives
  - Over 90 meetings in total:
    - City and TTC technical staff
    - Partner agencies
    - Stakeholders
    - Landowners/Property Managers
    - Adjacent project efforts
- Advanced transit and traffic modelling
- Develop Alternative Design Concepts and Evaluation (Phase 3)
- Coordination with East Bayfront Transit EA

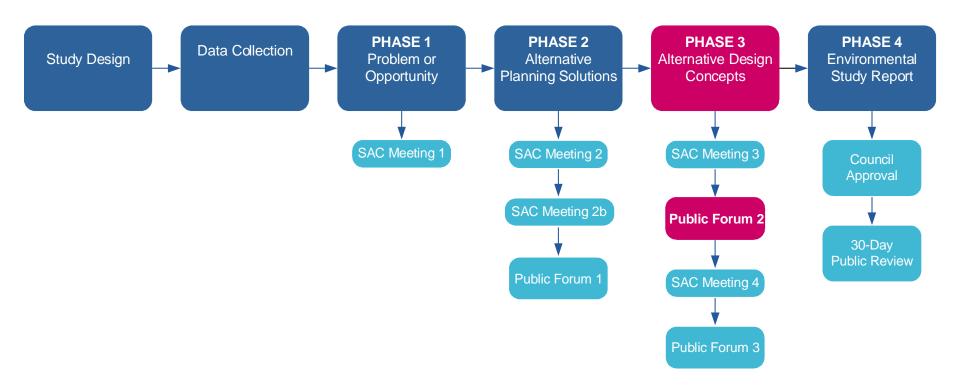
## **Study Area: Revised**



## **Overview**

- Review of EA Phases 1 & 2 from Public Forum #1: January 2008
- EA Phase 3: Alternative Design Alternatives
  - Long list of Design Alternatives
  - Evaluation of Design Alternatives
- Next Steps
  - Evaluation Criteria for Shortlisted Design Alternatives

## **Process to Date**



# REVIEW OF EA PHASES 1 & 2 Public Forum #1: January 2008

## **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.

## **Innovative Design Competition**



## **Innovative Design Competition**

## **Objectives**

- Continuous public promenade
- Complete Martin Goodman Trail
- Create major points of arrival where the heads of slips meet Queens Quay
- Improve Queens Quay
- Consistent standards for finishes, furniture, pavers, boardwalks and railings
- Sustainable approach that includes habitat and water quality improvements

## **Quay to the City Experiment**

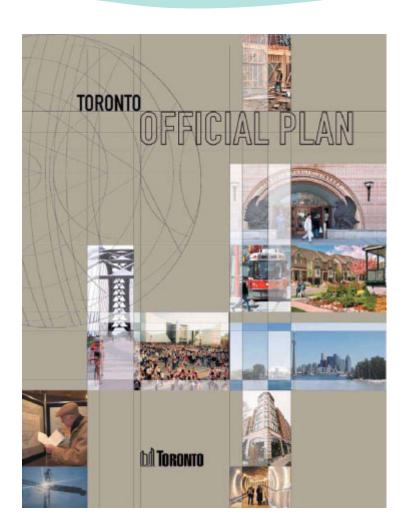




### **City of Toronto Official Plan**

Toronto City Council, November, 2002)

 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.



# Recap from January 2008 Public Forum 1

## Toronto Pedestrian Charter (Toronto City Council, May, 2002)

 walking supports community health, vitality and safety. It will increase use of public transit; decrease car dependence; reduce conflict between vehicles and pedestrians; ...



### Toronto Ledestrian Charter

Walking is the most ancient and universal form of travel. It is also an important form of exercise and recreation. Every personal trip involves walking, alone or in combination with taking public transit, driving or cycling.

A pedestrian is a person moving from place to place, either by foot or by using an assistive mobility device. Pedestrians include residents and visitors to the city of all ages and abilities. In order to travel safely, conveniently, directly and comfortably, they require an urban environment and infrastructure designed to meet their travel needs



To ensure walking is a safe, comfartable and convenient mode of urban travel, the City of Toronto respects the following principles:

### **/ccessibility**

Walking is a free and direct means of accessing local goods, services, community amenities and public transit.

Walking is the only mode of travel that is universally affordable, and allows children and youth, and people with specific medical

conditions to travel independently.

### Mealth and Well-Being Walking is a proven method of promoting

personal health and well-being.

### Environmental Sustainability Walking relies on human power and has

### negligible environmental impact.

### Personal and Community Safety An environment in which people feel safe

and comfortable walking increases community safety for all.

### Gommunity Cohesion and Vitality A pedestrian-friendly environment encourages and facilitates social interaction and local

To create an urban environment in all parts of the city that encourages and supports audking. the City of Toronto:

economic vitality.

- + upholds the right of polentrians of all ages and abilities to safe, convenient, direct and
- . provides a walking environment within the public right-of-way and in public parks that encourages people to walk for travel, exercise and recreation:
- supports and escourages the planning, design and development of a walking environment in public and private spaces (both exterior and interior) that meets the travel needs of pedestrians;
- . provides and maintains infrastructure that gives pedestrians safe and convenient message while walking along and exossing streets
- · ensures that residents' access to basic community amenities and services does not depend on car ownership or public transit use;
- sets policies that reduce conflict between polestrians and other users of the public right-of-way; \* creates walkable communities by giving high planning priority to compact, human-scale and mixed fund use:
- · encourages research and education on the social, economic, environmental and health benefits of walking as a firm of travel, exercise and recreation;
- + promotes laws and regulations that respect pedestrians' particular needs
- advocates for improving the provincial and federal regulatory and funding frameworks that affect the City's ability to improve the pedestrian environment; and
- · works with individual citizens, community groups and agencies, businesses and other levels of government to achieve these goods.

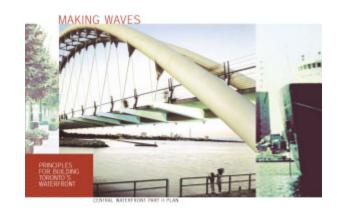


An urban environment that encourages and facilitates walking supports communit health, vitality and safety. It will increase use of public transit: decrease car dependence; reduce conflict between vehicles and pedestrians; lead to cleaner air; green public space; and support green tourism. Such an environment creates opportunities for the informal social interaction that is one of the main attributes of a vibrant, liveable city.

Adopted by Toronto City Council, May 21, 2002.

Central Waterfront Secondary Plan (Toronto City Council, April, 2003)

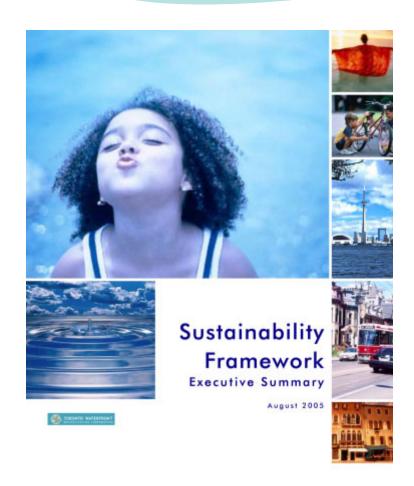
- Queens Quay will become a scenic waterfront drive
- The Martin Goodman/Waterfront Trail will be completed and connected to the city-wide trail or pathway system





## Sustainability Framework (Waterfront Toronto, August, 2005)

 Make alternative transportation options such as walking, cycling, and public transit the natural choice for residents and visitors to the waterfront area.



## Toronto Green Development Standard (City of Toronto, January, 2007)

- 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



## **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)**

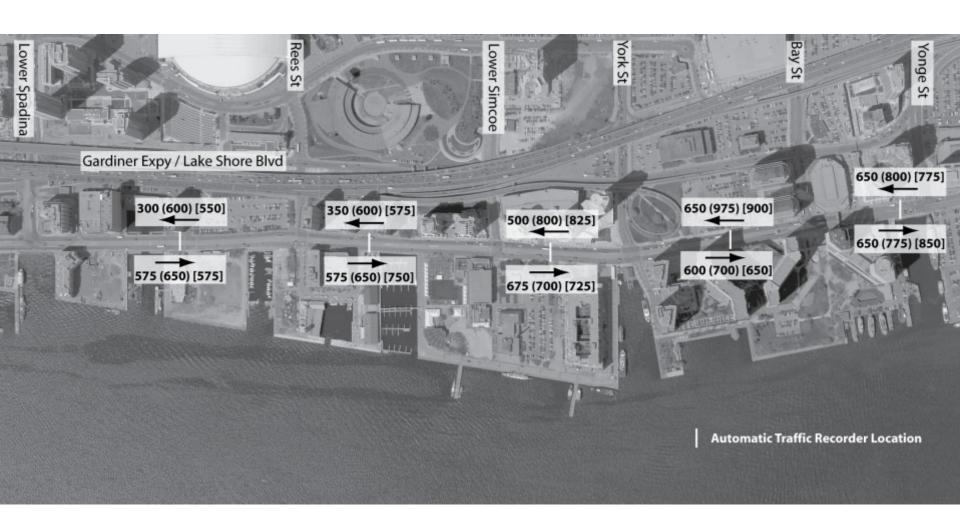
- Aesthetically it fails to provide the kind of atmosphere conducive to economic vitality, ground floor retail activity, and urban vibrancy.
- Operationally it suffers from sub-standard streetcar platforms, conflicting and illegal parking activities, and major points of conflict at intersections.
- Civically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

# Recap from January 2008

## **Problem Statement (cont'd)**

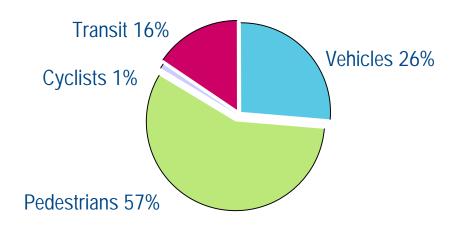
- A revitalized Queens Quay presents the opportunity to implement long-standing City of Toronto policy objectives while more effectively balancing the needs of its residential, business, recreational and visitor users.
- Strategically there is an opportunity to coordinate
   Queens Quay revitalization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

## **Data Collection: 2007**

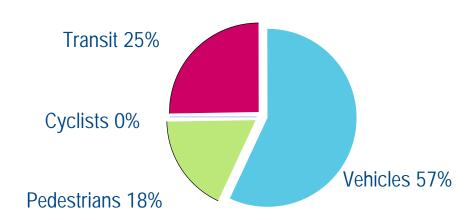


## Data Collection: Existing: Volume vs. Dedicated Space

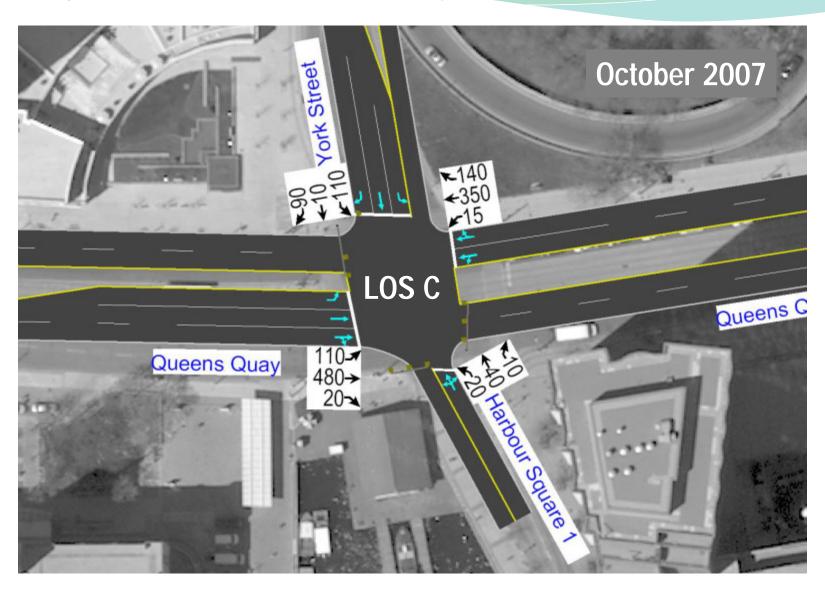
### **Average Intersection Volume**



### **Dedicated Intersection Space**



## **Existing Traffic Sample; Queens Quay / York Street**



## **Cut-Through Traffic**

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

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

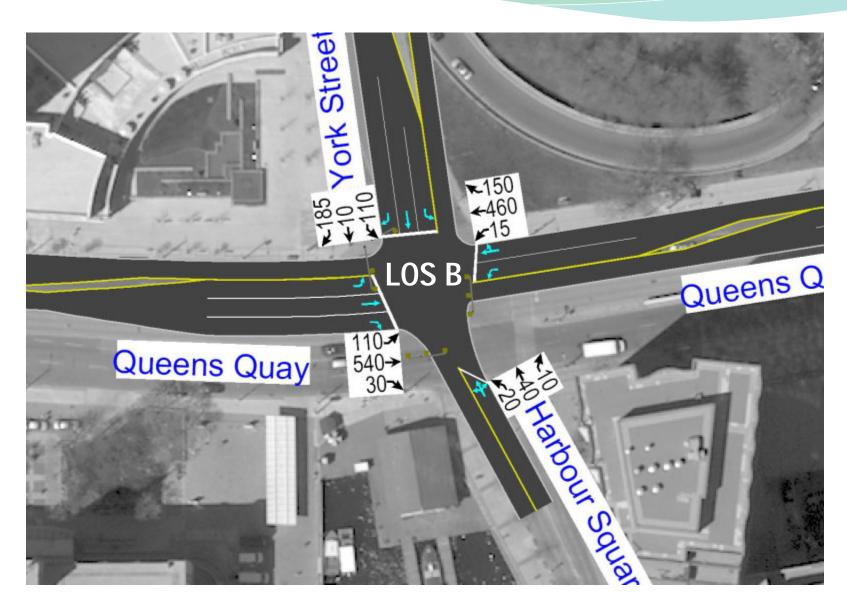
10 to 20 percent "cut-through" traffic

## **Estimating Future Traffic**

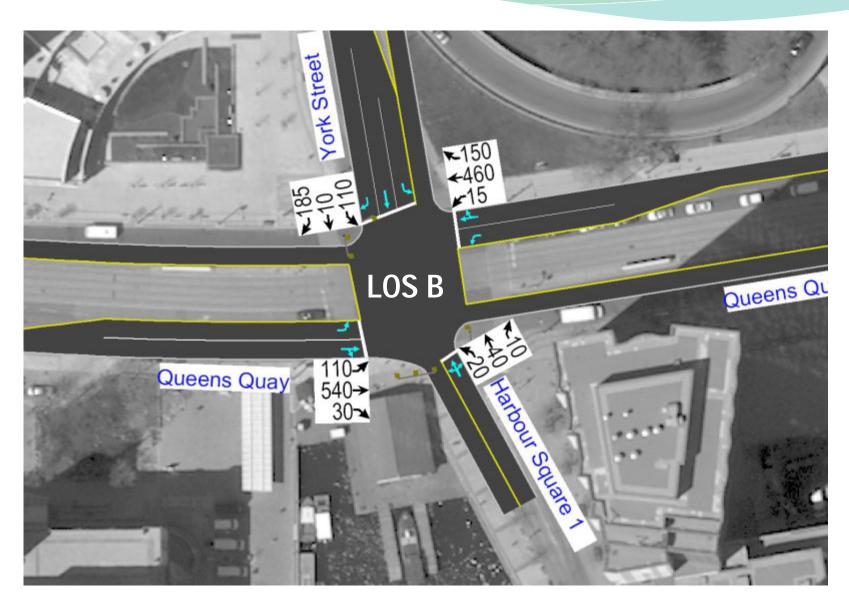
**Queens Quay / York Street – East Leg** 

Existing Traffic		<b>505</b>
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**



# **Future Traffic Sample; Centre Transit**



# **Preliminary AM Level of Service Summary**

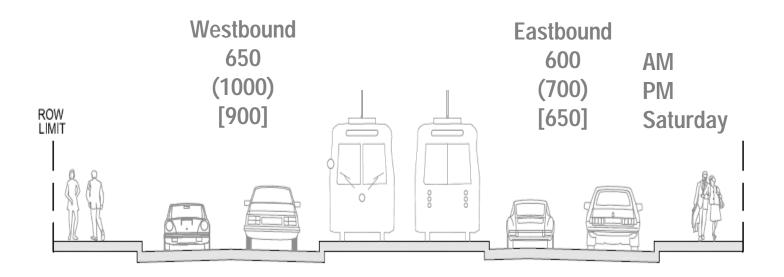
	<b>Existing Conditions</b>			Future Conditions		
Queens Quay @	V/C	Delay	LOS	V/C	Delay	LOS
Spadina Avenue	0.54	34	С	TBD		
TTC Loop	0.42	5	Α	0.55	26	С
EMS/Beer Store	-	-	-	0.47	8	Α
Rees Street	0.37	26	С	0.57	21	С
Robertson Crescent E.	-	-	-	0.48	9	Α
Lower Simcoe Street	0.31	26	С	0.60	24	С
Queens Quay 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

# **Traffic Feasibility Study**

Comparison of Network Traffic Operations Existing 4-Lane Queens Quay versus 2-Lane Queens Quay Spadina Avenue to Parliament Street								
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 area)								
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	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**

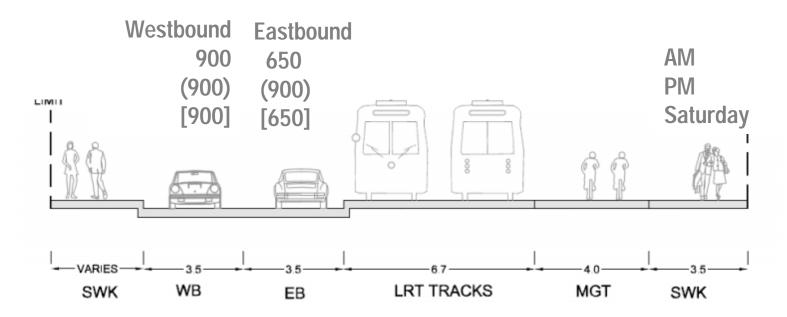
**Capacity** = 1400 vehicles per hour per direction



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

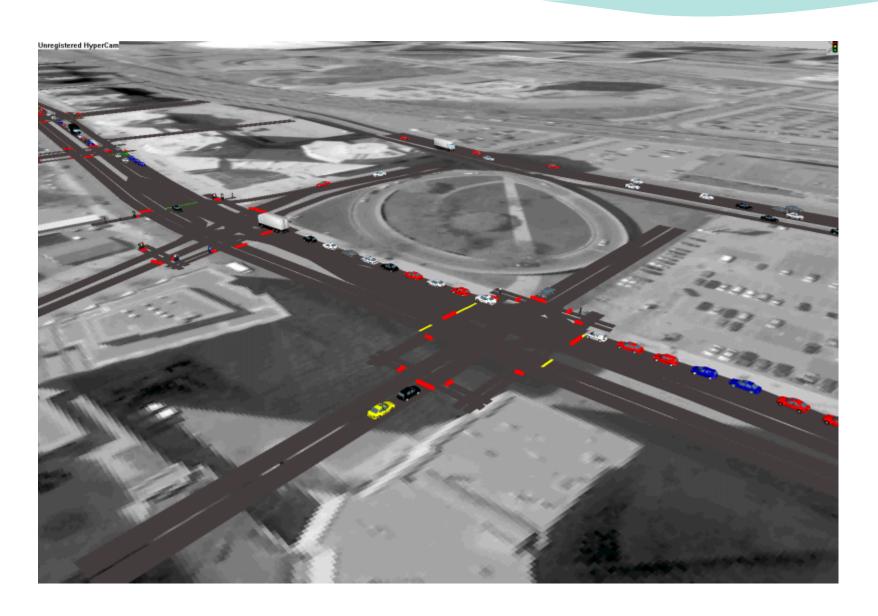
#### **Future Traffic – West of Bay**

**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

# VISSIM Micro Simulation – South Side Option



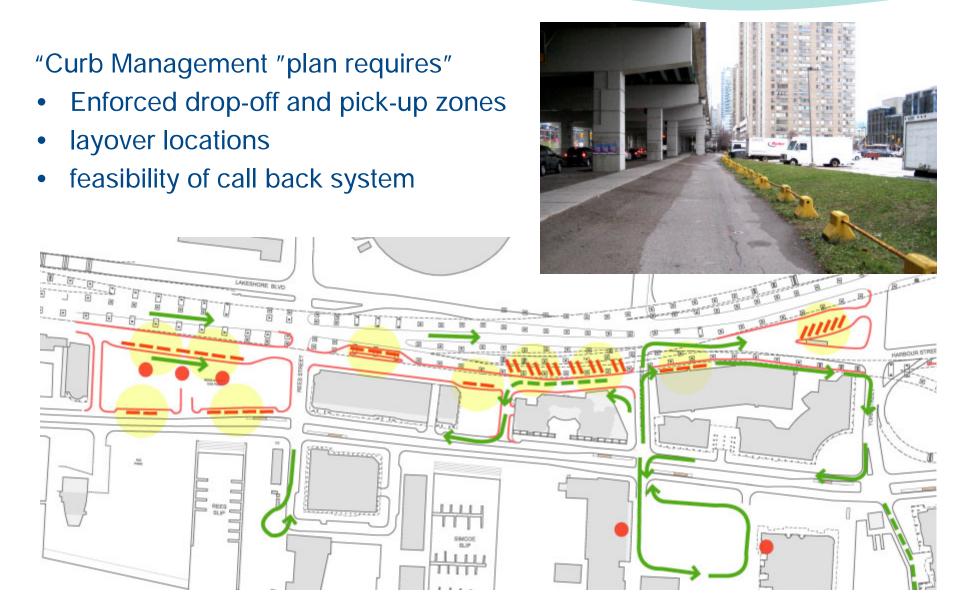
# **VISSIM Micro Simulation – Centre Option**

# **Bus Parking**



- New bus parking in dedicated locations
  - On-Street
  - Off-Street

# **Bus and Parking Strategy**



### 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

# 1. Accommodate a Satisfactory Landscape



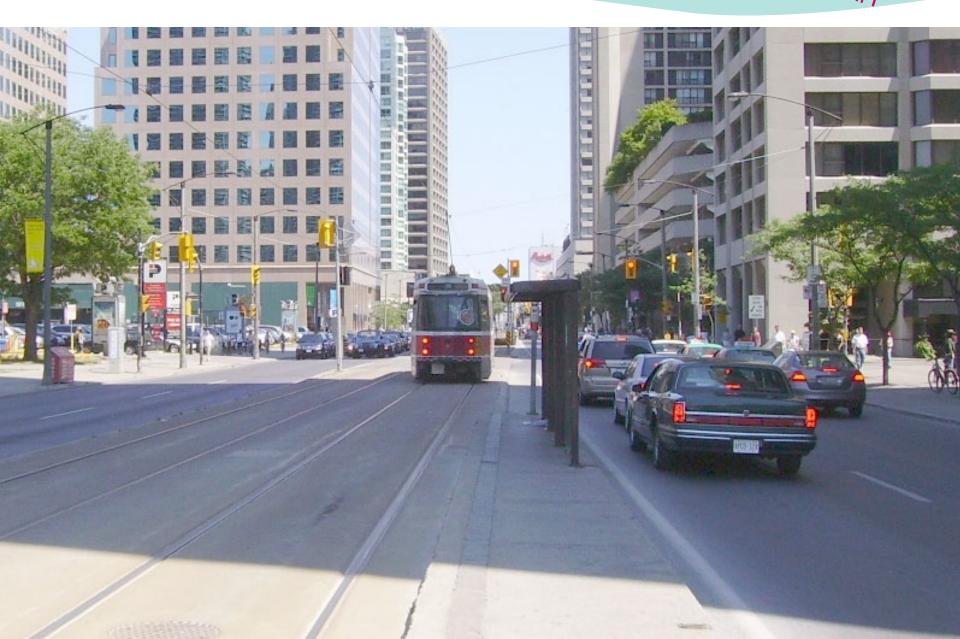
## 2. Accommodate a Generous Pedestrian Realm



# 3. Accommodate a Great Cycling Environment and Mend the Martin Goodman Trail



# 4. Improve Streetcar Operation



## 5. Accommodate Vehicle Travel with Fewer Conflicts



# 6. Accommodate Bus Parking with Fewer Conflicts and ... Public Forum 1 2008

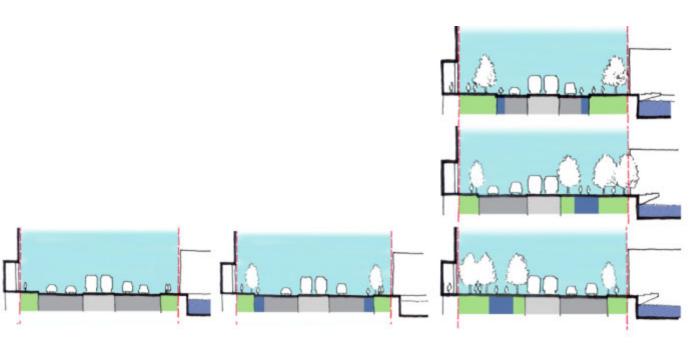


... Accommodate On-Street Parking with Fewer Conflicts

Public Forum 1 2008



# **Planning Solutions**





#### **Do Nothing**

Maintain Existing Conditions and Operations

#### Modify Operations Example: Existing Curbs,

Example: Existing Curbs, Remove Through Lanes, Add Bike Lanes, Signal Modifications

# Physical Modifications within ROW

Example 1: Reduce Through Lanes, Expand Sidewalks both Sides, Add Bike Lanes

Example 2: Through Lanes North side Martin Goodman Trail South side

Example 3: Through Lanes South side Martin Goodman Trail North side

#### **Expand ROW**

Example: Acquire Property on Southside

# **Evaluation of Planning Solutions**

	Existing	Conditions	Physical Changes		
Problem Statement Objectives	1. Do Nothing	2. Operational Changes	3. Existing Right-of-Way	4. Expand Right-of-Way	
Waterfront Main Street				•	
N. S. Connections	•	•	•	•	
E.W.Connections		•	•	•	
Aesthetically Vital	•	•	•	•	
Operations	•	•	•	•	
Grand + Beautiful Blvd.	•	•	•	•	
Policies		•	•	•	
Leverage Renewal		•		•	
Access		•		•	
Fit		•	•	•	

# **Recommended Planning Solution**

#### Physical Changes within the Existing Right of Way,.... including

- Operational Changes
- Possible Localized Widening

#### 2. What Opportunities Do you See For Improvement?

- "Widening the sidewalk where possible, and better pedestrian crossings at intersections would all be very helpful."
- "Bus parking on Queens Quay should be eliminated, maybe relocated north on lakeshore?"
- "Extend public transit east"
- "Reduce traffic on Queens Quay to make it more appealing to cyclists and pedestrians"
- "Continue the MGT, need better bike connections"
- "Make it more beautiful"
- "Remove the streetcar and replace it with an underground subway tunnel linked to Union Station.
- "Lack of community gathering space, nearest thing is Starbucks"
- "Consider how to make businesses more viable"

#### 3. What Do You Like About the Preferred Planning Solution?

- "More green space and mature trees"
- "Trees, bikes and pedestrians are all accommodated"
- "Wider platforms for TTC"
- "Solves the bike on sidewalk problem"
- "Take focus away from traffic and back to what the residents of the area want and need"
- "Reduces commuter traffic"
- "If traffic can be made to work it would result in a huge aesthetic improvement"
- "I do like it! It treats all users equally."
- "Please plant trees correctly and maintain them. Most trees around Queens Quay and the condo die!"

#### 1. What Works Well Now?

- "We like the public spaces that are showing up (promenade, HTO Park, Spadina Slip)"
- "Nothing"
- "Streetcar service works well, but better signage is needed at Union Station"
- "Harbourfront skating rink"
- "Music Garden, Empire Sandy, Wetland"
- "For the most part, the flow of pedestrian and vehicular traffic moves very well, even in summer"

# 4. What Concerns do you have with the Preferred Planning Solution?

- "Economic activity during the colder or offseason periods"
- "How to handle increased traffic volumes during events"
- "Need drop-off areas for buses and private vehicles coming to the ferry terminal"
- "Bike paths should not be at the expense of vehicles or pedestrians"
- "TTC is too noisy"
- "Where is the money coming from"

#### 5. Additional Comments

- "I just hope that this project will come true"
- "There is much resistance to reducing the number of lanes of traffic. The number of vehicles that are constantly parked illegally make this concern disappear. We currently only have one lane in each direction and the bottlenecks are a result of buses etc. which make the current situation worse than the proposed."
- "Add bicycle racks so cyclists can walk around the waterfront"

# PHASE 3: Alternative Design Concepts

### What are 'Alternative Design Concepts'?

- Demonstrate alternative ways to design the Preferred Planning Solution
- Each alternative proposes the location of elements within the right-of-way:
  - curbs
  - transit right-of-way
  - sidewalks
  - intersection design
  - active transportation facilities
  - etc.

- Each alternative considers:
  - traffic and transit operations
  - property access
  - pedestrian environment
  - active transportation facilities
  - urban design character
  - etc.

### **Phase 3: Alternative Design Concepts - Steps**

- Long list of Alternative Design Concepts
- Evaluation Process
- Shortlist of Alternative Design Concepts

- Detailed evaluation---including comprehensive traffic and transit simulations
- Preferred Alternative Design Concept

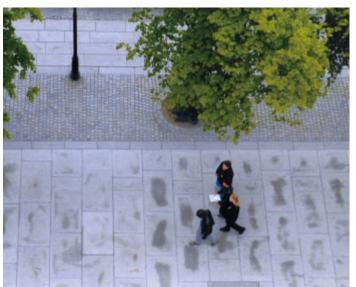
Focus of Tonight's Presentation

Next Public Meeting Early 2009

# Goals for Design Alternatives: Finding a Better Balance

 Finding a better balance between local traffic and other uses and looking for innovative ways to achieve it.





## **Goals for Design Alternatives: Providing a World Class Transit Service**

- TTC on Queens Quay will be among the best downtown transit experiences in North America
- Highest transit signal priority possible
- Off-vehicle payment at transit platforms to improve passenger loading
- New accessible low-floor transit vehicles





Melbourne, Australia



Salt Lake City, Utah



Minneapolis, Minnesota



Dublin, Ireland



Seattle, Washington

# Goals for Design Alternatives: Developing a Context Sensitive Approach to Street Design

- Provide adequate capacity and maintain accessibility for residents and businesses
- Restrict turning movements to facilitate better transit operations
- Improve pedestrian crossings to promote a more walking-oriented waterfront





# Goals for Design Alternatives: Improving the Public Realm across the Right-of-Way

- "Visually expand" the street segment without automobiles
- Indicate that the transit way is not a formal pedestrian area
  - Texture
  - Colour
  - Street furnishings
  - Trees
  - bollards



# Goals for Design Alternatives: Supporting a Waterfront Community and a Thriving Business District

- Sidewalk improvements
- On-street parking
- Access to all properties, north and south
- Service and delivery access
- Bus drop –off zones
- Four Season Waterfront







# Goals for Design Alternatives: Creating a Great Public Place...Not a Corridor

- Redefine what it means to be Toronto's waterfront 'Main Street'
- Make Queens Quay a destination
- Create a lasting, high quality environment
- Add value to the area



## **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**

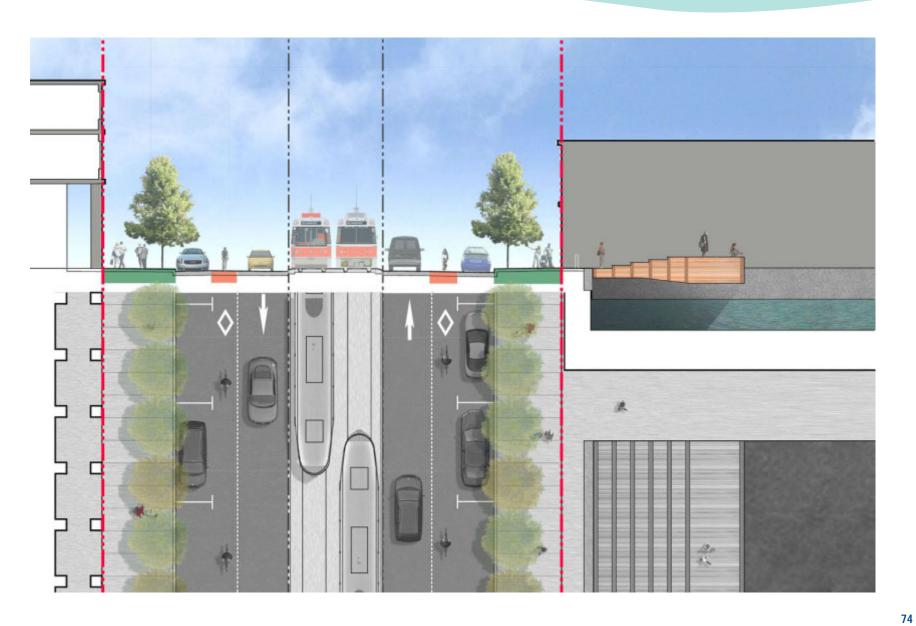
Alternative 4. Two-Way Traffic w/ Martin Goodman Trail

Alternative 5. One-Way Traffic w/ Martin Goodman Trail

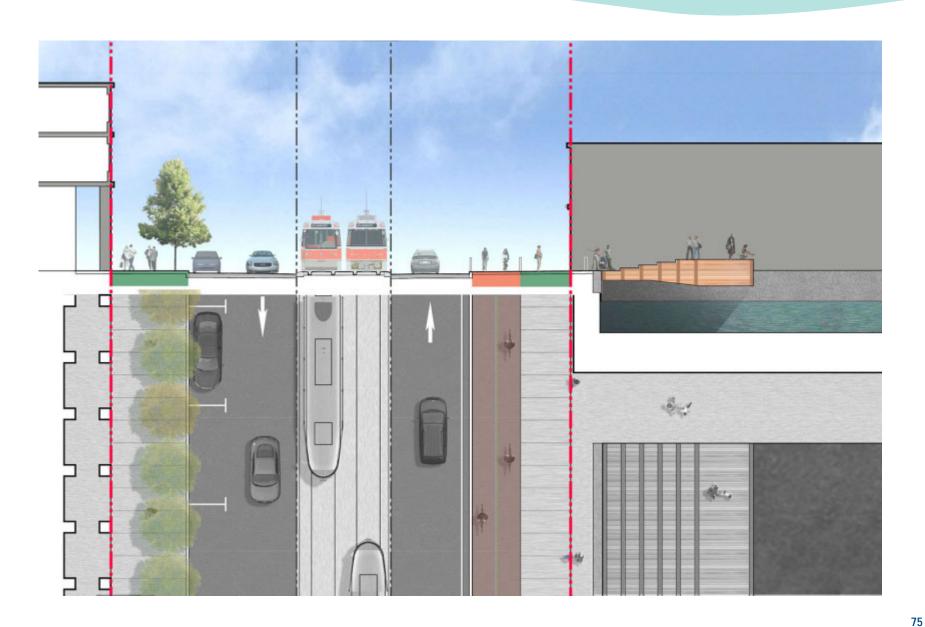
### **Alternative 1: Do Nothing**



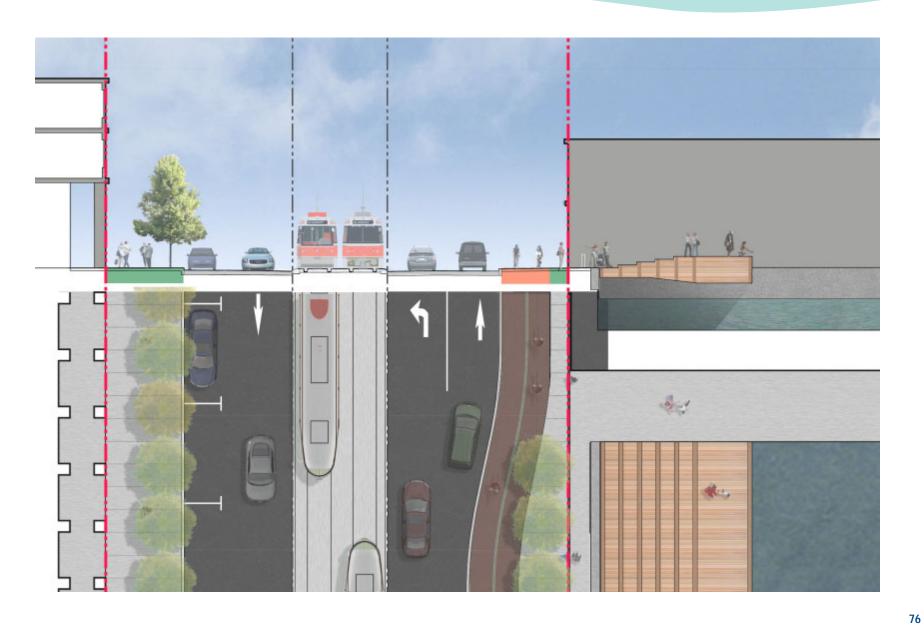
#### **Alternative 2: Centre Transit with On-Street Bike Lanes**



#### Alternative 3: Centre Transit with Martin Goodman Trail - (Mid-Block)



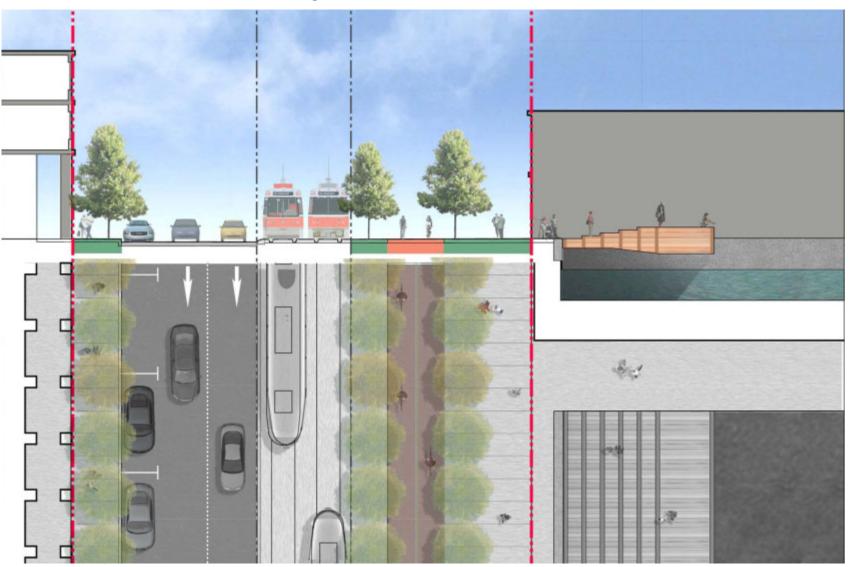
#### Alternative 3: Centre Transit with Martin Goodman Trail - (Intersection)



# Alternative 4: Southside Transit with Martin Goodman Trail and Two-Way Traffic



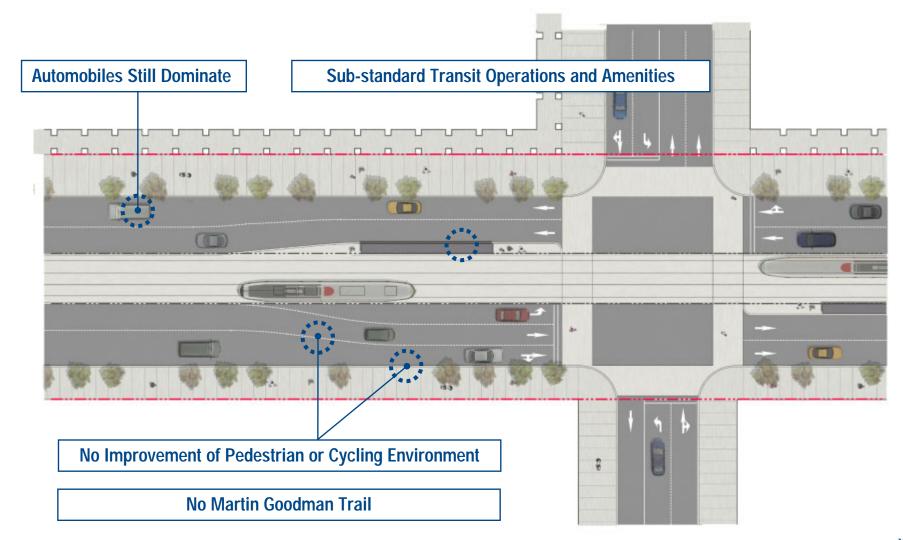
# Alternative 5: Southside Transit with Martin Goodman Trail and One-Way Traffic



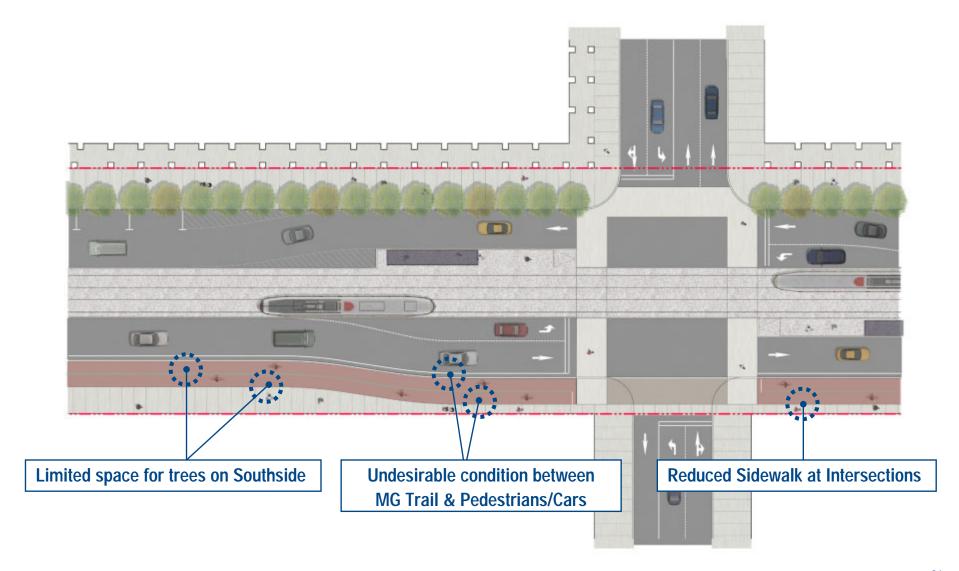
### **Evaluation of Long-List of Design Alternatives**

	Centre Transit			Southside Transit	
Evaluation Criteria	1.	/ 2.	3.	<b>/</b> 4. \	<b>5.</b>
	Do Nothing	On-Street	Martin	MG Trail w/	MG Trail w
		Bike Lanes	Goodman	Two-Way	One-Way
			Trail	Operations	Operations
Waterfront Main Street	×	0	0	<b>1</b>	0
N.S Connections	×	0	0	<b>√</b>	
E.W. Connections	×	0	×	$\overline{}$	$\overline{}$
Aesthetically Vital		<b>✓</b>	0	<b>√</b>	<b>√</b>
Operations + Safety		<b>✓</b>	0	<b>√</b>	
Grand + Beautiful Blvd.		<b>✓</b>	0	$\checkmark$	$\overline{}$
Policies		<b>✓</b>	×	<b>✓</b>	<b>√</b>
Leverage Renewal	×	<b>✓</b>	$\checkmark$	$\checkmark$	<b>✓</b>
Access	$\overline{\hspace{1cm}}$		<b>√</b>	0	
Fit	$\overline{}$		×		

# **Key Reasons for Screening Out... Alternative 1: Do Nothing**

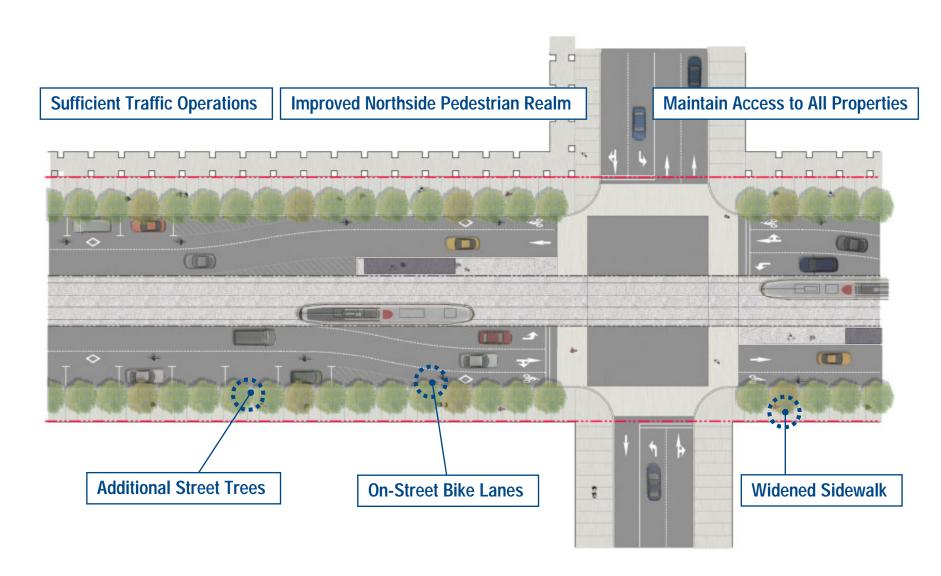


# Key Reasons for Screening Out... Alternative 3: Centre Transit with Martin Goodman Trail



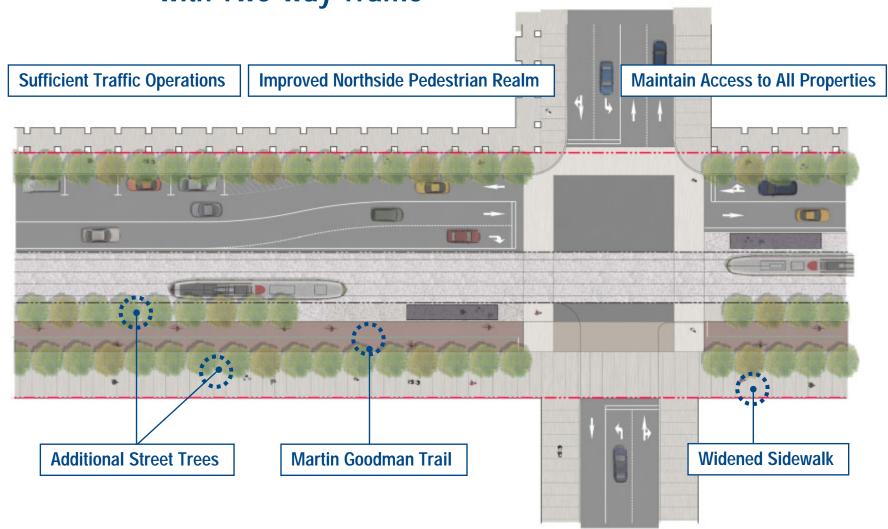
#### **Carried Forward:**

#### **Alternative 2: Centre Transit with Bike Lanes**



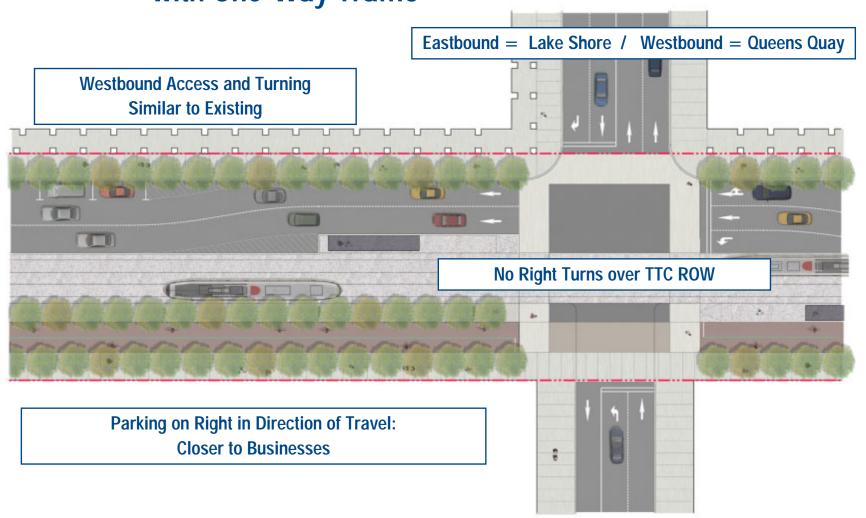
#### **Carried Forward:**

Alternative 4: Southside Transit with Martin Goodman Trail with Two-way Traffic

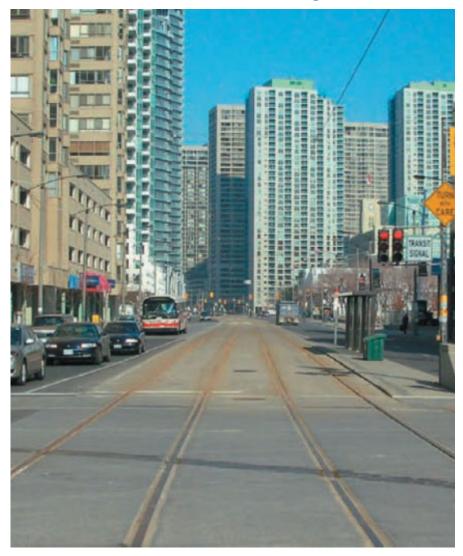


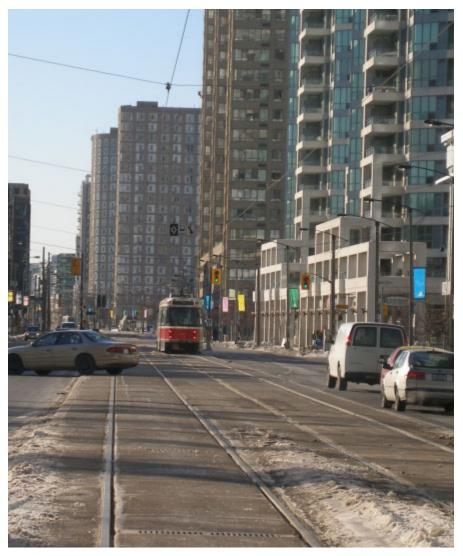
#### **Carried Forward:**

# Alternative 5: Southside Transit with Martin Goodman Trail with One-Way Traffic



# Carried Forward ... for Comparison Purposes Alternative 1: Do Nothing





### Alternative 1: Do Nothing - Queens Quay at Simcoe Today



### **Alternative 2: Centre Transit at Simcoe Slip**



### Alternatives 4 & 5: Southside Transit at Simcoe Slip



### Alternative 1: Do Nothing - Queens Quay at Simcoe Today



### **Alternative 2: Centre Transit at Simcoe Slip**



#### Alternatives 4 & 5: Southside Transit at Simcoe Slip



### Alternative 1: Do Nothing - Queens Quay at Simcoe Today



#### **Alternative 2: Centre Transit - Simcoe at Harbourfront Centre**



#### **Alternatives 4 & 5: Southside Transit - Simcoe at Harbourfront Centre**



## **NEXT STEPS**

#### Remaining Tasks to Complete Phase 3

- Conduct Detailed Evaluation of Shortlisted Design Alternatives
- Optimize Transit Signal Priority and Traffic Operations
- Develop Parking Solutions for Queens Quay Taxis
  - School and Tour Buses
  - Taxis
  - Loading Zones
  - On-Street Parking
- Work with Affected/Impacted Landowners/Condo Boards
  - Fire/Emergency Services
  - Residential and Commercial Properties
  - Planned Development
  - Harbourfront Centre/other cultural facilities
- Undertake Round 3 of Public Consultation in Early 2009

# PHASE 3 – Evaluation Criteria for Shortlisted Design Alternatives

#### **Evaluation Criteria for Shortlisted Alternatives**

- 1. Land Use/Planning and Policy Context
- 2. Urban Design and Public Realm
- 3. Transportation
- 4. Socio-Economic Environment
- 5. Natural Environment
- 6. Cultural Environment
- 7. Cost

### **QUESTIONS**

# TORONTO CENTRAL WATERFRONT PUBLIC FORUM #2

Queens Quay Revitalization EA
Bathurst Street to Lower Jarvis Street
Municipal Class Environmental Assessment (Schedule C)

December 08, 2008

