

# LOWER YONGE

Urban Design Guidelines and Transportation Master Plan EA

22 May 2013

PERKINS + WILL ARUP

# TRANSPORTATION MASTER PLAN EA

Trent Lethco, ARUP

### **TRANSPORTATION**

**Context** 

#### **CONNECTING WITH THE DOWNTOWN**



- Poor Pedestrian/Cyclist connections under Gardiner Expressway
- Limited vehicular circulation

#### **METRES OF MISERY**

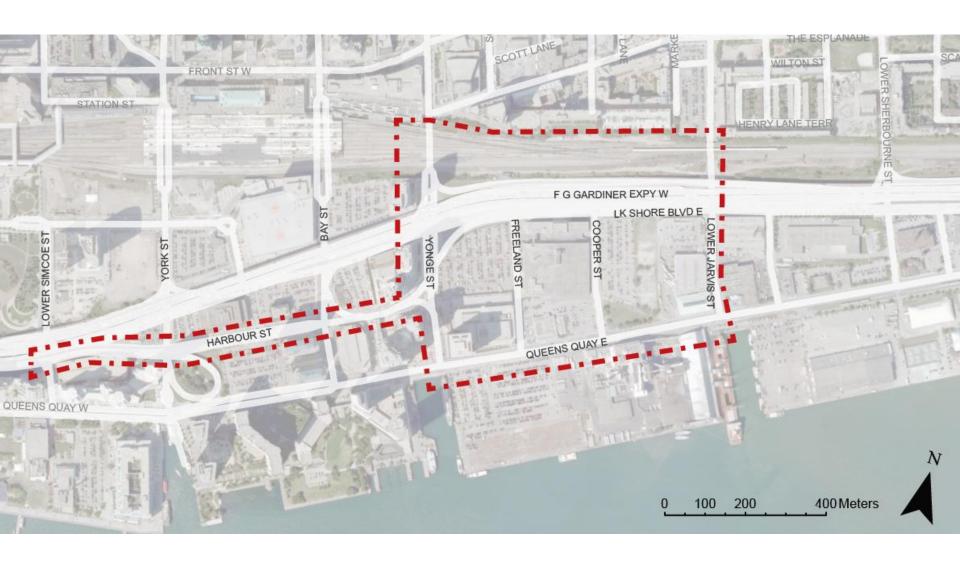




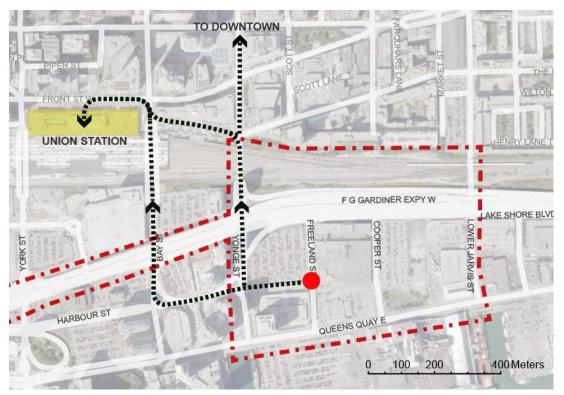


- Train tracks greatly impede mobility of all modes to waterfront
- Lower Yonge street grid cut off from downtown

#### **NETWORK OPTIMIZATION**



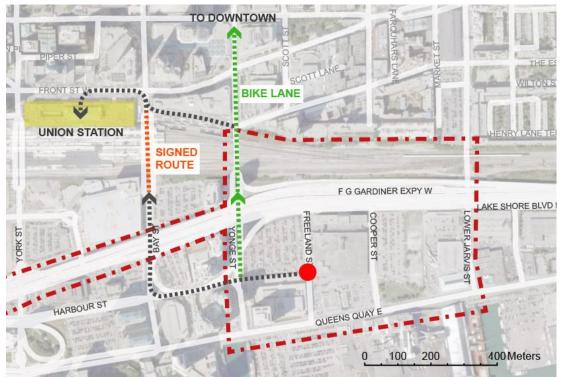
#### **ACTIVE TRANSPORTATION: Pedestrians**



	Union Station	Downtown Center
		(Queen St)
Distance	1 km	1.4 km
Time	14 min	18 min
Lanes Crossed	11 (Yonge, Bay, Lake Shore)	28
Sound Issues	<ul><li>Expressway traffic</li><li>Trains</li></ul>	
Other Issues	<ul><li>Multiple under-crossings</li><li>Complex intersections</li><li>Long crossing distances</li></ul>	

- Pedestrian flow within precinct
- Pedestrian connections to Light Rail, Union Station, and downtown

#### **ACTIVE TRANSPORTATION: Cyclists**



	Union Station	Downtown Center (Queen St)
Distance	1 km	1.4 km
Time	5 min	7 min
Traffic Lanes Crossed	11 (Yonge, Bay, Lake Shore)	28
Sound Issues	- Expressway traffic - Trains	
Other Issues	<ul><li>Cycle network gaps</li><li>Complex intersections</li><li>Assumes 2-way Harbour St.</li></ul>	

Provide sufficient bicycle infrastructure

#### **SUSTAINABLE TRANSPORTATION**



Convenient connections to future light rail

#### **SUSTAINABLE TRANSPORTATION**











Support a range of transportation options

### HARBOUR STREET

#### **HARBOUR STREET: Today**



- Transitions from highway to auto-oriented surface street
- Vehicle movement emphasized
- Major arterial

- Limited access to driveways
- Minimal pedestrian/cyclist amenities
- ~ 27m wide
- Speed Limit: 50 km/hr



Harbour Street at Lake Shore



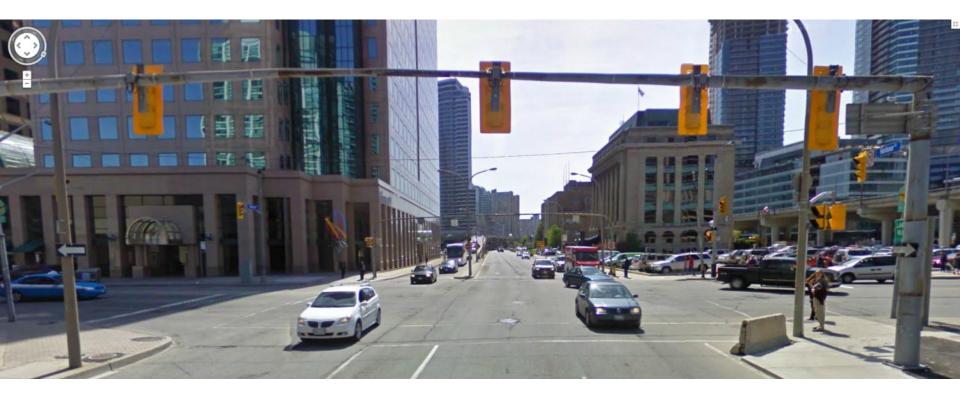
- One-Way Eastbound
  - One-way pair with westbound Lakeshore Blvd.
- Limited / no property access
- No pedestrian or bicycle facilities

#### Harbour Street at York Street



- Supports off-ramp traffic from Gardiner Expressway
- Some access to public parking
- Sidewalk on north side of street

Harbour Street at Bay Street



- Some complete street elements:
  - Sidewalks on both sides of street
  - **Splits from Gardiner Expressway**
- Vehicle access to properties

Harbour Street west of Yonge Street



- More pedestrian amenities
- Difficult pedestrian crossings:
  - Few crossing opportunities
  - Irregular intersections



#### **Influencing factors:**

- New planned and proposed developments
- Gardiner ramp reconfiguration
- Extension of Harbour Street east of Yonge Street

#### **Elements to consider:**

- 1-way vs. 2-way street
- Neighborhood street vs. Lake Shore extension
- Modes to accommodate / prioritize
- Street character: Landscaping and other amenities
- Safety for all modes

# **RAMP RECONFIGURATION: Impacts to Harbour Street** F G GARDINER EXPY W **EXISTING YORK-BAY-YONGE OFF RAMPS** FG GARDINER EXPY W F G GARDINER EXPY W **FUTURE YORK-BAY-YONGE RAMPS** FG GARDINER EXPY W

#### **RAMP RECONFIGURATION**

#### **EXISTING** AT LOWER SIMCOE ST

#### PROPOSED AT LOWER SIMCOE ST





## **PRECEDENTS**

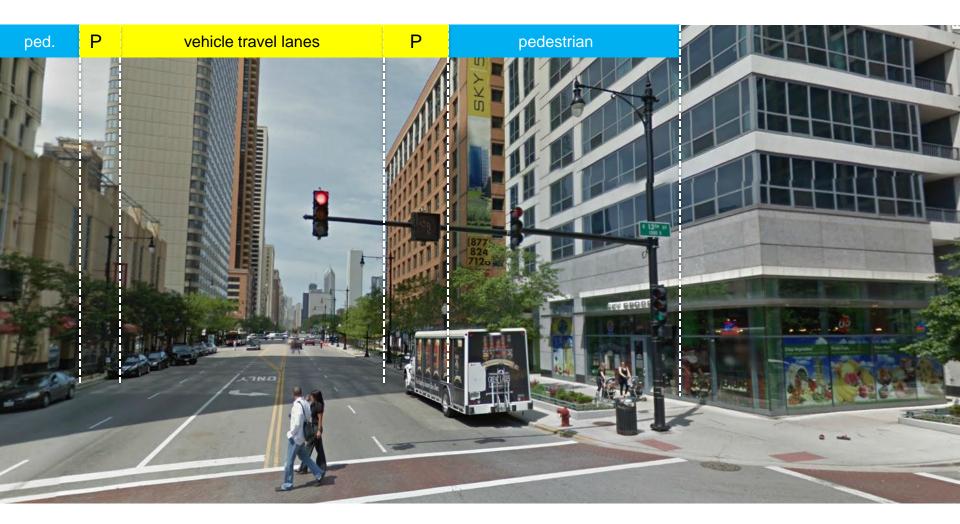
#### **EXAMPLE #1:** Harbour Street, West of Yonge Street

- 1-WAY COMMERCIAL STREET
- BALANCED VEHICLE / PEDESTRIAN
- BOYLSTON STREET, BOSTON MA: ROW~27m



#### **EXAMPLE #2:** Harbour Street, West of Yonge Street

- 2-WAY MAJOR ARTERIAL
- VEHICLE PRIORITY, PEDESTRIAN / TRANSIT ACCOMODATION
- S. MICHIGAN AVE, CHICAGO IL: ROW ~ 27m



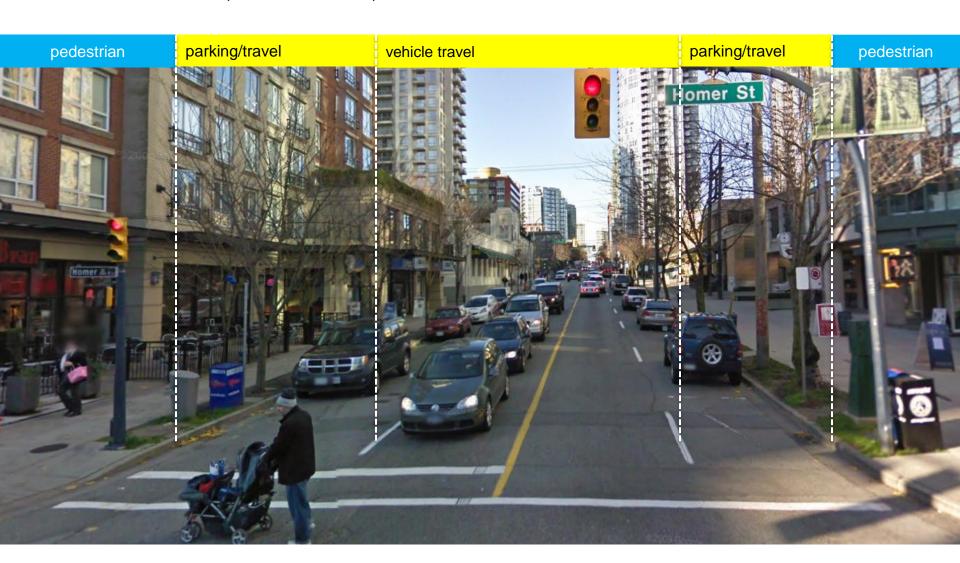
#### **EXAMPLE #3:** Harbour Street, West of Yonge Street

- 2-WAY COMMERCIAL STREET
- VEHICLE PRIORITY, PEDESTRIAN ACCOMODATION
- AVENUE RD, TORONTO, ON: ROW~24m



#### **EXAMPLE #4:** Harbour Street Extension (East of Yonge Street)

- 2-WAY BALANCED ACTIVITY STREET
- DAVIE STREET, VANCOUVER, B.C.: ROW ~25M



#### **EXAMPLE #5:** Harbour Street Extension (East of Yonge Street)

- 2-WAY BALANCED RESIDENTIAL MIXED USE STREET
- 23<sup>RD</sup> St and I St NW, Washington DC: ROW ~25M



#### **HUMAN CENTRIC APPROACH**

Model for a human-centered transportation system

