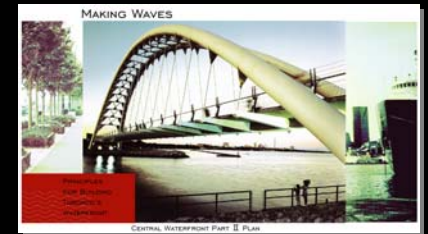




Improving the Gardiner – Transforming Toronto

Background – Chronology

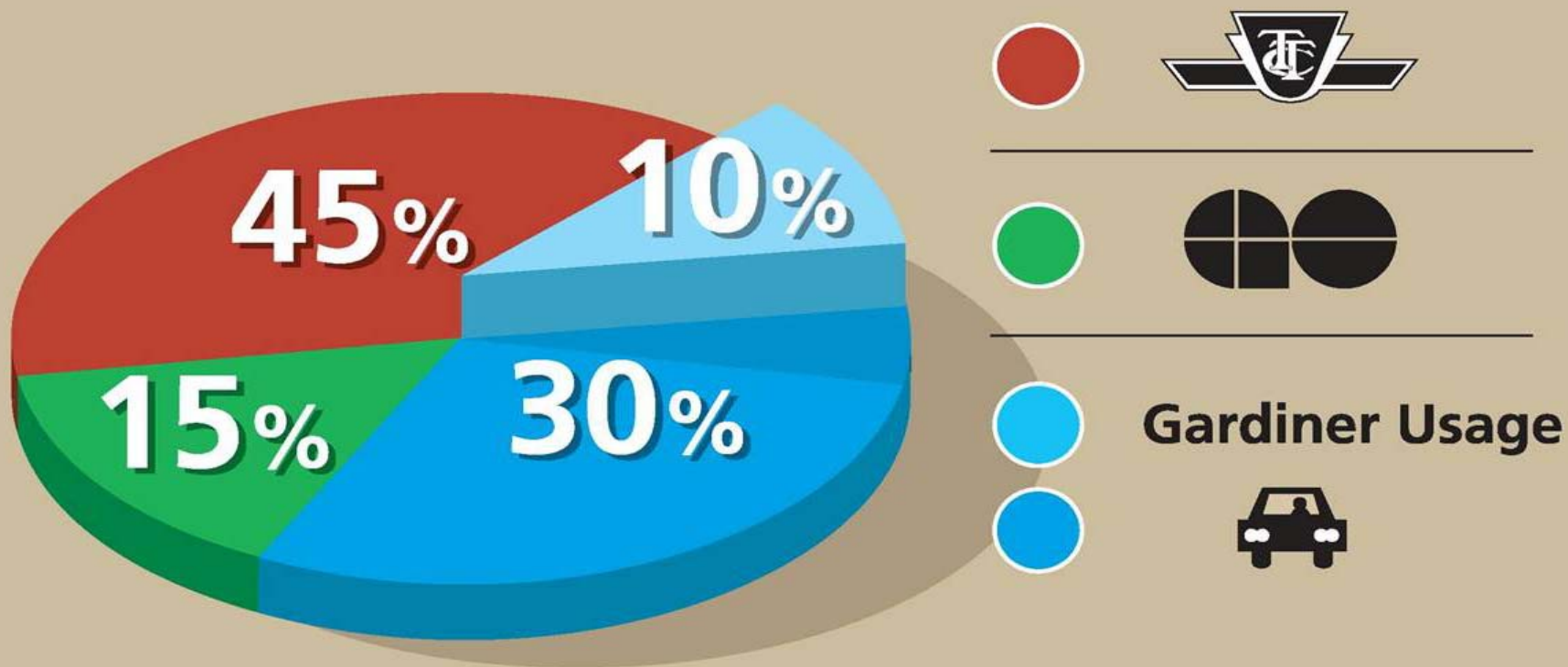
- 2000 – Waterfront Revitalization Task Force Report
- 2001 – Central Waterfront Secondary Plan
- 2002 – TWRC Development Plan & Business Strategy
- 2003 – City Council Directive



Background - Role of the Gardiner

Central Area Person Trips by Mode

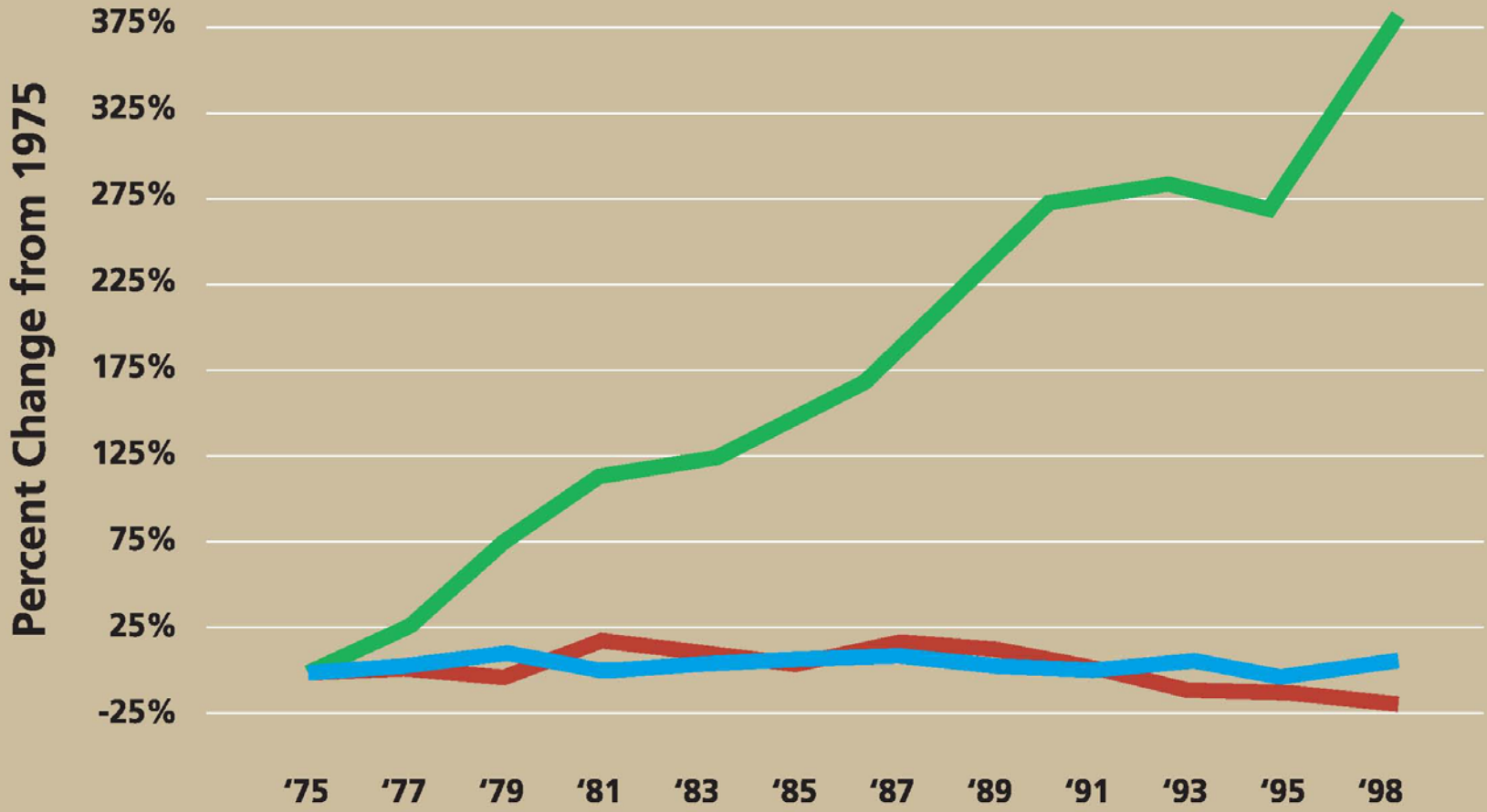
The Gardiner is a fractional part of commuter trips; it is not the solution to Toronto's transportation future.



Background - Role of the Gardiner



Percent Change in INBOUND Central Area Trips (7am-9am period)



Framework for Gardiner Analysis

1. Creating a Beautiful City
2. Recognizing Transit Key to Future Growth
3. Maximizing Benefits of Waterfront Revitalization

1. Creating a Beautiful City



- Existing Gardiner is an eyesore
- Structure is outdated
- Barrier between city and waterfront

1. Creating a Beautiful City

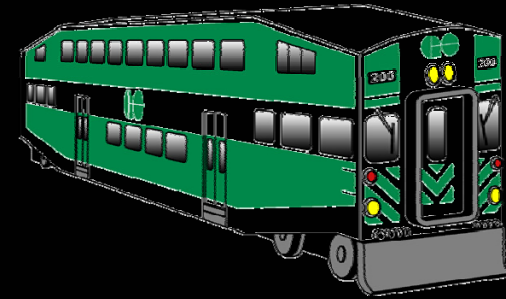


Improving Gardiner:

- Bold move - vision for the city we want
- Unprecedented opportunity to improve connection to waterfront
- Shows value put on quality of place

2. Transit will Accommodate Future Growth

- Future travel demand will be met through expanded public transit
- Underlying assumption of all options analyzed
- Consistent with transportation objectives of:
 - City of Toronto Official Plan
 - Central Waterfront Secondary Plan
 - Province's greenbelt and growth strategies



2. Transit will Accommodate Future Growth

- GO Transit has biggest impact on reducing use of Gardiner
- 70% of Gardiner users live outside of Toronto
- \$1 Billion GO Transit expansion underway
- Will add equivalent of 10 freeway lanes during rush hour
- Lead to reduction of 1.1 million km of car travel every day



2. Transit will Accommodate Future Growth

- GO Transit Expansion - 12 projects include:
 - Lake Shore West - Third Track
 - Lake Shore East - Third Track
 - Georgetown Corridor - Capacity Increase
 - Union Station Improvements

- Projects scheduled to be complete by 2009



2. Transit Will Accommodate Future Growth

TTC Waterfront Expansion:

- Planning based on transit as primary mode
- Union Station Platform Expansion
- Queens Quay LRT Expansion
- West Don Lands New LRT Service

3. Maximizing Benefits of Revitalization



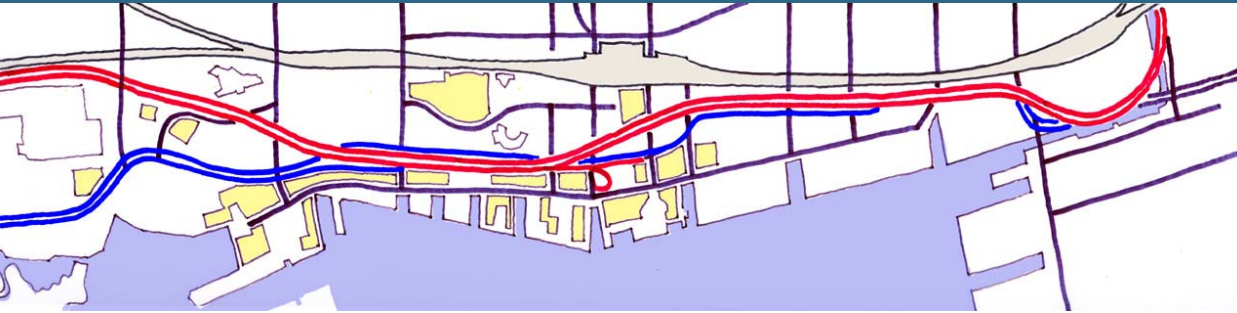
(right) Impression of the gateway public space created at the heads of slips, view from Queen's Quay Boulevard.

(opposite left) Studies in the variation of curvature to produce diverse conditions at the heads of slips, all within a coherent overall language.

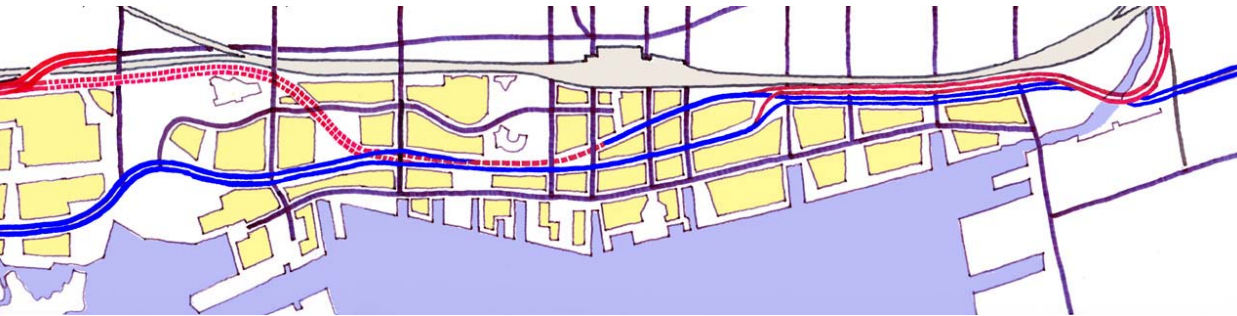
3. Maximizing Benefits of Revitalization



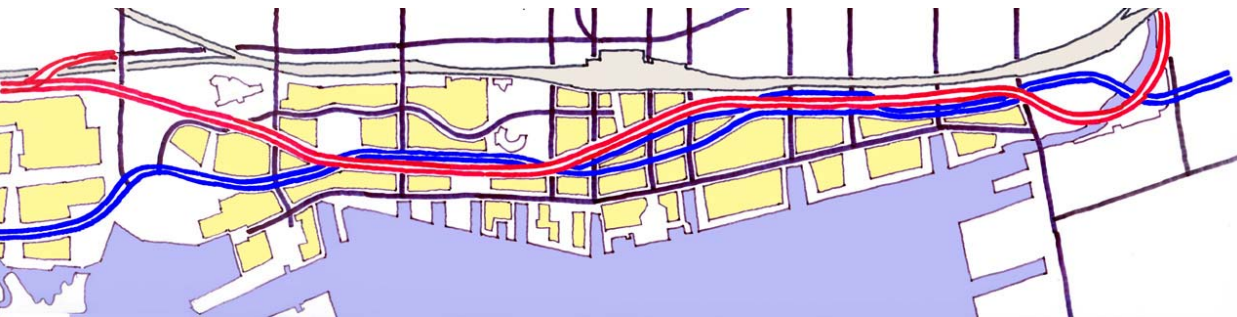
Four Options



- **Do Nothing**



- **Replacement**



- **Retain & Ameliorate**



- **The Great Street**

All Options Require Front Street Extension



- FSE must be built before changes are made to corridor
- FSE will take 30% of traffic destined for downtown
- Richmond/Adelaide ramps also widened from one lane to two

Front Street Extension

- FSE will provide more than a third of existing Gardiner traffic with new route into and out of city
- Service levels unacceptable without FSE
- Results in complete gridlock:
 - Demand will exceed capacity by 50% during rush hour
 - Waits at major intersections would increase by up to 4 minutes

Richmond/Adelaide Ramps

- Widening ramps to two lanes provides improved access to downtown
- Not as dramatic as proceeding without FSE but level of service not acceptable

Replacement

- Replace existing structure with at-grade and below grade road
- East of FSE interchange four-lane tunnel from Strachan to Spadina
- Spadina to Jarvis two five-lane one way streets
- Jarvis to Cherry four-lane express road on rail embankment
- Addresses barrier effect of elevated expressway
- Does not provide consistent urban boulevard
- Cost \$1.4 to 1.475 M

Retain & Ameliorate – “Transformation”

- Reduce barrier effect without removing elevated structure
- Remove ramps and move Lake Shore from underneath Gardiner
- Build underneath Gardiner fronting on Lake Shore
- Strengthen north/south connections
- Architectural enhancements to elevated structure
- Cost \$465 M

Great Street



- TWRC Preferred Option
- Retain Gardiner west of Spadina
- Remove east of Spadina to DVP
- Replace with University Ave-style Blvd.
- “Waterfront Boulevard”
- Simcoe to Jarvis five-lane one-way pairs
- Jarvis to Don River eight lanes

Rationale: Balanced Approach

- Placemaking – most dramatic impact
- Capacity – busiest part of Gardiner stays
- Cost - \$490 M
- Implementation:
 - Precedent of Eastern takedown
 - Eastern takedown on budget & on time
 - Straightforward technology

Performance Comparison

Morning Rush Hour

	Existing	Replace	Transform	Great Street
Average Speed (km/hour)	43	38	37	33
Travel Time Inbound – Humber to King @ Bay (minutes)	14	17	18	18
Travel Time Outbound – King @ Bay to Humber	13	13	15	15

Performance Comparison

Evening Rush Hour

	Existing	Replace	Transform	Great Street
Average Speed (km/hour)	37	36	36	32
Travel Time Inbound – Humber to King @ Bay (minutes)	15	17	18	20
Travel Time Outbound – King @ Bay to Humber	18	17	18	18

Cost Comparison

Existing

\$12 M
Annual Repairs

Replace

\$1.4 B –
\$1.475 B

Transform

\$465 M

Great Street

\$490 M

Constructability – Preparatory Construction

PREPARATORY CONSTRUCTION

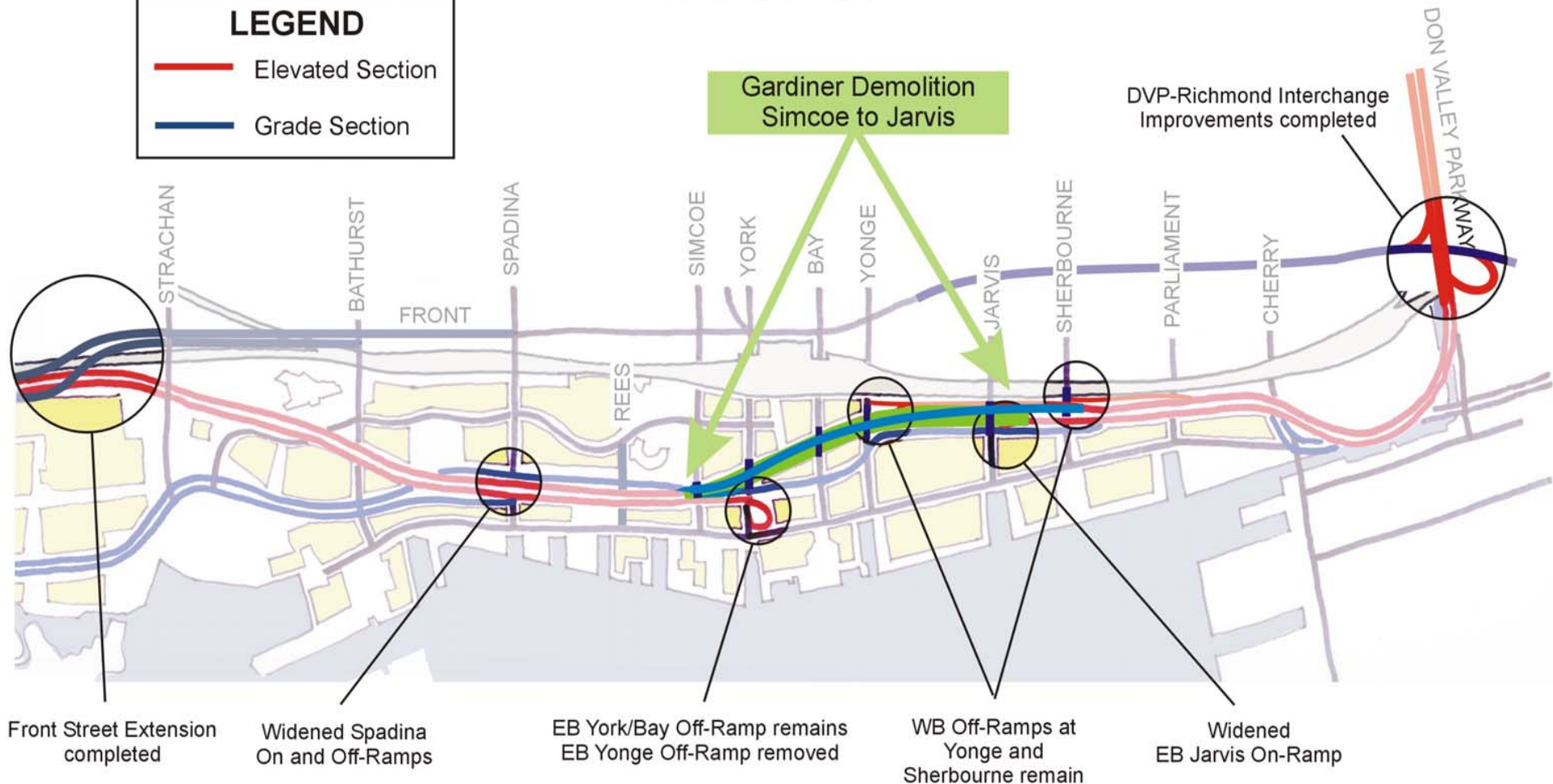


Constructability – Central

CENTRAL

LEGEND

-  Elevated Section
-  Grade Section

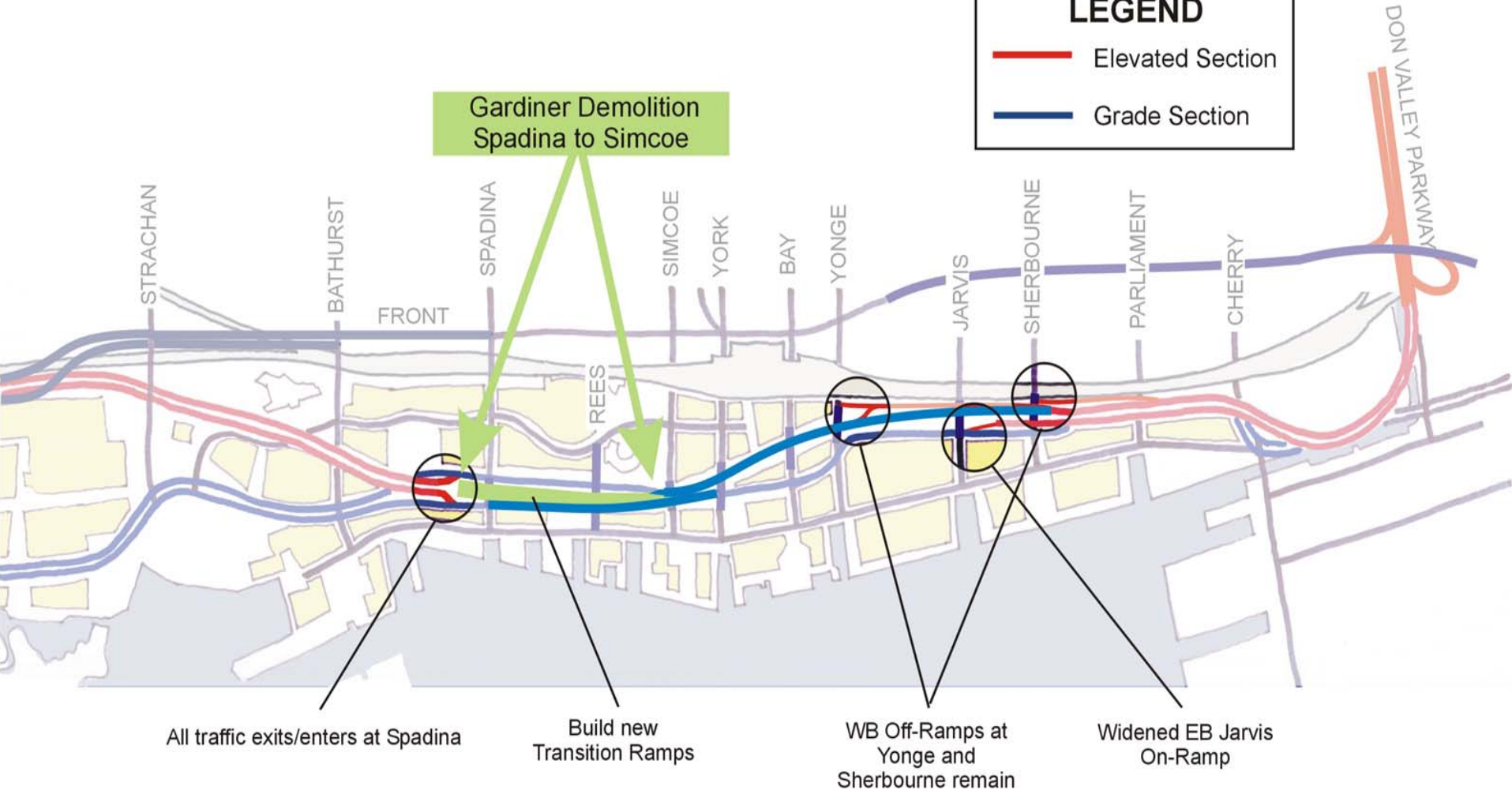


Constructability – Transition

TRANSITION

LEGEND

- Elevated Section
- Grade Section



All traffic exits/enters at Spadina

Build new
Transition Ramps

WB Off-Ramps at
Yonge and
Sherbourne remain

Widened EB Jarvis
On-Ramp

Constructability – Eastern

EASTERN

LEGEND

-  Elevated Section
-  Grade Section



New Transition ramps
in operation at Spadina

Stage construction
of DVP Ramps

Constructability

- **Preparatory Work – Four Years**
 - Environmental Assessment – 3 years
 - Front Street Extension – 4 years
 - Richmond / Adelaide improvements – 1 to 2 years
- **Central Section - Simcoe to Jarvis – Years 1 & 2**
 - Elevated expressway removed
 - Waterfront Boulevard constructed
 - Traffic disruption into downtown from west due to construction improved
- **Transitional Section at Spadina – Years 3 & 4**
 - Permanent ramps constructed
 - Elevated expressway from Spadina to Simcoe removed
 - All traffic now entering and exiting at Spadina
- **Eastern Section Jarvis to DVP – Years 3,4 & 5**
 - Elevated expressway removed
 - Waterfront Boulevard extended to DVP

Disruption

- Accommodate less traffic during implementation than existing road system
- 80 to 90% accommodation to and from west
- Nearly 100% accommodation to and from east
- Level of service – reduced, but reasonable

Mitigation Measures

- Pre-build systems wherever possible
- Simplify traffic operations – signals, turning movements
- Schedule closures for off-peak times

Waterfront Boulevard Costs

➤ Environmental Assessment	\$11 M
➤ Front Street Extension	\$255 M
➤ Richmond/Adelaide Ramps	\$46 M
➤ Central Section	\$100 M
➤ Transition Section	\$106 M
➤ Eastern Section	\$240 M
Total	\$758 M

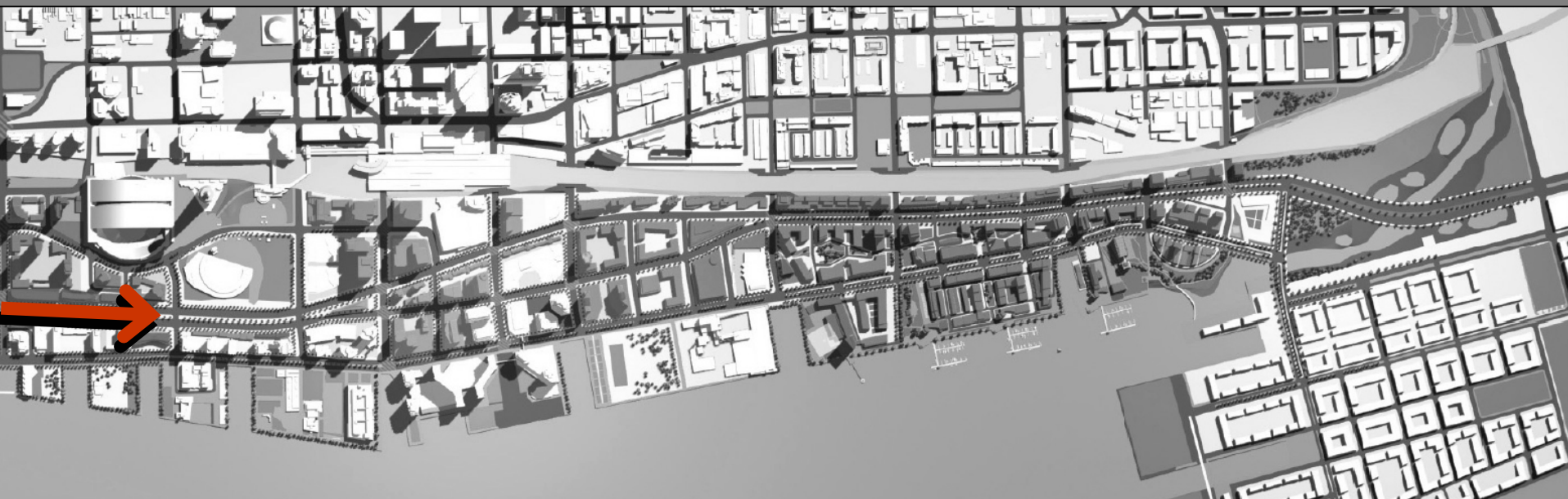


Gardiner at Rees





Waterfront Boulevard at Rees





Gardiner East Bayfront





East Bayfront Waterfront Boulevard



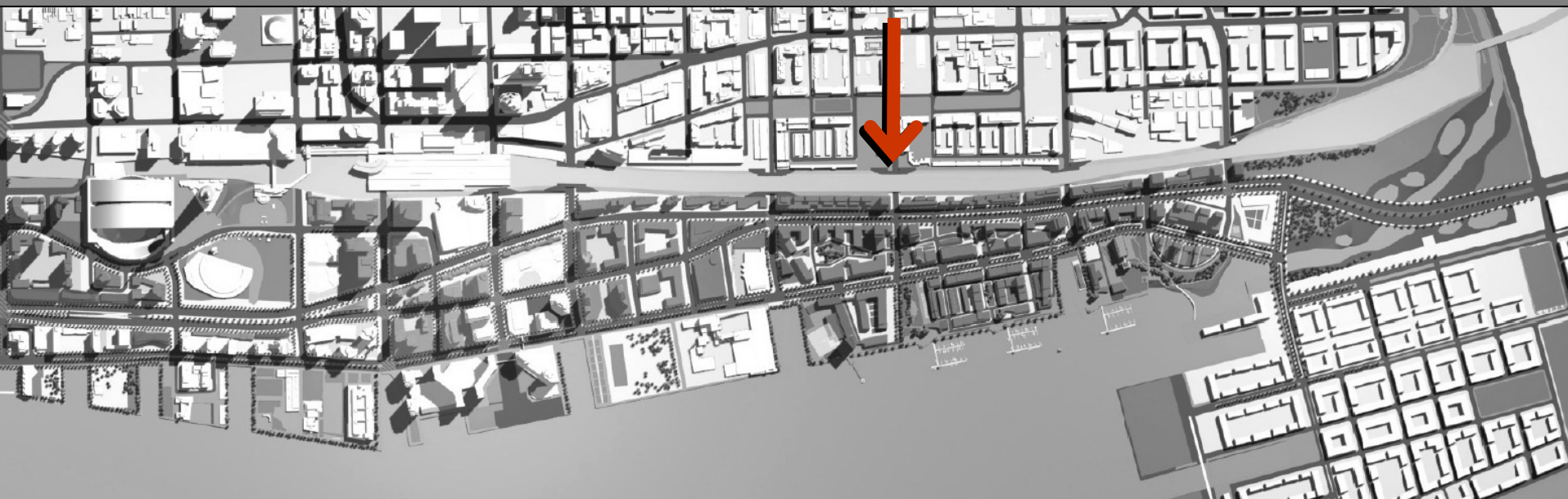


Gardiner at Sherbourne





Waterfront Boulevard crossing at Sherbourne



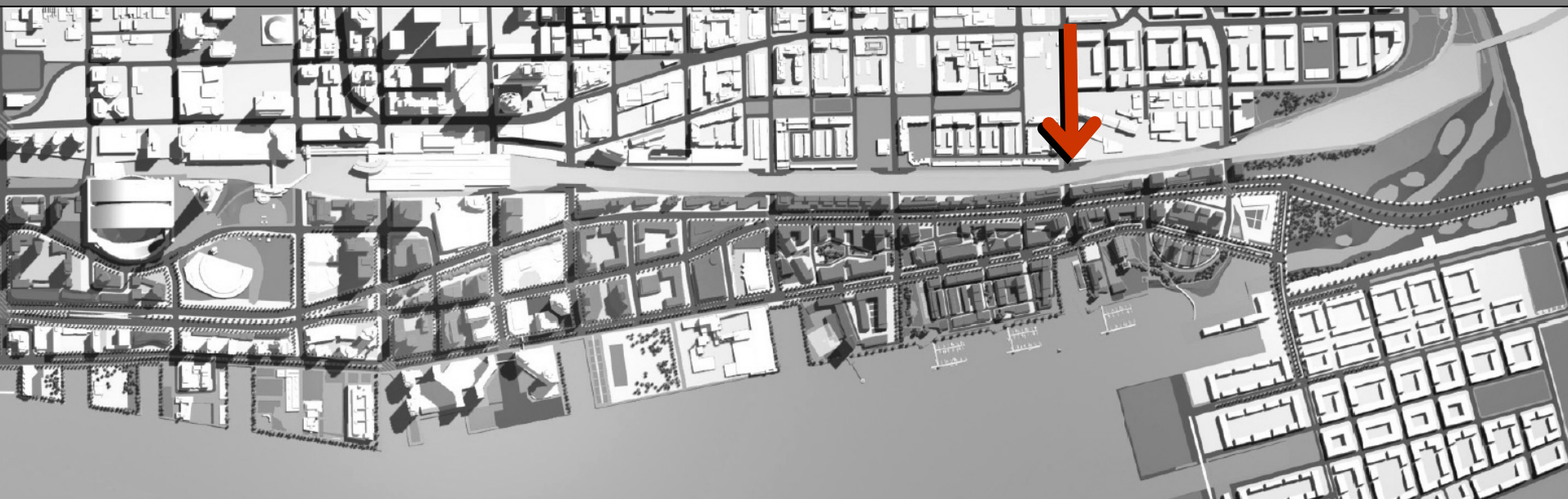


Gardiner at Parliament





Waterfront Boulevard at Parliament



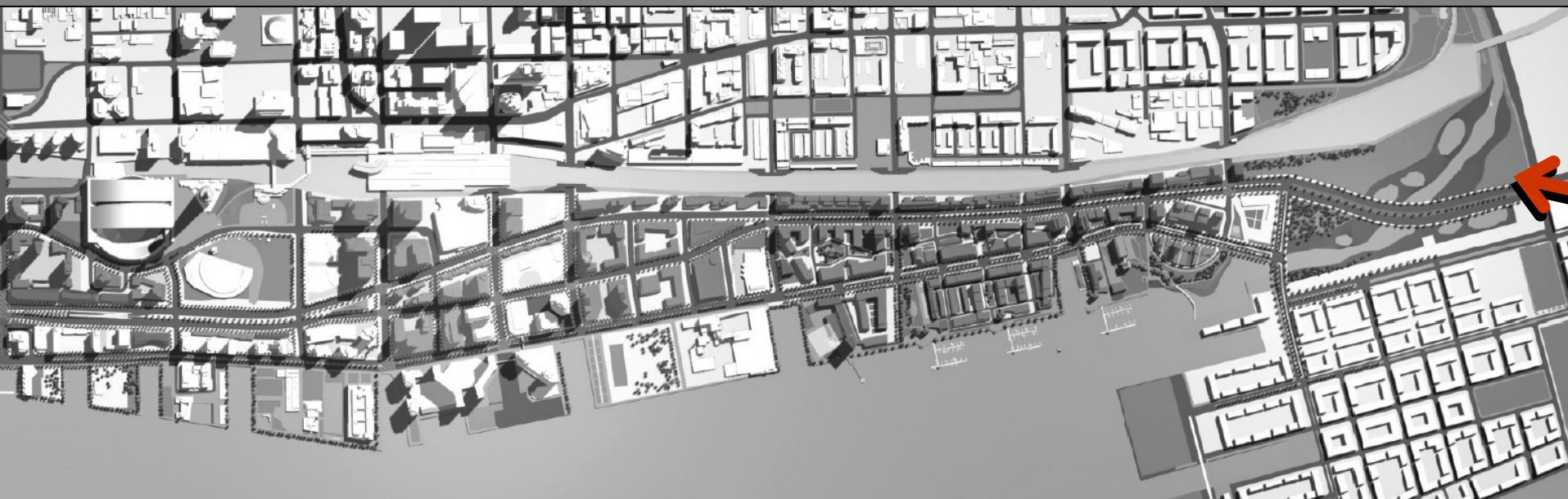


Gardiner at Don River





Waterfront Boulevard at Don River



Next Steps

- Due diligence on costing – Fall 2006
- Analysis of financing options – Fall 2006
- City-wide public consultation – Winter 2007
- Report to City Council – Winter/Spring 2007



TORONTO WATERFRONT
REVITALIZATION CORPORATION

www.towaterfront.ca