

# ***Ottawa's Light Rail Transit Project***



***Design, Build, Finance and Maintenance of  
the Confederation Line***

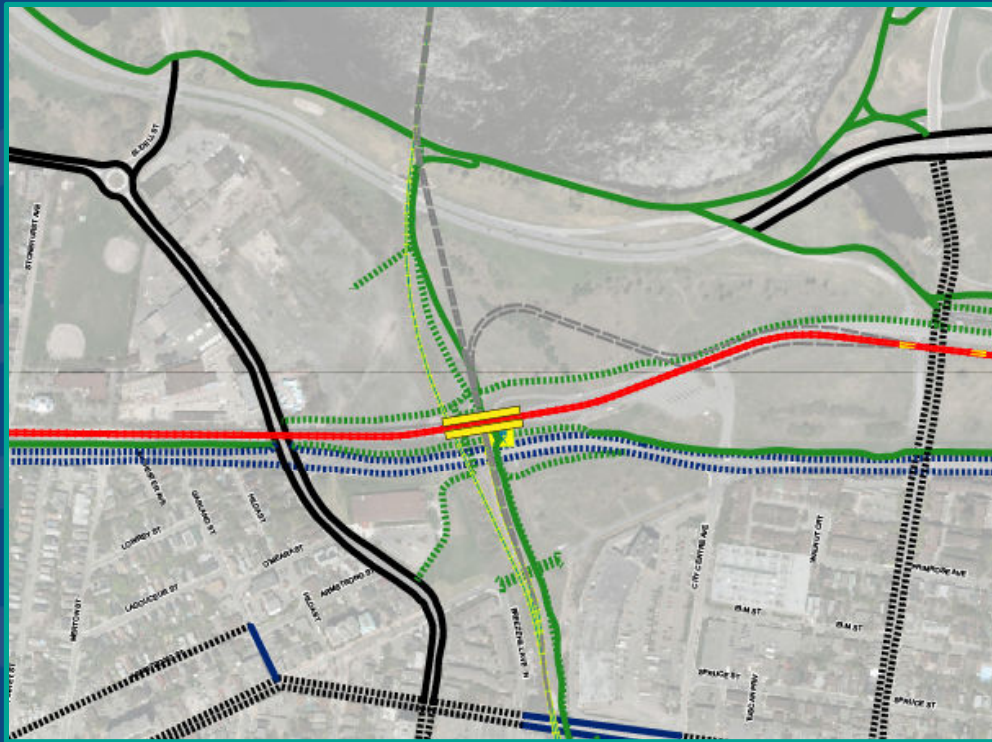
December 12, 2012

Presentation to Committee of the Whole

## ***Capacity and Growth***

- Ottawa's transit ridership is expected to grow from **9,300** people per hour per direction today to **18,000** by **2031**
- ***Confederation Line*** accommodates this capacity
- Further, the system has been designed to have capacity up to **24,000** people per hour per direction with small alteration
- ***Confederation Line*** can accommodate LRT expansions, West, South and East.

# Station Connectivity



*The Confederation Line was designed to provide an attractive lifestyle choice as well as a transportation option for the community*



# Mobility During Construction



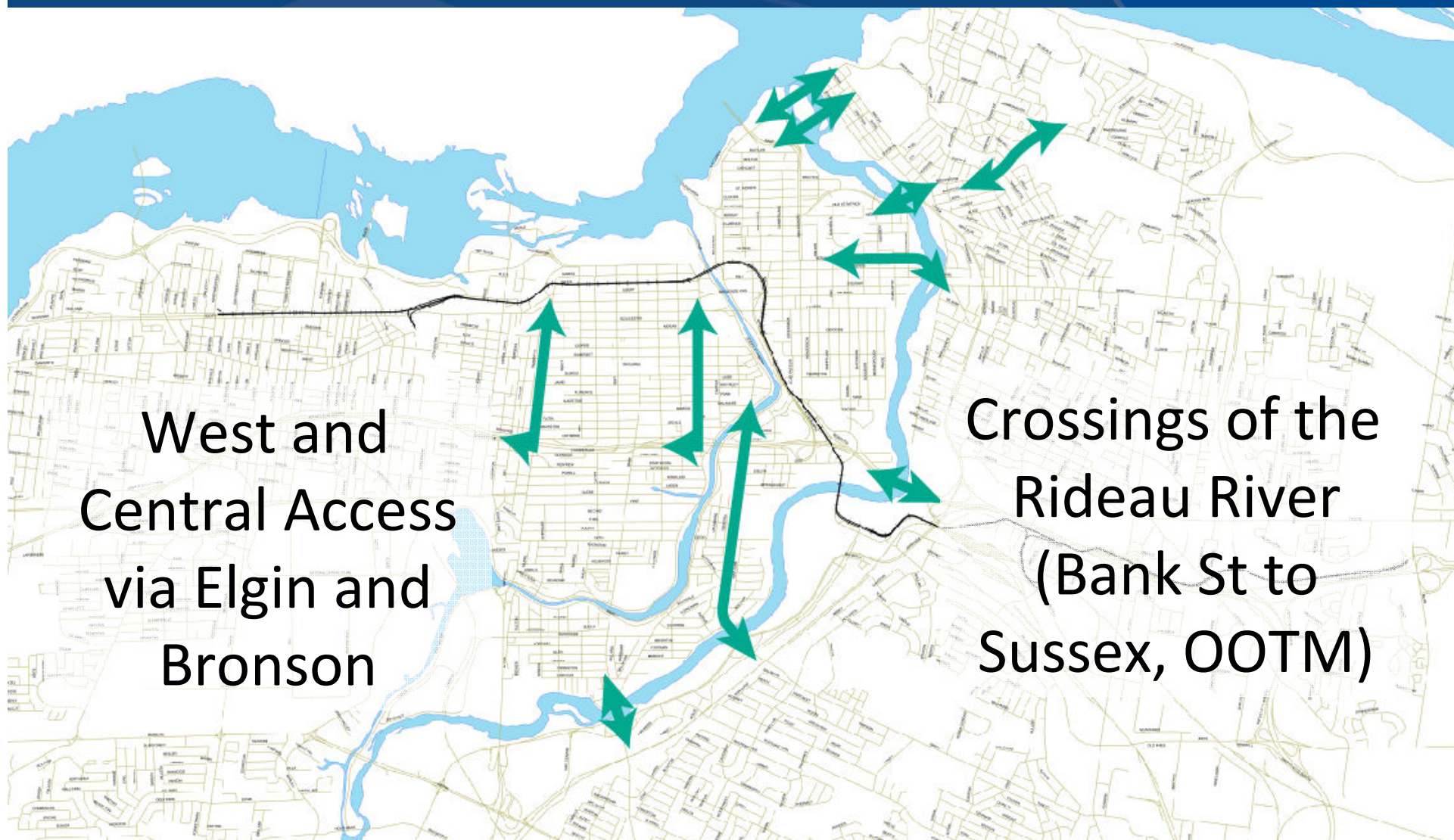


## ***Mobility During Construction***

- Council has made several decisions over the last two years that minimizes mobility impacts to residents during Confederation Line construction:
  - major arterial road works
  - Highway 417 widening
  - Scott/Albert widening
  - Increasing O-Train frequency
  - Routing bus service on the Strandherd-Armstrong Bridge
  - Investments in cycling infrastructure
  - City-wide Transportation System Management Program



# ***Mobility During Construction***



West and  
Central Access  
via Elgin and  
Bronson

Crossings of the  
Rideau River  
(Bank St to  
Sussex, OOTM)



## ***Mobility Matters***

- ***Mobility Matters*** was built into the Project Agreement to influence the bidder's approach to maintaining a high level of service during construction
- Each lane closure requirement was subject to a lane rental charge for each hour of affected block of roadway or Transitway segment and this cost was added to bids for evaluation purposes.
- This incented the proponents to minimize road closures in the development of their construction plan/scheduling.

## ***Mobility During Construction***

- As a consequence of Mobility Matters RTG's proposal minimizes impacts to OC Transpo service through the following:
  - Accelerated completion of the Highway 417 widening
  - Reduced number of extra buses and hours of service required through an efficient construction staging plan
  - Used transit priority measures that minimize transit trip times and the additional fleet required to support service



## ***Mobility During Construction***

- Make additional traffic camera available to the City's Transit Control Centre to assist in service monitoring and control
- Provide a staging area for westbound express buses during peak times in the northwest quadrant of the Highway 417/Vanier Parkway interchange
- Provide a staging area for three buses throughout the day near Laurier Station



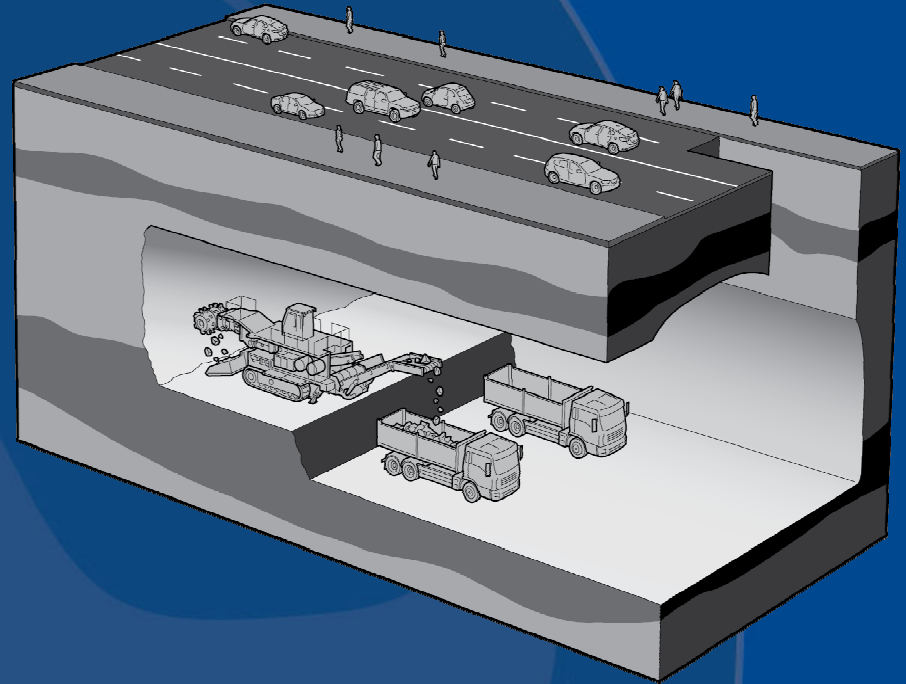
## *Transportation to/from West*

- An alternate western BRT will be created with dedicated bus lanes on the widened Scott Street and temporary stop facilities will be installed on Scott Street at Bayview station and Booth Street
- The Transitway between Tunney's Pasture and Bayview Stations will remain open while the Bayview Bridge works are underway



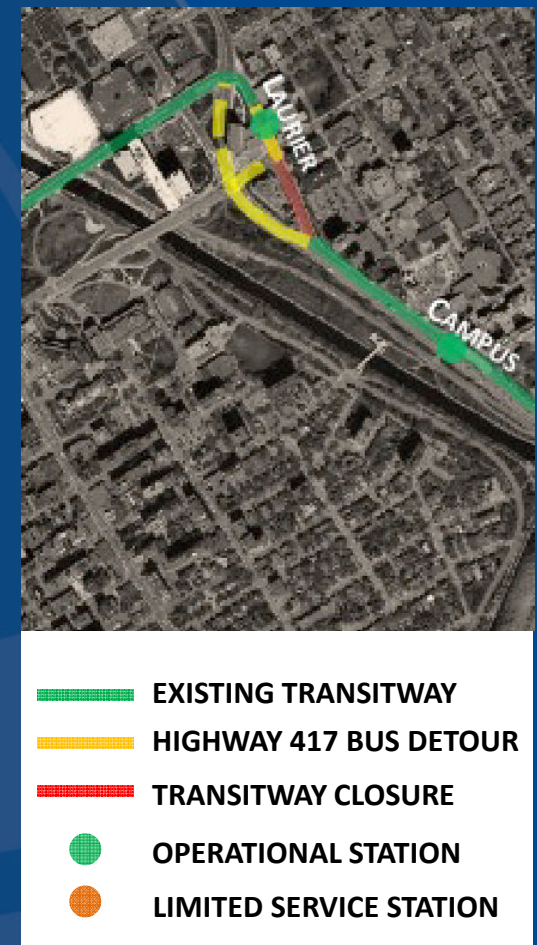
## *Transportation in Central Area*

- The tunnel subsurface mining technique will minimize lane closure requirements
- Some sidewalk closures will be required, temporary pedestrian paths will be installed as needed



## *Transportation in Central Area*

- Detour arrangements proposed in the vicinity of Laurier and Campus Stations will allow the Transitway to operate through both of these stations with minor delays until the spring of 2016
- Post 2016 dedicated lanes on Nicholas will provide for an alternative BRT bypassing Campus Station



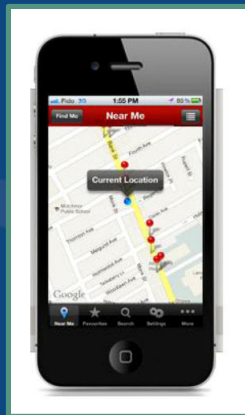
## *Transportation to/from East*

- While Campus station is closed, Laurier station will serve the University of Ottawa and Sandy Hill; a bus lay-up area will be provided on Laurier Avenue near Laurier Station, with capacity for three buses
- BRT services will use the widened Highway 417/174 lanes between Blair and Nicholas only once it becomes necessary to close Lees station and the Hurdman Bridge



## *Ottawa on the Move*

- Ottawa on the Move will now also keep residents informed of construction impacts of Confederation Line and other infrastructure projects and will provide mobility options
- Associated mobility tools will be launched in mid 2013



# Noise and Vibration

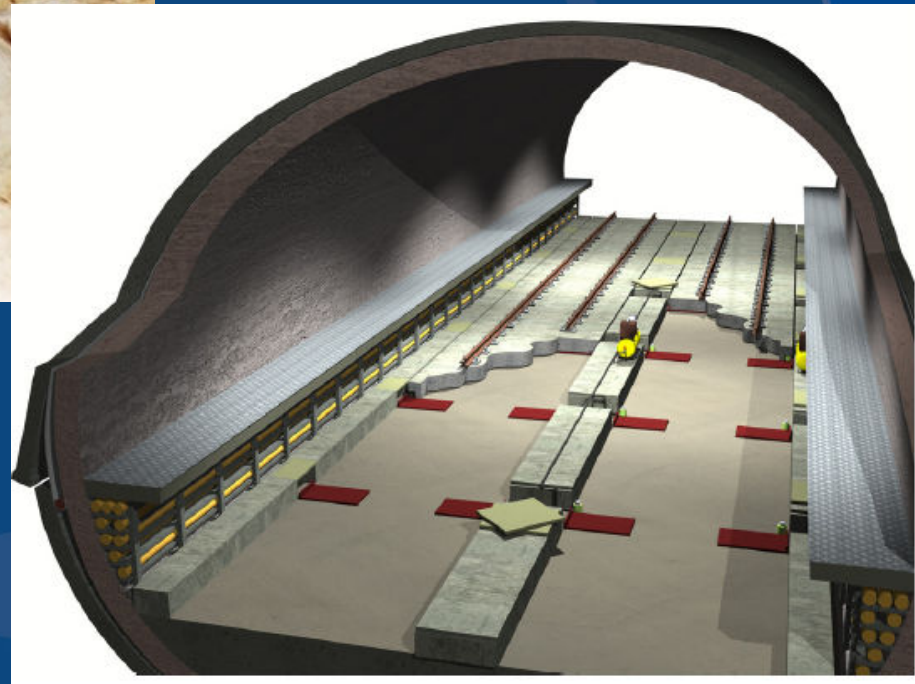


# *Examples of Noise Mitigation Technologies*

- Resilient Fastener Devices



- Floating Trackbed





- The existing Noise Bylaw did not contemplate Tunnel construction.
- The recommended bylaw changes allows the tunnel construction and the removal of the excavated material through the night and on weekends provided the surface noise is in compliance with the 65 decibels threshold outlined in the bylaw
- This will allow construction to occur along the accelerated schedule while ensuring minimum disturbance on the surface level

# *Business Development Strategy and Property Acquisition*



# ***Business Development Strategy and Project Agreements***

- There are currently three integrated entrance opportunities being negotiated:
  - Place-de-ville for the DTW-E entrance
  - Sun Life Financial for the DTE-W entrance
  - Cadillac Fairview for the west entrance of the Rideau Station within the Rideau Centre
- Agreed negotiation frameworks have been arranged with these property owners.

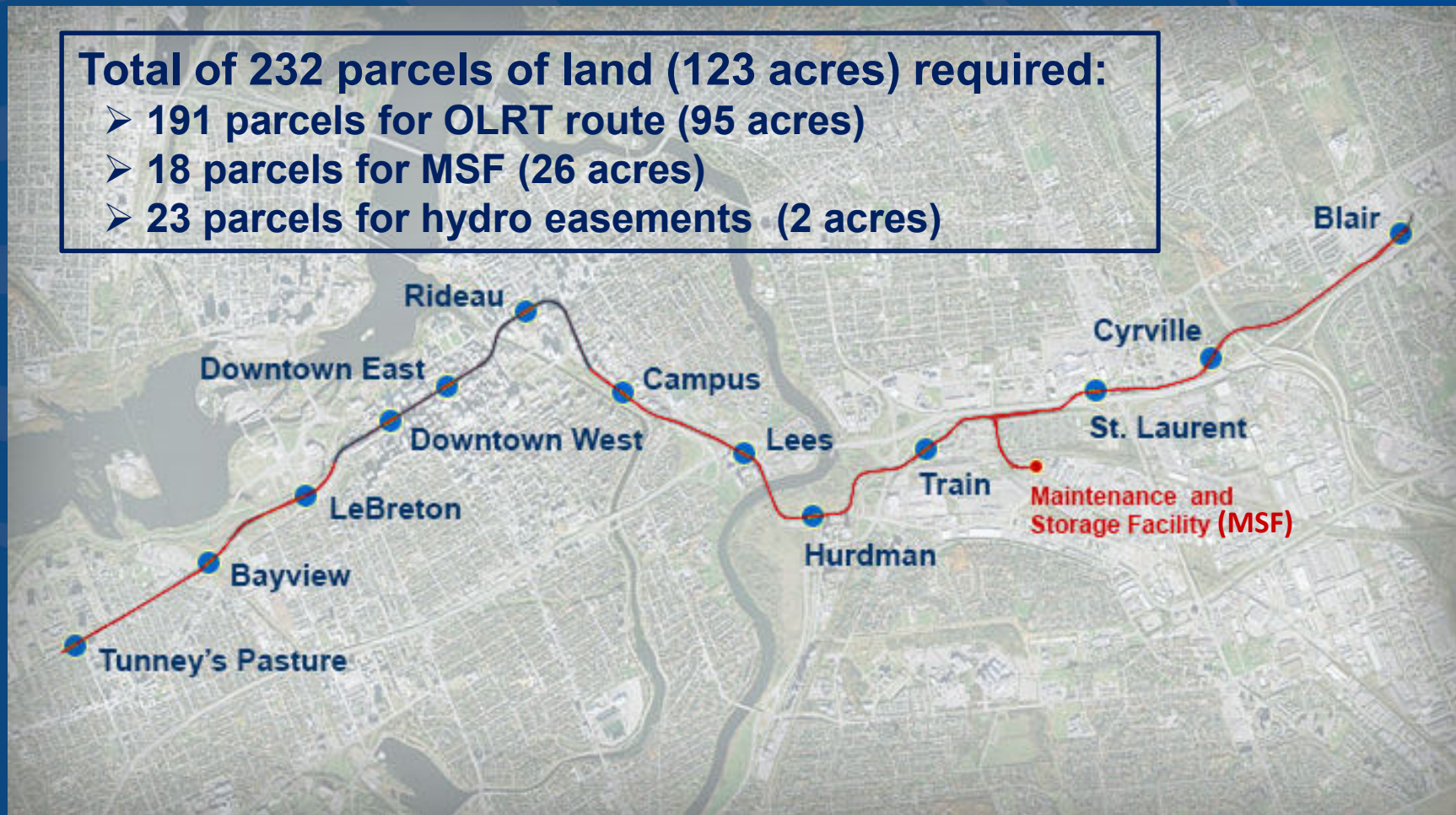


# Property Acquisition

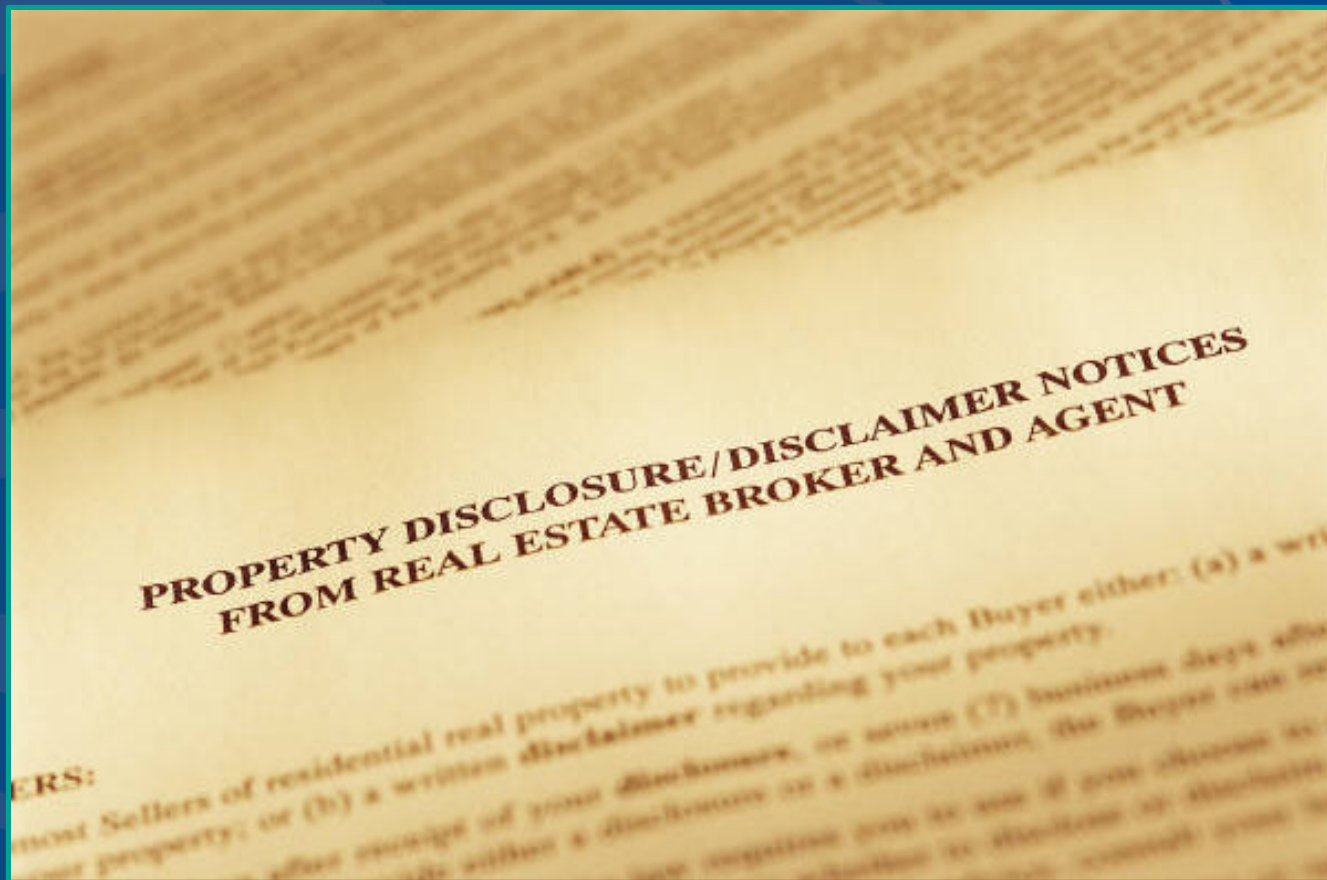
- Negotiations are underway to secure the property required for the OLRT project.

**Total of 232 parcels of land (123 acres) required:**

- 191 parcels for OLRT route (95 acres)
- 18 parcels for MSF (26 acres)
- 23 parcels for hydro easements (2 acres)



# ***Legal Agreements***



## Approvals

- Key approvals, such as the federal and provincial Environmental Assessments, have already been completed or will be complete before Financial Close is reached
- Other key approvals, such as the NCC's Federal Land Use, Design and Transaction approval, are expected to occur in timelines that meet the project requirements

*In general, the City is responsible for obtaining approvals before contract award, while RTG is responsible for obtaining the majority of the permits and approvals after contract award*

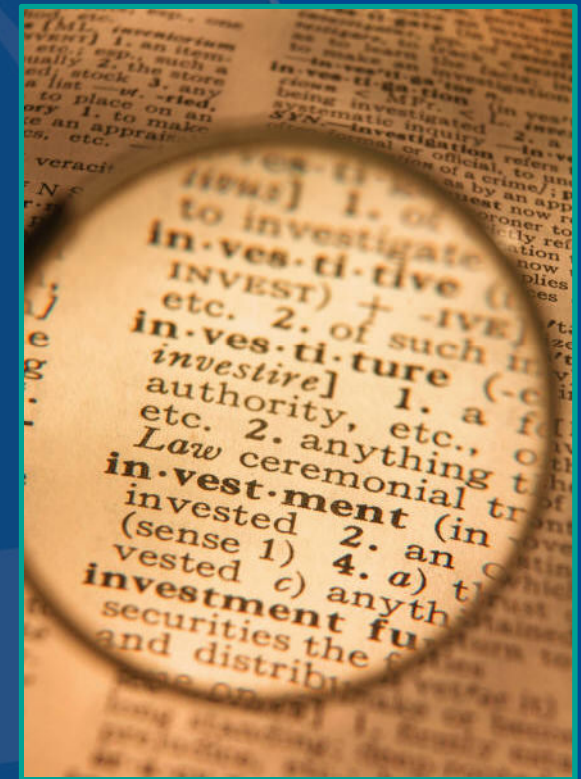


## ***Project Agreement***

- The Project Agreement is the binding legal document between the City and RTG that covers both the construction period and the maintenance term that commences on the first day following the revenue service availability date. It outlines:
  - Governance structure and reporting obligations
  - Regulatory responsibilities and safety
  - Performance Standards and obligations for Operation of the System
  - Performance Standards and obligations for Maintenance of the System

# Financial Presentation Overview

- Construction Budgets and funding
- Maintenance & Service Term Expenses
- Transit Long Range Plan



# OLRT Construction Budget

Project Budget July 2011 vs. Current (Millions)				
			July Estimate \$M	Current \$M
Property, Engineering, Project Management (City works)			397	275
Tunnel & Stations			777	681
Track work/ Systems/ M&S Facility			442	551
Civil Works			174	102
Vehicles			325	344
Financing & Transaction Costs			N/A	177
<b>TOTAL</b>			<b>2,115</b>	<b>2,130</b>



# OLRT Construction Budget Funding

	Cash \$M	Direct Debt Authority \$M	P3 Debt \$M	Total
Gas Taxes	191	33	225	449
Development Charges	180	36	75	291
Transit taxes	156	34		190
Total – net budget	527	103	300	930
Federal and Provincial Grants	1,200			1,200
Total	1,727	103	300	2,130

# RTG Financing Structure

Financing Term	RTG
<b>Capital Structure</b>	<ul style="list-style-type: none"> <li>• Long Term Debt: \$225 M</li> <li>• Long Term Equity: \$75 M</li> <li>• Short Term Debt: \$232 M</li> </ul>
<b>Bank Lenders</b>	<ul style="list-style-type: none"> <li>• Bank of Nova Scotia (AA-)</li> <li>• National Bank of Canada (A)</li> <li>• BTMU (A+)</li> <li>• SMBC (A+)</li> </ul>
<b>Long Term Lenders (bond)</b>	<ul style="list-style-type: none"> <li>• Sun Life</li> <li>• National Bank Financial</li> </ul>
<b>Equity Providers</b>	<ul style="list-style-type: none"> <li>• ACS</li> <li>• SNC Capital</li> <li>• EllisDon</li> </ul>

# Associated Works Construction Budget and Funding

	Gross Budget \$M	Provincial Revenue \$M	Dev Charges \$M	Dev Charge Debt \$M	Capital Reserve \$M
Hwy 417 Widening	226	206.0	1.6	0.8	17.6
OLRT transition	63				63
Multi-Project contingency	100				100



# Maintenance and Service Term Expenses

	Current	Jul-11	Difference
	\$M	\$M	\$M
Maintenance	804	733	72
Lifecycle	208	243	-35
Insurance and Administration	87		87
<b>Sub-total Paid to Proponent</b>	<b>1100</b>	<b>976</b>	<b>124</b>
Energy	112	228	-115
Labour	138	176	-37
<b>Sub-total Paid by City</b>	<b>251</b>	<b>403</b>	<b>-153</b>
<b>Total</b>	<b>1350</b>	<b>1379</b>	<b>-28</b>

# Transit LFRP Affordability

	Jul-11 \$M	Nov-12 \$M	Difference \$M
<b>New Debt</b>			
Debt Issued	5,238	5,021	(217)
Principal Paid	(3,876)	(3,782)	94
Interest Paid	(3,240)	(3,288)	(48)
<b>Existing Debt</b>			
Principal Paid	(408)	(408)	-
Interest Paid	(149)	(149)	-
<b>Outstanding Total Debt in 2048</b>	<b>(1,362)</b>	<b>(1,238)</b>	<b>123</b>
<b>City Cash Position in 2048</b>	<b>1,989</b>	<b>2,157</b>	<b>168</b>
<b>Meets Funding Covenants/Is affordable?</b>	<b>TRUE</b>	<b>TRUE</b>	<b>N/A</b>
<b>Millions CAD</b>			

# QUESTIONS?



[www.ottawalightrail.ca](http://www.ottawalightrail.ca)