inter-regional connectivity is the key to success
On November 28, 2008 Regional Transportation Plan approved by Metrolinx Board

Top 15 priorities for early implementation include:
- Viva Highway 7 and Yonge Street through York Region
- Spadina subway extension to Vaughan Corporate Centre
- Yonge subway extension to Richmond Hill Centre
- Sheppard/Finch LRT
- Scarborough RT replacement
- Eglinton Crosstown LRT
...transit city LRT plan
the future includes two subways

...connecting to Highway 7 and Yonge Street rapidways
where we are today

- December 3 – welcome!
what’s important when planning this subway extension?

You told us your top three priorities were:

1. Connections to other transit
2. Careful planning of existing neighbourhoods and future growth
3. Destinations, places to go and sensitivity to the local environment were tied for the third priority

In addition, we need to address all the technical and operational requirements and costs
capacity improvements to the Yonge line

- New subway cars have increased capacity
- Closer spacing between trains
- 7th car added to train
- Transfer to Spadina Subway: 2,300 riders
- New parking spaces on Spadina Subway extension: 2,900
subway construction techniques
cut-and-cover process
traffic management during construction at stations
Presenting your Yonge subway extension project
the final yonge subway project includes…

- Six stations
- Two intermodal Terminals
  - Steeles & Yonge
  - Richmond Hill Centre
- Bridge over East Don River
- Park-and-Ride facilities for 2,000 cars at Langstaff/Longbridge
construction overview
Since we last met, final design has laid out all the pieces that come with a subway and where they are required:

- passenger pick-up-and-drop-off
- entrances
- bus terminals
- parking
- electrical substations
- emergency exit buildings
- vent shafts
cummer/drewry station
part of the north york centre plan
- Maximizes passenger convenience
- Minimizes bus operating costs
- Reduces bus travel time
- Best possible transit oriented development opportunities
- Reduces property acquisition costs
- Offers negligible difference in long-term maintenance costs over other options considered
- Anticipate less business impact
- Accommodates future rapid transit along Steeles Avenue
steeles station – how it works
clark station
east don river bridge crossing

- Allows for shallow, relatively flat subway tunnel that will be operationally least costly
- Allows for a shallow subway station at Royal Orchard – easier pedestrian access, quicker emergency response
- Opportunity to reduce the slope on Yonge Street for pedestrians and drivers
- Opportunity to naturalize the valley
east don river bridge crossing
east don river bridge crossing

Concept drawing only
royal orchard station
• Bicycle and pedestrian paths
• Noise buffers
• Maintain a green corridor
• Bio-swales
• Sustainable treatments for parking
• Protection of natural environment
key considerations at richmond hill centre

407 transitway

subway

YRT/ Viva

GO bus

GO train
### Major Project Costs

<table>
<thead>
<tr>
<th>Major Project Elements</th>
<th>Cost M$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stations and Area Facilities</td>
<td>$650</td>
</tr>
<tr>
<td>Finch improvements</td>
<td>$5</td>
</tr>
<tr>
<td>Cummer/Drewry</td>
<td>$70</td>
</tr>
<tr>
<td>Steeles</td>
<td>$195</td>
</tr>
<tr>
<td>Clark</td>
<td>$70</td>
</tr>
<tr>
<td>Royal Orchard</td>
<td>$65</td>
</tr>
<tr>
<td>Langstaff/Longbridge</td>
<td>$85</td>
</tr>
<tr>
<td>Richmond Hill Centre</td>
<td>$160</td>
</tr>
<tr>
<td>Tunnels, Special Structures and Operating Systems</td>
<td>$600</td>
</tr>
<tr>
<td>Subway Trains</td>
<td>$240</td>
</tr>
<tr>
<td>Storage and Maintenance Facilities for Subway Trains</td>
<td>$110</td>
</tr>
<tr>
<td>Engineering and Other Costs</td>
<td>$675</td>
</tr>
<tr>
<td>Property</td>
<td>$125</td>
</tr>
</tbody>
</table>

**Project Cost Estimate, 2008 Dollars**: $2.4 billion
capital cost estimates and timeline

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Complete Functional Design</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provincial Project Approval</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>[6 months duration] October 2008 - April 2009</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project Notice To Proceed</td>
<td>Initial Capitalization</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>May 2009</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project Management</td>
<td>Governance</td>
<td>AFP</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Set-up: 1 year, mid 2010</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Property</td>
<td>CEAA [12 months duration]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2009-2011</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Design</td>
<td>Engineering [48 months overall duration]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2010-2013 [multiple projects starts and completion]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Construction [66 months overall duration]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2011-2016 [multiple projects starts and completion]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subway System Commissioning [1 year duration]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Throughout 2016</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>In-service</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2016/2017</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Thank-you