The purpose today is to:

- introduce the study
- describe the process for preparation of the study
  Terms of Reference, and
- obtain your input to the proposed study scope

Please review the information displayed and discuss any aspects of the EA with the Study Team members in attendance.

You are encouraged to comment and provide input. Comment forms are provided for your convenience and may be completed here or returned to the Study Team (preferably by June 30, 2004)
**ENVIRONMENTAL ASSESSMENT PROCESS:**
**WHERE WE ARE**

<table>
<thead>
<tr>
<th>Completed Activity</th>
<th>On-going or Future Activity</th>
</tr>
</thead>
</table>

**Problem Statement**

- Describe Undertaking from background studies
  - (Transportation Master Plan)
- Update Existing Conditions

**Evaluate Undertaking**

- Identify Alternatives to the undertaking
  - (Alt. Strategies)
- Identify Alternative Methods of carrying out the Undertaking

**Establish Planning & Design Criteria**

- Development of Criteria
  - (Design)
- Assessment of Effects of Alternative Designs
- Evaluation of Alternative Designs

**Select preferred Alternative Design**

- Mitigation and monitoring of effects of Preferred Alternative Design
- Refine preferred Alternative Design
- Preparation of Draft EA Report
- Present Draft EA Report
- Draft EA Report Circulation
- Finalize and Submit Final EA Report to MOE

**Outline EA Work Plan**

- Prepare and Submit Terms of Reference to Ministry of Environment (MOE)

**Today**

- Terms of Reference
  - Open House # 1
  - June 12 & 15, 2004

**MOE Approval of Terms of Reference**

- EA Open House # 2
  - Late 2004

**EA Open House # 3**

- Spring 2005

**EA Open House # 4**

- Summer 2005

**MOE Approval of EA**

- Final EA Report Review

* If the alternative strategy selected is different from the undertaking a revised Terms of Reference will be submitted

**NORTH YONGE STREET CORRIDOR PUBLIC TRANSIT IMPROVEMENTS ENVIRONMENTAL ASSESSMENT (EA)**

**Terms of Reference**

**ENVIRONMENTAL ASSESSMENT PROCESS:**
**WHERE WE ARE**

- Completed Activity
- On-going or Future Activity

0-04-001520-YRTP

June 2004
Background:

- Proponent - Regional Municipality of York
- Purpose - to conduct an Individual EA Study of public transit improvements in the North Yonge Street Corridor
- To outline what will be studied in the EA, the Study Team must prepare a Terms of Reference (ToR) as per therequirements of the Ontario Environmental Assessment Act (EAA) - Sections 6.1(2) and 6.(2)(3) and, if required, the Canadian Environmental Assessment Act (CEAA)
- The ToR must be submitted to the Provincial Ministry of the Environment (MOE) for review and ultimately approval by the Minister
NORTH YONGE STREET CORRIDOR
PUBLIC TRANSIT IMPROVEMENTS
ENVIRONMENTAL ASSESSMENT (EA)

Proposed EA Study Area
NORTH YONGE STREET CORRIDOR PUBLIC TRANSIT IMPROVEMENTS
ENVIRONMENT ASSESSMENT - TERMS OF REFERENCE

EXISTING NATURAL ENVIRONMENT

LEGEND

- Existing Arterials
- Existing Rail
- Existing Local Roads
- Existing Watercourses
- Existing Waterbodies
- Existing Earth Science Areas of Natural & Scientific Interest
- Existing Biological Environmentally Significant Area
- Existing Hydrogeological Environmentally Significant Area

LIMIT OF STUDY AREA

(City of Vaughan)

(Town of Richmond Hill)

(Town of Aurora)

(Town of Newmarket)

(Town of Markham)

(Town of Whitchurch-Stouffville)

(Town of East Gwillimbury)

(City of Vaughan)

(Town of Aurora)

(Town of Newmarket)

(Town of Richmond Hill)

(Town of Whitchurch-Stouffville)

(Town of East Gwillimbury)

(Limit of Study Area)

(Bradford GO Rail Line)

(Toronto and Region Conservation Authority)

(Lake Simcoe Region Conservation Authority)
Public Transportation Issues

• York Region is forecast to have significant growth:
  Population - Current 0.8M  2026 - 1.3M
  Employment - Current 385,000 jobs  2026 - near 700,000 jobs

• The growth will generate a proportionate increase in travel demand

• Reliance on the private automobile will overload already badly congested roads

• York Region’s Official Plan (OP) and the 2002 Transportation Master Plan emphasized the importance of an improved public transit system to:
  - Sustain the natural environment
  - Foster economic vitality
  - Ensure healthy communities
  - Improve quality of life
The Purpose of the Undertaking is to:

- Provide improved public transit infrastructure and services in the northern section of the network’s primary north-south corridor (Yonge Street) capable of:
  - reducing road congestion through greater transit ridership within the Region and across Regional Boundaries (e.g. into Toronto)
  - achieving integrated transit connections with other corridors e.g. Highways 404/7, GO Transit Services (trains/buses) & TTC

- Integrate improved public transit in a manner that enriches streetscapes, supports mixed-use development along the corridor and connects Regional Centres (Newmarket, Richmond Hill Centre and Markham Centre)
The EA Act stipulates that the Study assess and evaluate Alternatives to the Undertaking

These will include:

- **A Do Nothing Strategy**
  - including only approved/committed road improvements and minor improvementsto existing YRT local transit services

- **A Road Expansion Strategy**
  - all of the Do Nothing Strategy and
  - any further increase in road capacity required to meet demand

- **Priority Transit with Transportation Demand Management**
  - enhance existing bus travel times & capacity
  - reduce peak period vehicular trips through Travel Demand Management (TDM) and measures including High-occupancy Vehicle (HOV) lanes on north-south roads
The EA Act stipulates that the Study assess and evaluate
Alternatives to the Undertaking (cont.)

- **Enhanced GO Train/Bus Service**
  - improved GO Train Service on the CN Bradford Subdivision, including higher off-peak frequency
  - improved GO Transit bus service, including integration with YRT local bus services

- **Rapid Transit Corridor Initiatives to be assessed as an extension of the network planned in the southern municipalities and based on:**
  - Rapid Transit service in exclusive curb, median or segregated right-of-way, or in mixed traffic with enhancements such as priority at signals, lane and station improvements
Assessment/Evaluation of Technology Alternatives

- **Conventional Buses**
  - in mixed traffic
  - integral part of enhanced transit system
    *e.g.* Feeder to other transit systems

- **Bus Rapid Transit (BRT)**
  - Combines transit stations, vehicles, services, runningways (rights-of-way) and Intelligent Transportation Systems (ITS) into an integrated system

- **Light Rail Rapid Transit (LRT)**
  - LRT is an intermediate capacity form of rail technology able to operate in streets or separate rights-of-way
  - Usually obtains electric power from overhead wires
Assessment/Evaluation of Technology Alternatives

- **Diesel Multiple Units (DMU’s)**
  - diesel powered rail car operating on conventional tracks
  - self-propelled vehicles rather than pushed or pulled by a heavy diesel locomotive

- **Automated Guideway Transit (AGT)**
  - fully automated driverless trains
  - intermediate to high capacity
  - grade-separated operations
  - *e.g.* on an elevated guideway
NORTH YONGE STREET CORRIDOR PUBLIC TRANSIT IMPROVEMENTS
ENVIRONMENT ASSESSMENT - TERMS OF REFERENCE

ALTERNATIVE METHODS OF CARRYING OUT
PUBLIC TRANSIT IMPROVEMENTS
POTENTIAL ROUTING ALTERNATIVES

NOTE: THE PINK LINES DO NOT FORM A CONTINUOUS PATH OF PORTIONS OF THE ALTERNATIVES.
Assessment/Evaluation Process

Step #1 - Establish the Factors to be Considered
- Transportation Service and integration with other Transportation/Transit Services across Municipal Boundaries
- Natural Environmental Issues
- Social and Cultural Environmental Issues
- Implementation - Construction/Operations/Staging
- Costs - Capital Operating and Maintenance

Step #2 - Establish Viable Alternatives
- Alternatives to the Undertaking (other Transportation Strategies)
- Alternative methods of carrying out the Undertaking (e.g. designs)
Assessment/Evaluation Process (cont.)

Step #3 - Assessment/Evaluation
- How well each Alternative satisfies the Regional goals and each factor by quantitative and/or qualitative assessments

Step #4 - Selection of Preferred Alternative(s)
  a) The preferred transportation strategy
  b) The preferred method (infrastructure designs). The selection may involve staging alternatives over the planning period
  e.g. Integration and coordination with the preferred transportation systems in the southern part of the Yonge Street Corridor
### Potential Environmental Factors

<table>
<thead>
<tr>
<th>FACTOR</th>
<th>ISSUES/CONCERNS</th>
<th>ACTION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A. General</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Compliance</td>
<td>• Meet MOE approval requirements</td>
<td>Commitments made during the EA will be implemented</td>
</tr>
<tr>
<td></td>
<td></td>
<td>*e.g. Requirements imposed on contracts/sub-trades</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Environmental remedial measures</td>
</tr>
<tr>
<td><strong>B. Natural Environment</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Fisheries &amp; Acquatic Habitat</td>
<td>• Nature/extent of any aquatic habitat that may be disrupted</td>
<td>Acquatic habitat will be inventoried</td>
</tr>
<tr>
<td></td>
<td>• Destruction of fish habitat</td>
<td>Mitigating measures will be developed for implementation</td>
</tr>
<tr>
<td>2. Wildlife Habitat</td>
<td>• Construction can remove wildlife habitat</td>
<td>Potential impact on wildlife habitat will be determined</td>
</tr>
<tr>
<td></td>
<td>• Linear facilities can fragment wildlife habitat</td>
<td>Objective to maximize protection &amp; minimize disruption</td>
</tr>
<tr>
<td>3. Vegetation &amp; Wetlands</td>
<td>• Effects on vegetation &amp; wetlands incl. dewatering</td>
<td>Potential impact of construction on vegetation and wetland areas</td>
</tr>
<tr>
<td></td>
<td>• Forest cover, erosion control measures</td>
<td>will be determined</td>
</tr>
<tr>
<td>4. Groundwater Resources</td>
<td>• Potential interference with recharge areas &amp; release of contaminants</td>
<td>Groundwater recharge and discharge zones will be mapped</td>
</tr>
<tr>
<td></td>
<td>• Adverse effect on groundwater</td>
<td>Groundwater quality will be considered and mitigating measures identified</td>
</tr>
<tr>
<td>5. Surface Water Resources</td>
<td>• Potential adverse effect on surface water from stormdrainage release of contaminants, etc.</td>
<td>Watercourses will be identified and mapped</td>
</tr>
<tr>
<td></td>
<td>• Features will be assessed on basis of applicable water protection standards</td>
<td></td>
</tr>
<tr>
<td>6. Ecosystems Planning</td>
<td>• Importance of considering the inter-relationships of individual factors</td>
<td>Features will be identified and mapped</td>
</tr>
<tr>
<td></td>
<td>• Oak Ridges Moraine, Wetlands Conservation Areas, etc.</td>
<td></td>
</tr>
<tr>
<td>7. Air Quality &amp; Energy</td>
<td>• Adverse effect on air quality <em>e.g. burning of fossil fuels</em></td>
<td>Air quality effects and emissions will be considered in the EA</td>
</tr>
<tr>
<td></td>
<td>• Mitigating measures will be identified</td>
<td></td>
</tr>
<tr>
<td>8. Contaminated Soils</td>
<td>• Contaminated soils maybe uncovered <em>e.g. Hydrocarbons, etc.</em></td>
<td>Potential contaminated sites will be identified</td>
</tr>
<tr>
<td></td>
<td></td>
<td>A contingency plan will be developed for dealing with contaminated sites</td>
</tr>
</tbody>
</table>
## NORTH YONGE STREET CORRIDOR
### PUBLIC TRANSIT IMPROVEMENTS
#### ENVIRONMENTAL ASSESSMENT (EA)

**Terms of Reference**

### Potential Environmental Factors (Cont.)

<table>
<thead>
<tr>
<th>FACTOR</th>
<th>ISSUES/CONCERNS</th>
<th>ACTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>C. Social Environment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Traffic Circulation</td>
<td>• Neighbourhood traffic infiltration • Access to businesses/residences</td>
<td>• Potential for traffic infiltration will be assessed</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Mitigating measures will be identified</td>
</tr>
<tr>
<td>2. Effect on residences</td>
<td>• Dislocation can be created by property acquisition</td>
<td>• Minimize acquisition and develop possible mitigation through</td>
</tr>
<tr>
<td></td>
<td></td>
<td>compensation and relocation programs</td>
</tr>
<tr>
<td>3. Noise &amp; Vibration</td>
<td>• Potential for increased noise and vibration during construction and</td>
<td>• The ambient (current) noise levels will be measured and</td>
</tr>
<tr>
<td></td>
<td>operations</td>
<td>the future noise levels projected</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Noise/vibration effects will be assessed, including defining</td>
</tr>
<tr>
<td></td>
<td></td>
<td>appropriate mitigation/monitoring plans</td>
</tr>
<tr>
<td>4. Safety</td>
<td>• Protect public from injury during the construction/operations of</td>
<td>• Safety and emergency access will be addressed in the EA</td>
</tr>
<tr>
<td></td>
<td>transportation facilities</td>
<td>• Safety and emergency access plans will be included in the</td>
</tr>
<tr>
<td></td>
<td></td>
<td>transportation designs/construction methods</td>
</tr>
<tr>
<td>D. Economic Environment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Effect on Business &amp; Other</td>
<td>• Public transportation improvements can have positive or negative effects on</td>
<td>• Business and property owners will be involved in the planning of the</td>
</tr>
<tr>
<td>Land Uses</td>
<td>business and adjacent lands</td>
<td>Undertaking</td>
</tr>
<tr>
<td></td>
<td>• New construction can potentially create discontinuity in local pedestrian/</td>
<td>• Minimize property impacts and maximize benefits to business and the</td>
</tr>
<tr>
<td></td>
<td>traffic patterns</td>
<td>community</td>
</tr>
<tr>
<td>2. Level of Accessibility</td>
<td>• New construction can potentially create discontinuity in local pedestrian/</td>
<td>• The current circulation patterns will be established</td>
</tr>
<tr>
<td></td>
<td>traffic patterns</td>
<td>• Possible mitigating measures will be identified</td>
</tr>
<tr>
<td>3. Goods Movement</td>
<td>• Construction may restrict access and/or reduce road capacity</td>
<td>• Assessment will inventory major truck routes, manufacturing operations, etc.</td>
</tr>
<tr>
<td>4. Support of Approved Urban</td>
<td>• Transportation improvements should support development by improving</td>
<td>• Assessment based on detailed corridor land use inventory will be</td>
</tr>
<tr>
<td>Structure</td>
<td>accessibility</td>
<td>developed with regional/local planning agencies</td>
</tr>
<tr>
<td>E. Cultural Environment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Archaeological Resources</td>
<td>• Riverbanks and heights of land represent high potential for archaeological</td>
<td>• All available archaeological information will be collected/reviewed in the EA</td>
</tr>
<tr>
<td></td>
<td>resources</td>
<td>• Phase 1 archaeological review will be carried out. Where warranted, the review will be expanded to Phase 2</td>
</tr>
<tr>
<td>2. Heritage Resources/</td>
<td>• Numerous built heritage features and cultural landscapes must be considered in planning/design/construction phases</td>
<td>• Preliminary identification of Built Heritage Features, Heritage</td>
</tr>
<tr>
<td>Cultural Landscapes</td>
<td></td>
<td>Conservation Districts, Cultural Landscapes will be reviewed in the EA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Mitigating measures will be defined for design/construction</td>
</tr>
</tbody>
</table>
What Happens Next?

• Following this Open House, the Study Team will address all comments received. Input received will be considered during the preparation of the ToR.

• Once the ToR has been finalized, it will be submitted to the MOE who will circulate it to Government Review Agencies and make it available for the 30-day public review period.

• After MOE approval of the ToR, the EA Study will be carried out with completion expected by the end of 2005.

We encourage you to provide comments so that your ideas and concerns can be considered at each stage of the development of this important project.
In your opinion, will the Terms of Reference for the Environment Assessment as presented address concerns you may have with the scope of the study area and the potential effects of the undertaking?

If not, what modifications or additions do you suggest should be made to the scope of the EA?

Other comments

Please mail comments to this address: 1 West Pearce Street, 6th Floor, Richmond Hill, Ont. L4B 3K3
If you need more information on the North Yonge Street Corridor Public Transit Improvements EA, please contact:
Barry Darch, P.Eng., PMP
Study Manager
Phone: (416) 441-4111
Fax: (416) 441-4131
Email: b.darch@delcan.com

Steve Mota
Program Coordinator - EA
Phone: 1-877-464-9675 ext.5056
Fax: (905) 895-0191
Email: steve.mota@region.york.on.ca

http://www.yorkinmotion.com/
# York Rapid Transit Plan
North Yonge Street Corridor Public Transit Improvements
Environmental Assessment
Terms of Reference

Public Consultation Centre #1
June 12 & 15, 2004

## Comments

<table>
<thead>
<tr>
<th>Ref. #</th>
<th>Questions</th>
<th>4. Other comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>-</td>
<td>Provide good parking at stations.</td>
</tr>
<tr>
<td>2</td>
<td>-</td>
<td>More GO train service during the day please!</td>
</tr>
<tr>
<td>3</td>
<td>-</td>
<td>I have talked with many people at seminars etc. in this area and most agree they would rather not work than go downtown. What we need is good paying jobs here!! Whatever you – it must be cost effective. It cannot cost more to ride than we earn.</td>
</tr>
<tr>
<td>4</td>
<td>My concern is that we are not looking far enough ahead.</td>
<td>Has sufficient study been given to increasing the frequency and length of the GO-trains and to add Saturday and Sunday service? This as an interim measure, whilst a study is carried out to assess the suitability of a rapid (above ground) transit system which would run alongside the 404 hwy. Surely this would involve less disruption than using the highly developed Yonge Street corridor.</td>
</tr>
</tbody>
</table>