New McNicoll Bus Garage
Public Open House

May 14, 2014
Kennedy Public School
The Need for a New Bus Garage

The Problem

- Garages are operating at over-capacity
- New bus garage required within five years to accommodate increased ridership
- Some buses serving east-end routes are stored and maintained in west-end garages
- Extra deadhead time (travel when buses are not in service) adds unwanted wear and tear on buses, shortening bus life span and increasing operating costs
- Not feasible to expand existing facilities and insufficient maintenance capacity
The Need for a New Bus Garage

Opportunities

• Growth in ridership = need to expand and improve transit service across the city and north-east Scarborough

• New buses and a new maintenance and storage facility are needed to support ridership growth

• A facility close to the bus routes served will result in efficiencies and cost savings
Community Benefits

• Increased transit service on nearby routes from buses entering and leaving the garage

• Enhanced perimeter landscaping

• Trees to help mitigate noise

• Several hundred, stable, secure jobs

• New customer base for local retailers and restaurants

• Cost savings from efficiencies will be channeled back into service improvements across the network

• TTC to apply “Good Neighbour Policy”
Recent Service Improvements

- Service levels are based on observed ridership levels and TTC Board-approved service standards
- Service levels are constantly adjusted to meet changes in passenger demand
- More riders = Increased Service

Recent service increases on local routes

43 Kennedy
- Morning peak period (April 2014)
- Late evening (April 2014)
- Monday-Friday midday (March 2013)

17 Birchmount
- Saturday and Sunday daytime (January 2014)
- Afternoon peak period (September 2013)
The Need for a New Bus Garage

New bus garage will be able to accommodate conventional buses as well as the longer articulated buses (40 ft and 60 ft)
McNicoll Garage – Proposed Site

- Scarborough Chinese Baptist Church
- Enbridge Construction and Maintenance Facility
- Mon Sheong Foundation Long Term Care Facilities
- TTC Site

Kennedy Rd
Kennedy Rd
McNicoll Ave
Silver Star Blvd
GO Stouffville Line
Mary Ward Catholic Secondary School
McNicoll Ave
Scarborough Chinese Baptist Church
Enbridge Construction and Maintenance Facility
Mon Sheong Foundation Long Term Care Facilities
TTC Site
Why This Location?

• Proximity to bus routes being serviced

• Availability of suitably-sized parcel of land to accommodate bus storage and maintenance needs
  • The facility will be capable of supporting 250 in-service buses

• Site location and need were examined in a feasibility study in 2008

• Property is owned by the City of Toronto for TTC use

• Land is already zoned “Employment Heavy Industrial”
Property Zoning

- Property is zoned “Employment Heavy Industrial”
- Other permitted uses include:
  - Pesticide or Fertilizer Manufacturing
  - Cement or asphalt plant
  - Synthetic Rubber Manufacturing
  - Large Scale Smelting
  - Industrial Gas or Petrochemical Manufacturing
Existing Bus Garages
Bus Garage and Routes Served

- Sheppard Avenue and Markham Road
- Warden Avenue and Eglinton Avenue East
- Birchmount Avenue and Danforth Road
- Allen Road and Wilson Avenue
Project Scope

- New facility to store and maintain 250 buses
- Site at north-east quadrant of Kennedy and McNicoll
- Project will include:
  - Indoor storage area for 250 buses
  - Capacity to fuel and clean buses
  - Traffic offices for dispatching operators
  - Training rooms
  - Employee parking lot
**Project Process**

- Potential environmental impacts will be assessed in accordance with the Transit Project Assessment Process (TPAP)

- Stakeholder consultation is ongoing:
  - Public Open House #1: November 27, 2013
  - Public Open House #2: May 14, 2014
  - Public Open House #3: Fall 2014
Facility Facts

Operations

- Maintain and store 250 buses
- Operate 24/7
- All buses stored indoors

Will be built to Toronto Green Standard

- Energy Efficiency
- Stormwater Retention and Reuse
- Storage and Collection of Recycling and Organic Waste
Facility Facts

Preliminary Building Concept (~ 26,000 m²)

- ~ 17,000 m² of indoor bus storage
- ~ 5,300 m² of repair garage
- ~ 1,600 m² of indoor fueling and washing lanes
- ~ 2,100 m² of office and administrative uses

Total Site Area (~ 70,000 m²)
Garage Functions

Traffic offices for dispatching, equipment storage, bus wash, and refueling
Garage Functions

Maintenance and daily safety inspections
Garage Functions

Parking, storage and fueling station
Typical Bus Frequency – TTC Bus Garages

Weekday Bus Travel

- Approximately 15 buses outbound during morning rush hour 7:00 am – 10:00 am
- Approximately 20 buses outbound between 3:00 pm – 6:00 pm

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<th>Time</th>
<th>Weekdays</th>
<th>Weekends</th>
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<tr>
<td></td>
<td>Buses Outbound</td>
<td>Buses Inbound</td>
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<tr>
<td>4:00 am</td>
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<td>40</td>
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<tr>
<td>4:00 am – 5:00 am</td>
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<td>6</td>
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<tr>
<td>5:00 am – 6:00 am</td>
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<td>2:00 pm – 3:00 pm</td>
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<td>3:00 pm – 4:00 pm</td>
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<td>1</td>
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<td>Total</td>
<td>242</td>
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## Consultation and Planning Schedule

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<th>Tasks</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
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<tr>
<td>Technical Analysis Identify Problems &amp; Opportunities</td>
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<tr>
<td>Public Consultation #1</td>
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<tr>
<td>Public Consultation #2</td>
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<tr>
<td>Draft Report to TTC Board</td>
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<tr>
<td>Draft Report to City Council</td>
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**City - TTC Transit Project Assessment Process**

- Notice of Commencement for TPAP
- Public Consultation #3 on Draft Environmental Project Report
- Notice of Completion of Environmental Project Report
- 30-Day Review Period
- 35-Day MOE Review/Minister Decision on whether this project can proceed
Issues Raised From Open House #1

Open House #1 was held on November 27, 2013

• Over 40 people attended the Public Open House #1
• Comments and questions were recorded and included in a Consultation Report, posted on the project web page projects.ttc.ca

| Air Quality | An Air Quality Assessment was undertaken. Results indicate that mitigation is not warranted. |
| Traffic Impact | A Traffic Impact Assessment Study was undertaken. The McNicoll Bus Garage would cause minimal impacts to the traffic conditions given the frequency of buses travelling to and from the Facility during rush hours. See “Typical Bus Frequency - TTC Bus Garages” panels. |
| Noise | A Noise Assessment was undertaken. Mitigation measures have been developed. See "Noise Mitigation" panels. |
| Vegetation Removals | No fish habitat or watercourses were found within the subject site. Vegetation communities on the site are consisted of mainly non-native species that is typical for abandoned agricultural fields. Further consultation with TRCA will be undertaken. |
Preferred Design Layout

Redlea Avenue

Bus Storage

Cleaning and Re-Fuelling Station

CNR/GO Rail

Employee Administration

Main Entrance

Bus Storage

Repair Bays

Storage

Loading Dock

Cleaning and Re-Fuelling Station

Employee Administration

McNicoll Bus Garage – Public Open House #2

May 14, 2014
Environmental Project Report

• Draft Environmental Project Report (EPR) will include:
  • Archaeological Assessment
  • Traffic Impact Study
  • Air Quality Assessment
  • Noise Assessment
  • Natural Environment Assessment

• EPR will provide the project background, preliminary details of the proposed design, potential impacts and mitigation measures and a summary consultation undertaken

• EPR will be available for a 30-day public and agency review period as part of the 120-day TPAP process
Archaeological Assessment

Stage 1 Archaeological Assessment – completed
• Includes geographic, land use historical information
• Will help develop recommendations for Stage 2 assessment

Stage 2 Archaeological Assessment scheduled for spring 2014
• Includes test pitting and visual review of artifacts on the surface

The results of the archaeological assessments will be documented in the Environmental Project Report
Traffic Impact

• The Traffic Impact Study revealed poor overall intersection operations
  • Kennedy Road / McNicoll Avenue
  • Midland Avenue / McNicoll Avenue

• Poor operations are generally due to traffic growth in the area, and are not related to the McNicoll Bus Garage

• Bus activity from the facility will occur primarily during off peak hours

• Study reveals that site traffic will result in minimal infiltration onto local roads
Bus Distribution Inbound/Outbound

Time of Day

Pull-Out  Pull-In

AM Peak 8:00-9:00
PM Peak 16:15-17:15

# of Future Buses

4.00 6.00 8.00 10.00 12.00 14.00 16.00 18.00 20.00 22.00 24.00
0 5 10 15 20 25

Source: TTC Vehicle Count
Bus vs Car Volumes

Vehicular traffic flows through Kennedy Road and McNicoll Avenue
Projected Bus Movement

- Scarborough Chinese Baptist Church
- Employee Parking
- Enbridge Construction and Maintenance Facility
- Mon Sheong Foundation Long Term Care Facilities
- McNicoll Ave
- Running Track
- Mary Ward Catholic Secondary School
- Kennedy Road
- Future Redlea Ave Extension
- Property Line
- Recommend Entrance/Exit
- Repair Garage
- Indoor Bus Parking
- Enbridge Construction and Maintenance Facility
- McNicoll Bus Garage

30% 15% 5% 50%

May 14, 2014
McNicoll Bus Garage – Public Open House #2
Air Quality Assessment

- Air Quality Assessment Study was carried out in accordance with Ministry of the Environment (MOE) and Ministry of Transportation (MTO) guidelines
- Study reviewed nine contaminants typically emitted by motor vehicles including nitrogen dioxide and carbon monoxide
- Background contaminant levels were based on maximum values reported in the study area from MOE and National Air Pollution Surveillance monitoring stations
- Emission rates were estimated based on U.S. Environmental Protection Agency and MOE published values
Air Quality Assessment

- Maximum background concentrations were combined with maximum predicted emissions from the facility in order to assess compliance
- The maximum combined concentrations were all below their respective MOE (Ministry of the Environment) guidelines or Canada Wide Standards except for benzene and PM$_{10}$
- Assessment revealed exceedence of $<1\%$ of the time for benzene and PM$_{10}$
- PM$_{10}$ includes dust and smoke from nearby factories and roads
- As such, mitigation measures are not warranted per MOE guidelines and/or Canada Wide Standards
Noise Assessment

• Noise mitigation measures are required to reduce disruption for local residents; a concern expressed at the first public meeting in November, 2013

The noise mitigation plan consists of:
• Acoustic panels around rooftop fans
• Buses access facility from Redlea Avenue (preferred over using McNicoll)
• False façades (an extension of the roof) to the west of the facility
• Bay doors along the west side of the facility to be closed when not in use

These noise mitigation measures will reduce noise levels for the community and meet Provincial sound level requirements
Noise Assessment

Noise Levels – Potential Impacts

• Ambient night time noise levels at the west perimeter of the proposed facility range from 37 dBA to 51 dBA

• Night time sound level limit is 45 dBA (night time – 11:00 p.m. to 7:00 a.m.)

• MOE requires mitigation for impacts exceeding the noise guideline limit

• Ambient noise and Facility noise do not exceed 45dBA

<table>
<thead>
<tr>
<th>Location</th>
<th>Relevant Noise Guideline Limit</th>
<th>Predicted Noise Level from Facility w/ Mitigation</th>
<th>Net Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Noise Sensitive Area to the West of the Facility</td>
<td>45 dBA</td>
<td>45 dBA</td>
<td>0 dBA</td>
</tr>
</tbody>
</table>
Natural Environment Assessment

- No fish habitat or watercourses were found within the subject site
- The site is dominated primarily by a significant non-native component that is typical for abandoned agricultural fields. No rare or endangered species were encountered during field work
- A portion of the site is located in the Toronto and Region Conservation Authority (TRCA) regulated area
- Ongoing consultation with TRCA
TTC Commitment

- Consultation through planning and design process
- Community Liaison Officer (CLO) assigned to project
- CLO to respond to all questions and advocate for the community interests
- Meet with stakeholders: residents, businesses and the stakeholder groups to address specific enquiries
- Provide update project information
- Post regular updates on a dedicated project page at projects.ttc.ca
Next Steps

- Respond to comments received at this Open House and post on projects.ttc.ca
- Refine mitigation measures to minimize or avoid environmental impacts
- Hold Public Consultation #3 in the fall of 2014
- Start Transit Project Assessment Process (TPAP) (provincial regulatory process)

Continue community consultations through detailed design and construction planning
## Schedule

<table>
<thead>
<tr>
<th>Date</th>
<th>Event Description</th>
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<tbody>
<tr>
<td>November 27, 2013</td>
<td>Project Assessment Public Consultation #1</td>
</tr>
<tr>
<td>May 14, 2014</td>
<td>Public Consultation #2</td>
</tr>
<tr>
<td>Summer/Fall 2014</td>
<td>Transit Project Assessment TTC Board and City Council</td>
</tr>
<tr>
<td>2015</td>
<td>Detailed design and construction planning</td>
</tr>
<tr>
<td>2016</td>
<td>Start construction</td>
</tr>
<tr>
<td>2019</td>
<td>Complete construction and commission facility</td>
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Contact Us

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Toronto, ON M2N 6L9

Comments would be appreciated by May 23, 2014

Thank you for your participation!
Freedom of Information and Protection of Privacy Act

Information collected will be used in accordance with the *Freedom of Information and Protection of Privacy Act*. With the exception of personal information, all comments will become part of the public record.

You are encouraged to contact members of the Project Team if you have any questions or concerns regarding the above information.