

TORONTO TRANSIT COMMISSION REPORT NO.

MEETING DATE: July 6, 2011

SUBJECT: TORONTO-YORK SPADINA SUBWAY EXTENSION
PROJECT UPDATE AND SCHEDULE STATUS

INFORMATION ITEM

RECOMMENDATION

It is recommended that the Commission receive the presentation to be provided at the meeting for information.

FUNDING

There are no funding implications arising from this report. The project is considered fully funded by the City of Toronto, the Regional Municipality of York, the Province of Ontario and the Government of Canada.

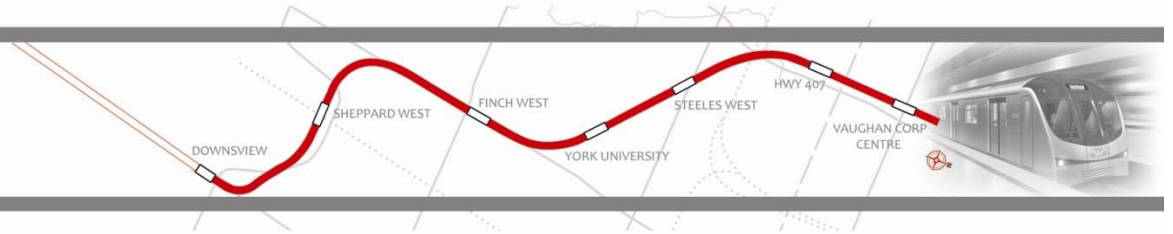
JUSTIFICATION

The presentation provides the Commission with the status of the project and indicates that satisfactory progress is being made to deliver this project.

June 13, 2011
70-2-1
03-04-000030694



Toronto-York Spadina
Subway Extension

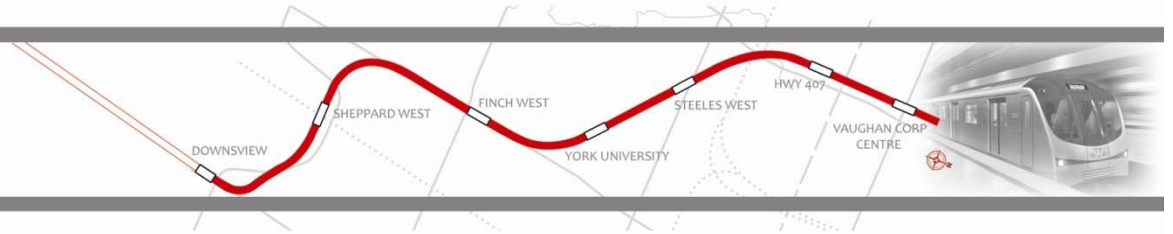


Toronto-York Spadina Subway Extension

Project Update and Schedule Status

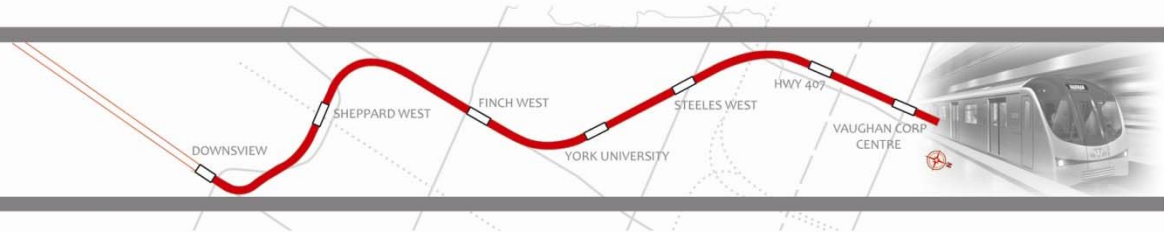
July 6, 2011 Commission Meeting
Andy Bertolo
Chief Project Manager

03-04-000031065



Overview

1. Alignment
2. Budget & Costs
3. Governance
4. Schedule
 - Chronology
 - Project Schedule
 - Milestones Achieved
5. Main Issues
6. Going Forward
7. Conclusion
8. Station Design Concepts
9. Construction Progress Photographs



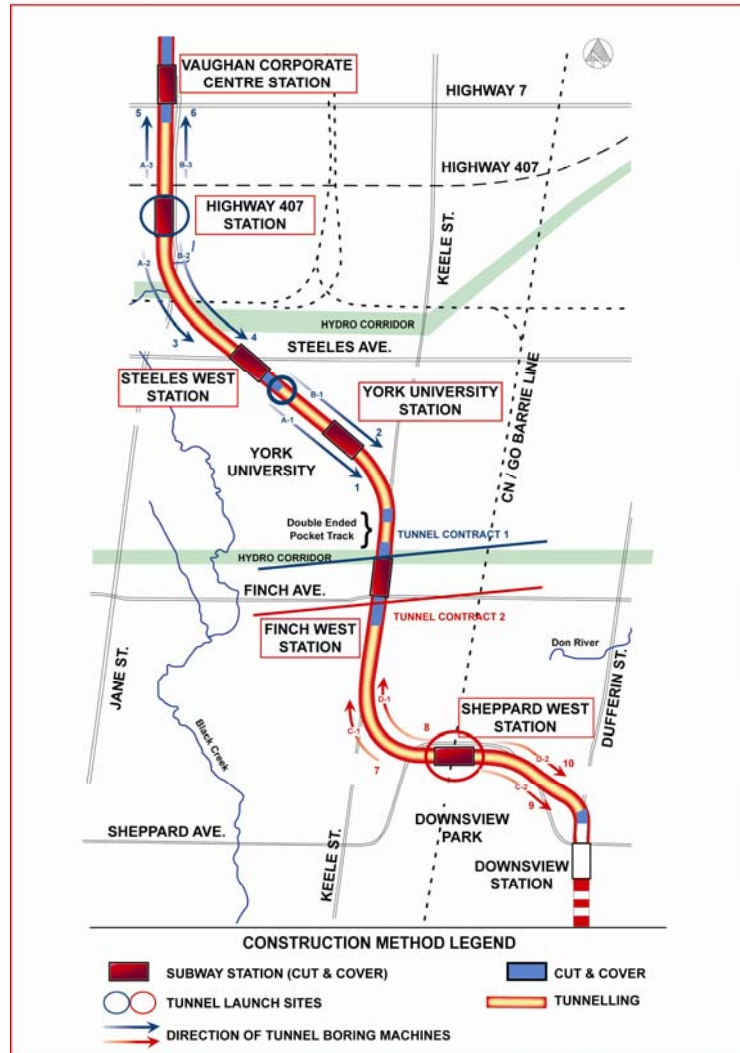
1. Alignment

Total Length 8.6 km

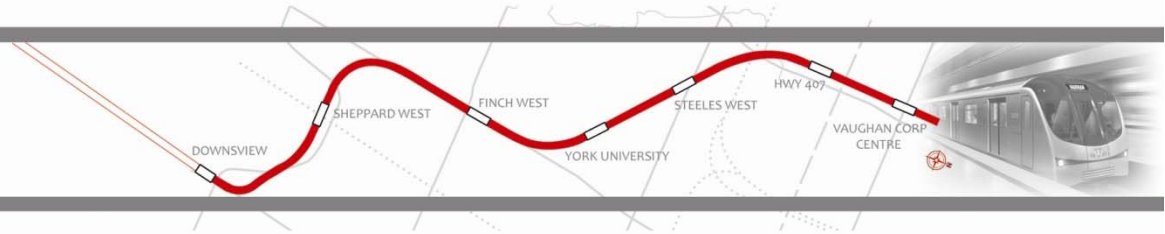
- City of Toronto 6.2 km
- Region of York 2.4 km

6 Stations

- Sheppard West
- Finch West
- York University
- Steeles West
- Highway 407
- Vaughan Corporate Centre



06-22-2011



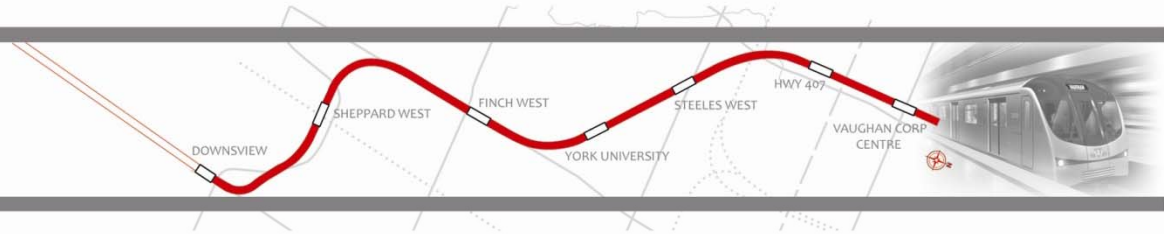
2. Budget & Costs

Budget

Project is Fully Funded*	\$2,634 M
Federal Government	\$697 M
Provincial Government (in Trust)	\$870 M
Municipal <ul style="list-style-type: none"> • City of Toronto 59.96% • Region of York 40.04% 	\$878 M
Total	\$2,445 M

Projected Earnings from Trust Funds \$189 M

Budget Escalated to Year of Occurrence 2009-2015 \$2,634 M

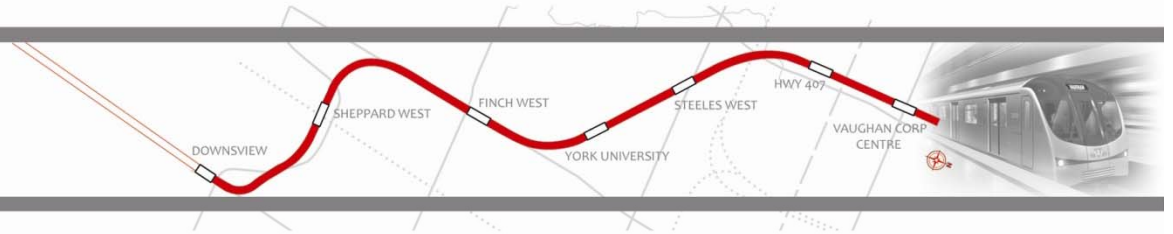


2. Budget & Costs (cont'd)

Costs

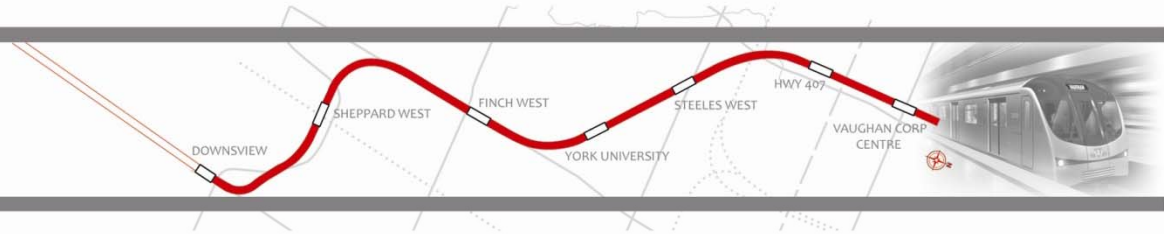
To June 30 Forecast (April 30 Actual \$377 M)	\$430 M
Forecast Expenditure to December 2011 Forecast	\$650 M
Awarded/Pending Construction Contracts	\$1,688 M
Supply/Services Contracts, Property, Licences	\$290 M
By October, 2011 estimate of contracted work	\$1,978 M

- Approximately 95%-96% of work by private sector
- Approximately 4%-5% by TTC on critical safety and operation critical connections and for TTC expertise in custom technology
- Budget is tight, but achievable



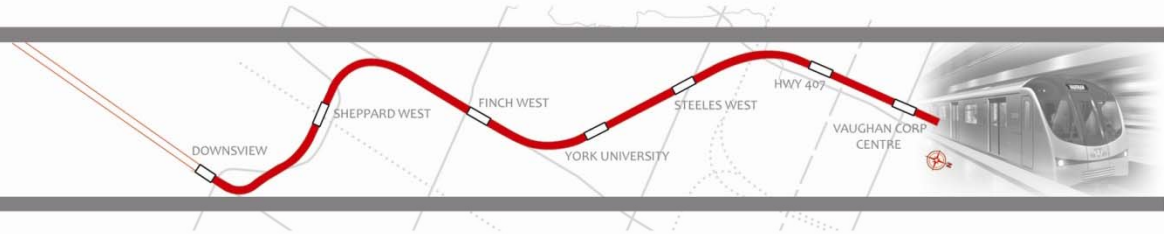
3. Governance

- Executive Task Force (ETF)
 - (City/ Region)
 - Oversight of Budget, Scope and Schedule
 - Monitors cash flow expenditures
- Move Ontario Trust (MOT)
 - (City/ Region/ Province)
 - Monitors cash flow and manages trust funds
- Management Committee
 - (Federal/ City/ Region)
 - Monitors progress, issues and cash flow
- Toronto Transit Commission
 - Overall Project Manager



3. Governance (cont'd)

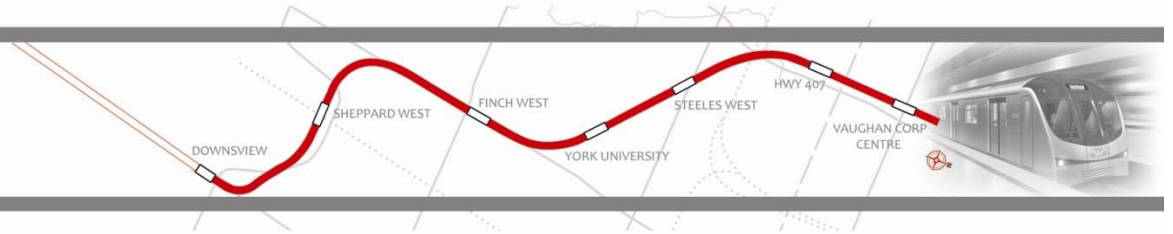
- TYSSE organized as a TTC department
- Staffing approaching/at peak numbers now
- Stable until late 2012, then staffing begins to wind down
- Made up of Separate Sections
 - Third Party, Planning & Property
 - Project Controls
 - Design & Construction
 - Systems Design & Installation
 - Project Procurement
- Detailed designs by external engineering and architectural firms
- Project head office leased – 5160 Yonge Street
- Proposed 5 field offices/trailers for 3-4 years



4. Schedule

Chronology

- Project announced spring 2006
- Project planning 2006-April 2008
- Partial funding approval April 2008
 - Began organizing
- Full funding approval September 5, 2008
- Thereafter began:
 - Design of stations and tunnels
 - Permits and third party agreements
 - Property acquisition
 - Municipal and other regulatory approvals
 - Negotiation of recoverable costs
 - Contractor outreach



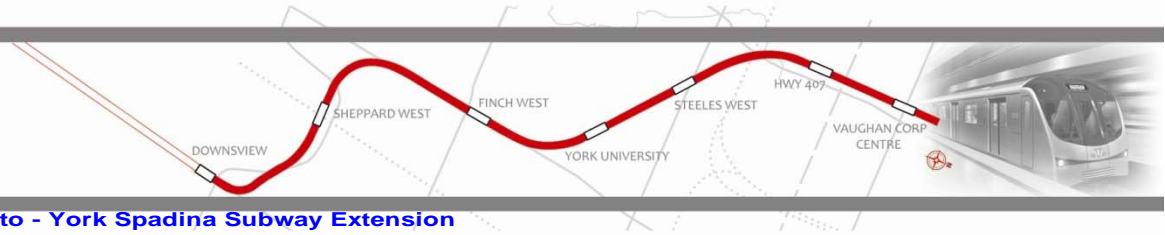
4. Schedule (cont'd)

Chronology

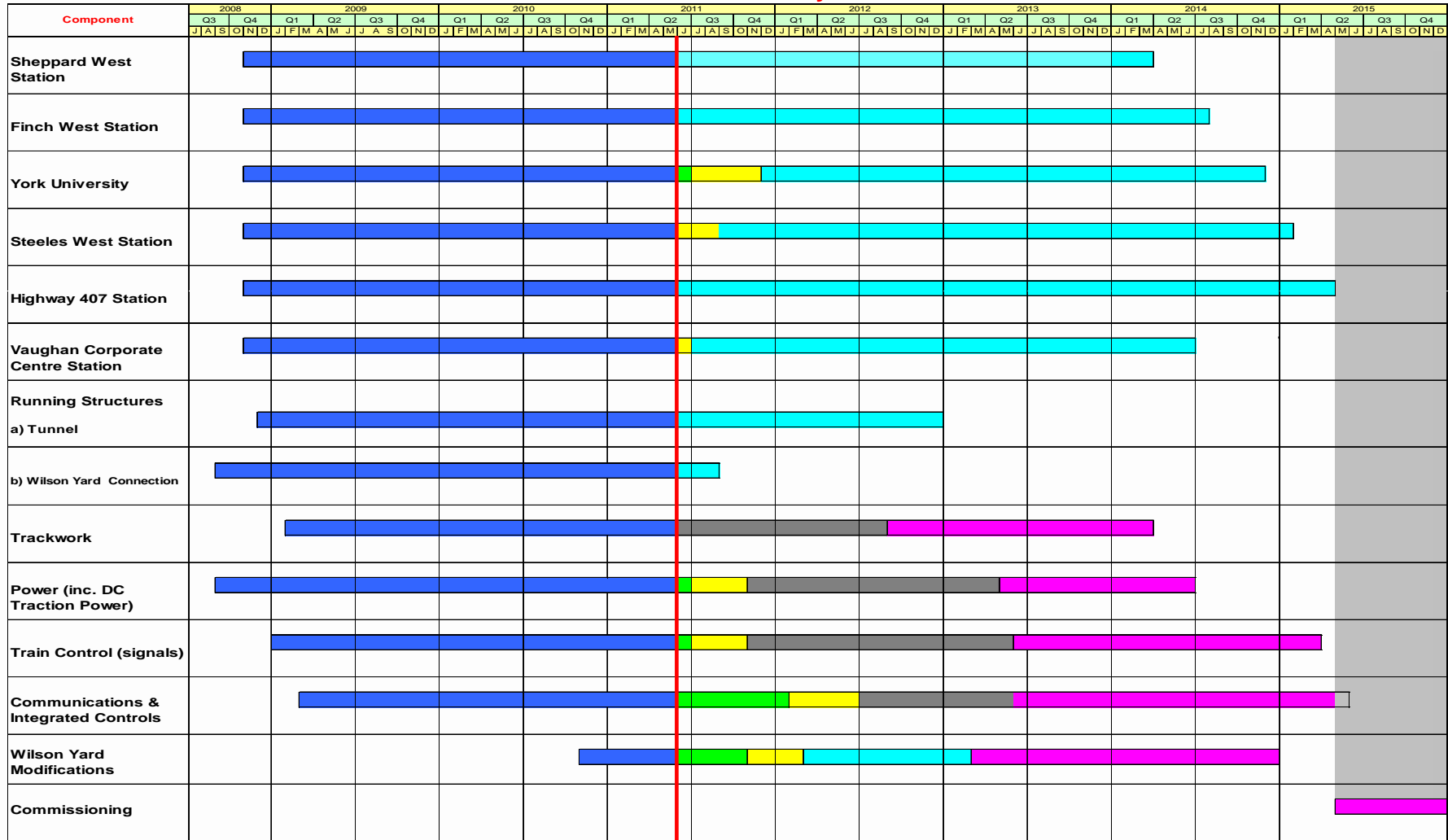
- Thereafter began: (cont'd)
 - Project delivery (contracting) strategy
 - Geotechnical investigation
 - Specialized studies/investigation
 - Organized utility relocations
 - Developed new specifications for tunnel boring machines, tunnel liners, track work
 - Public consultation
 - Approval of station design concepts



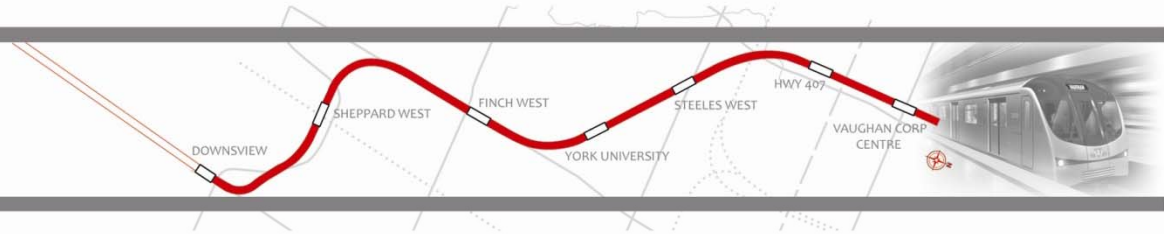
Toronto-York Spadina Subway Extension



Toronto - York Spadina Subway Extension Schedule Summary



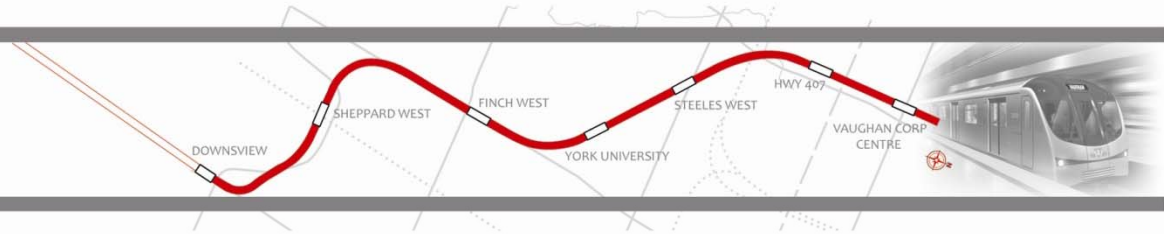
Actual DESIGN TENDER & AWARD CONSTRUCTION SYSTEMS INSTALLATION



4. Schedule (cont'd)

Milestones Achieved

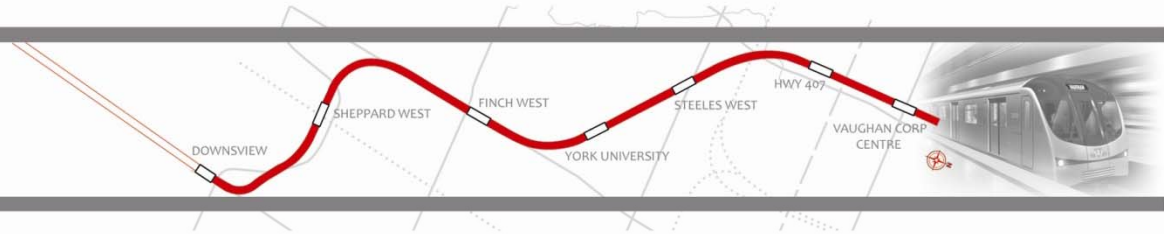
- Project delivery (contracting) strategy adopted
- Two open houses held soliciting comments for each station – 12
- Risk workshops held - 28
- Value engineering workshops - 11
- All designs for stations and tunnels completed
- Four tunnel boring machines manufactured and on site
- Wilson Yard connecting structure – 1st stage complete



4. Schedule (cont'd)

Milestones Achieved (cont'd)

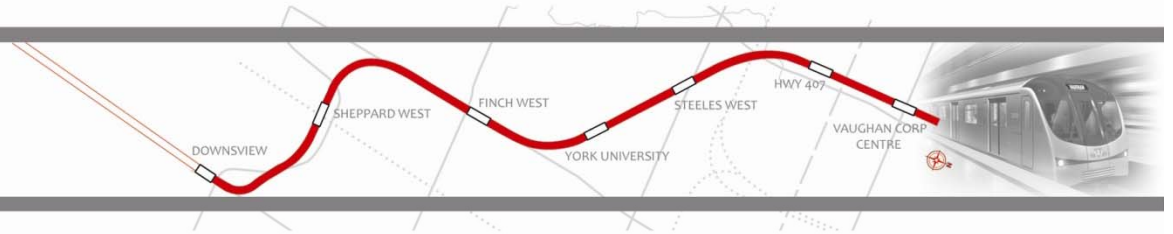
- Work started on tunnelling, two stations and related works
- Work to start on two more stations shortly – contracts awarded
- Tunnel liners manufacture 40% completed – being delivered
- Preparatory works, relocation of utilities, detours completed to ready sites at Sheppard West, Finch West (July 29), Highway 407 and York University Stations
- Steeles West Station tendered – schedule award August 2011
- York University – schedule award – October 2011



4. Schedule (cont'd)

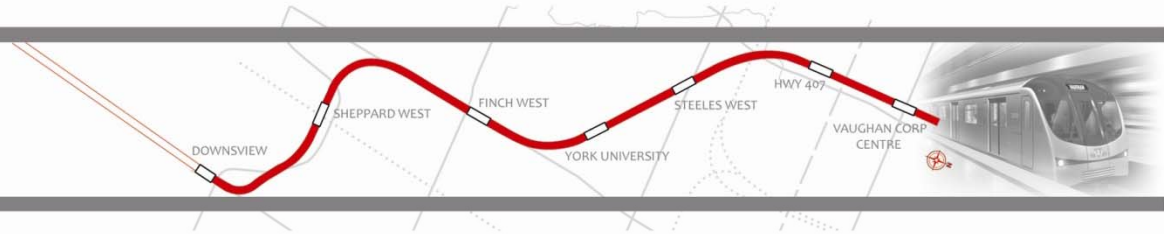
Schedule

- No more float time remaining in schedule
- Time slippage due to contractor non-performance, difficulty in relocating utilities, property issues
- Currently expect to open December 2015
- Schedule is tight, but achievable



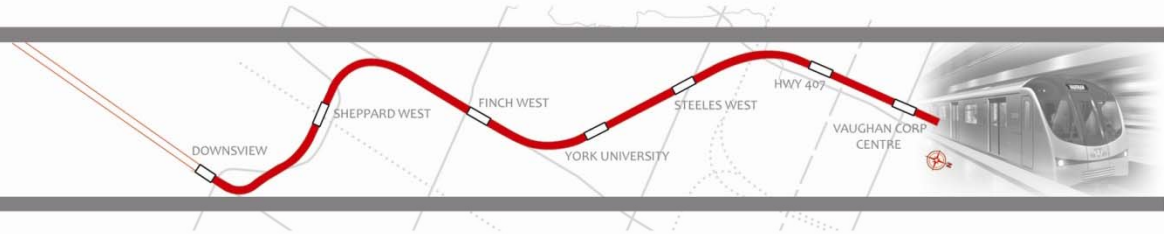
5. Main Issues

- Schedule
- Budget
- Final resolution of planning/property matters
- Contractor performance and schedule/quality compliance
- Funding for Automatic Train Control (Signals)



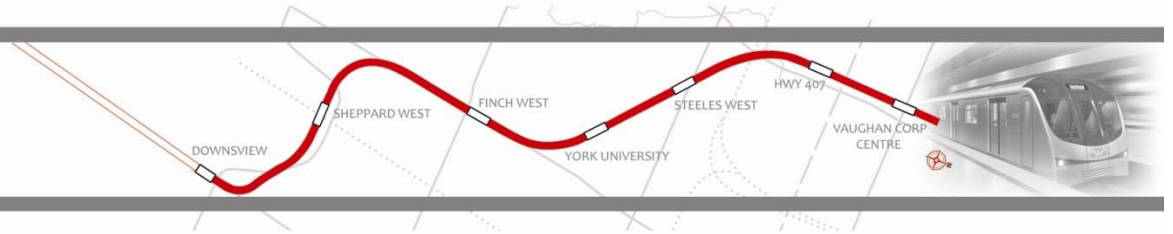
6. Going Forward

- Tender final station – York University Station
- Continue with Systems design
 - Trackwork
 - Signals
 - Traction power
 - Communications
 - Fare collection
 - Fire Ventilation
 - Integrated Controls



6. Going Forward (cont'd)

- Finalize Commission Plan (includes Safety Certification)
- Advance construction activities
- Advance tendering of systems elements
- Explore and pursue cost savings
- Explore and pursue schedule improvements

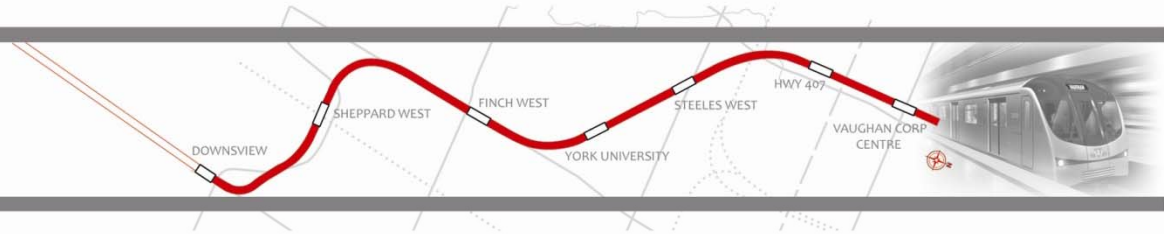


7. Conclusion

- 40% milestone on active schedule reached
- Challenges and issues remain and being addressed/managed
- To date satisfactory progress achieved
- Project is on time and on budget



Toronto-York Spadina
Subway Extension

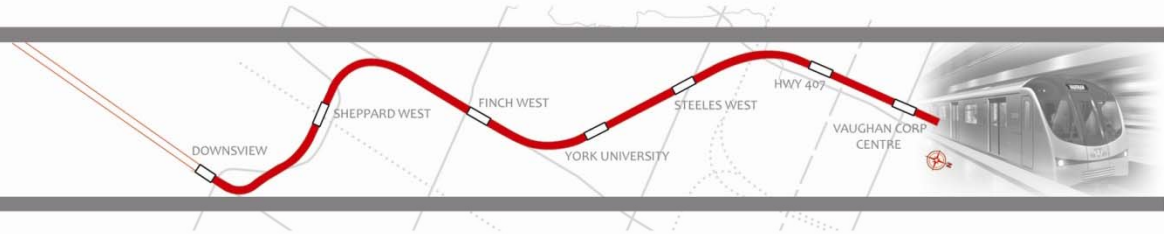


Sheppard West Station





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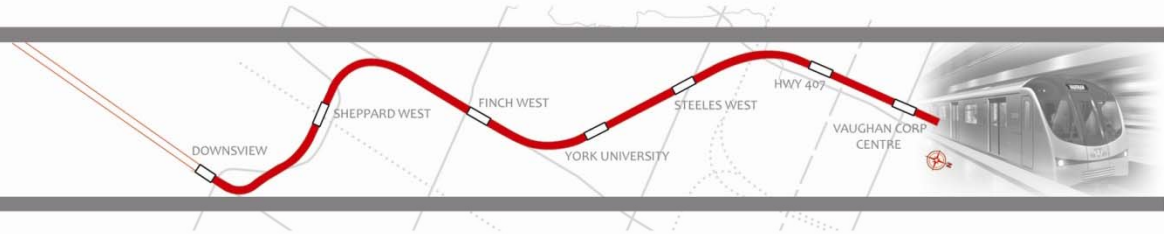


Finch West Station



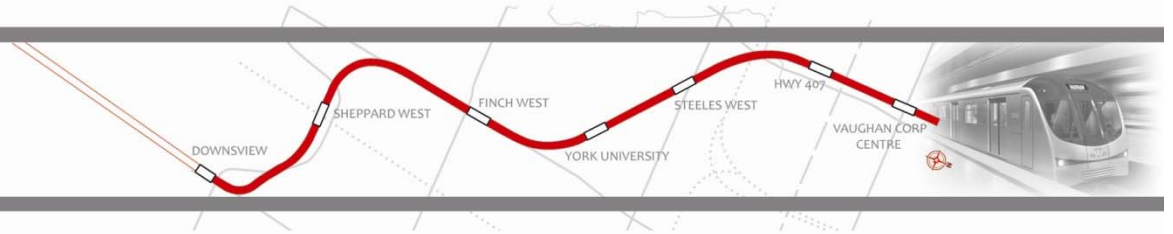


Toronto-York Spadina
Subway Extension



York University



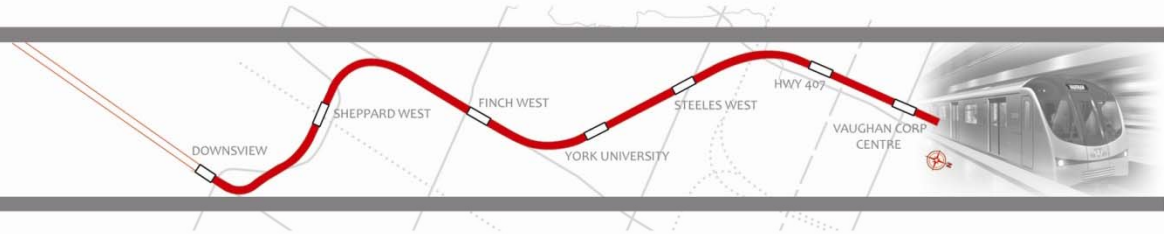


Steeles West Station





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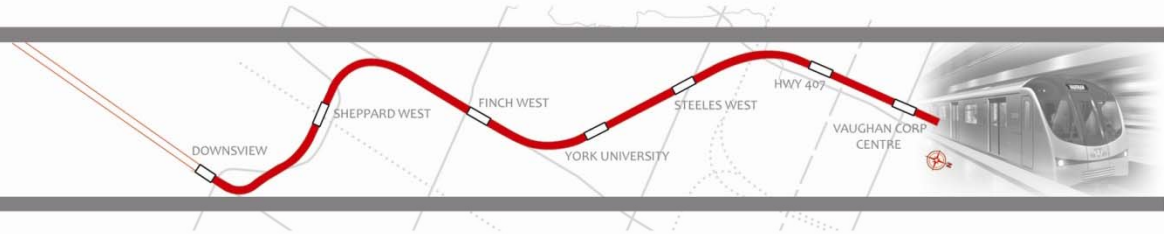


Highway 407 Station





Toronto-York Spadina
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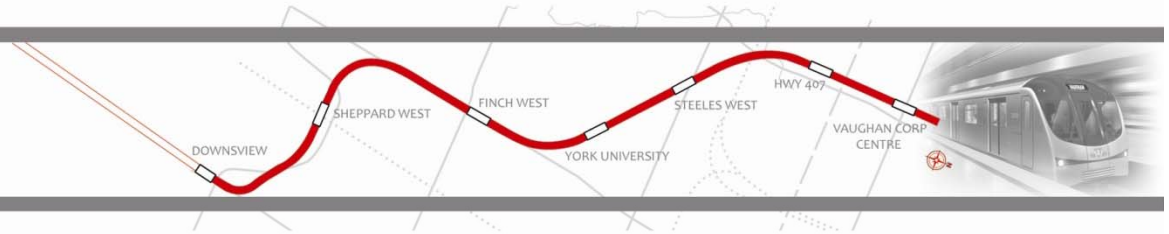


Vaughan Corporate Centre Station





Toronto-York Spadina
Subway Extension

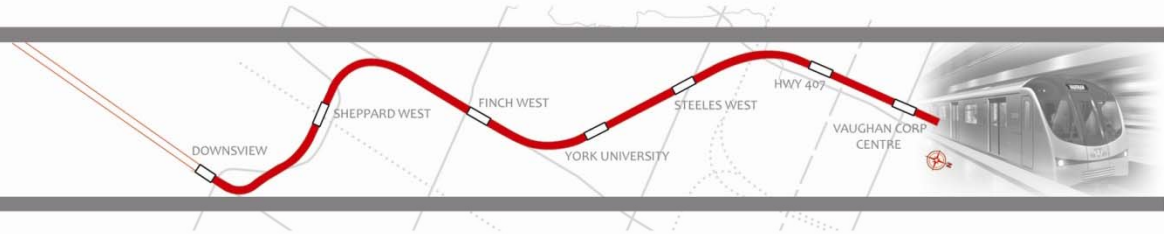


Sheppard West Launch Shaft – June 14, 2011



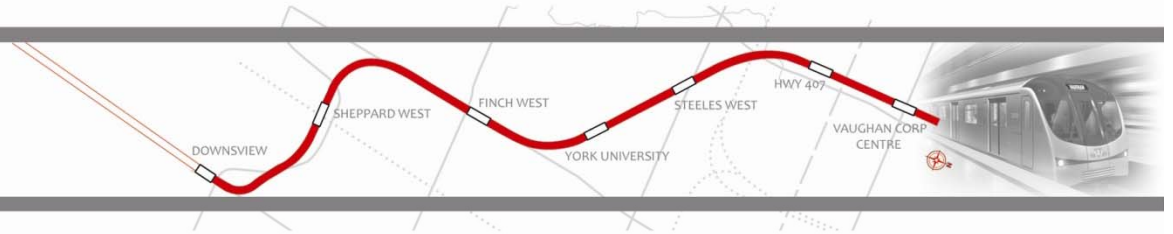


Toronto-York Spadina
Subway Extension



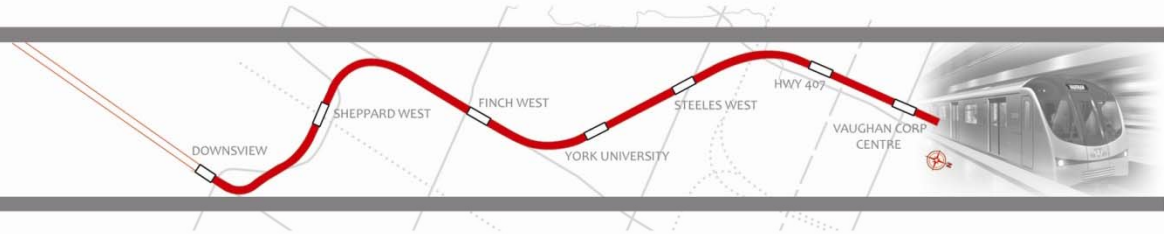
Highway 407 Bridge Girder Installation – June 24, 2011





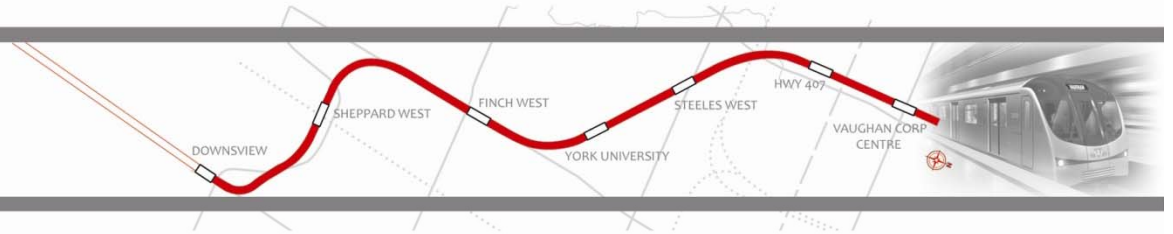
Murray Ross/Tangiers Detour Road – June 21, 2011





Fire Hall Construction – June 2011



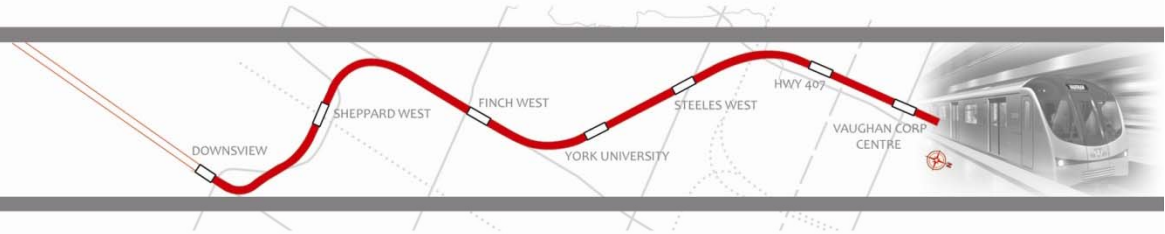


Keele-Finch Utility Relocation Looking NW – June 2011





Toronto-York Spadina
Subway Extension



TBM Launch – June 17, 2011

