

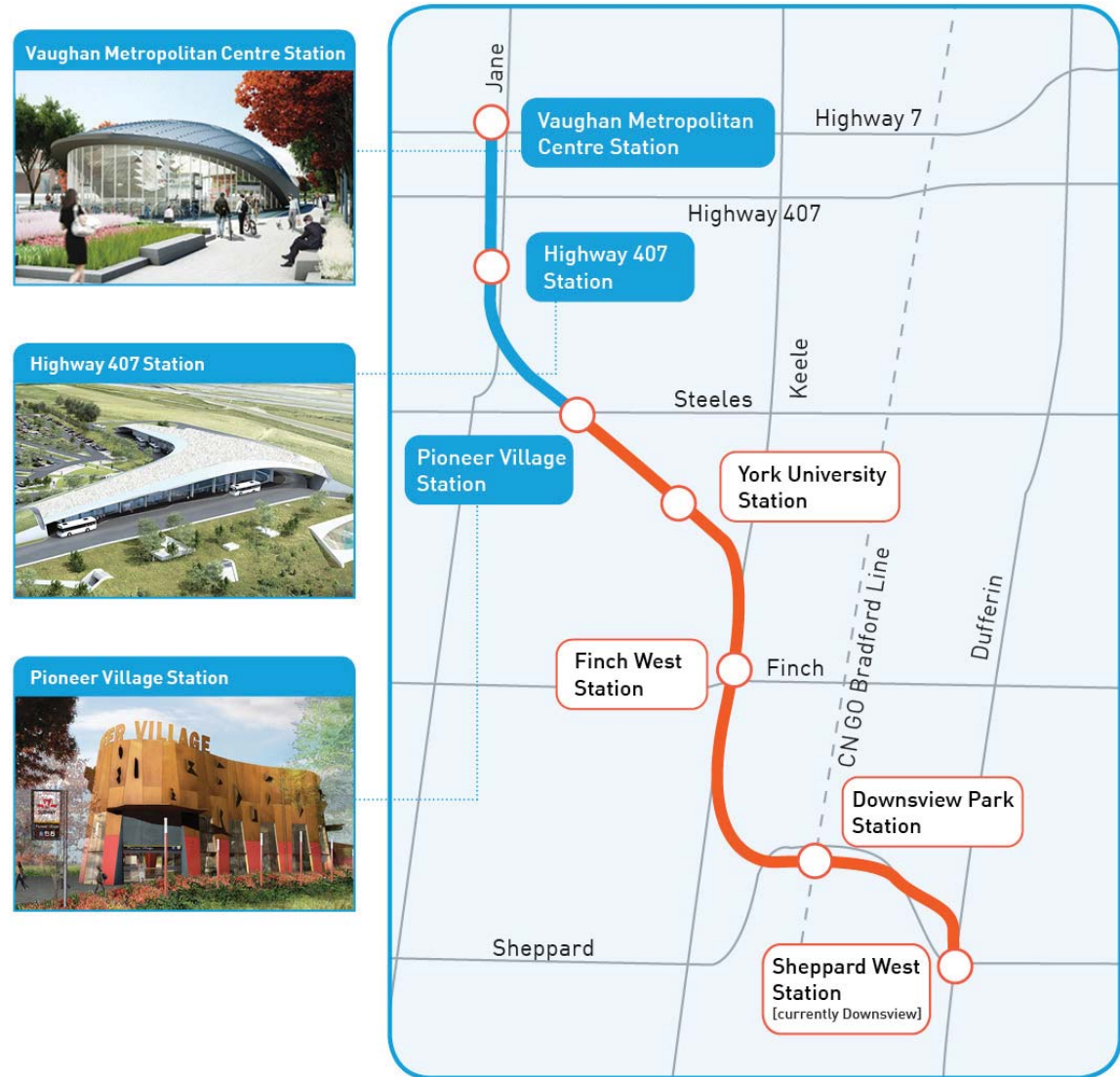
7 | Spadina Subway Transit Strategy

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7.1 | Objective

The length of the Spadina Subway extension from the TTC Downsview subway station to Highway 7 and Jane Street is 8.6 kilometres, of which 2.4 kilometres is in York Region. The extension will include three subway stations in York Region: Pioneer Village Station (formerly Steeles West Station), Highway 407 Station, and Vaughan Metropolitan Centre (VMC) Station. Each of the stations in York Region will have a bus terminal. Commuter parking lots will be located at Pioneer Village Station with 1,850 spaces, and at Highway 407 Station with 600 spaces. The subway extension is scheduled to be complete by the fall of 2016 and the existing surface bus network will be restructured to connect with the subway stations where applicable. The alignment of the proposed subway is shown in **Figure 9**.

Figure 9: Spadina Subway Extension Station Location



The Spadina Subway Transit Strategy (SSTS) builds upon the Viva Network Expansion Plan (VNEP), the 2012-2016 YRT/Viva Five-Year Plan and a terminal bus bay justification analysis. The SSTS outlines the proposed changes to the existing YRT/Viva network to service the three new subway stations in York Region. The SSTS plan will decrease the annual cost of service by approximately \$286,759 and the fleet required will increase by 23 rush hour vehicles due to the assumption of some TTC services.

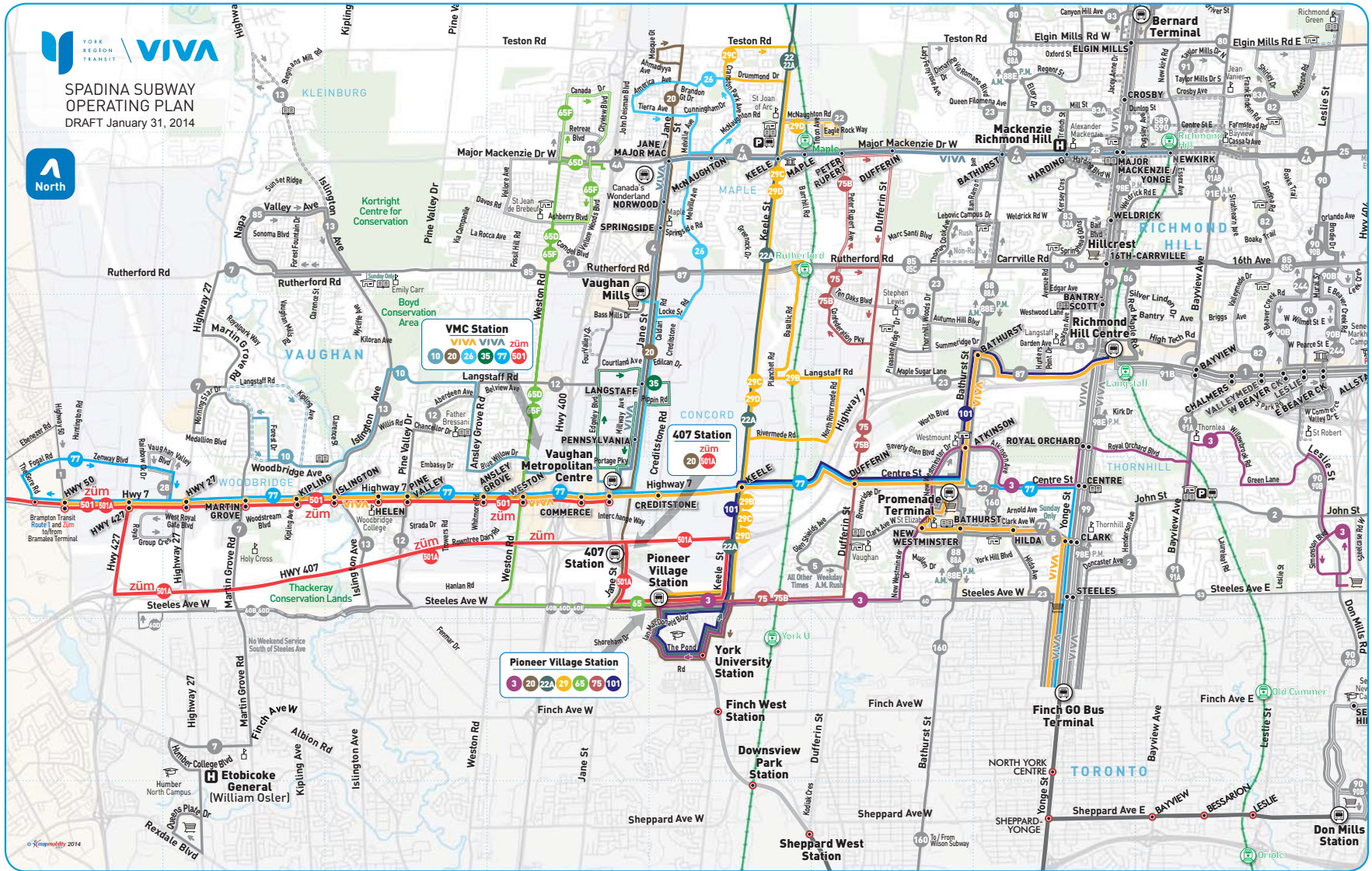
Route restructuring will occur in phases and will be coordinated with the Spadina Subway extension and the VNEP. **Table 25** lists the routes and provides a brief summary of the proposed restructuring.

The proposed restructuring is shown in **Figure 10**.

Table 25: Proposed Route Restructuring

Route	Subway Station Connection	Restructuring Proposal
Viva purple	Not applicable	Restructure to end at service Richmond Hill Centre Terminal (as per VNEP)
Viva orange	Vaughan Metropolitan Centre	Restructure to service VMC station, Promenade Terminal, Finch GO Bus Terminal and Richmond Hill Centre Terminal (as per VNEP)
Viva silver	Vaughan Metropolitan Centre	New service (as per VNEP)
3 – Thornhill	Pioneer Village	Restructure to service Pioneer Village Station
10 – Woodbridge	Vaughan Metropolitan Centre	Restructure to service Vaughan Metropolitan Centre Station
20 – Jane	Pioneer Village, Highway 407, Vaughan Metropolitan Centre	Restructure to service Pioneer Village Station, Highway 407 Station and Vaughan Metropolitan Centre Station
22A – King City	Pioneer Village	Restructure to service Pioneer Village Station
26 – Maple Local	Vaughan Metropolitan Centre	Restructure to service Vaughan Metropolitan Centre Station
29 – Keele	Pioneer Village	Assume service from TTC, restructure to service Pioneer Village Station
35 – Jane Local	Vaughan Metropolitan Centre	Assume service from TTC, restructure to service employment lands adjacent to the Vaughan Metropolitan Centre Station
65 – Weston	Pioneer Village	Assume service from TTC, restructure to service Pioneer Village Station
75 – Dufferin	Pioneer Village	Assume service from TTC, restructure to service Pioneer Village Station
77 – Highway 7	Vaughan Metropolitan Centre	Maintain existing routing, stop on-street at Vaughan Metropolitan Centre Station
101 – York U Shuttle	Pioneer Village	New conventional service from Richmond Hill Centre Terminal to York University
360 – Maple Express	Not applicable	Service duplication, alternative service provided by Spadina Subway
760 – Vaughan Mills/Wonderland	Not applicable	Service duplication, alternative service provided by Viva orange, Viva silver, Route 20 – Jane

Figure 10: Spadina Subway Transit Strategy Restructuring



7.2 | Pioneer Village Station

The Pioneer Village Station is located at Steeles Avenue and Northwest Gate (York University). The station will have a YRT/Viva bus terminal on the north side of Steeles Avenue and a TTC terminal on the south side. The preliminary layout of the YRT/Viva bus terminal is shown in **Figure 11**.

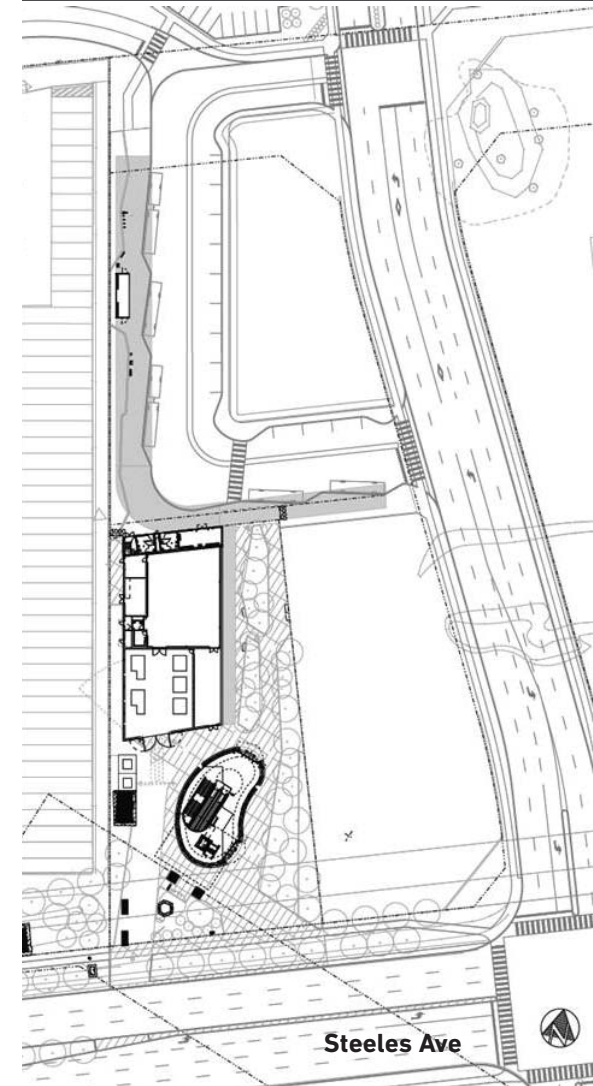
Commuter parking for 1,850 vehicles and associated access roads are located in the hydro corridor to the north of the station. The main entrance to the subway is located on the north side of Steeles Avenue West and provides access to the YRT/Viva bus terminal, the on-street Passenger Pick-Up and Drop Off, and commuter parking. A pedestrian walkway from the commuter parking lot through the YRT/Viva bus

terminal will be designed to provide a protected route for passengers moving to and from the main entrance.

It is proposed that the Pioneer Village Station will be serviced by Route 3 – Thornhill, Route 20 – Jane, Route 22A – King City, Route 29 – Keele, Route 65 – Weston, Route 75 – Dufferin and the proposed Route 101 – York U Shuttle. The routes will require four in-service bays and one bay designated for growth.



Figure 11: Pioneer Village Bus Terminal Preliminary Layout



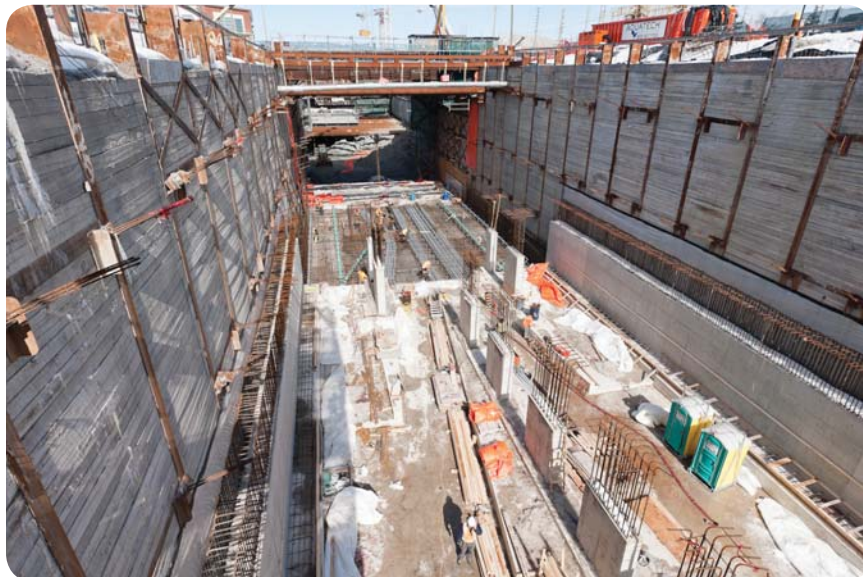
7.3 | Highway 407 Station

The Highway 407 Station bus terminal will integrate YRT/Viva, Brampton Transit and GO Transit service. The preliminary layout of the bus terminal is shown in **Figure 12**.

It is proposed that the Highway 407 Station will be serviced by YRT Route 20 – Jane, YRT Mobility Plus and Brampton Transit Route 501A – Queen. The station will primarily accommodate transfers between YRT/Viva and GO Transit as most connections with the subway will occur at the Vaughan Metropolitan Centre and Pioneer Village Subway Stations.

The barrier-free access route from the parking lot and Passenger Pick-Up and Drop-Off is separated from vehicle traffic and leads directly to the sliding doors at the main entrance.

Figure 12: Highway 407 Subway Station Preliminary Layout



7.4 | Vaughan Metropolitan Centre Station

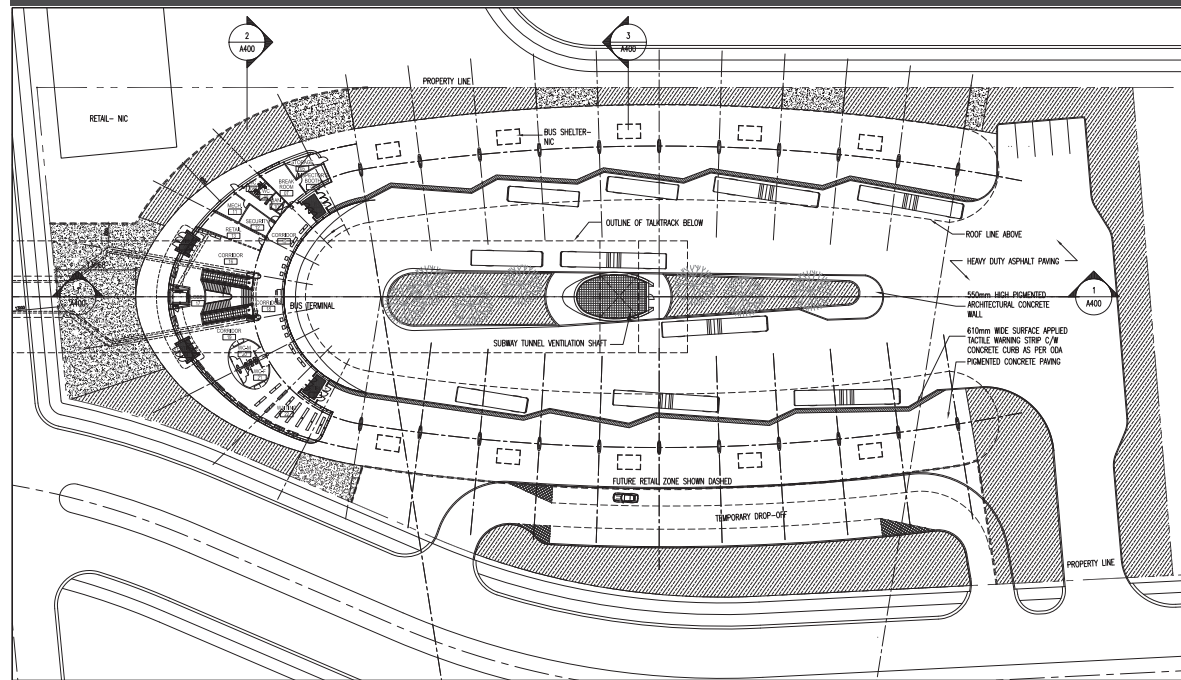
The Vaughan Metropolitan Centre (VMC) Station is the northern terminus of the Spadina Subway Extension. The preliminary layout of the VMC bus terminal is shown in **Figure 13**.

The Vaughan Metropolitan Centre Station is located north of Highway 7 to the west side of the relocated Millway Avenue. The station will be a multi-modal transportation hub with a Passenger Pick-Up and Drop-Off, connections to York Region Transit Bus Terminal, and connections to Viva service along Highway 7.

Viva orange, Viva silver and Brampton Züm 501 – Queen will service the station on-street. Passengers will board/alight in the centre lane rapidway vivastation on Highway 7. The rapidway vivastation will have access to the subway concourse below and passengers will be able to walk to the bus terminal located north of Highway 7 via the concourse. Route 77 – Highway 7 will also service the station on-street at a curbside stop.

It is proposed that the Vaughan Metropolitan Centre Station will be serviced by Route 10 – Woodbridge, Route 20 – Jane, Route 26 – Maple Local and Route 35 – Concord Local. The routes will require six in-service bays and two bays designated for growth and one bay for Mobility Plus.

Figure 13: Vaughan Metropolitan Centre Preliminary Layout



7.5 | Cost and Fleet

The cost and fleet requirements of the Spadina Subway transit strategy are additional to the changes planned in the VNEP.

Table 26 summarizes the costs for Pioneer Village Station. (Route 101 – York U Shuttle is not included in Table 19 as it is part of the VNEP.) The routing/restructuring changes associated with operating into Pioneer Village Station will result in an overall annual increase of \$310,621.

In the case of Highway 407 Station, Route 20 is the only YRT/Viva route servicing the terminal. The hours and cost for Route 20 are shown in **Table 26**.

Table 27 summarizes the costs for Vaughan Metropolitan Centre Station. **Table 27** excludes Route 20 (as Route 20 is included in Table 19), and also excludes Route 77 – Highway 7, Viva orange and Viva silver as these routes are included in the VNEP. The routing/restructuring changes associated with operating into Vaughan Metropolitan Centre Station will result in an overall annual decrease of \$597,380.

The overall cost of the routing/restructuring changes associated with operating into the three stations is an annual decrease of \$286,759.

Table 28 shows that a fleet increase of 23 vehicles is required. The increase is needed for the routes assumed from TTC and for the additional shuttle to York University. All other routes will be operated with the existing fleet numbers.

Table 26: Pioneer Village Station - Annual Cost and Hours

	Route 3	Route 20	Route 22A	Route 29	Route 65	Route 75	Total
Daily Hours							
Weekday	0.1	0.4	0.1	38.5	33.8	18.8	72.9
Saturday	0.0	0.2	0.0	10.7	14.6	20.0	25.5
Sunday	0.0	0.1	0.0	11.6	10.8	10.0	22.5
Annualized							
Weekday	29.3	94.1	24.1	96,737	84,897	47,301	23,041
Saturday	1.9	7.8	0.0	554.9	756.8	1,038.7	2,360
Sunday	2.3	7.0	0.0	719.0	667.8	618.8	2,015
Cost							
Weekday	\$2,928	\$9,413	\$2,405	-\$16,796	\$285,722	-\$54,090	\$283,672
Saturday	\$195	\$780	\$0	-\$22,917	\$10,781	\$56,134	-\$11,161
Sunday	\$232	\$698	\$0	\$2,452	\$16,192	\$16,492	\$19,574
Route Total	\$3,356	\$10,890	\$ 2,405	-\$ 37,261	\$312,695	\$18,536	\$310,621

Table 27: Vaughan Metropolitan Centre - Annual Cost and Hours

	Route 10	Route 26	Route 35	Route 360	Total
Daily Hours					
Weekday	-0.1	0.1	-9.1	-14.8	-23.9
Saturday	-0.1	0.1			0
Sunday	-0.1	0.1			0
Annualized					
Weekday	-25.1	33.5	-2,275.7	-3,706.4	-5,973.7
Saturday	-2.6	2.6			0
Sunday	-3.1	3.1			0
Cost					
Weekday	-\$2,510	\$3,347	-\$227,573	-\$370,643	-\$597,380
Saturday	-\$260	\$260			0
Sunday	-\$310	\$310			0
Route Total	-\$3,080	\$3,917	-\$227,573	-\$370,643	-\$597,380

Table 28: Spadina Subway Transit Strategy Proposed Fleet Requirements

Route	Time Period	Fleet Required
Route 35 – Concord Local	AM Rush Hours	+2
	PM Rush Hours	+1
Route 29 – Keele	AM Rush Hours	+8
	PM Rush Hours	+6
Route 65 – Weston	AM Rush Hours	+6
	PM Rush Hours	+5
Route 75 – Dufferin	AM Rush Hours	+4
	PM Rush Hours	+4
Route 360 – Maple Express	AM Rush Hours	-2
	PM Rush Hours	-2
Route 101 – York U Shuttle	AM Rush Hours	+5
	PM Rush Hours	+5
Total	AM Rush Hours	+23
	PM Rush Hours	+19
Total Fleet Required		+23

Table 29: Spadina Subway Transit Strategy Public Information Centres

Date (7 p.m. – 9 p.m.)	Location	Municipality
Monday, February 3, 2014	Al Palladini Community Centre	Vaughan
Wednesday, February 5, 2014	North Thornhill Community Centre	Vaughan
Monday, February 10, 2014	Garnet A. Williams Community Centre	Vaughan
Tuesday, February 11, 2014	Vellore Village Community Centre	Vaughan
Wednesday, February 12, 2014	Maple Community Centre	Vaughan
Tuesday, February 18, 2014	Kleinburg Public School	Vaughan

7.6 | Public Information Centres

In February 2014, six SSTS public information centres (PICs) were held in the City of Vaughan, with at least one PIC per ward, as shown in **Table 29**.

The purpose of the PICs was to publicize the Spadina Subway extension and associated YRT/ Viva routes, receive public input regarding the routes, and identify customer needs.

Comments from the PICs included:

- > Support for the proposed Route 101 – York University Shuttle to provide service to York University
- > Suggestion for Route 75 – Dufferin to operate to Downsview Subway Station instead of Pioneer Village Station
- > Suggestion that all branches of Viva orange operate to Finch GO Bus Terminal
- > Suggestion for Viva purple to service Promenade Terminal
- > Suggestion for Route 20 – Jane to only service Pioneer Village Station

7.7 | Next Steps

The next steps of the SSTS are:

- > Continue to meet with transit partners to discuss future plans, operations and facility requirements
- > Meet with York University staff to discuss routing options and how best to service the campus when the subway is operational
- > Continue to provide updates to the public through upcoming PICs and continue to solicit feedback

