# **6** Viva Network Expansion Plan

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### 6 | Viva Network Expansion Plan

### 6.1 | Objective

The Viva Network Expansion Plan (VNEP) is a document identifying rapid transit services and infrastructure elements planned for implementation from 2015 through 2020. The VNEP has two objectives: to enhance rapid transit service by utilizing vivaNext rapidways, and to expand York Region's rapid transit network by implementing new service.

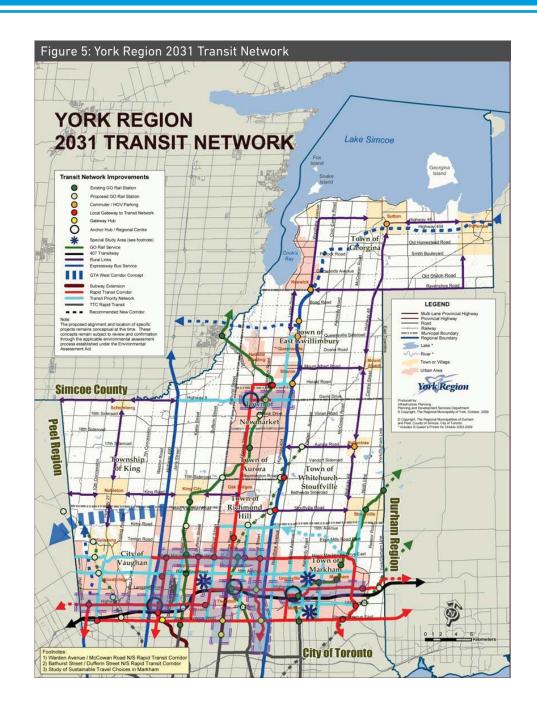
#### The VNEP initiatives will:

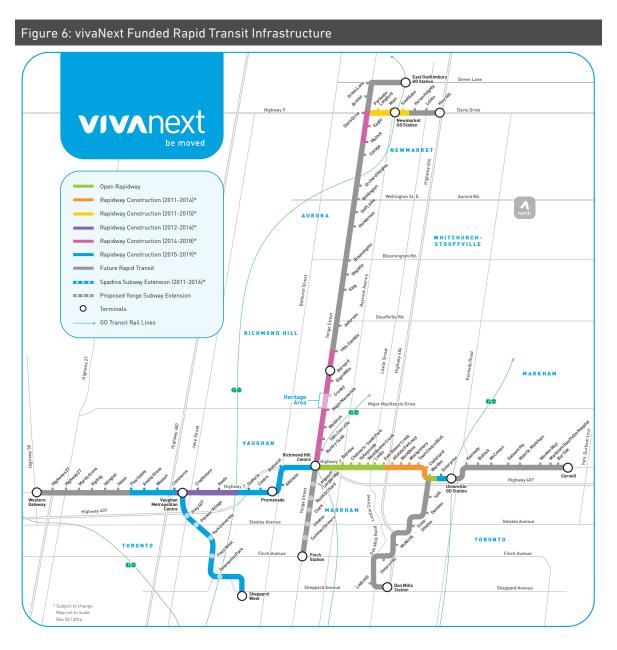
- > Expand rapid transit service in York Region
- > Increase transit ridership
- > Decrease transit travel time
- > Improve schedule reliability
- > Increase transit network connectivity

The VNEP service and infrastructure initiatives are consistent with the rapid transit corridors identified in the York Region 2031 Transit Network.

## **6.2** | York Region Future Transit Network

The 2009 York Region Transportation Master Plan Update's 2031 Transit Network map identifies transit corridors in which transit demand is projected to increase due to population and employment growth. Figure 5 shows the Master Plan's 2031 Transit Network. The rapid transit network consists of Bus Rapid Transit (BRT) operating in mixed traffic with transit priority measures, BRT in dedicated lanes, Light Rail Transit (LRT), and subway and commuter rail. Figure 6 shows the vivaNext construction projects scheduled to be completed by the end of 2019.





## 6.3 | Viva Network Expansion Plan

The vivaNext construction program and the proposed VNEP service initiatives are complementary. Most Viva service is currently provided by BRT operating in mixed traffic with transit priority measures. The VNEP initiatives support the construction of the three rapidways along major corridors, the extension of the Spadina Subway into York Region, and the Cornell Terminal, as shown in **Figure 7**.

## **6.4** | Proposed Changes to Viva Routes

#### Viva blue/blue 'A' (Yonge Street)

Viva blue currently operates two branches along Yonge Street, one from the Finch GO Bus Terminal to the Newmarket GO Bus Terminal, and one between the Finch GO Bus Terminal and the Bernard Terminal. Viva blue 'A' operates between the Newmarket GO Bus Terminal and the Finch GO Bus Terminal, bypassing the Richmond Hill Centre Terminal. Viva blue 'A' operates southbound during the weekday morning rush hours and northbound during the weekday afternoon rush hours.

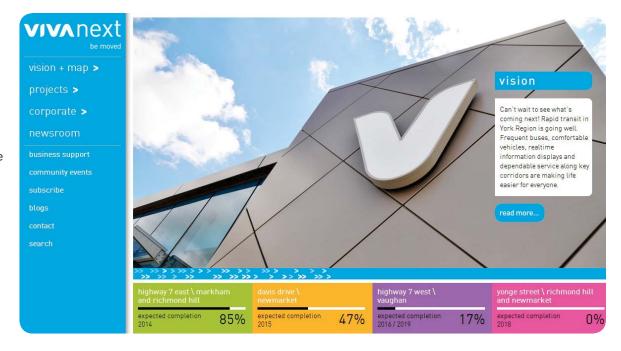
In 2018, construction of the Yonge Street rapidways from Highway 7 to 19th Avenue/ Gamble Road and from Mulock Drive to Davis Drive is scheduled for completion. Viva blue will then operate within these dedicated lanes.

#### Viva yellow (Davis Drive)

Construction of the Davis Drive rapidway is expected to be complete in 2015 and Viva yellow will be introduced shortly thereafter. Viva yellow will operate from the Newmarket GO Bus Terminal along Davis Drive to a newly constructed bus loop at a carpool lot located at Davis Drive and Highway 404.

#### Viva purple (Highway 7 East)

Viva purple currently operates between Markham Stouffville Hospital and York University along Highway 7, Bathurst Street, Centre Street, and Keele Street. In 2014, construction of the Highway 7 East rapidway between Highway 404 and Warden Avenue is expected to be complete. In the long-term, it is proposed that Viva purple operate between the Richmond Hill Centre Terminal and



Markham Stouffville Hospital as Viva orange and the Spadina subway will then serve passengers travelling to York University. Following completion of the rapidway, Viva purple service will be modified in two phases:

- > Phase 1–2017: Viva purple will operate a new branched service along Highway 7 between Town Centre Boulevard and Kennedy Road. The new branch will operate during the weekday rush hours, and alternate trips between Highway 7 and Enterprise Boulevard branch during the non-rush hours, on Saturdays and Sundays/holidays.
- > Phase 2–2018: Viva purple will operate between Richmond Hill Centre Terminal and Markham Stouffville Hospital.

### Viva pink (Highway 7 East)

Viva pink currently operates during weekday rush hours between the Finch GO Bus Terminal and Unionville GO Station along Yonge Street, Highway 7, Warden Avenue and Enterprise Boulevard. It is proposed that Viva pink will be extended eastward in 2020 to operate from Highway 7/McCowan Road to the Finch GO Bus Terminal via Enterprise Boulevard and Unionville GO Station.

#### Viva green (Leslie Street/Major Mackenzie Drive)

Viva green currently operates during weekday rush hours between TTC Don Mills Subway Station and Highway 7/McCowan Road via Don Mills Road, Gordon Baker Road, Pharmacy Avenue, Warden Avenue, Enterprise Boulevard, and Highway 7. It is proposed that Viva green will be restructured in 2020 to operate all day service along Leslie Street between the TTC Don Mills Subway Station and along Major Mackenzie Drive between Leslie Street and Yonge Street.

#### Viva silver (Jane Street/Major Mackenzie Drive)

The Jane Street and Major Mackenzie Drive corridors are currently served by conventional YRT bus service. In 2018, it is proposed that Viva silver will operate between the Vaughan Metropolitan Centre subway station and Major Mackenzie Drive/Newkirk Road. Viva silver is planned to be a BRT service operating in mixed traffic with transit priority measures.



## 6.5 | YRT/Viva VNEP Fleet Plan

The Viva bus requirements between 2015 and 2020 are shown in **Table 22**.

Implementation of the YRT/Viva VNEP will impact the existing Viva and conventional bus fleet. When the plan is fully implemented, Viva buses will increase by 20 (and conventional buses will decrease by 10).

Table 22: In-Service Viva Bus Requirements							
Viva Line	2015	2016	2017	2018	2019	2020	
blue / blue 'A'	27	27	27	27	27	27	
yellow	5	5	5	5	5	5	
purple	18	18	18	8	8	8	
pink	8	8	8	8	8	10	
orange	8	8	8	19	19	19	
green	5	5	5	5	5	7	
silver	0	0	0	10	10	10	
Total	71	71	71	82	82	86	



#### 6.6 | YRT/Viva VNEP Financial Summary

Viva annual operating costs between 2015 and 2020 are shown in **Table 23**.

Viva operating costs are estimated to increase by \$14,796,000 due to the YRT/Viva VNEP service initiatives. At the same time, corresponding reductions in operating costs for the underlying conventional bus network of \$5,221,000 are expected. Overall, there is an estimated annual operating cost increase of \$9,575,000 by 2020.

Preliminary YRT/Viva VNEP capital requirements are presented in **Table 24** and include costs for transit priority measures, new vivastations, and two structured parking garages. The vivaNext rapid transit infrastructure program does not fund the identified capital projects.

Table 23: Viva Annual Operating Costs (in \$1,000s)							
Viva Line	2015	2016	2017	2018	2019	2020	
blue / blue 'A'	\$11,985	\$11,985	\$11,985	\$11,985	\$11,985	\$11,985	
yellow	\$3,239	\$3,239	\$3,239	\$3,239	\$3,239	\$3,239	
purple	\$10,118	\$10,118	\$10,118	\$5,115	\$5,115	\$5,115	
pink	\$2,286	\$2,286	\$2,743	\$2,743	\$2,743	\$2,743	
orange	\$3,535	\$3,535	\$3,535	\$11,262	\$11,262	\$11,262	
green	\$1,278	\$1,278	\$1,278	\$1,278	\$1,278	\$3,748	
silver	\$0	\$0	\$0	\$5,907	\$5,907	\$5,907	
Total	\$32,441	\$32,441	\$32,898	\$41,529	\$41,529	\$43,999	

Annual Operating Costs as of July 2014

Table 24: VNEP Capital Costs (in \$1,000s)						
Viva Line	2015	2016	2017	Total		
blue / blue 'A'	\$0	\$0	\$0	\$0		
yellow	\$0	\$0	\$0	\$3,896		
purple	\$0	\$4,820	\$0	\$4,820		
pink	\$0	\$1,490	\$0	\$1,490		
orange	\$0	\$0	\$9,021	\$9,021		
green	\$0	\$15,401	\$4,591	\$19,992		
silver	\$0	\$0	\$23,097	\$23,097		
Parking Lot (2)*	\$0	\$0	\$20,000	\$20,000		
Professional Services	\$0	\$2,171	\$5,671	\$8,232		
Scope & Contingency	\$0	\$4,342	\$11,342	\$16,463		
Total	\$0	\$28,224	\$73,722	\$107,011		

<sup>\*</sup>Surface parking initially, ultimately parking structure Capital Costs as of July 2014

## 6.7 | VNEP Implementation Plan

The VNEP Implementation Plan is shown in **Figure 8**.

A technical advisory committee has been created to guide and monitor plan progress, and a consultant has been retained to create the VNEP project schedule and incorporate all functional elements into one project schedule.

The detailed design for Viva silver is underway and the preliminary submission will be ready for review during Q3 of 2014. Funding for detailed

design of the other Viva lines has also been secured. The request for proposal (RFP) for the detailed design for Viva purple, pink and orange was issued in the spring of 2014 and will be awarded in the fall of 2014. The RFP for Viva green will be issued in the fall of 2014 and will be awarded in the winter of 2015.

A communication strategy is also in progress. The communication strategy will provide customers, residents and businesses affected by the project with information before, during and after construction.



