

# Future Ready Case Study



## vivaNext BRT

### Project Overview

The \$1.4B vivaNext Bus Rapid Transit is one of the largest and most ambitious infrastructure projects in North America. It is being funded by the province of Ontario and implemented by the provincial transit agency Metrolinx.

The vivaNext Bus Rapid Transit Rapidway ultimate challenge and goal for the program is the transformation of York Region's resolutely suburban, car-dependent culture to a transit-supportive urban culture. This involves the construction of separate BRT segments using dedicated median rapid transit lanes along Highway 7 in Vaughan, Richmond Hill and Markham; Yonge Street in Richmond Hill and Newmarket; and Davis Drive in Newmarket.

WSP is providing Technical Advisory Services and Construction Oversight to York Region Rapid Transit (YRRTC) for the vivaNext program.

### What future trend(s) did we include over the current code?

- Need to mitigate climate change impacts
- Increasing income inequality
- Urban growth

### How did we consider these trends?

**Need to mitigate climate change impacts:** By providing an alternative to car travel, the Bus Rapid Transit systems will reduce greenhouse gas emissions and traffic congestion

**Increasing income inequality:** The vivaNext BRT Rapidway will provide a much higher level of service reliability, passenger comfort and convenience.

**Urban growth:** The population of York Region is projected to rise from 1.1 million in 2017 to 1.8 million in 2041, an increase of 63%, providing additional high speed mass transit to accommodate this

population growth is critical to the success of the City. Station design requirements accounted for future development plans. For example, the arching glass-topped passenger stations with heated indoor enclosures, seating, and real time bus information on electronic displays, are designed for maximum passenger comfort and convenience, Transit right-of-way was designed to also carry LRT vehicles which can accommodate increased ridership from future population growth.

### How was our final approach better?

Given public concerns over traditional Design-Bid-Build projects running late and over-budget, the move to AFP delivery is a radical development in the delivery of large-scale infrastructure projects. The successful management and delivery of the vivaNext BRT will be a benchmark for all future transit projects.

WSP have been involved in every step of the process. Starting with preliminary design, environmental assessment and tender support, we are currently working with the York Region Rapid Transit Corporation to ensure the project is implemented properly. Our expertise and history of the project will ensure this landmark project is completed successfully and to the satisfaction of the public.

### The outcome

As construction continues, WSP continues to play a critical role in ensuring the successful delivery of this project. We are part of an integrated project team with other consultants, the Design-Build consortium, multiple government agencies, operators, and the public which is required to build this one-of a kind project. When completed in 2020 the vivaNext BRT Rapidway will support future growth across York Region.

WSP is key player to ensure the program meets schedule and budget targets and effectively integrates this new transportation system in a dense urban landscape for a healthier city.

### For more information:

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