

October 24, 2024
FOR INFORMATION

Report of the President

BRT Work Program – Progress Update

1. Recommendation

It is recommended that:

1. The Board of Directors receive this report for information.

2. Purpose

This report provides the Board with a progress update on delivery of the Region's 2051 Bus Rapid Transit (BRT) network projects and general next steps in progressing the BRT work program.

Key Points:

- > In October 2023, Regional Council approved the prioritization of the next generation of BRT projects and a recommendation for a phased delivery program of the Region's 2051 BRT network
- > Funding from senior levels of government for construction of these prioritized projects will be critical to progressing completion of the BRT network
- > The federal Canada Public Transit Fund is expected to be a key source of funding for the Jane Street and Highway 7 East priority BRT projects. One core objective for federal funding includes showcasing how projects unlock the supply of affordable housing
- > In order to capitalize on lessons learned from previous BRT projects in York Region, optimize future BRT delivery based on current industry best practices, and inform funding advocacy efforts, staff are undertaking the following initiatives:
 - Capital Cost, Operations and Maintenance Review of the current BRT network;

- Comprehensive Capital Cost Estimate update for the full 130-kilometre 2051 Rapid Transit Network, as identified in the Region’s 2022 Transportation Master Plan; and
 - Construction Contract Delivery Models Review and Assessment.
- > Procurement for the Jane Street BRT Transit and Rail Project Assessment Process (TRPAP) and 30% Preliminary Design contract is complete, subject to Board approval for contract award
 - > Various stages of BRT planning, design, and delivery are underway along the Highway 7 BRT corridors in Markham and Vaughan

3. Background

In October 2023, Regional Council approved prioritization recommendations for delivery of next generation BRT projects

Prioritization of York Region’s 2051 Rapid Transit Network (**Appendix A**) sets the stage for delivery of critical BRT projects, including along Jane Street and the Highway 7 East corridor. On [October 26, 2023](#), Regional Council approved the [prioritization recommendations](#) for a phased delivery of the Region’s 2051 BRT network. This phased implementation is based on a balanced approach to address growth and travel demand in communities across the Region.

The current BRT work program includes projects along several of the rapid transit corridors that are in various stages of planning, design, construction and funding advocacy

Regional Council has made investments to advance planning, design, and some construction of priority BRT along Jane Street and Highway 7 East corridors. These investments will ensure York Region BRT projects meet funding requirements and have greater likelihood of receiving capital funding commitments from senior levels of government. Advancement of rapid transit projects in York Region also includes BRT initiatives by others, such as Metrolinx.

The current BRT work program includes:

1. Funding Advocacy and Stakeholder Engagement
2. Future BRT Delivery Optimization
 - a. Capital Cost, Operations & Maintenance review
 - b. Capital Cost Estimates update
 - c. Construction Contract Delivery Models review and assessment
3. Advancing Priority BRT projects along Jane Street and Highway 7 East corridors
 - a. Jane Street BRT – Highway 7 to Major Mackenzie Drive

- b. Highway 7 East BRT
 - i. Simcoe Promenade – Birchmount Road to Andre De Grasse Street
 - ii. Enterprise Boulevard – Andre De Grasse Street to Kennedy Road
 - iii. Kennedy Road – YMCA Boulevard to Highway 7 (led by York Region Public Works)
 - iv. Highway 7 East – Kennedy Road to York-Durham Line
- 4. Supporting Highway 7 West-Queen Street BRT – Helen Street to Mississauga Road (Metrolinx-led project)

4. Analysis

FUNDING ADVOCACY & STAKEHOLDER ENGAGEMENT

Investments are needed from all levels of government to advance completion of the Region’s BRT network

There is significant competition for transit and infrastructure funding across the GTHA and the entire country. Approximately \$1.7 billion is required to advance design and capital construction of the Region’s priority BRT projects needed in the next 10 years, located within high growth corridors of Jane Street and Highway 7 East.

Construction-ready projects are anticipated to have a greater chance of being funded. Preliminary planning, design, and engineering work for the Jane Street and Highway 7 East BRT projects is advancing. In parallel, staff continue to work with the Province to ensure York Region’s priority BRT projects are included in any updates to provincial transit planning policies and documents, such as Metrolinx’s anticipated Regional Transit Plan Update.

Continued and focused advocacy efforts with senior levels of government are imperative to securing long-term funding required for the Region’s BRT priorities.

The Canada Public Transit Fund has four core objectives for long-term funding, including increasing the supply of affordable housing

The Canada Public Transit Fund will allow for targeted transit investment of \$3 billion per year, on average, with funds starting to flow in 2026-27. The fund aims to meet the following core objectives:

1. Increase the use of public transit and active transportation relative to car travel
2. Increase housing supply and affordability as part of complete, transit-oriented communities
3. Contribute to climate change mitigation and resilience

4. Improve public transit and active transportation options for all, especially Indigenous peoples and equity-deserving groups

To access the program's long-term funding, municipalities will need to take [actions that directly increase housing supply and affordability](#), particularly in transit-oriented and complete communities.

The Province, through MTO, will be in a leadership role for determining the Metro-Regions created within the GGH/GTHA and will be the lead applicant for Metro-Region Agreements with municipalities and the federal government

In Ontario, Metro-Region Agreements funding will be led by the Province, through MTO. This stream is intended to be for a partnership of organizations within or adjacent to a Census Metropolitan Area and will offer substantial and predictable funding in regions with the highest funding demand and most complex public transit networks. This funding will support diverse projects, both from planning and feasibility studies to major and capital transit expansion. Metro-Region Agreements will include projects on a 10-year horizon period and substantial check-in would happen every five years.

YRRTC is starting to work with the Region and Cities of Vaughan and Markham to demonstrate how investment in the Region's BRTs meets federal funding criteria

The key to unlocking core funding objectives of housing supply and affordability for the Jane Street and Highway 7 East BRT corridors is defining and leveraging the relationship between future transit investment and development integration. YRRTC, in collaboration with the Region and Cities of Vaughan and Markham planning staff, are actively working together to develop the most compelling case for both the Jane Street and Highway 7 East BRT corridors to meet the federal funding criteria. A further update will be provided to the Board at a future meeting.

OPTIMIZING FUTURE BRT DELIVERY

Investments in centre-median dedicated rapidways to date have enabled significant population and job growth in Regional Centres, increased transit ridership, and connected York Region to economic hubs in the Greater Toronto and Hamilton Area. Continued investment in delivering the next 130 kilometres of the Region's BRT network will support expected growth over the next 30 years.

YRRTC and the Region have over 20-years' experience delivering BRT infrastructure and many lessons have been learned with respect to the planning, procurement, design, construction, delivery, and operations of the initial 34-kilometre BRT system. This experience provides the

opportunity to incorporate lessons learned and best practices to optimize delivery of the next priority BRT projects to ensure they achieve best value for money.

A Capital Cost, Operations and Maintenance Review is underway to ensure investments for future BRT corridors return value for money

It is important that delivery of future BRT projects align with the Region's Fiscal Strategy of delivering infrastructure within the Region's current fiscal capacity, and that future long-term operations and maintenance costs of the BRT system are sustainable. As such, a Capital Cost, Operations and Maintenance Review was initiated, in collaboration with Public Works and YRRTC's Technical Advisory Consultant (Jacobs), to assess the impacts of the current BRT infrastructure design on the capital investment and long-term Operations and Maintenance (O&M) costs.

The review will identify system elements that have high capital and/or O&M costs, and investigate potential lifecycle design changes that could be implemented for the next phase of BRT projects. This review is intended to improve the capital cost per kilometre and the long-term O&M costs, while not impacting customer experience and service levels.

The scope of work for this study includes:

- > Data Collection;
- > Capital and Operations & Maintenance review;
- > Existing conditions review;
- > Market scan of BRT designs;
- > Value engineering workshops; and
- > Options development and recommendations.

Workshops to generate input from Regional departments have been held and a number of alternatives/concepts of infrastructure design elements are being evaluated as potential cost saving measures. Outcomes and recommendations of this review will be considered as input to future Capital programming and brought forward to the YRRTC Board and Regional Council as appropriate.

Class 4 capital cost estimates are complete for the full BRT Network and will be updated based on the Capital Cost, Operations & Maintenance review

A Class 4 cost estimate is prepared when only limited or high-level design information for a corridor is available. These estimates are typically used for project screening, concept evaluation, feasibility determination, and preliminary budget approval.

To inform the ongoing BRT funding advocacy program and Regional capital budget outlook, staff have worked closely with Jacobs to prepare Class 4 capital cost estimates for the 130+ kilometres of new BRT corridors (19 separate corridors) in the 2051 Rapid Transit Network. Applying lessons learned, the estimates captured all elements of delivery of the program, including property costs, utility relocation costs, overall construction costs, and fleet.

The capital cost estimates were prepared based on the current design of the BRT system and were structured to allow for any changes in design of the future system infrastructure. The cost estimates will be updated based on the results and recommendations of the Capital Cost, Operations and Maintenance review, as necessary.

Construction contract models review and assessment has commenced to inform delivery of the priority BRT projects

Part of the successful delivery of future BRT corridors is ensuring that the right construction contract delivery model is used for BRT projects. YRRTC, in collaboration with York Region, has commenced a series of workshops with industry experts in both the public and private sectors on various contract models used in the industry. A detailed assessment of the various contract models will be undertaken, applying lessons learned from implementation of the completed 34-kilometre rapidway.

This process to identify the most appropriate contract model for the priority BRT projects will also support the overall best value for money approach for delivery of these projects. Ongoing progress on this initiative will be reported to the Board.

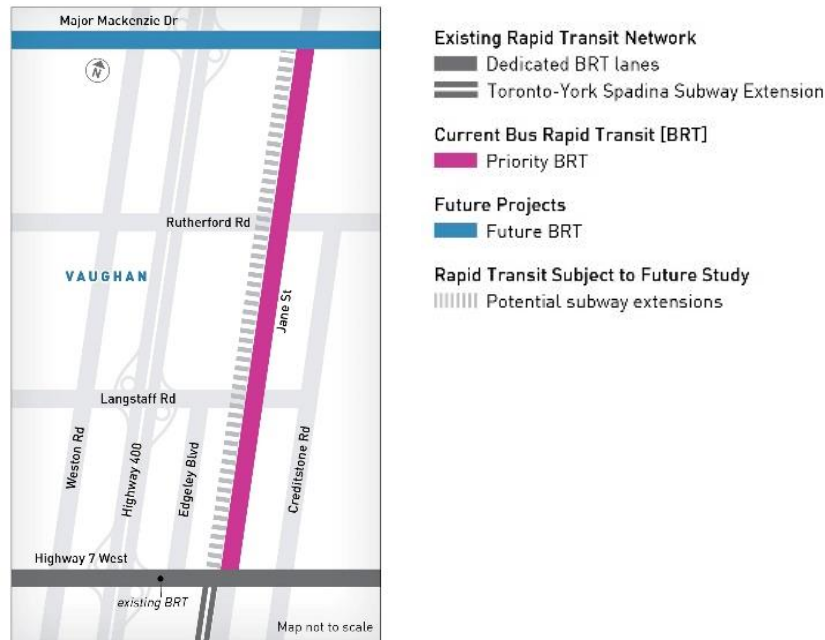
ADVANCING PRIORITY BRT PROJECTS

JANE STREET BRT

Procurement for the Jane Street BRT Environmental Assessment (TRPAP) & 30% Preliminary Design is complete and contract award subject to Board approval

The Jane Street BRT corridor is 6.3 kilometres along Jane Street from Highway 7 to Major Mackenzie Drive (Figure 1). BRT service on this segment will provide connections to the currently in-service Highway 7 BRT, Line 1 Subway at VMC Station, SmartVMC Bus Terminal, and many destinations in between and beyond, such as Canada's Wonderland, Vaughan Mills Mall, and Cortellucci Vaughan Hospital.

Figure 1
Jane Street BRT Corridor



A Transit and Rail Project Assessment Process (TRPAP) study and 30% Preliminary Design (PD) will be completed in support of the ongoing advocacy program to secure construction funding from senior levels of government.

In consultation with various Regional departments, a Request for Pre-Qualifications was issued to market on May 10, 2024, and closed on June 10, 2024. Three firms were shortlisted for the opportunity to respond to a Request for Proposal. This request was issued on July 15, 2024, and closed on August 23, 2024.

A separate report is included on this Board agenda for approval of award of the Jane Street BRT environmental assessment and preliminary design services. The contract will be awarded subject to Board approval.

Jane Street BRT project schedule will be available in Q1 2025

Upon successful award of the Jane Street BRT contract, the consultant will prepare a detailed project schedule, in consultation with YRRTC. This will include timing for public consultation and community outreach. More details on the overall project schedule will be provided to the Board in Q1 2025.

HIGHWAY 7 EAST BRT

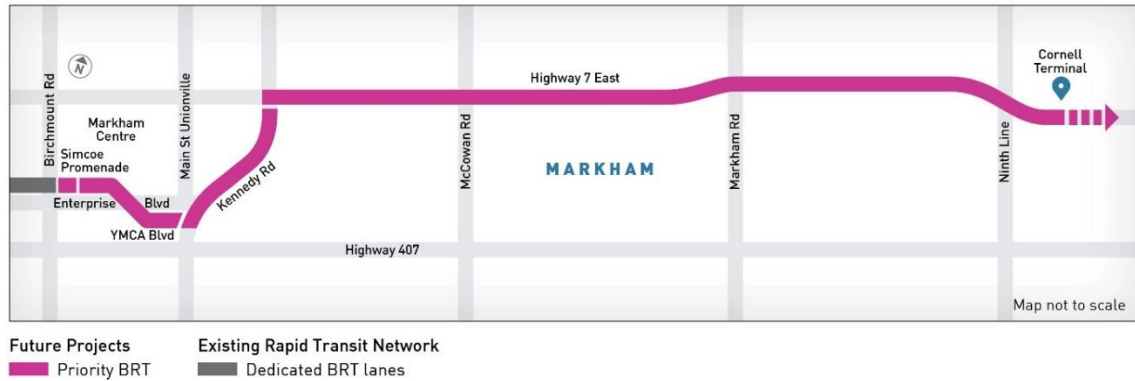
Various stages of BRT planning, design and delivery are underway along the Highway 7 East BRT Corridor in the City of Markham

The Highway 7 East BRT corridor (approximately 13.7 km) encompasses the following (Figure 2):

- > Simcoe Promenade – Birchmount Road to Andre De Grasse Street in Markham Centre;
- > Enterprise Boulevard – Andre De Grasse Street to Kennedy Road in Markham Centre;
- > Kennedy Road – YMCA Boulevard to Highway 7; and
- > Highway 7 – Kennedy Road to York-Durham Line.

BRT along these corridors will complete the Highway 7 BRT from Richmond Hill Centre through Markham Centre and over to the Cornell Community. Connections along this BRT corridor will include: Unionville GO Station, Markham Pan Am Centre, newly opened York University Markham Campus, the Markville Secondary Plan area, Cornell Bus Terminal, and Markham Stouffville Hospital.

Figure 2
Highway 7 East BRT Corridor



Detailed design for Simcoe Promenade is complete, with revised implementation strategies being considered

Simcoe Promenade is a short segment of rapidway (approximately 215 m) within Markham Centre that will extend the existing dedicated BRT from Birchmount Road to Andre De Grasse Street. In May 2021, YRRTC received Board approval to work with the adjacent developer, Remington Group, to carry out the detailed design and construction of this segment of rapidway.

YRRTC and the Region have finalized negotiations with the City of Markham for access to the rapidway lands. The detailed design has been completed and revised implementation strategies are being considered.

The Highway 7 Environmental Assessment review and Gap Analysis is nearing completion with results reported to the Board in Q4 2024

The *Highway 7 Corridor & Vaughan North-South Link Public Transit Improvements*, Class Environmental Assessment (EA) was completed in 2005. With the passage of time, it was prudent to complete an EA Gap Analysis to ensure all current requirements are captured and addressed for the corridor prior to progressing to Preliminary Design. The EA Gap Analysis includes the Enterprise Boulevard (approximately 1.3 km) and Highway 7 East (approximately 11 km) BRT segments.

The EA Gap Analysis is underway with YRRTC's Technical Advisory Consultant, Jacobs, and is nearing completion. The scope of work includes:

- > A Needs/Opportunity identification;
- > An Assessment of existing conditions;
- > A review of preferred corridor alignments;
- > Identification of anticipated impacts and mitigation measures (including any need for an EA addendum); and
- > Identification and recommendation of potential additional studies/ early works and completing any relevant to the planning stage of delivery of the projects.

Upon completion of the EA Gap Analysis, preparations for Preliminary Design for the rapidway through Markham Centre and across Highway 7 will begin. Results of the Gap Analysis and next steps will be reported to the Board in Q4 2024.

Kennedy Road BRT Detailed Design is progressing and property acquisition is underway

The Kennedy Road BRT is a 1.2-kilometre segment of centre-median rapidway from YMCA Boulevard to Highway 7, and is an essential link that will connect the Highway 7 West BRT and Highway 7 East BRT. This project is being delivered by Public Works as part of the Region's 10-year capital delivery program.

The project is currently in detailed design, which is expected to be completed in 2025. A number of supporting design studies, such as geotechnical and environmental have also been completed. Property acquisition is ongoing and will be completed by end of 2026. Utility

relocations are expected to commence in 2025 and the start of construction is planned to begin sometime in 2027, lasting approximately three years.

YRRTC is actively involved in the project, providing lessons learned from delivery of the past BRT program, as well as general design and BRT delivery support.

SUPPORTING HIGHWAY 7 WEST BRT

Metrolinx continues to progress work on the Queen Street – Highway 7 BRT study with a short list of options being evaluated

The Queen Street – Highway 7 BRT project is a planned extension (approximately 24 km) of the Highway 7 rapidway from Helen Street in the City of Vaughan to Mississauga Road in the City of Brampton (Figure 3). The segment within York Region (Helen Street to Highway 50) is approximately 5.8 kilometres. Metrolinx is currently undertaking a Transit and Rail Project Assessment Process (TRPAP), Preliminary Design (PD), and Preliminary Design Business Case (PDBC) for the corridor.

Figure 3
Highway 7 West-Queen Street BRT Corridor



A long list of design options was identified and evaluated, and a preliminary shortlist of options was developed with conceptual designs prepared. These shortlist options are currently being evaluated. York Region representatives are awaiting information from Metrolinx on next steps for the project.

5. Financial Considerations

Funding for the Jane Street and Highway 7 East BRT projects and related scopes of work described in this report are included in the YRRTC BRT proposed 2025 10-year Capital Budget of \$34.2 million.

A capital construction cost estimate of approximately \$1.7 billion in additional investment for the two priority BRT corridors (Jane Street and Highway 7 East) will be required over the next 10 years to construct these projects. These dollars are not currently included in the Region's 10-year Capital Plan, as they require funding commitments from senior levels of government and are subject to the Region's Fiscal capacity considerations.

Funding for the Kennedy Road BRT detailed design and construction is funded and included in Public Works' 10-year Capital Budget. The Highway 7 West BRT planning project is being funded and led by Metrolinx.

As BRT funding is advanced by senior levels of government, the capacity of the Region to finance any required share of capital costs would need to be addressed in the Region's Capital planning process.

6. Relationship Management

Advancement of all work related to the BRT corridors requires ongoing collaboration with many partners to ensure input and feedback on all matters are appropriately addressed and for successful progress on implementation of the BRT network. Defining the relationship between the transit investment and future development on Jane Street and Highway 7 East will be key to unlocking affordable housing objectives, including working together with the Region and local municipalities to develop and demonstrate the most compelling case to meet the federal funding criteria.

YRRTC will continue to work closely with local municipalities, the Region, the Province, Metrolinx, and other partners to ensure that the BRT work program continues to be developed with inputs from emerging plans as well as existing work programs.

7. Conclusion

Continued investment in and delivery of the Region's 2051 BRT network will support Regional population and economic growth over the next 30 years, connecting people, jobs and destinations across the GTHA from the City of Toronto and Peel, York and Durham Regions.

The application of best practices, lessons learned from 20 years of BRT delivery experience, and a focus on financial sustainability to optimize delivery of BRT priority corridors along Jane Street and Highway 7 East, will ensure these projects achieve best value for money.

Advancing funding advocacy, planning, preliminary design, and related works for these projects will put the Region in a solid state of readiness for much-needed construction funding from senior levels of government.

YRRTC will continue to progress the BRT work program to ensure this construction-ready goal is achieved in a timely manner, working collaboratively with our many critical partners. Regular updates on this work program will continue to be provided to the Board.

For more information on this report, please contact Liza Sheppard, Vice President, Project Implementation at 1-877-464-9675 ext. 71035. Accessible formats or communication supports are available upon request.

Recommended by: **Paul Jankowski**
President, York Region Rapid Transit Corporation

October 15, 2024

eDOCS # 16297383
Appendix A – Bus Rapid Transit Network Plan

Appendix A
Rapid Transit Network Plan

