

The Regional Municipality of York

May 18, 2023
Regional Council

Report of the Commissioner of Public Works

Queen Street-Highway 7 Bus Rapid Transit Improvements between Kipling Avenue and east of Islington Avenue

1. Recommendations

1. The Region enter into an agreement with Metrolinx to undertake a technical feasibility study to investigate widening the constrained section of Highway 7, from Kipling Avenue to east of Islington Avenue for an estimated value not to exceed \$500,000 excluding HST, for the term of the agreement.
2. The Commissioner of Public Works be authorized to execute the agreement on behalf of the Region.
3. This report be circulated to Metrolinx and the City of Vaughan.

2. Summary

It is recommended that York Region enter into an agreement authorizing Metrolinx to undertake a technical feasibility study to investigate widening the constrained section of Highway 7, from Kipling Avenue to east of Islington Avenue. The study will focus on the potential for six traffic lanes and two Bus Rapid Transit (BRT) lanes. This study would be completed as a scope change to the Queen Street-Highway 7 BRT preliminary design business case being led by Metrolinx.

Key Points:

- Highway 7, from Kipling Avenue to east of Islington Avenue, is the last remaining four traffic lane section in the City of Vaughan which is resulting in increased delays for traffic during rush hours
- In April 2023 [Vaughan Council](#) requested that York Region advance the necessary steps and partner with Metrolinx to initiate a technical feasibility study for widening the constrained section of Highway 7, from four to six traffic lanes as part of the Queen Street-Highway 7 BRT project
- Metrolinx's Queen Street-Highway 7 BRT study only considers the addition of two BRT lanes along a four-lane corridor. Additional traffic lanes are outside the scope of Metrolinx's current study

- Improvements to Highway 7, from Kipling Avenue to east of Islington Avenue are included in the 2022 Transportation Master Plan but are not included in the 10-year Roads and Transit Capital Program primarily based on expected significant costs to add traffic lanes in this area with steep grades, a crossing of the Humber River and a grade separated rail structure
- Metrolinx has agreed to expand the scope of its consulting engineering study subject to Regional funding to include project planning and a technical feasibility study for six traffic lanes on Highway 7, from Kipling Avenue to east of Islington Avenue
- The proposed study scope and cost estimate are being refined in consultation with Metrolinx and their engineering consultant. An upset limit of \$500,000 excluding taxes is recommended. Funding for the technical feasibility study would come from the approved 2023 Public Works capital budget
- Delegated authority is required to enter into an agreement with Metrolinx to undertake this additional scope of work and to authorize payment to Metrolinx

3. Background

The Metrolinx Queen Street-Highway 7 Bus Rapid Transit initiative will provide an east-west connection between York and Peel Regions

Metrolinx has initiated a project to develop the Queen Street-Highway 7 BRT Preliminary Design Business Case. Metrolinx uses this business case process to prioritize investment in rapid transit projects across the Greater Toronto and Hamilton area. Appendix A shows the planned BRT corridor which will provide an east-west rapid transit connection between York and Peel Region. An update to Council was provided in [October 2020](#) indicating that although this is not a top BRT transit priority corridor from the Region's perspective, there are benefits assuming no significant Regional funding was being sought.

Queen Street-Highway 7 BRT project timelines are governed by Metrolinx. The project was initiated in mid-2022 and is anticipated to be completed by mid-2024, with significant stakeholder consultation occurring between Q3 2022 and Q1 2024. Metrolinx has not announced funding or a schedule for construction of Queen Street Highway 7 BRT.

Planning work by Metrolinx has included input from York Region, Vaughan, Peel Region and Brampton and Metrolinx is currently refining the short-list of preferred design options for the corridor.

Remaining four-lane section of Highway 7 in Vaughan is a result of physical challenges in the area including steep grades and a crossing of Humber River

The section of Highway 7, between Kipling Avenue and Wigwoss Drive (east of Islington Avenue) is the last remaining four-lane section of Highway 7 in Vaughan. Highway 7 has six-lanes east and west of this section creating a bottleneck for movement of people and goods. This constrained section is a result of physical challenges in the area including steep grades, a crossing of Humber River, and a grade separated rail structure which is part of the Canadian Pacific MacTier subdivision providing a connection to the Vaughan Intermodal facility. Appendix B shows the constrained section of Highway 7 in Vaughan.

Highway 7 was identified for rapid transit and road improvements in the Transportation Master Plan

Improvements to Highway 7, within the study area for the Queen Street-Highway 7 BRT, are included in the 2022 Transportation Master Plan (TMP). Improvements are identified for both future rapid transit and road improvements to address transportation needs to 2051.

Rapid transit improvements are shown in Map 3 of the [TMP](#) and include Highway 7 from the existing BRT lanes, which terminate at Helen Street, to the boundary with Peel Region at Highway 50. These improvements are being addressed as part of the Metrolinx-led Queen Street-Highway 7 BRT initiative.

Road improvements are shown on Map 4 of the [TMP](#) and generally include the constrained section of Highway 7, from west of Kipling Avenue to east of Islington Avenue. There is a continuous sidewalk along the north side of Highway 7. Improvements, subject to a project-specific environmental assessment, would be focused on adding traffic lanes to address car travel during rush hours. Prioritization of this road project is lower based on the high cost for addressing primarily private car needs during rush hours.

While this section is identified for improvements in the TMP, these improvements are not expected to be included in the 10-year Roads and Transit Capital Program or the 2022 Development Charge Bylaw until after 2041. Prioritization of Highway 7 road improvements would increase with inclusion of rapid transit lanes and other active transportation improvements as part of the larger Metrolinx project.

A feasibility study at the Region's cost is required to assess an option which addresses rapid transit and traffic needs as part of the Metrolinx project

Metrolinx has indicated that including additional traffic lanes is outside the scope of the Queen Street-Highway 7 BRT project. As such, options to-date have not addressed adding new traffic lanes to the four-lane section of Highway 7, between Kipling Avenue and east of Islington Avenue. Metrolinx indicated they are open to expanding the scope of their project to include a technical feasibility study at the Region's cost. Metrolinx needs confirmation to proceed with the technical feasibility study as soon as possible to maintain project timelines. Metrolinx's study provides an opportunity for the Region to investigate the feasibility of

widening traffic lanes in the constrained section of Highway 7 to six traffic lanes, in addition to the two BRT lanes being studied by Metrolinx.

4. Analysis

In April 2023, Vaughan Council passed a resolution requesting the Region advance steps with Metrolinx to initiate a technical feasibility assessment

May 2023 Committee of the Whole received and referred to staff a [Vaughan Council resolution](#) regarding Highway 7 improvements between Wigwoss Drive and Kipling Avenue. Vaughan Council requested the Region advance necessary steps to partner with Metrolinx to initiate the technical feasibility study for widening Highway 7, from four to six general purpose lanes, in addition to two lanes for BRT, from Kipling Avenue to Wigwoss Drive. Vaughan's Council resolution follows from a Vaughan letter dated February 3, 2023, sent to Metrolinx identifying concerns with respect to the BRT options being considered.

Metrolinx provided a scope of work and preliminary estimated cost to undertake the feasibility study for Queen Street-Highway 7 BRT

Highway 7 is a Regional Road, and the Region would be responsible for funding a technical feasibility study regarding lane requirements as part of the Queen Street-Highway 7 BRT project. Scope for the technical feasibility study includes developing preliminary design criteria, identifying widening alternatives, completing structural assessments and other functional engineering works (stormwater, hydrology, natural environment, and cultural). The Region will work with Metrolinx to finalize the consulting engineering scope and fees within the \$500,000 upset limit for this work.

Staff recommend the technical feasibility study be undertaken by the consultant delivering the Queen Street-Highway 7 BRT project on behalf of Metrolinx. This approach ensures that road widening alternatives are aligned with rapid transit options for the corridor.

The study would determine order-of-magnitude cost to include the additional two general purpose traffic lanes as part of the future BRT project

The technical feasibility study will determine whether including two additional traffic lanes with two BRT lanes is possible along the section of Highway 7, from Kipling Avenue to east of Islington Avenue. Although there could be economies-of-scale to including additional lane widenings as part of the larger Metrolinx BRT project, the marginal costs to address physical challenges in the area, including steep grades, the Canadian Pacific rail bridge and crossing of the Humber River, are expected to be significant. These costs are not included in the 10-year Roads and Transit Capital Program.

Improvements in this area are not budgeted in the 10-year capital plan

Since improvements to Highway 7 in this area are not currently budgeted, any decision to proceed with improvements to Highway 7 as part of the Metrolinx Queen Street-Highway 7 BRT project would require a prioritization discussion of planned Regional infrastructure investments. Metrolinx has not announced a schedule or funding for the construction of the Queen Street-Highway 7 BRT.

5. Financial

As Regional staff are currently working with Metrolinx to finalize the proposed scope, it is recommended that an upset limit of \$500,000 excluding taxes be authorized. Funding for the technical feasibility study will be accommodated from the approved 2023 Public Works capital budget.

Funding for the Region's share of construction for the Queen Street-Highway 7 BRT or for additional traffic lanes in the constrained section of Highway 7 is not currently in York Region's 10-year capital plan. Estimated construction costs for additional traffic lanes will be determined through the feasibility study. Expenditures and offsetting funding for this additional work would be considered as part of upcoming capital budgets to be approved by Council. Funding may be required from senior levels of government to implement this additional work.

6. Local Impact

York Region continues to work with the City of Vaughan and Metrolinx to coordinate and advocate for road and rapid transit improvements in this area to support growth. The Woodbridge core, a key commercial and historic area in the City of Vaughan, is located just north of the constrained section of Highway 7. The Queen Street-Highway 7 BRT will serve the southern portion of the Vaughan Enterprise Zone, providing a transit spine for employees to travel to and from their workplace via transit.

7. Conclusion

Metrolinx is advancing the preliminary design business case for the Queen Street-Highway 7 BRT, providing an east-west rapid transit connection between York and Peel Regions. Metrolinx's study provides an opportunity for the Region to investigate the feasibility of widening traffic lanes in the constrained section of Highway 7 to six traffic lanes, in addition to the two BRT lanes being studied by Metrolinx.

For more information on this report, please contact Brian Titherington, Director, Transportation Infrastructure Asset Management at 1-877-464-9675 ext. 75901. Accessible formats or communication supports are available upon request.



Recommended by:

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Recommended by:

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Commissioner of Public Works



Approved for Submission:

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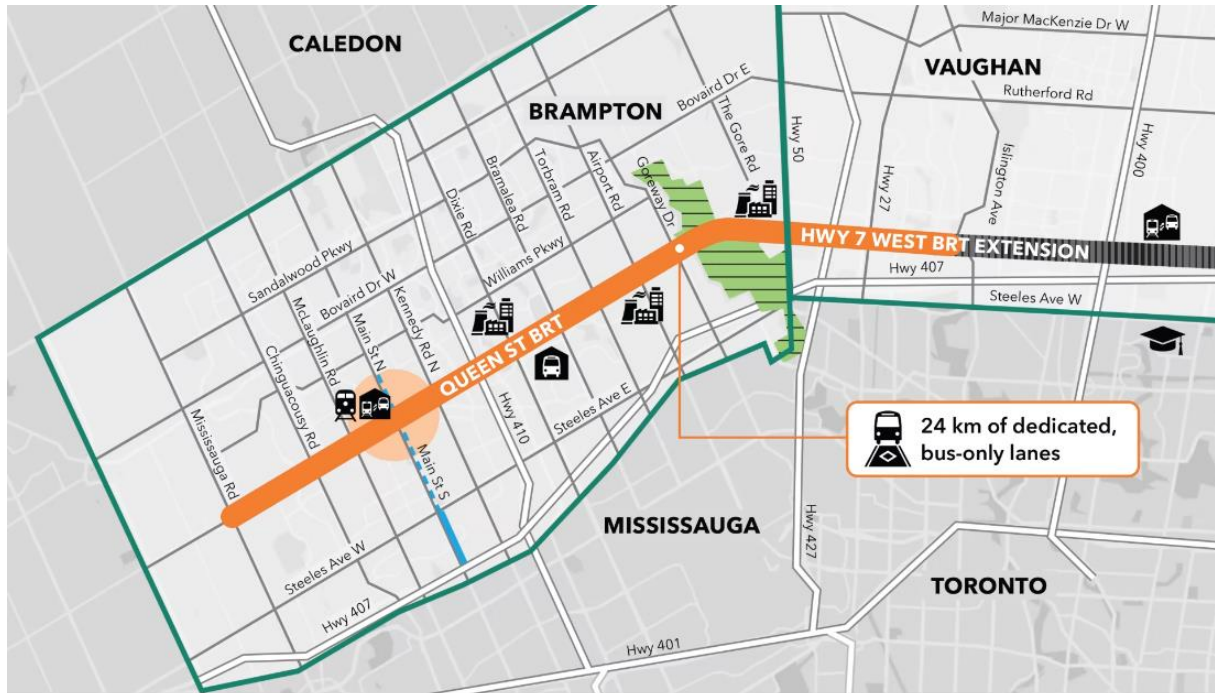
Chief Administrative Officer

May 5, 2023

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Appendix A – Queen Street Highway 7 BRT

Appendix B – Existing Conditions – Kipling Ave to Wigwoss Drive



Queen Street-Highway 7 BRT

- | | | |
|-------------------|---------------------------------------|---|
| City Boundaries | Hazel McCallion Line | York University |
| Downtown Brampton | Commercial/Industrial Area | Western end of the Viva Rapidway on Hwy 7 |
| Queen Street BRT | Claireville Conservation Area | Potential Rapid Transit Extension* |
| Brampton GO | Bramalea City Centre and Bus Terminal | |
| | Transit Hub | |

* Unfunded

METROLINX

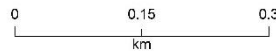




**Queen Street-Highway 7 Bus Rapid Transit Improvements
between Kipling Avenue and East of Islington Avenue.**

City of Vaughan - Highway 7 Widening Constraints

May 18, 2023



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-  Waterbody
-  Railway

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