

Date: 2021-07-05

Subject: **Recommendation Report: Transportation Master Plan and Capital Plan Interim Strategy and the Evaluation of Torbram Road (Citywide)**

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Report Number: Planning, Bld & Ec Dev-2021-800

RECOMMENDATIONS:

1. **THAT** the report from Andria Oliveira, Transportation Project Manager, Planning, Building & Economic Development Department to the Planning & Development Committee Meeting of July 26, 2021, re: Recommendation Report: **Transportation Master Plan and Capital Plan Interim Strategy and the Evaluation for Torbram Road (Citywide)**, be received;
2. **THAT** Council endorse the approach outlined in this report for an Interim Strategy to address Capital Plan Implementation programs while the Transportation Master Plan (TMP) Review is underway, including the TMP Principles Scorecard to assess how projects deliver on Streets for People, Vision Zero, and broader planning objectives;
3. **THAT**, while the TMP Review is underway and as identified in this report (itemized in Appendix B), Council direct staff to pause the planning and implementation (Environmental Assessment and detailed design) of longer-term six-lane road widening projects, and continue to refocus the capital work plan and more immediate, previously identified six-lane road widening projects on delivering transit and active transportation infrastructure as a priority, and that staff report back accordingly;
4. **THAT** Council provide direction to cancel the six-lane road widening of Torbram Road from Queen Street to Steeles Avenue, and that staff subsequently be directed to apply the TMP Principles Scorecard as a framework for redesigning this segment of Torbram Road to be more consistent with the TMP Review objectives and principles, and that staff be directed to report back to Council on options for the redesign including a review of the implications of reframing the project objectives and outcomes.

OVERVIEW:

- **The Transportation Master Plan (TMP) is the City's long term strategy to guide decision-making for multi-modal transportation planning and investment. The current Transportation Master Plan was endorsed in 2015.**
- **Staff is initiating a comprehensive Transportation Master Plan Review and update that will take its broad direction from the Brampton 2040 Vision and emergent Complete Street principles, and work in tandem with the ongoing Brampton Plan (Official Plan Review).**
- **The 2040 Vision for "Transportation and Connectivity" is that Brampton will be a mosaic of safe, integrated transportation choices and new modes, contributing to civic sustainability, and emphasizing walking, cycling, and transit.**
- **The TMP Review's Guiding Principles are to:**
 - **Enhance Mobility and Travel Options for People and Goods**
 - **Advance Multi-Modal Transportation Equity**
 - **Integrate Transportation and Land Use Planning**
 - **Protect Public Health and Safety**
 - **Improve Environmental Sustainability**
 - **Leverage Technology**
 - **Emphasize Community Engagement and Collaboration**
- **A key task of the TMP Review in responding to mobility needs and multi-modal equity will be to address the efficacy of road widenings from four to six-lanes in general as an overall planning policy, and specifically those projects that had been proposed in previous studies.**
- **Staff have developed an Interim Strategy to assess six-lane road widenings currently in the City's Capital Plan while the TMP Review is underway, to determine if these projects can be deferred to be comprehensively reassessed through the TMP Review, or whether there is merit for immediate intervention where such projects may already be in a more advanced state.**
- **A TMP Principles Scorecard has been created as a decision-guidance tool to test whether or not road widening projects meet the City's planning objectives and priorities.**
- **This scorecard was used to assess the current six-lane widening project for Torbram Road. The results suggest that widening Torbram is not**

consistent with the City's planning objectives for a safer, healthier, greener, and people-oriented Brampton.

- **Staff recommend that Torbram Road not be widened to six-lanes and that design options be explored that maintain a four-lane cross-section with provisions for active transportation, landscaping, and enhanced safety and operational improvements for all modes.**

BACKGROUND:

Staff are initiating a review of the City's Transportation Master Plan (TMP), last updated in 2015. The TMP is the City's blueprint for strategic mobility planning. It provides guidance for developing multi-modal planning solutions to address travel demand as a result of population and employment growth over a 20-year horizon, and to do so in a manner that is environmentally and economically sustainable.

The TMP has also informed the Development Charges By-Law Update and 10-Year Roads Capital Program. The TMP explores high level, long term needs for road infrastructure, transit infrastructure, freight, and active transportation linkages to 2041. The plan also makes recommendations for more immediate actions and policies to implement over a 5-10 year period. The TMP is reviewed and updated every 5 years to respond to changing policy, demographics, and transportation planning best practices. The TMP Review tests previous and new strategic recommendations for meeting future aspirations (e.g. Vision 2040) to ensure the TMP remains consistent and relevant.

In February 2021 staff brought forward a report to Planning Committee to highlight the achievements of the 2015 TMP and emerging considerations for the TMP Review. Staff developed a series of outcome-oriented objectives and principles for the TMP Review (Appendix A), consistent with planning goals for Vision 2040 and Complete Streets, Term of Council Priorities for Streets for People, Vision Zero and equalizing all forms of transportation.

The TMP Review's Guiding Principles are to:

- Enhance Mobility and Travel Options for People and Goods
- Advance Multi-Modal Transportation Equity
- Integrate Transportation and Land Use Planning
- Protect Public Health and Safety
- Improve Environmental Sustainability
- Leverage Technology

- Emphasize Community Engagement and Collaboration

A key task of the TMP Review is to address the efficacy of six-lane road widenings in the context of an updated policy framework with Vision 2040, the Brampton Plan (Official Plan Review). The TMP Review will assess the need, effectiveness and implications of widening urban roads to six-lanes given the City's objectives for a safe, healthy, green and "people-oriented" Brampton. This review process will rethink the more conventional approaches and tools utilized for transportation network planning which prioritize motor vehicle levels of service (facilitating travel speeds and reducing delay) at the expense of other modes and broader planning considerations.

The question of how to deal with programmed six-lane road widening projects (particularly those now in Environmental Assessment or detailed design phases) while the TMP Review is underway is an issue that has required further consideration and direction. On the basis of lessons learned from the recent Williams Parkway review/redesign exercise and the TMP Review Objectives and Principles (Appendix A), Transportation Planning and Capital Works staff have worked together to develop an Interim Strategy and an approach to address previously recommended six-lane road widenings.

CURRENT SITUATION:

The conventional transportation planning response over the past several decades to meet population and employment growth, and to address auto-oriented travel demand and congestion, has been to widen roads to accommodate more motor vehicles. The City of Brampton (like almost all other big cities in North America) has relied almost exclusively on the results of transportation demand modelling to justify adding lanes to our arterial roads. While the travel demand model is a useful tool to inform strategic transportation network planning, it should not be the only decision-making tool. The very nature of such models, developed in the post-war era to address the burgeoning of motor vehicle travel over longer distances and the evolution of modern suburbs, means that the mobility needs of other modes were almost completely ignored. This focus on adding new roads and lane capacity has also resulted in negative impacts on community and livability outcomes with respect to urban design, walkability, and the safety of vulnerable users.

The implications of widening or not widening our roads beyond four lanes will be examined through the citywide TMP Review. In the meantime, staff from Transportation Planning and from Capital Works have collaborated to develop an approach for an Interim Strategy for the TMP and Capital Plan implementation programs.

Transportation Master Plan + Capital Plan Interim Strategy

While the TMP Review is underway, there is a need to assess and rationalize the major capital road projects that are currently moving through the implementation process of the Capital Plan. This rationalization is meant to take stock of these current projects and test them against the goals of Vision 2040, the emerging Brampton Plan, best practices for Complete Streets and Streets for People, and broader goals for public health, sustainability, and the image/experience of the city. This review will also still need to consider top-of-mind concerns such as traffic congestion, goods movement, etc. to weigh trade-offs in projects and build consensus on how to deal with competing objectives. The vision for transportation in Brampton remains a multi-modal one that of necessity includes motor vehicles – the shift in thinking is that we are called to prioritize the needs of vulnerable users and sustainable modes, and to plan our communities around people rather than cars.

With recent lessons learned from applying a more equitable multi-modal approach to the detailed redesign of projects such as Williams Parkway, Bramalea Road etc., staff have realized that in a constrained right-of-way there are many competing interests for public space. Six-lane road widening projects prioritize and dedicate the majority of this space for cars and vehicular movement. In many cases, this approach yields minimal space for boulevard and public realm goals— leaving fewer trees, less shade, and reduced buffers between sidewalks/multi-use paths and traffic lanes. The outcome is an environment that is not comfortable, attractive, or perceived to be safe by vulnerable users, which in turn sterilizes any opportunities to encourage and promote more sustainable modes as viable mobility options.

As a first phase of the Interim Strategy, an interdisciplinary staff Coordinating Committee was convened to:

- *Review six-lane road widening projects* from various functional perspectives, and determine which projects should be paused and deferred to be re-scoped through the TMP Review;
- Identify opportunities to continue to *refocus the Capital Plan to deliver on Council Priorities* for equalizing all forms of transportation and delivering Streets for People by embracing a Vision Zero framework in the planning, design, and operation of Brampton's streets;
- *Report to Council* with outcomes and next steps.

Review of six-lane road widening projects

The Interim Strategy Coordinating Committee conducted an initial screening and reviewed the long-list of six-lane road widening/capacity improvement projects (Appendix B). Based on the project type (Environmental Assessment or detailed design), project status, and forecasted timelines for future construction, the team rationalized the list of projects into the following four categories:

Capital Refocus Projects

- Six-lane projects that have been re-evaluated, reframed and re-scoped to deliver active transportation infrastructure, people-moving operational improvements, and improved landscaping with an increased tree canopy.

Priority Evaluation Projects

- Six-lane projects that are approaching a key milestone in the planning or design process, and are therefore time-sensitive. These projects need to be further evaluated in a timely manner to determine immediate next steps (i.e., whether to proceed as planned, pause, or redesign).

Coordination Committee Reframe & Ongoing Review Projects

- Ongoing six-lane projects that are currently in the process of being reviewed by project leads and the Interim Strategy Coordinating Committee. The Coordination Committee will work to evaluate these projects and explore options to revise relevant scopes of work to deliver on strategic priorities. Generally, these projects are on trend to maintain four-lane cross-sections and to focus on the delivery of active transportation and transit infrastructure. Once Coordination Committee Reviews are completed, staff will report back to seek Council's direction on these projects.

Paused Projects

- These six-lane projects are forecasted beyond a short-term implementation horizon, meaning that they can be reassessed and re-scoped as part of longer-range planning through the TMP Review.

TMP Principles Scorecard

A TMP Principles Scorecard (Appendix C) has been developed as a decision-guidance tool for the Coordinating Committee to use in assessing how *Priority Evaluation Projects* and *Reframe/Ongoing Review Projects*, deliver on broader policy objectives that take direction from the 2040 Vision, Streets for People goals, and Term of Council Priorities.

As part of the development of the Scorecard, staff translated the more detailed TMP Review objectives and principles (Appendix A) into a series of thematic questions to test and demonstrate how projects explicitly deliver on the City's updated planning needs and priorities.

The TMP Principles Scorecard should also be used as a guide to reframe the needs and opportunities for the design of future road and street projects.

Ongoing Capital Plan Refocus – Strategic Projects

As the Interim Strategy Coordinating Committee continues to discuss critical issues for the TMP and Capital Plan implementation programs, as well as the TMP Review, the Committee will also explore new opportunities for strategic capital projects that are not currently considered as part of the six-lane projects review, but that could advance complete streets improvements, and that would serve to support development in Downtown, Uptown, Higher-Order Transit Corridors, Major Transit Station Areas, Town Centres, etc.

Priority Evaluation Project: Torbram Road (Queen St. to Steeles Ave.) Implementation Update

As part of the Interim Strategy, Torbram Road (Queen St. to Steeles Ave.) is identified as a Priority Evaluation Project (Appendix B), since detailed design for a widening to six lanes is nearing completion. Given the evolving policy context and the timing of important decision milestones for land acquisition, utilities, etc., to support a six-lane road widening, staff identified the need to reassess and confirm the project direction before proceeding any further with implementation. The Coordinating Committee determined that it would be helpful to “pilot” the TMP Principles Scorecard (Appendix C) through the application and demonstration of a candidate project. As the first Priority Evaluation Project, Torbram was selected and evaluated using the Scorecard, and complemented with the consideration of other implementation issues.

Overview

Torbram Road is currently designated in the Official Plan as a north-south Minor Arterial in the City's road network, with residential neighbourhoods in the west and low density, industrial employment lands in the east. Torbram currently has several heavy vehicle and goods movement restrictions. For example, south of East Drive/Walker Drive, heavy vehicles are permitted; between East Drive/Walker Drive and Clark Boulevard, heavy vehicles are permitted in the day and have overnight restrictions (9 pm to 7 am); and between Clark Boulevard and Queen Street, heavy vehicles are restricted and not

permitted unless this segment of road is the only way to access employment lands on the east side of Torbram.

Previous Transportation Master Plans recommended the exploration of a six-lane road widening of Torbram Road from Queen Street to the south City limit (Appendix D). The existing roadway design consists of a four-lane paved road with an urban cross-section and a posted speed limit of 60 km/hr. More specifically, the existing road consists mainly of four-lanes for traffic, with a sidewalk on the west side, an intermittent sidewalk on the east side, and a centre turning lane in some sections (Appendix E, Figures 1, 2, 5, 6 illustrate cross-section examples).

In 2011, the City completed a Class Environmental Assessment for the widening of Torbram Road to six lanes between Queen Street and the City south limit, as a solution to accommodate north-south traffic demand anticipated by 2031. The detailed design was initiated soon after.

2019 Transportation and Traffic Reassessment

Given changes in the City's policy direction towards a more multi-modal transportation planning approach in the years since completion of the EA, a Transportation and Traffic Reassessment of Torbram Road was completed in 2019.

The purpose of the 2019 Reassessment was to evaluate and confirm justification for improvements to automobile level of service in the corridor, and to also assess the levels of service for sustainable modes including pedestrians, cyclists and transit.

Travel demand modelling at both the "macro" and "micro" scales was undertaken as part of the reassessment. Macro-scale modelling compares projected traffic volumes against lane capacity for a broader network and yields vehicle level of service estimates for corridor segments. Micro-scale modelling focuses on individual corridors and provides more detailed information of vehicle delay. Modelling provides useful information on potential future traffic conditions, but is only one part of a more fulsome assessment that must also consider the implications of vehicle traffic on other modes of travel, policy direction, and value for the cost of proposed improvements.

The preferred cross-section identified in the reassessment included six general purpose traffic lanes, a multi-use path in the west boulevard and a sidewalk in the east boulevard (Appendix E, Figures 3 and 7). At the time, this reassessment was one of the first of its kind undertaken by the City. The study was deemed to confirm the traffic need to widen Torbram Road to six-lanes, and the following multi-modal elements:

- For pedestrians, the corridor was generally improved with the inclusion of a sidewalk on the east side and a 3.0 metre multi-use pathway on the west side. However, the pedestrian experience and perceived safety are degraded at intersections, given the scale and long crossing distances (8+ lanes in some cases).
- For cyclists, the multi-use path on the west side provides new infrastructure and creates an option for cyclists; however, a cycling facility is only available on one side of the road making it difficult to navigate and access destinations on both sides of the road.
- For transit, service quality remains generally unchanged since buses will continue to operate in mixed traffic. The improvement to transit is relative to the improvement for vehicles.
- For cars, as seen in the table below, modelling results indicate that travel time reductions on the segment of Torbram Road between Steeles Avenue and Queen Street that would result from the addition of two new lanes amount to less than one minute at most in 2021 and up to two minutes in 2031-2041

	2021			2031-41		
	4 lanes	6 lanes	difference	4 lanes	6 lanes	difference
AM Peak	8'35"	7'41"	0'54"	9'59"	7'59"	2'0"
PM Peak	8'18"	8'2"	0'16"	8'59"	8'12"	0'47"

Note: Corridor travel times depicted in minutes (') and seconds (")

Overall, the 2019 Reassessment confirmed that adding lanes on this segment of Torbram Road would have marginal impacts on auto and transit travel times. Further, the resultant wider intersection crossing distances and reduced buffers between cars and more vulnerable road users would reduce the level of comfort, attractiveness and perceived safety of the corridor for pedestrians, cyclists and people accessing transit.

Current Assessment + Next Steps

The Torbram Road detailed design project is at approximately 80% completion with construction planned to begin in 2023 in the current Capital Works budget forecast. The current design and cross-section for the Torbram six-lane expansion project is attached in Appendix E (Figures 3, 4, 7, 8). The cross-sections illustrate the six-lanes plus a centre turn lane, a multi-use path on the west side and a sidewalk on the east side. The project also includes the construction of a noise wall on the west side of Torbram Road.

Through the design process, issues with the noise wall have been identified with the limiting of pedestrian permeability to Torbram, for transit access, etc. Currently, some

residents abutting Torbram have gates in their fences to access Torbram, and with the construction of the noise wall, these gates will be removed. Staff are currently exploring design options to address noise wall and access concerns for residents who live in the adjacent subdivisions and do not currently have gate access to Torbram.

Through the Interim Strategy Coordinating Committee, staff assessed the current six-lane widening project for Torbram Road against the TMP Principles Scorecard and a visualization exercise to explore how the project does or does not deliver on the City's planning and design goals. As illustrated in Appendix F for the Torbram Project Evaluation, in almost all accounts the widening project does not conform to the City's planning objectives for a safer, healthier, greener and people-oriented city. On this basis, staff recommend stopping the current detailed design for six-lanes for Torbram Road. Alternatively, staff recommend exploring options to use the TMP Principles Scorecard as a design tool/framework to maintain a four-lane cross-section that incorporates provisions for active transportation, enhanced multi-modal safety, operational enhancements and improved landscaping.

A shift in the design will detach the need for the noise wall on the west side of Torbram from the road expansion project. The redesign will also have implications for ongoing land acquisition discussions, utilities coordination, and the financing of the project. Staff plan to report back to Council on any implications of reframing the project objectives and outcomes, including considerations for budget.

CORPORATE IMPLICATIONS:

The multidisciplinary Interim Strategy Coordinating Committee will continue to work together to evaluate priority projects and revise project plans to deliver on strategic priorities. The Committee and smaller staff working teams will explore project implications and trade-offs to report back to Council accordingly.

TERM OF COUNCIL PRIORITIES:

The TMP and Capital Plan Interim Strategy and the TMP principles policy assessment of Torbram Road support the following Council Priorities:

Council Priority: Brampton is a Green City

Strategic Priority: 3.1 Equalize All Forms of Transportation

Project: 3.1.1. Update the TMP to prioritize active transportation and non-auto modes

Council Priority: Brampton is a Safe and Healthy City
Strategic Priority: 4.2 Streets for People
Project: 4.2.1. Incorporate the Vision Zero framework into transportation planning, design and operations to prevent fatal and serious injury from motor vehicle collisions within the City Right-of-Way.

CONCLUSION:

The Brampton 2040 Vision provides an exciting outlook for the future, and Streets for People and Vision Zero provide important objectives to rethink Brampton's transportation network. To achieve Vision 2040 and Streets for People, Brampton will need to continue to reassess its approach to transportation decision-making to guide the City's future transportation improvements and investments. The City's TMP Review will be more strategic in its approach, resulting in a more future-oriented plan, that will align with Brampton 2040 and important City objectives, plans and strategies.

Among the multi-modal issues that the TMP Review will address are four to six-lane road widening projects. While the TMP Review is underway, staff have developed an Interim Strategy to assess planned six-lane road widening projects to determine if projects should be refocused, evaluated in more immediate detail, or paused to be further re-scoped and confirmed through the TMP Review. As needed, staff will report back to Council on Priority Evaluation Projects and Coordination Committee Reframe & Ongoing Review Projects identified in Appendix B that will require further strategic direction.

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Attachments:

Appendix A: TMP Review Objectives and Principles Overview

Appendix B: Six-Lane Road Capacity Improvement Projects

Appendix C: TMP Principles Scorecard

Appendix D: Torbram Road Project Study Area (Queen to City Limit)

Appendix E: Torbram Road: Existing Conditions and Proposed Cross Sections

Appendix F: TMP Principles Scorecard: Torbram Project Evaluation