# Evaluation of Alternative Scenarios

## Brampton Mobility Plan

August 2025

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**Attachment A – Detailed Evaluation Table**

# 1 Introduction

## 1.1 A New Vision for Brampton

The Brampton Mobility Plan (BMP) outlines the City of Brampton's transportation vision for the next several decades. The BMP is, in part, an update to the 2015 Transportation Master Plan, but it is also an entirely new plan that takes a sustainable and equitable approach to transportation planning that is more in line with the Brampton 2040 Vision and the new Brampton Plan.

In February 2021, Council endorsed seven principles that direct Brampton to re-think the way transportation is planned with a more sustainable approach to city building. The guiding principles are as follows:

1. Enhance mobility and travel options for people and goods.
2. Improve environmental sustainability.
3. Integrate transportation and land use planning.
4. Advance multi-modal transportation equity.
5. Protect public health and safety.
6. Leverage technology.
7. Emphasize community engagement and collaboration.

## 1.2 Study Process

The BMP study was undertaken in four phases. In Phase 1, background materials and data were reviewed to identify Brampton's transportation needs and opportunities, and emerging transportation topics were explored. Alongside Council-endorsed guiding principles, the Phase 1 findings confirmed that Brampton's future transportation system needs to be a sustainable and equitable system.

Through Phase 2 of the study, a progressive policy framework and decision-making criteria were developed to address the City's multi-modal transportation vision and goals for the BMP, putting sustainable transportation at the forefront of transportation planning. In Phase 3, multi-modal scenarios are developed to address Brampton's transportation needs and opportunities with consideration for the Council-endorsed guiding principles presented above. In Phase 4, the final step, an implementation plan was developed for the preferred alternative.

# 2 Evaluation Criteria

The BMP evaluation criteria to address the City's sustainable and multi-modal transportation visions and goals is presented in **Table 2-1**. These criteria are intended to be measurable and meaningful for the city-wide solutions analysed in the BMP study. Each criterion is categorized under one of six guiding principles for the BMP study. The seventh guiding principle for the BMP study is to "Emphasize community engagement and collaboration" which speaks to the process in which the BMP is being undertaken and not criteria for the analysis of alternative solutions.

In parallel to the identification of evaluation criteria, a transportation equity framework was developed to provide an overall equity emphasis to the BMP. This framework will help to identify and prioritize transportation projects in the plan, as well as to provide guidance for future transportation planning work at the City of Brampton. The equity framework will address the processes through which transportation projects are planned and implemented (procedural equity), and target a fair allocation of transportation amenities, benefits, and burdens (distributional equity).

**Table 2-1. Evaluation Criteria**

| BMP Guiding Principle | Goal | Metric / Measure |
|---|---|---|
| **1.** Enhance mobility and travel options for people and goods | Reduce use of single occupant vehicles | Number of vehicle trips as a proxy for reduced reliance on vehicle travel. (Morning peak hour) |
| | | Vehicle-kilometres travelled (VKT) as a proxy for reduced reliance on vehicle travel. (Morning peak hour) |
| | Increase travel choices | Mode share targets (% trips by mode) for 2051 |
| | | Total estimated transit capacity on major corridors (morning peak hour) |
| | | Increase in transit capacity |
| | | Amount of available cycling facilities in the network relative to the available major roads in the network |
| | | Coverage of sidewalk facilities |
| | | Length of higher order transit and priority transit corridors in the network divided by length of arterial roads in the network. |
| | | Average Vehicle Travel Time (weighted average for trips originating in Brampton) |
| | | Average Transit Travel Time - in vehicle + wait time (weighted average for trips originating from Brampton) |
| | | Frequency and duration of transit service (e.g. earlier or later service hours to accommodate different travel patterns and schedules) |

| BMP Guiding Principle | Goal | Metric / Measure |
|---|---|---|
| **1.** Enhance mobility and travel options for people and goods. *(continued)* | Increase connectivity | Population within 800 m of a rapid transit stop. |
| | | Jobs within 800 m of a rapid transit stop. |
| | | Length of cycling facilities in the network. |
| | | Coverage of sidewalk facilities |
| | | Multimodal connections to and within growth areas and to adjacent municipalities. |
| | Increase efficiency of existing infrastructure | Optimize existing infrastructure to carry more people. |
| | Support economic development / productivity | Total congested vehicle-hours travelled (VHT) (v/c ≥0.85) (Morning peak hour) |
| | | Total congested VKT |
| | | Screenlines approaching (v/c≥0.85) or over capacity (v/c≥1.0) (Morning peak hour) |
| | | Congestion on Strategic Goods Movement Network (SGMN) (congested VKT on SGMN) |
| | | Access/connections to employment areas for workers and movement of goods. |
| | | Access/connections to provincial highways, intermodal terminals, airport, and employment areas. |
| | Financial feasibility | Capital costs |
| | | Operating costs |

| BMP Guiding Principle | Goal | Metric / Measure |
|---|---|---|
| **2.** Improve environmental sustainability | Reduce GHG emissions and improve air quality | Vehicles-kilometres travelled (VKT) |
| | | Adoption of electric or other low-emission vehicles. |
| | Reduce impacts to environmental features | Number of new crossings of watercourses and natural heritage system areas. |
| | | Incorporate Low Impact Development (LID) facilities in transportation projects. |
| **3.** Integrate transportation and land use planning | Transportation Network supports planned land use. | Qualitative assessment of supporting plan land use / planned growth. |
| **4.** Advance multi-modal transportation equity | Improve access to opportunities and community amenities | Jobs within 800 m of a rapid transit stop. |
| | | Schools (all types) within 800 m of a rapid transit stop |
| | | Access/connections to community services, recreation, parks, healthcare, grocery stores. |
| | | Roads planned/designed with a Complete Streets approach. |
| | Improve mobility for households and individuals in high equity need and high access need areas. | Length of higher order and priority transit corridors in high equity need / high access need areas. |
| | | Proportion of high equity need / high access need population within 800 m of a rapid transit stop. |
| | | Transit travel time - in vehicle + wait for high equity need / high access need areas (weighted average) |
| | | Length of cycling facilities in high equity need / high access need areas. |
| | | Coverage of sidewalk facilities in high equity need / high access need areas. |

| BMP Guiding Principle | Goal | Metric / Measure |
|---|---|---|
| **5.** Protect public health and safety | Prioritize vulnerable road users | Vision Zero considerations, including dedicated and separated facilities for walking and cycling. |
| | Promote active living | Designs incorporate pedestrian and cyclist safety. |
| | | Designs incorporate streetscape improvements. |
| | | Results of World Health Organization Health Economic Assessment Tool (HEAT). |
| | Reduce traffic noise / vibrations | Complete Streets / enhanced streetscape improvements that promote alternative modes of travel (fewer cars). |
| **6.** Leverage technology | Optimize existing road network capacity | Use of technology, advanced traffic management, and transportation demand management (TDM) measures. |
| | Create a future-ready system | Accommodate emerging mobility and other new travel technologies. |

# 3 Alternative Scenarios

## 3.1 Scenario Development

Four modelling scenarios were developed to represent alternative future mobility options in Brampton. These scenarios include a varying emphasis on roads, transit, active transportation, emerging mobility and technology, and complete street design considerations.

The four alternative modelling scenarios are described below:

1. **Do Nothing Scenario** – this scenario provides a baseline for comparison. Future 2051 travel demand is applied to the existing network (2016 network for modelling purposes).
2. **Business as Usual Scenario** – this scenario represents the recommended scenario from Brampton's 2015 TMP Update study. While ambitious transit recommendations were included in the 2015 TMP, the future network also relied heavily on expansions of the road network, including widening a grid network of 6-lane roads.
3. **Brampton Plan Scenario** – the City's new official plan adopts a more sustainable approach to accommodate future travel demands. More focus is given to sustainable modes such as transit, walking and cycling, recognizing that road network expansions will only induce more vehicular demand on the road network. This scenario excludes any road widenings that result in six or more general purpose travel lanes, though existing segments of 6-lane roads will remain. Instead, there is a focus on Complete Streets to improve person-carrying capacity including dedicated transit lanes on higher-order transit corridors and enhanced pedestrian and cycling facilities to achieve the Brampton Plan mode share target of 25% of trips made by transit and 11% of trips made by active modes.
4. **Bold Moves Scenario**– the Bold Moves scenario goes beyond the Brampton Plan scenario (Scenario 3) with respect to sustainable travel. The Bold Moves scenario is an ambitious scenario with significant investment in higher order transit (LRT, BRT), complete streets, active transportation, and emerging mobility technologies. This scenario represents a mode share target of 35% of trips made by transit and 15% trips made by active modes, a 35% increase of sustainable travel compared to Scenario 3.

**Figure 3-1: Business as Usual Scenario – 2015 TMP Transit Network**

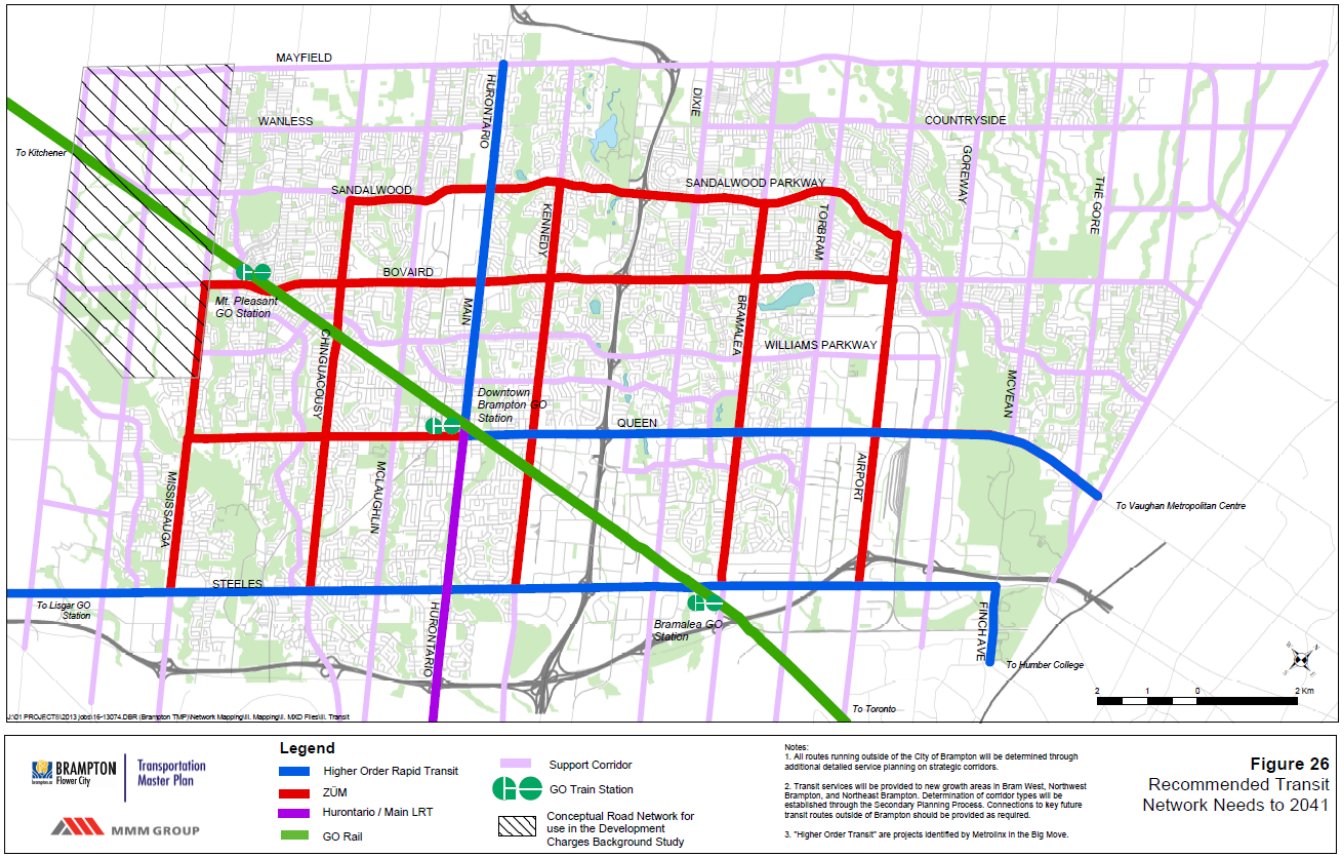



**Figure 26**
Recommended Transit Network Needs to 2041

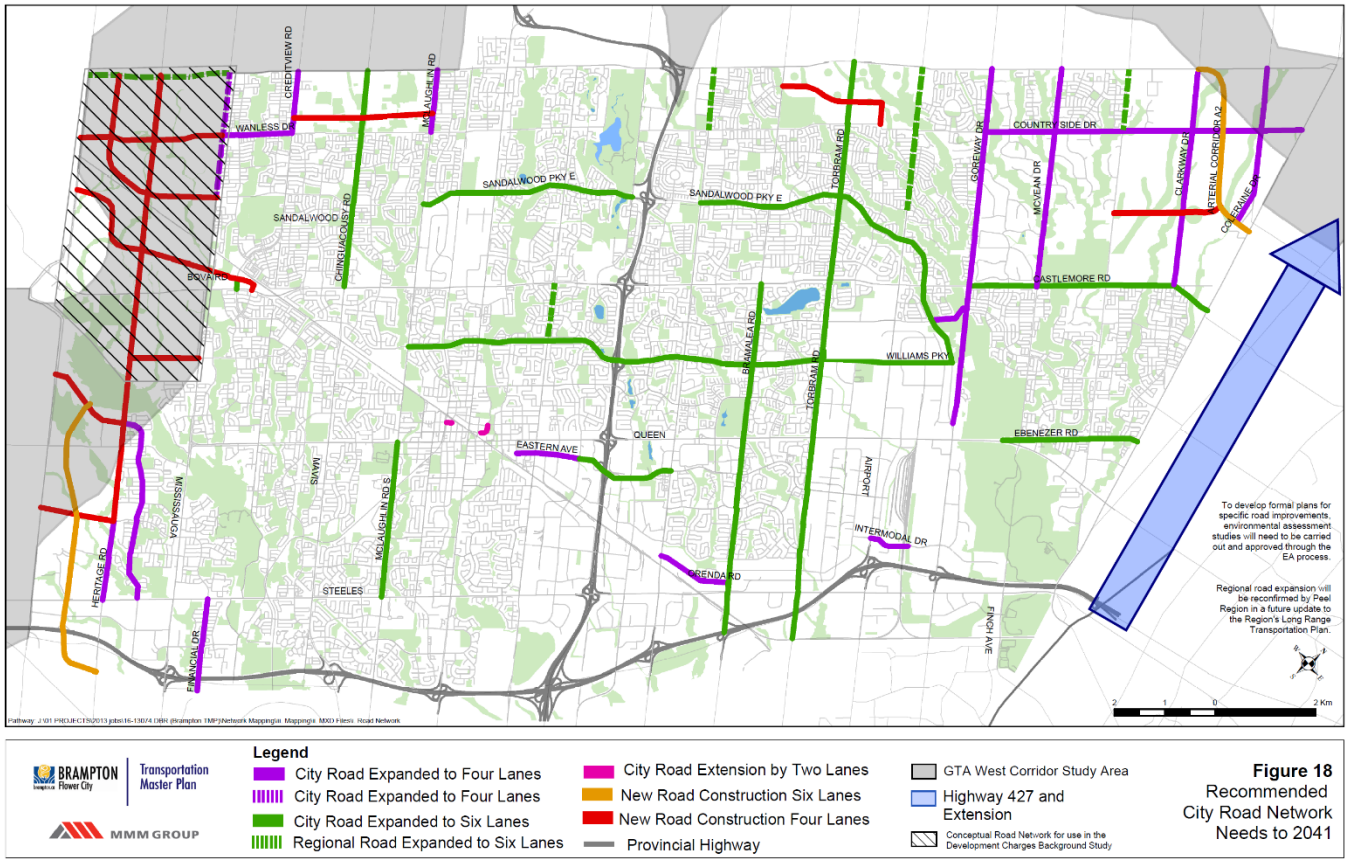
**Higher Order Transit**

- Hurontario-Main LRT (south of Queen Street)
- Hurontario (north of Queen Street)
- Queen Street (east of Main Street)
- Steeles Avenue

**Priority Bus / Züm**

- Mississauga Road
- Chinguacousy Road
- Kennedy Road
- Bramalea Road
- Airport Road
- Sandalwood Parkway
- Bovaird Drive
- Queen Street (west of Main Street)

**Figure 3-2: Business as Usual Scenario – 2015 TMP Road Network**




BRAMPTON Flower City | Transportation Master Plan
MMM GROUP

**Legend**

- City Road Expanded to Four Lanes
- City Road Expanded to Four Lanes
- City Road Expanded to Six Lanes
- Regional Road Expanded to Six Lanes
- City Road Extension by Two Lanes
- New Road Construction Six Lanes
- New Road Construction Four Lanes
- Provincial Highway
- GTA West Corridor Study Area
- Highway 427 and Extension
- Conceptual Road Network for use in the Development Charges Background Study

**Figure 18**
Recommended City Road Network Needs to 2041

**Widen to 6 lanes**

- Chinguacousy Road
- McLaughlin Road
- Bramalea Road
- Torbram Road
- Sandalwood Parkway-Humberwest Parkway
- Castlemore Road
- Williams Parkway
- Clark Boulevard
- Ebenezer Road

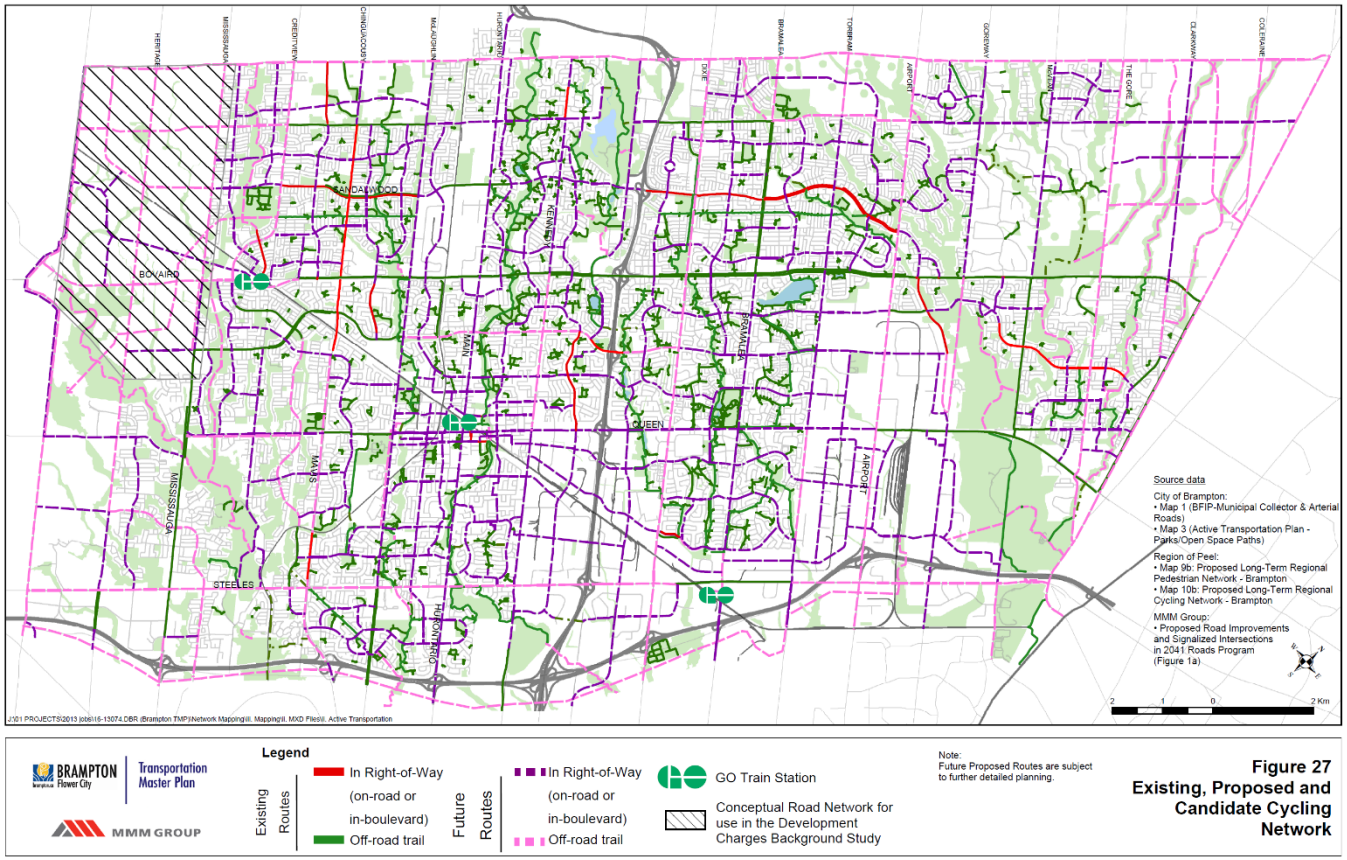
**Widen to 4 lanes**

- Wanless Drive
- Creditview Road
- McLaughlin Road
- Goreway Drive
- McVean Drive
- Clarkway Drive
- Coleraine Road
- Countryside Drive
- Heritage Road

**New Roads to service new community areas**

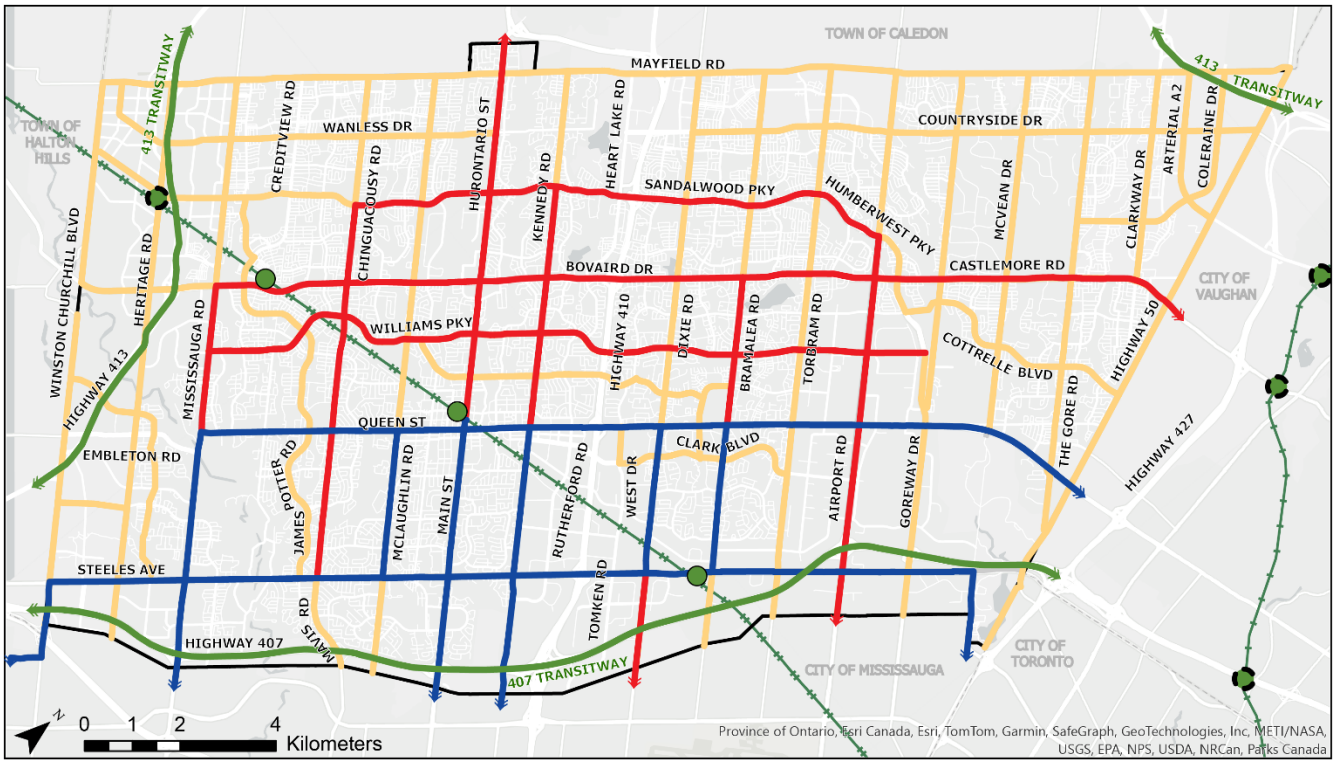
- Northwest Brampton (Heritage Heights)
- Northeast Brampton (Area 47)
- Southwest Brampton (Bram West)

**Figure 3-3: Business as Usual Scenario – 2015 TMP Active Transportation Network**




Active transportation network per 2015 TMP.

**Figure 3-4: Brampton Plan Scenario – Transit Network**




**Transit Network**
**Brampton Plan Scenario**

**Legend**

- Brampton Border

**Rail**

- Kitchener GO Line
- Existing GO Stations
- Bolton GO Line (CONCEPTUAL)
- New GO Stations (CONCEPTUAL)

**Roads**

- Highway
- Major Arterial (Regional)
- Major Arterial (City)
- Minor Arterial
- Collector
- Local

**Proposed Transit Network**

- Higher Order Transit (BRT or LRT)
- Priority Bus or Zum
- Support Corridor
- Provincial Transitway

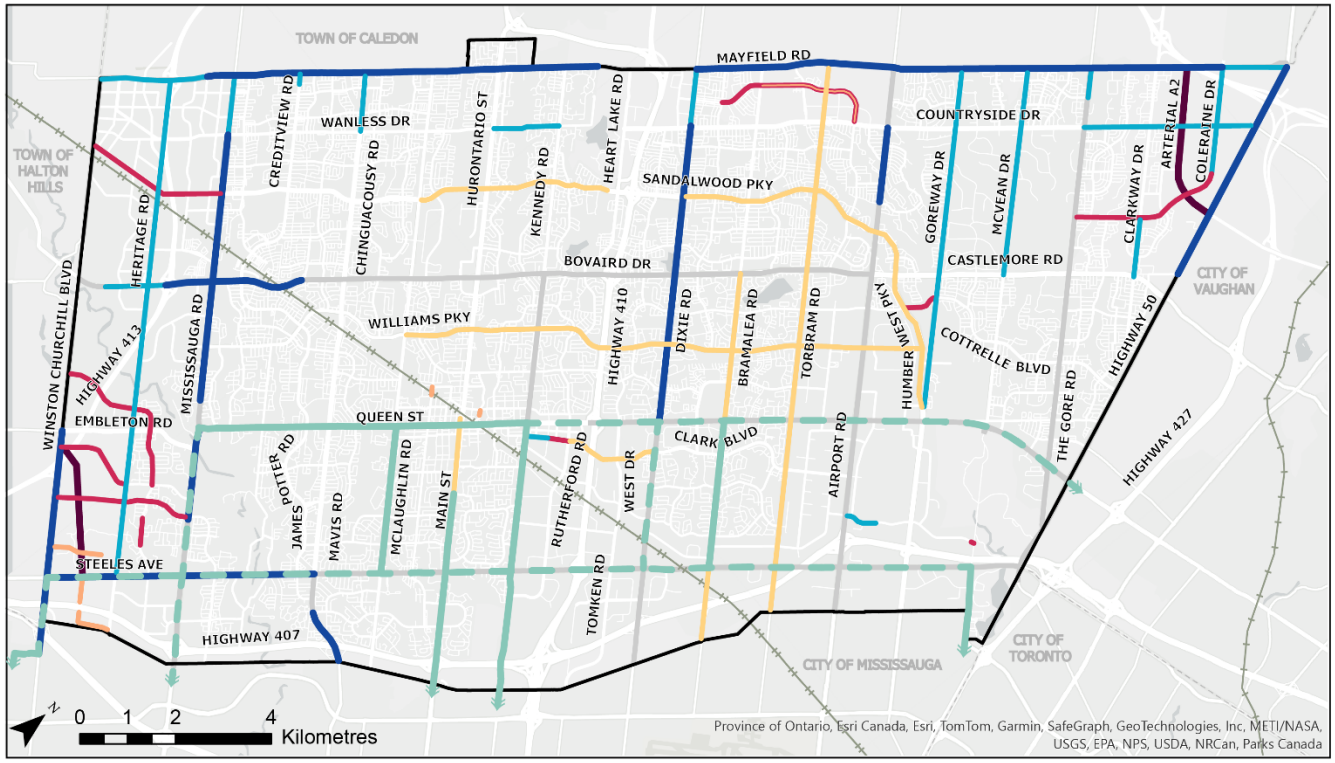
**Higher Order Transit**

- Hurontario-Main (south of Queen)
- Queen Street
- Steeles Avenue
- Mississauga Road
- McLaughlin Road
- Kennedy Road
- Dixie Road
- Bramalea Road

**Priority Bus / Zum**

- Mississauga Road
- Chinguacousy Road
- Hurontario Street (north of Queen)
- Kennedy Road
- Bramalea Road
- Airport Road
- Sandalwood Parkway
- Bovaird Drive
- Williams Parkway

**Figure 3-5: Brampton Plan Scenario – Road Network**




**Road Network**
**Brampton Plan Scenario**

**Legend**

- Brampton Border
- Kitchener GO Line
- Bolton GO Line (Conceptual)

**Roads**

- Highway
- Major Arterial (Regional)
- Major Arterial (City)
- Minor Arterial
- Collector
- Local

**Road & Complete Street Network**

- New 6 lanes
- New 4 lanes
- New 3 lanes
- New 2 lanes
- Complete Streets Reconstruction
- Widening to 6 lanes
- Widening to 4 lanes
- Widening for Transit (+2 lanes)*
- Conversion for Transit (-2 Lanes)*

*Subject to Further Study

**Widen to 6 lanes (may be use for transit lanes)**

- Mississauga Road (Peel)
- Dixie Road (Peel)
- Airport Road (Peel)
- Mavis Road (Peel)
- Mayfield Road (Peel)
- Bovaird Drive (Peel)
- Steeles Avenue (Peel)

**Widen/convert for transit**

- McLaughlin Road
- Hurontario-Main Street
- Kennedy Road
- Bramalea Road
- Queen Street

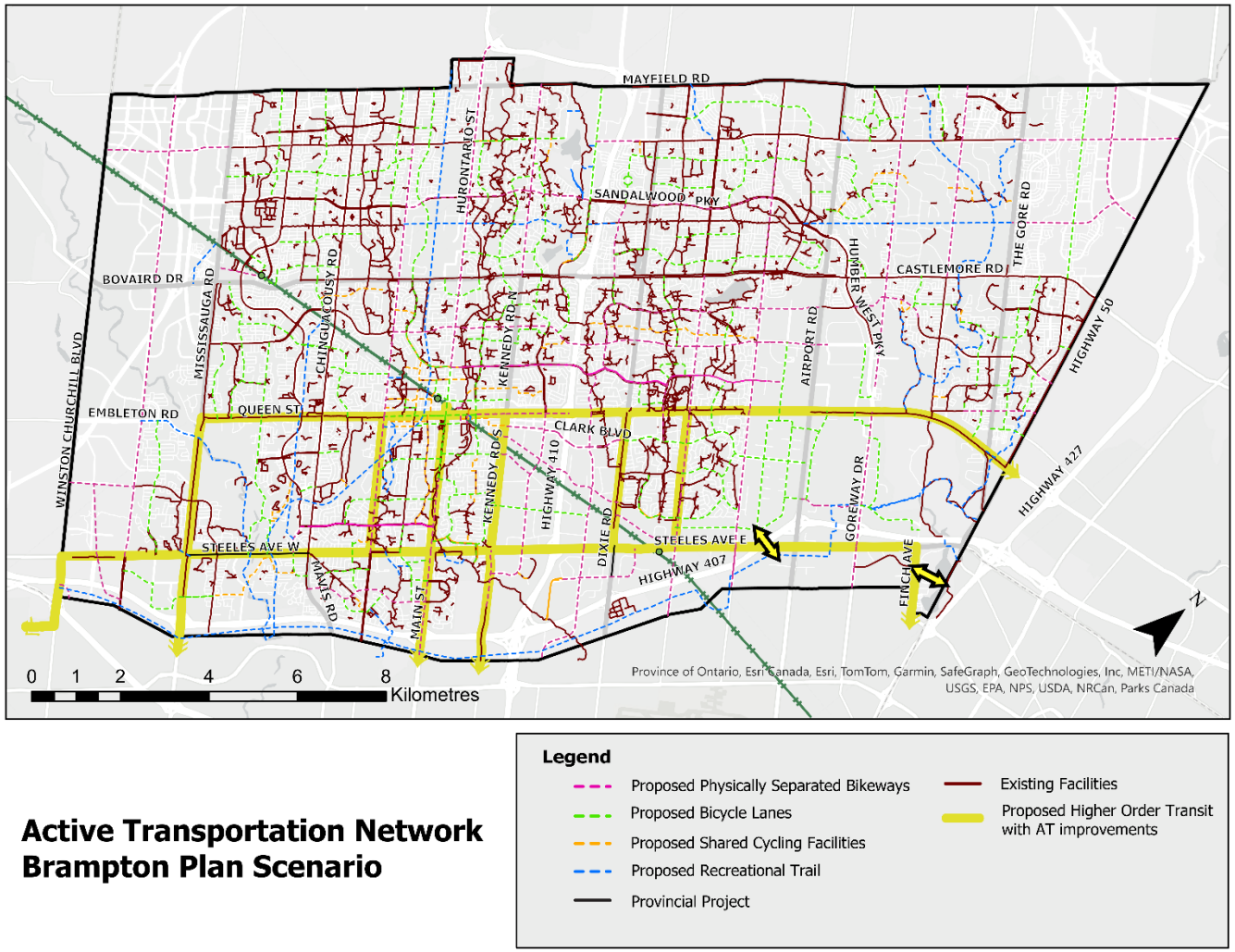
**Widen to 4 lanes**

- Heritage Road
- Chinguacousy Road
- Goreway Drive
- McVean Drive
- Clarkway Drive
- Coleraine Drive (Peel)
- Wanless Drive
- Countryside Drive

**New Roads to service new community areas**

- Northwest Brampton (Heritage Heights)
- Northeast Brampton (Area 47)
- Southwest Brampton (Bram West)

**Figure 3-6: Brampton Plan Scenario – Active Transportation Network**




**Active Transportation Network**
**Brampton Plan Scenario**

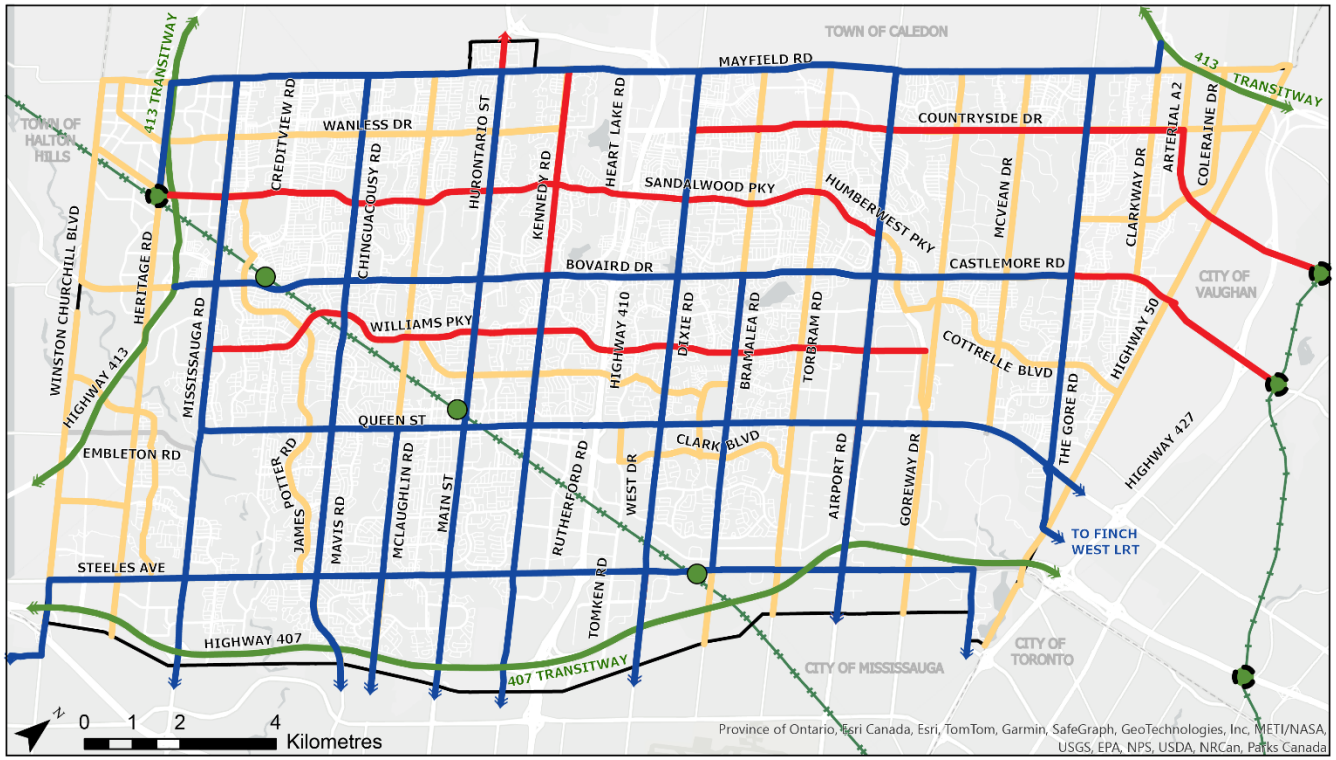
**Legend**

- Proposed Physically Separated Bikeways
- Proposed Bicycle Lanes
- Proposed Shared Cycling Facilities
- Proposed Recreational Trail
- Provincial Project
- Existing Facilities
- Proposed Higher Order Transit with AT improvements

Active transportation network per Brampton Plan (update of network from Active Transportation Master Plan)

Highlighted corridors indicate proposed Higher Order Transit which is assumed to include active transportation enhancements.

**Figure 3-7: Bold Moves Scenario – Transit Network**




**Transit Network**
**Bold Moves Scenario**

**Legend**

- Brampton Border

**Rail**

- Kitchener GO Line
- Existing GO Stations
- Bolton GO Line (CONCEPTUAL)
- New GO Stations (CONCEPTUAL)

**Roads**

- Highway
- Major Arterial (Regional)
- Major Arterial (City)
- Minor Arterial
- Collector
- Local

**Proposed Transit Network**

- Higher Order Transit (BRT or LRT)
- Priority Bus or Zum
- Support Corridor
- Provincial Transitway

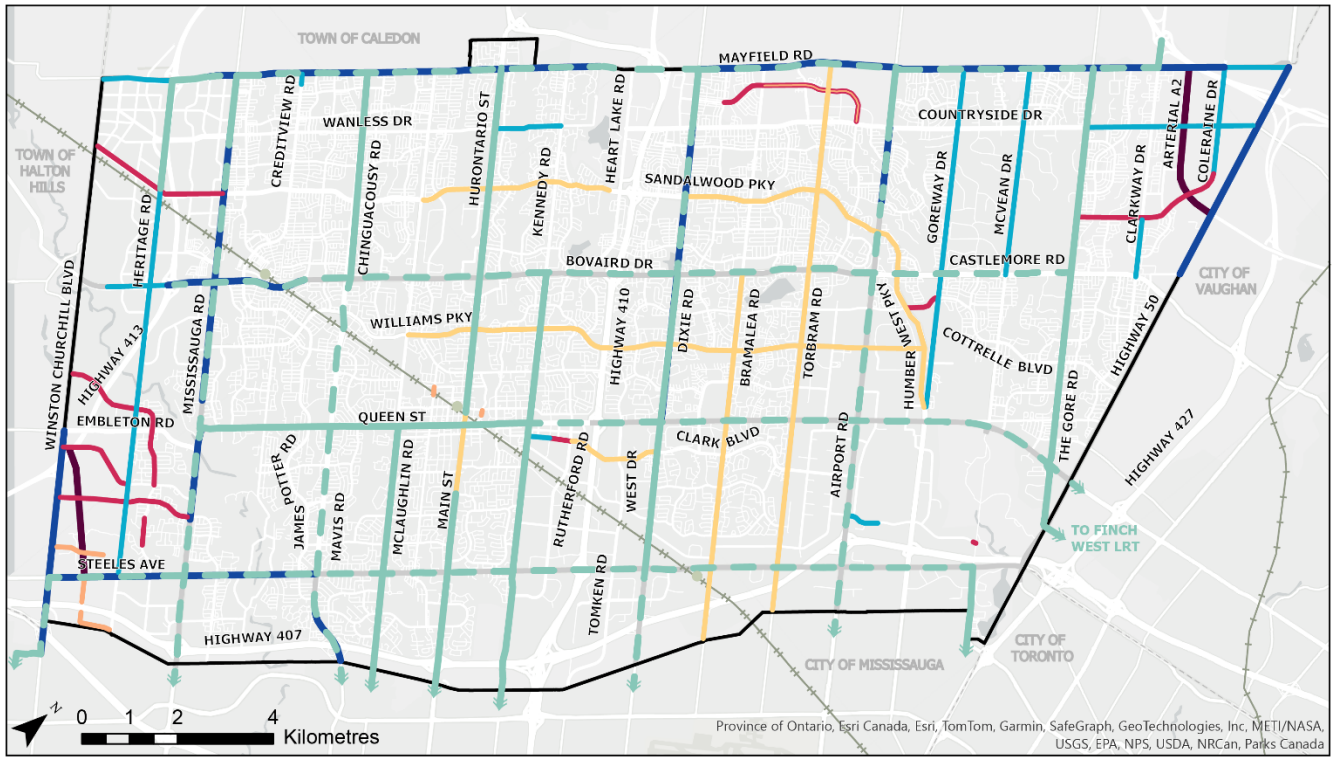
**Higher Order Transit**

- Mississauga Road
- Chinguacousy-Mavis Road
- McLaughlin Road
- Hurontario-Main Street
- Kennedy Road
- Dixie Road
- Bramalea Road
- Airport Road
- The Gore Road
- Mayfield Road
- Bovaird-Castlemore
- Queen Street
- Steeles Avenue

**Priority Bus / Zum**

- Kennedy Road (north of Bovaird Drive)
- Countryside Drive
- Sandalwood Parkway
- Castlemore Road (east of The Gore)
- Williams Parkway

**Figure 3-8: Bold Moves Scenario – Road Network**




**Road Network**
**Bold Moves Scenario**

**Legend**

- Brampton Border
- Kitchener GO Line
- Bolton GO Line (Conceptual)

**Roads**

- Highway
- Major Arterial (Regional)
- Major Arterial (City)
- Minor Arterial
- Collector
- Local

**Road & Complete Street Network**

- New 6 lanes
- New 4 lanes
- New 3 lanes
- New 2 lanes
- Complete Streets Reconstruction
- Widening to 6 lanes
- Widening to 4 lanes
- Widening for Transit (+2 lanes)*
- Conversion for Transit (-2 Lanes)*

*Subject to Further Study

**Widen to 6 lanes (may be use for transit lanes)**

- Mississauga Road (Peel)
- Dixie Road (Peel)
- Airport Road (Peel)
- Mavis Road (Peel)
- Mayfield Road (Peel)
- Bovaird Drive (Peel)
- Steeles Avenue (Peel)

**Widen/convert for transit**

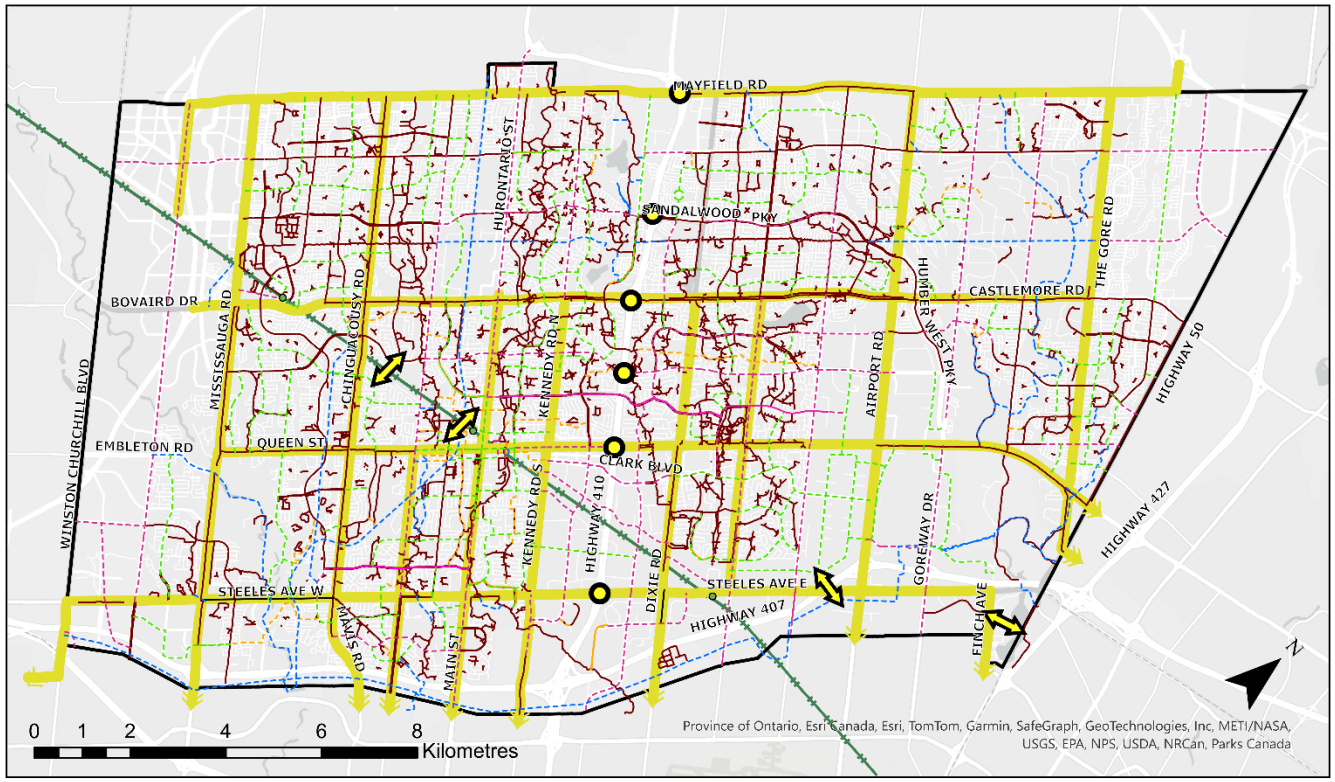
- Chinguacousy Road
- McLaughlin Road
- Hurontario-Main Street
- Kennedy Road
- Bramalea Road
- Mayfield Road
- Bovaird Drive–Castlemore Road
- Queen Street

**Widen to 4 lanes**

- Heritage Road
- Chinguacousy Road
- Goreway Drive
- McVean Drive
- Clarkway Drive
- Coleraine Drive (Peel)
- Wanless Drive
- Countryside Drive

New Roads to service new community areas

**Figure 3-9: Bold Moves Scenario – Active Transportation Network**




**Active Transportation Network**
**Bold Moves Scenario**

**Legend**

- Proposed Physically Separated Bikeways
- Proposed Bicycle Lanes
- Proposed Shared Cycling Facilities
- Proposed Recreational Trail
- Provincial Project
- Existing Facilities
- Proposed Higher Order Transit with AT improvements
- Improve AT connection at Interchange
- Crossing of Major Barriers

Cycling network from Brampton Plan scenario with additional connections at major barriers.

- Cycling connection across Highway 410
  - At Bovaird Drive
  - At Queen Street
- Cycling connection across Highway 407
  - At/near Torbram / Airport / Goreway
  - At Bramalea, also providing connection to Bramalea GO
- Cycling Connection across Kitchener Line
  - Between Chinguacousy and McLaughlin
  - At/Near McMurchy
- Cycling Connection across CN Rail
  - At Intermodal Drive
- Improve connectivity to West Humber Trail
  - At/near Steeles / Finch / Highway 50

# 4 Analysis and Evaluation

## 4.1 Travel Demand Modelling

The City of Brampton's travel demand forecasting model was used to assess and compare the four future alternative scenarios identified in **Section 3.1**. The modelling scenarios were used to estimate the impact of the proposed network changes that comprise each alternative solution including the addition of bus-only lanes, more frequent transit service, new roads, and/or road expansions.

Future travel demand by car and by transit are shown in **Figure 4-1** and **Figure 4-2**, respectively, for the morning peak period. At the time of the modelling analysis, the higher growth assumptions of "Land Use Scenario 2" were used to estimate future demand and transportation impact. As shown, the future morning peak period travel demand by car increases by 70% compared to the 'existing' 2016 base year while trave demand by transit increases at a faster rate, up to 90% depending on scenario.

Total vehicle kilometres travelled (VKT) for the alternatives are shown in **Figure 4-3**. Between the Do Nothing and Business-As-Usual scenarios, the VKT increases by approximately 13,000 veh-km, which can be attributed to increased vehicle travel in response to increased capacity from road widening projects. Between the Do Nothing and Bold scenarios, VKT decreases by approximately 50,000 veh-km, which can be attributed to a shift to transit due to the addition of higher order and priority transit corridors and more frequent service on those corridors. Transit capacity for each alternative is shown in **Figure 4-4**.

It is noted that travel demand models have traditionally been calibrated based on car travel and behavioural mode shift changes that occur with intensification are typically not well captured in the model. The modelling work completed for the BMP is intended to provide a comparative assessment of the alternative solutions and is only one component of the overall evaluation.

**Figure 4-1. Brampton Travel Demand by Car (Peak Period)**

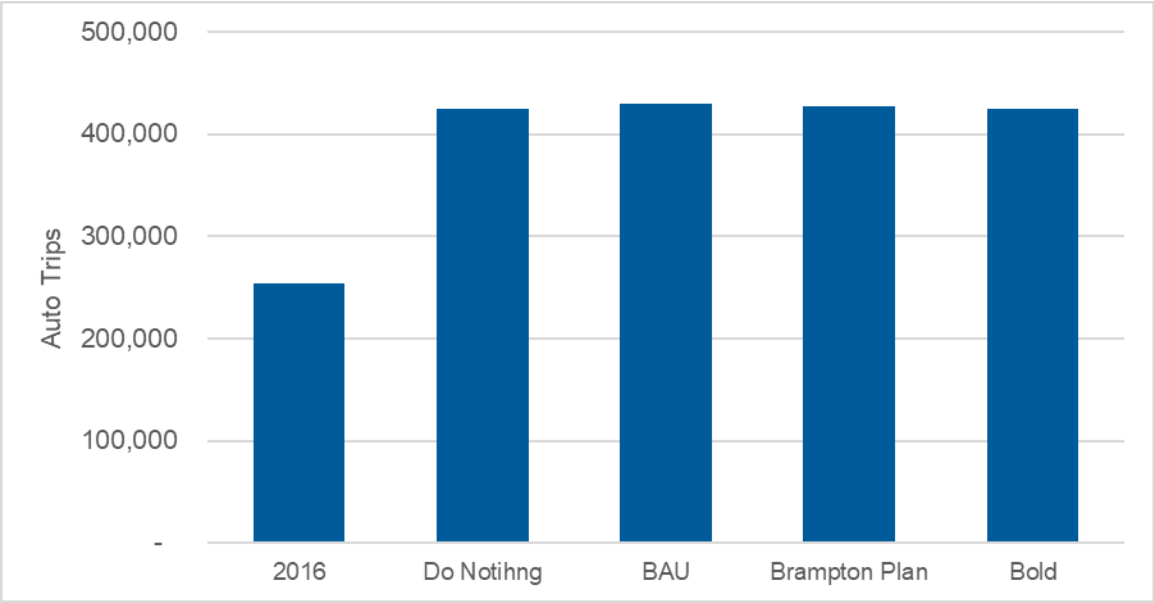



**Figure 4-2. Brampton Travel Demand by Transit (Peak Period)**

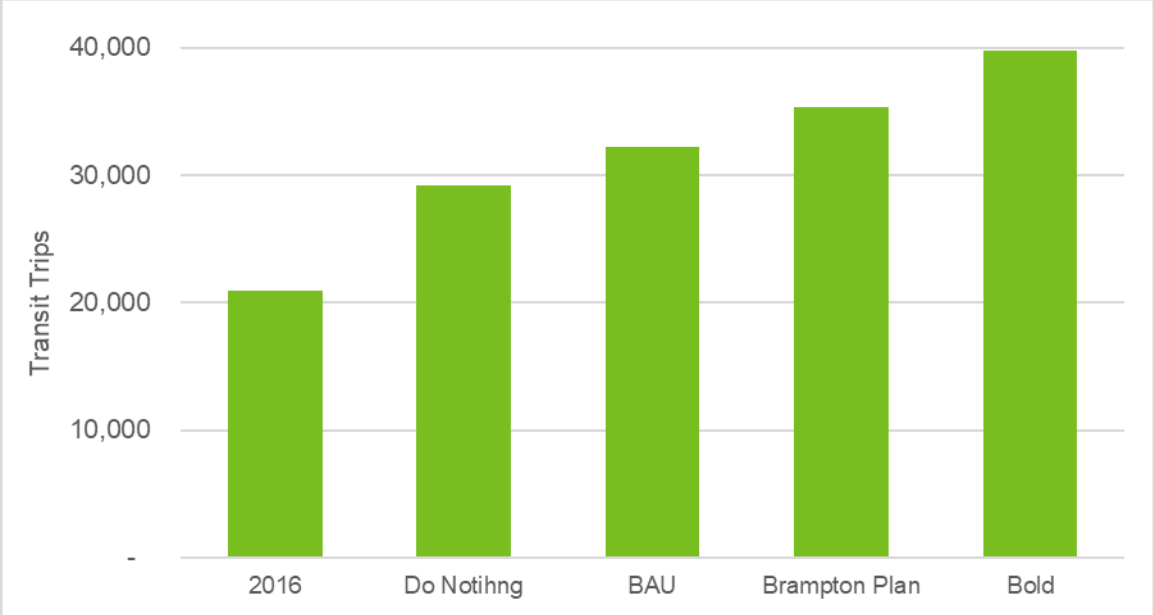


**Figure 4-3. Vehicle Kilometres Travelled (VKT) in Brampton, AM Peak Period**

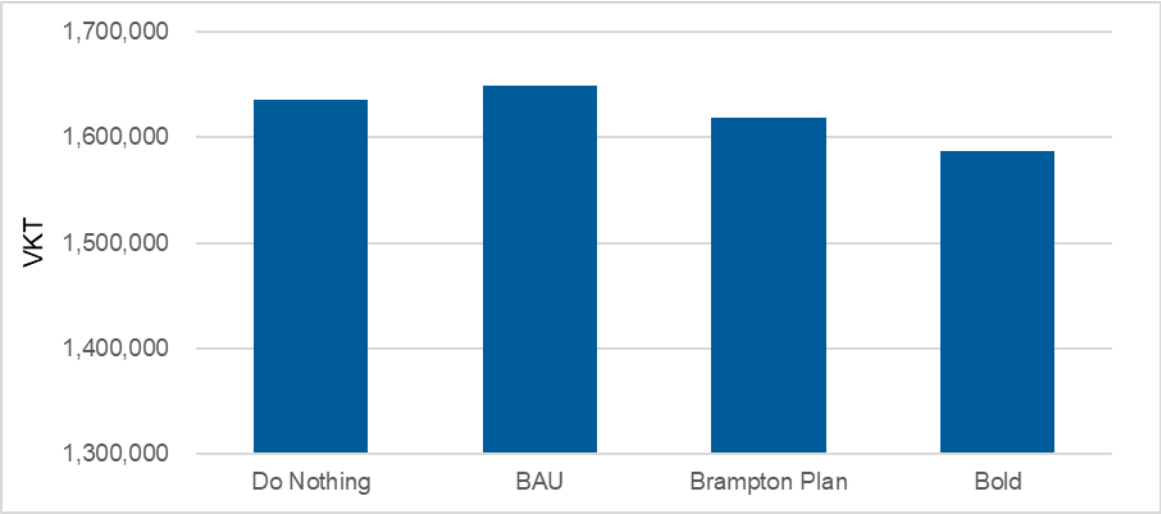
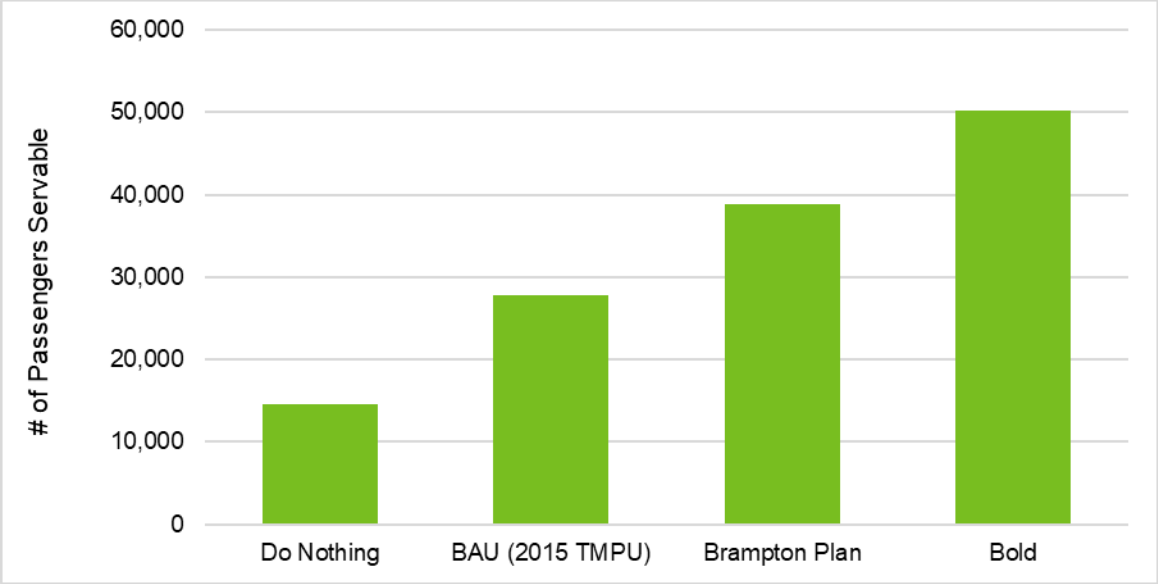



**Figure 4-4. Transit Capacity Modelled (AM Peak Period)**



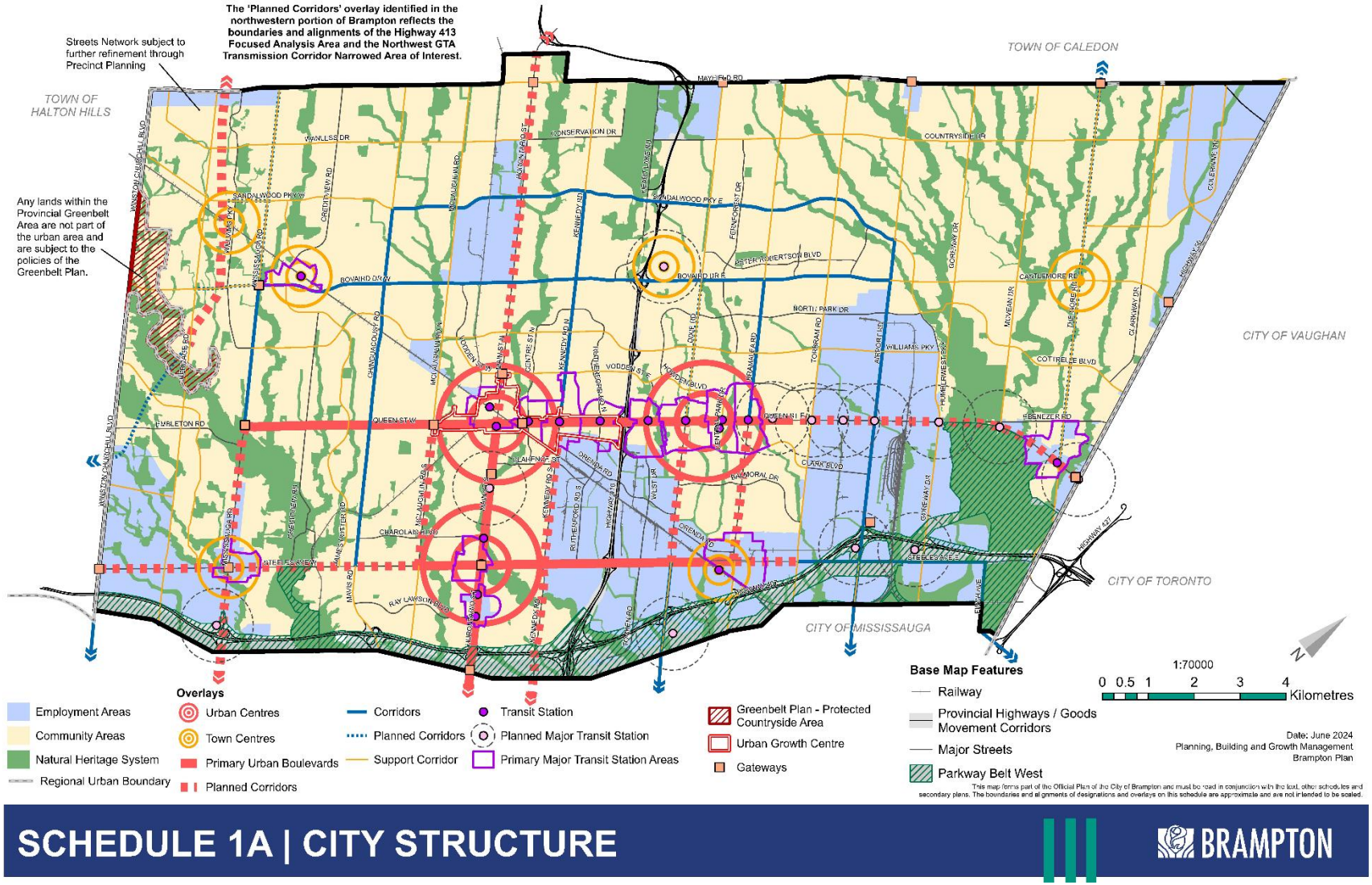

Note: Increased transit capacity is due to more rapid transit corridors and higher service frequencies with each progressive scenario.

## 4.2 Impacts to Natural, Cultural and Socio-Economic Environments

City structure and natural heritage system mapping from Brampton Plan and transportation equity mapping were used to support the evaluation of alternatives.

- Schedule 1A | City Structure, presented in **Figure 4-5**, shows Brampton's land uses, including designated areas where future growth will be concentrated, such as Urban Centres and Town Centres, along Primary Urban Boulevards and Corridors, and in Primary and Planned Major Transit Station Areas.
- Schedule 6A | Natural System, presented in **Figure 4-6**, shows the natural heritage system in Brampton, including wetlands, river valleys, designated Greenbelt Plan lands, and water resources system.
- Transportation Equity Prioritization Score by Traffic Analysis Zone, presented in **Figure 4-7**, was the result of a social equity index and spatial access analysis. The social equity index looked at demographic and socio-economic data (e.g. income, youth and seniors, new immigrants, etc.) while the spatial access analysis measured the ease of reaching key destinations (e.g. healthcare, employment, education, grocery stores, etc.). Combined, each traffic analysis zone in Brampton was assigned a prioritization score. Higher scores indicate areas with higher proportion of equity-priority population and poor spatial access.

**Figure 4-5: City Structure / Land Use**



## Figure 4-6: Natural Heritage System

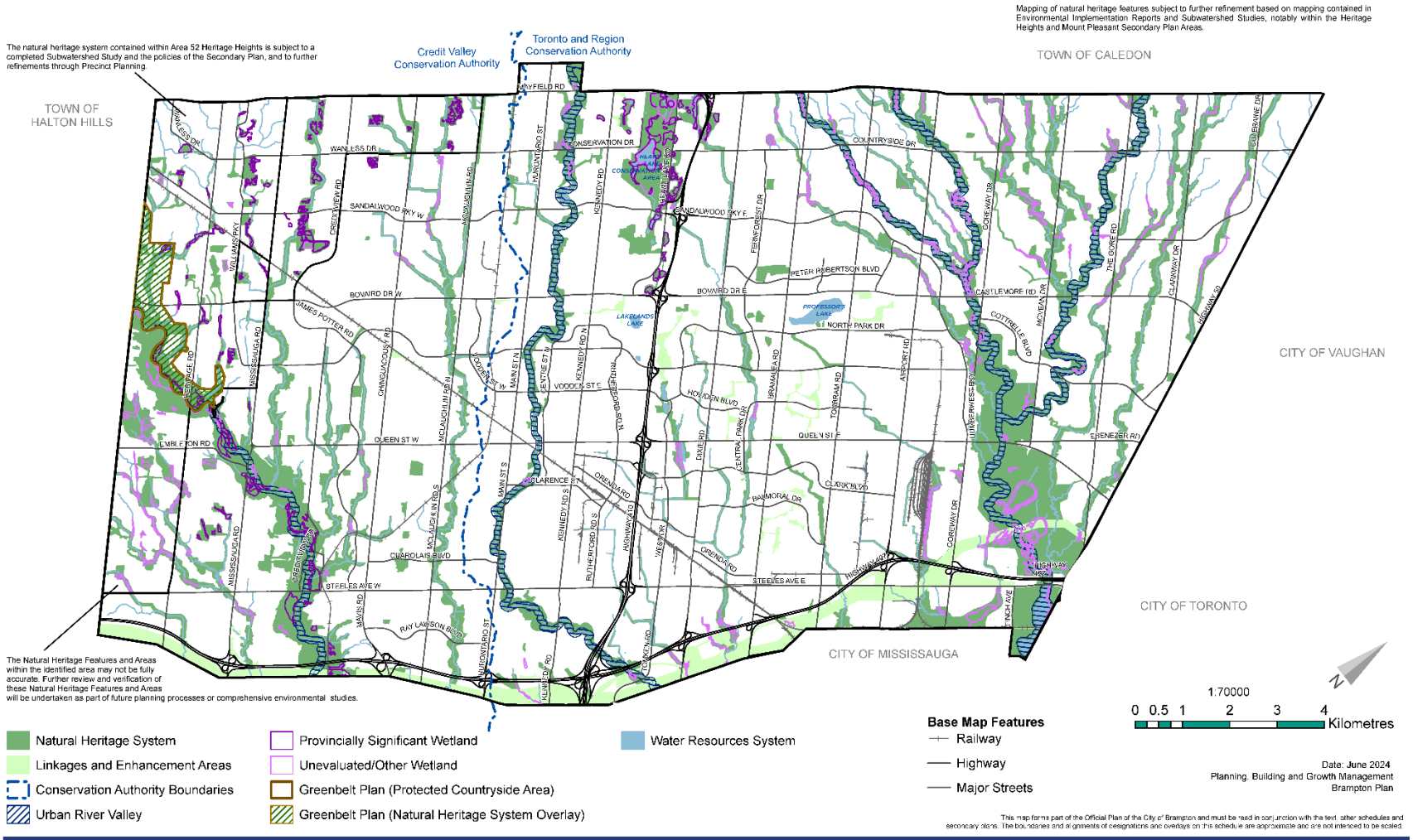
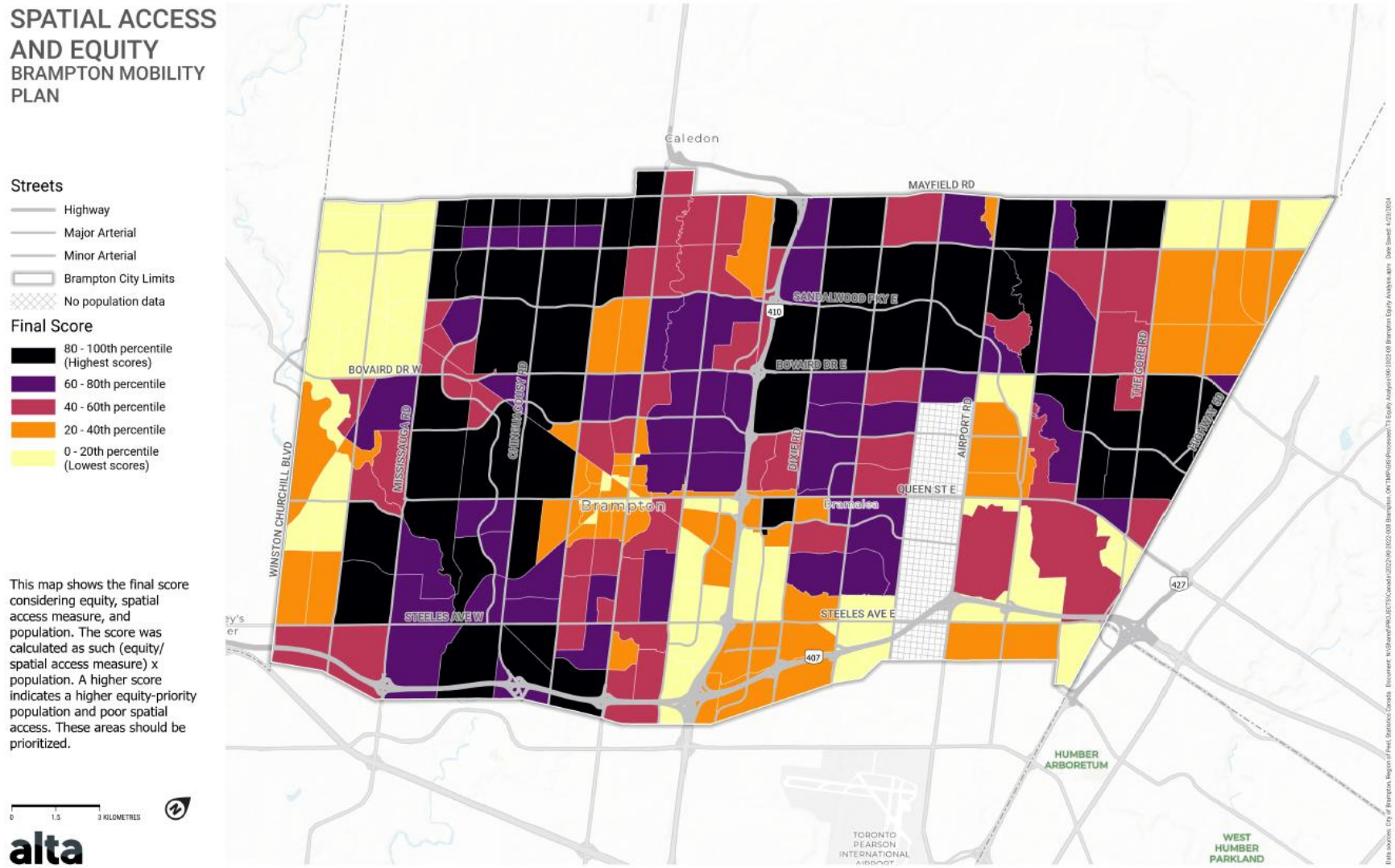


**Figure 4-7: Transportation Equity Prioritization Score**



## 4.3 Evaluation of Scenarios

A qualitative and quantitative evaluation of the alternative solutions was undertaken. A summary of the evaluation is presented in **Table 4-1** and more detailed documentation of the analysis and evaluation assessment by criteria are included in **Attachment A**.

**Table 4-1: Evaluation Summary**

| Guiding Principle | Goal | Do Nothing Scenario | BAU (2015 TMP) Scenario | Brampton Plan Scenario | Bold Moves Scenario |
|---|---|---|---|---|---|
| 1. Enhance mobility and travel options for people and goods | Reduce use of single occupant vehicles | ○ | ○ | ◕ | ● |
| | Increase travel choices | ○ | ◑ | ◕ | ● |
| | Increase connectivity | ○ | ◑ | ◕ | ● |
| | Increase efficiency of existing infrastructure | ○ | ○ | ◕ | ◑ |
| | Support economic development / productivity | ○ | ◕ | ◕ | ◑ |
| | Financial feasibility | ● | ◕ | ◑ | ◔ |
| 2. Improve environmental sustainability | Reduce GHG emissions and improve air quality | ○ | ○ | ◕ | ◕ |
| | Reduce impacts to environmental features and Natural Systems | ◕ | ○ | ● | ◑ |
| 3. Integrate transportation and land use planning | Transportation Network supports planned land use. | ○ | ◑ | ◕ | ◕ |
| 4. Advance multi-modal transportation equity | Improve access to opportunities and community amenities | ○ | ◑ | ◕ | ● |
| | Improve mobility for households and individuals in high equity need and high access need areas. | ○ | ◑ | ◕ | ● |
| 5. Protect public health and safety | Prioritize vulnerable road users | ○ | ◑ | ● | ● |
| | Promote active living | ○ | ◑ | ◕ | ● |
| | Reduce traffic noise / vibration | ○ | ◑ | ◕ | ● |
| 6. Leverage technology | Optimize existing road network capacity | ○ | ◑ | ◕ | ◕ |
| | Create a future-ready system | ○ | ○ | ◕ | ◕ |
| **Overall Score / Rank** | | **Not Recommended** | | **Carried Forward** | |

## 4.4 Draft Preferred Scenario

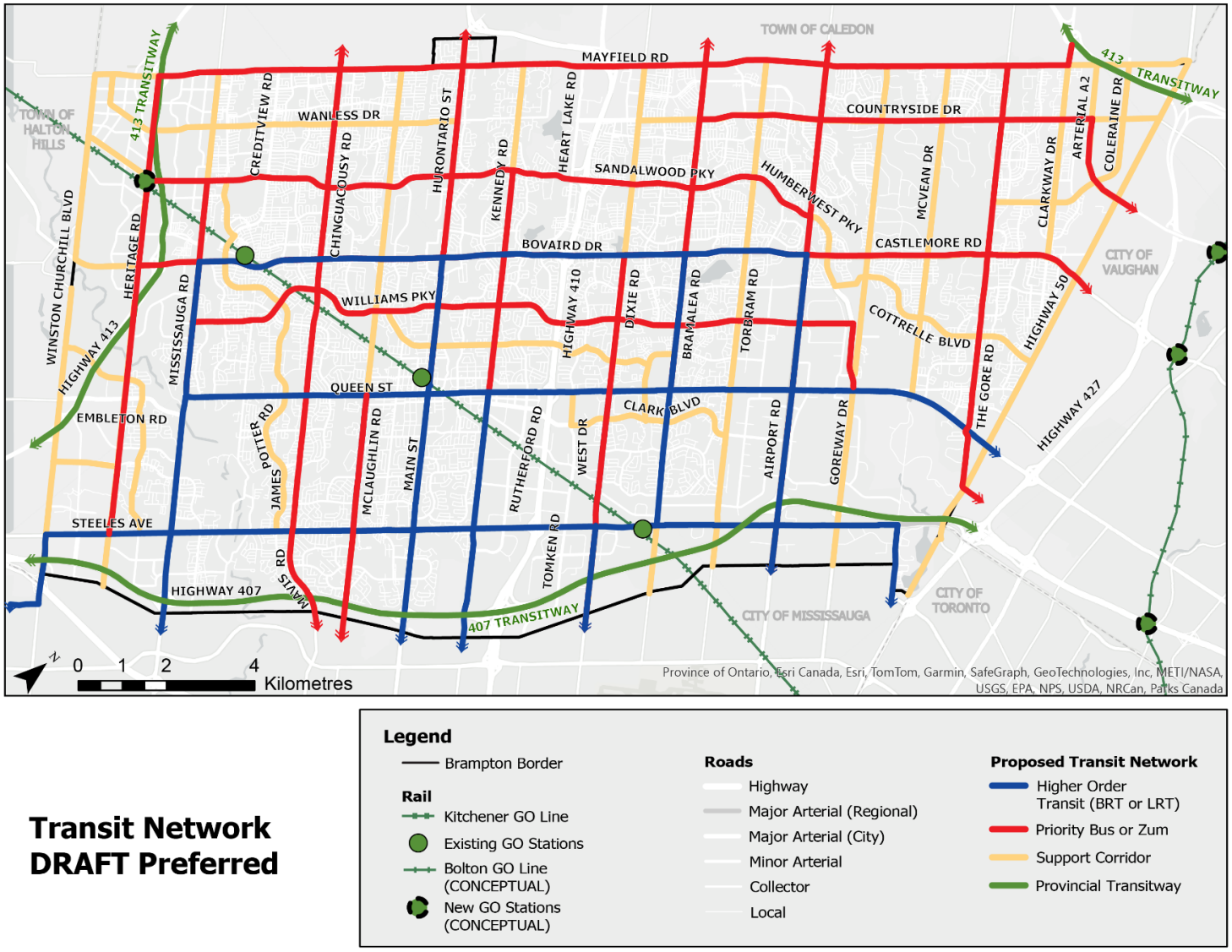
Based on the findings of the evaluation, components of both the Brampton Plan scenario and the Bold Moves scenario were carried forward into the preferred scenario. The draft preferred scenario consists of the following components:

- Expands upon the **transit network** in the Brampton Plan, plus:
  - Adds new higher order transit on Bovaird Drive, Airport Road
  - Extends higher order transit on Main Street, Mississauga Road, Bramalea Road
  - Removal of higher order transit on McLaughlin Road, Dixie Road
- The **road and complete streets network** supports the transit and active network:
  - New roads provide access in new development areas
  - Road widenings or lane conversions to support higher order transit network are to be confirmed through future corridor specific studies.
- Expands upon the **active transportation network** in Brampton Plan, plus:
  - Enhanced connectivity across freeway interchanges
  - Additional connections across major barriers

The draft preferred transit, road and active transportation networks are shown in **Figure 4-8**, **Figure 4-9**, and **Figure 4-10**, respectively.

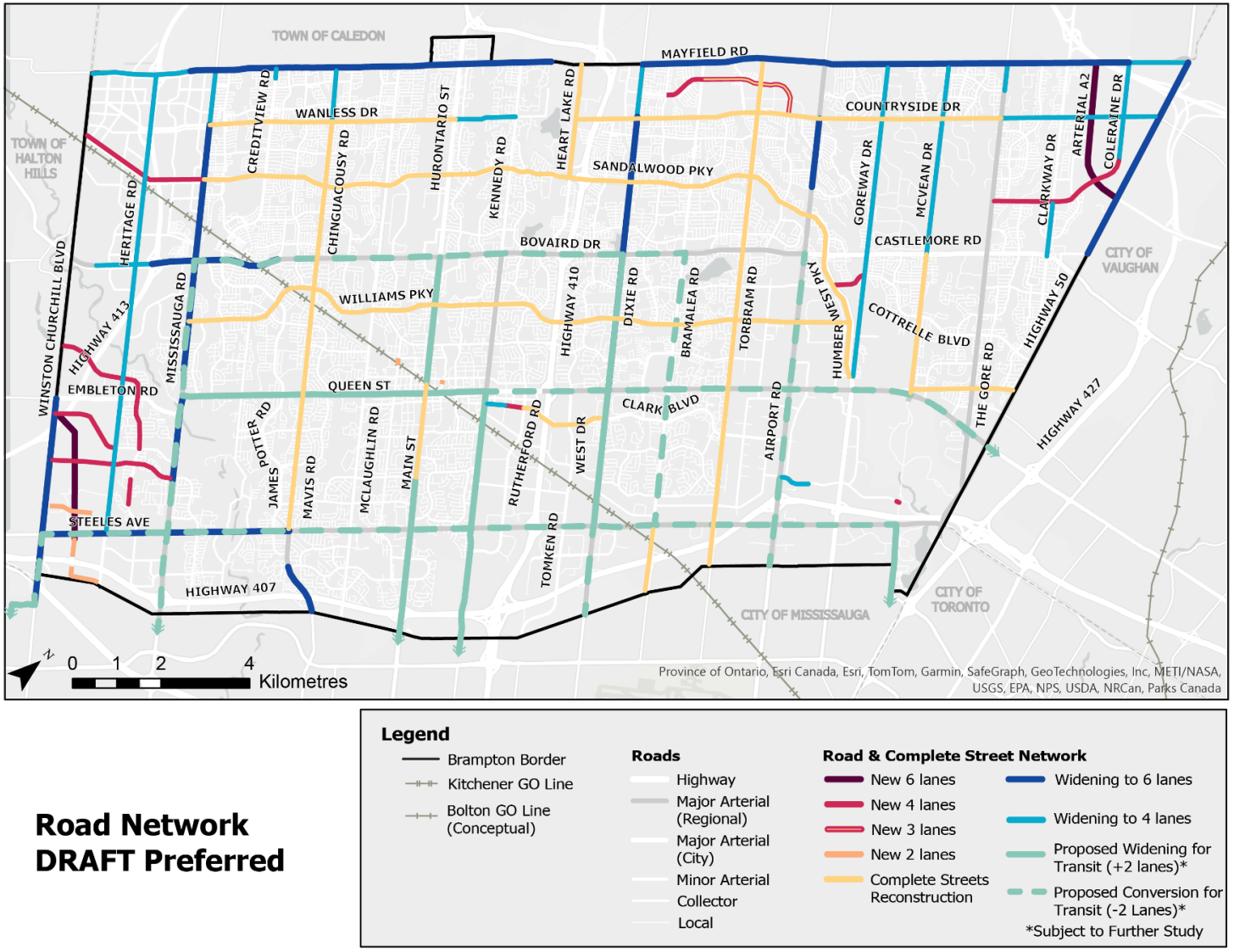
***Subsequently, the draft preferred scenario was refined based on consultation and feedback from the study team, Internal and External Technical Advisory Committees, and the public.***

**Figure 4-8: Draft Preferred Scenario – Transit Network**



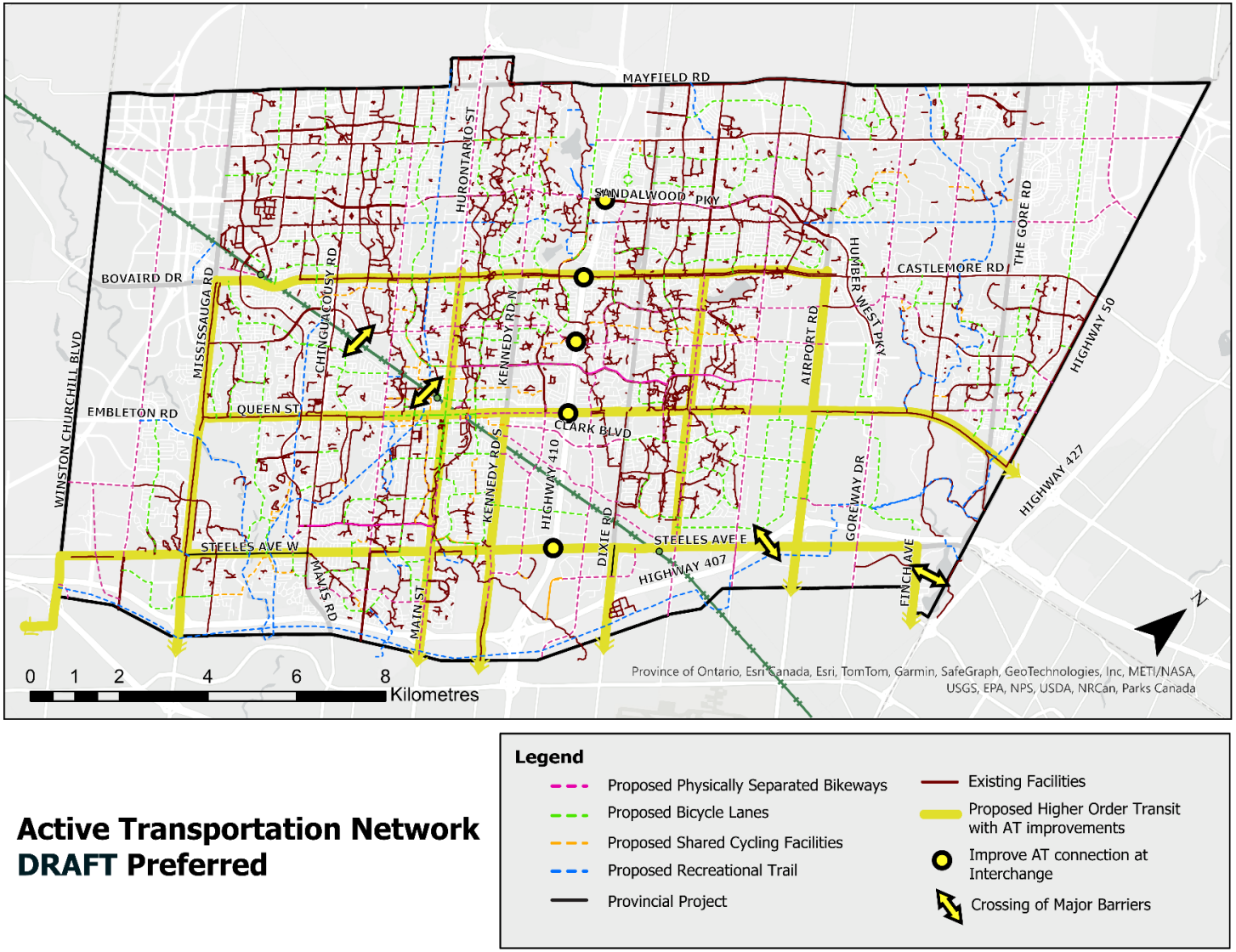

Draft Preferred Network as of September 2024.

**Figure 4-9: Draft Preferred Scenario – Road Network**




Draft Preferred Network as of September 2024.

**Figure 4-10: Draft Preferred Scenario – Active Transportation Network**




Draft Preferred Network as of September 2024.

# Attachment A – Detailed Evaluation Table

# Brampton Mobility Plan
## Evaluation

| Guiding Principle | Goal | Metric | Do Nothing | BAU (2015 TMPU) | Brampton Plan | Bold |
|---|---|---|---|---|---|---|
| 1. Enhance mobility and travel options for people and goods | Reduce use of single occupant vehicles | Number of vehicle trips as a proxy for reduced reliance on vehicle travel. (Morning peak hour) | 182,000 veh trips | 184,100 veh trips | 183,000 veh trips | 182,200 veh trips |
| | | Vehicle-kilometres travelled (VKT) as a proxy for reduced reliance on vehicle travel. (Morning peak hour) | 1.64 million VKT | 1.65 million VKT | 1.62 million VKT | 1.59 million VKT |
| | **Score / Rank** | | **Poor** | **Poor** | **Good** | **Preferred** |
| | Increase travel choices | Mode share targets (% trips by mode) for 2051 | - | 16% transit (by 2041)<br>10% AT (by 2041) | 25% transit<br>11% AT | 32.5% transit<br>12.5% AT |
| | | Total estimated transit capacity on major corridors (morning peak hour) | 14,600 | 27,800 | 38,900 | 50,200 |
| | | Increase in transit capacity | - | +90% | +166% | +244% |
| | | Amount of available cycling facilities in the network relative to the available major roads in the network | Some roads in Brampton's road network have cycling facilities. | Some roads in Brampton's road network have cycling facilities. | Many roads in Brampton's road network have cycling facilities. | Many roads in Brampton's road network have cycling facilities. |
| | | Coverage of sidewalk facilities | Existing network | Walking network as proposed in 2015 TMP. | Follows Brampton Plan (i.e. 2019 Active Transportation Master Plan with updates).<br>Assumes that all Higher Order Transit projects will include enhanced walking facilities. | Expands on Brampton Plan scenario.<br>Provides additional connectivity across barriers such as Highway 410, Highway 407, freeway interchanges and railway lines.<br>Assumes that all Higher Order Transit projects will include enhanced walking facilities.<br>Includes new connections in Downtown Brampton. |
| | | Length of higher order transit and priority transit corridors in the network divided by length of arterial roads in the network. | 79.0 km / 395 km (20%) | 161.5 km / 413 km (39%) | 162.1 km / 413 km (39%) | 308.3 km / 413 km (75%) |
| | | Average Vehicle Travel Time (weighted average for trips originating in Brampton) | 20.2 min | 17.1 min (15% savings compared to Do Nothing) | 17.6 min (13% savings compared to Do Nothing) | 17.8 min (12% savings compared to Do Nothing) |
| | | Average Transit Travel Time - in vehicle + wait time (weighted average for trips originating from Brampton) | 52.5 min | 50.1 min (5% savings compared to Do Nothing) | 47.8 min (9% savings compared to Do Nothing) | 43.1 min (18% savings compared to Do Nothing) |
| | | Frequency and duration of transit service (e.g. earlier or later service hours to accommodate different travel patterns and schedules) | Current transit frequency and service hours. | Provides more frequent transit service throughout the day | Provides more frequent transit service throughout the day | Provides the most frequent transit service, for more hours of the day |
| | **Score / Rank** | | **Poor** | **Acceptable** | **Good** | **Good / Preferred** |

# Brampton Mobility Plan
## Evaluation

| Guiding Principle | Goal | Metric | Do Nothing | BAU (2015 TMPU) | Brampton Plan | Bold |
|---|---|---|---|---|---|---|
| 1. Enhance mobility and travel options for people and goods (continued) | Increase connectivity | Population within 800 m of a rapid transit stop. | 41,700 (4% of population) | 203,700 (19% of population) | 219,000 (20% of population) | 605,300 (56% of population) |
| | | Jobs within 800 m of a rapid transit stop. | 24,300 (6%) jobs | 151,500 (38% of jobs) | 149,900 (38% of jobs) | 227,900 (58% of jobs) |
| | | Length of cycling facilities in the network. | 615.7 km | n/a | 962.4 km | 962.4 km |
| | | Coverage of sidewalk facilities | - | Walking network per 2015 TMP. | Follows Brampton Plan and 2019 Active Transportation Master Plan. Assumes that all Higher Order Transit projects will include enhanced walking facilities. | Expands on Brampton Plan. Providing additional connectivity across barriers such as Highway 410, Highway 407, at interchanges and railway lines. Assumes that all Higher Order Transit projects will include enhanced walking facilities. New connections in Downtown Brampton. |
| | | Multimodal connections to and within growth areas and to adjacent municipalities. | Provides some modal connections to growth areas within Brampton and to adjacent municipalities. | Provides some modal connections to growth areas within Brampton and to adjacent municipalities. | Provides several modal connections to growth areas within Brampton and to adjacent municipalities. | Provides the most multimodal connections to growth areas within Brampton and to adjacent municipalities. |
| | **Score / Rank** | | **Poor** | **Acceptable** | **Good** | **Preferred** |
| | Increase efficiency of existing infrastructure | Optimize existing infrastructure to carry more people. | No change from existing. Existing infrastructure is well used, but also over capacity in some locations resulting in road congestion, delays to transit, and gaps in the active transportation network. | Implement higher order transit, prioirty transit, and active transportation improvements to incrase person-carrying capacity. But network also relied n new roads and road widenings to increase vehicle capacity. | Implement higher order transit, priority transit, and active transportation improvements to increase person-carrying capacity. There are some conversion of general purpose travel lanes to transit only lanes, but some corridors need to be widened to accommodate transit only lanes. | Implement higher order transit, transit priority, and active transportation improvements to increase person-carrying capacity. There are some conversion of general purpose travel lanes to transit only lanes, but many corridors need to be widened to accommodate transit only lanes. |
| | **Score / Rank** | | **Poor** | **Poor** | **Good** | **Acceptable / Good** |

# Brampton Mobility Plan
## Evaluation

| Guiding Principle | Goal | Metric | Do Nothing | BAU (2015 TMPU) | Brampton Plan | Bold |
|---|---|---|---|---|---|---|
| 1. Enhance mobility and travel options for people and goods (continued) | Support economic development / productivity | Total congested vehicle-hours travelled (VHT) (v/c ≥0.85) (Morning peak hour) | 38,200 congested VHT | 21,100 congested VHT | 23,000 congested VHT | 25,400 congested VHT |
| | | Total congested VKT | 1,032,000 congested VKT | 709,000 congested VKT | 744,000 congested VKT | 821,000 congested VKT |
| | | Screenlines approaching (v/c≥0.85) or over capacity (v/c≥1.0) (Morning peak hour) | 5 screenlines approaching capacity (>0.85); 5 screenlines over capacity (>1.0). | 4 screenlines approaching capacity (>0.85); 2 screenlines over capacity (>1.0). | 4 screenlines approaching capacity (>0.85); 3 screenlines over capacity (>1.0). | 4 screenlines approaching capacity (>0.85); 3 screenlines over capacity (>1.0). |
| | | Congestion on Strategic Goods Movement Network (SGMN) (congested VKT on SGMN) | 378,000 congested VKT | 263,000 congested VKT | 273,000 congested VKT | 278,000 congested VKT |
| | | Access/connections to employment areas for workers and movement of goods. | No new transit, cycling, and walking connections are provided to connect workers to employment areas. | New transit, cycling, and walking connections are provided to connect workers to employment areas.<br><br>New roads and road widenings provide more access/capacity for goods movement. | Significant new transit, cycling, and walking connections are provided to connect workers to employment areas.<br><br>Lane conversion for dedicated transit lanes may impact goods movement. | Significant new transit, cycling, and walking connections are provided to connect workers to employment areas.<br><br>Many lane conversions are required for dedicated transit lanes and may impact goods movement. |
| | | Access/connections to provincial highways, intermodal terminals, airport, and employment areas. | No new road capacity and connections to employment destinations, truck routes, and freight hubs. | Provides the most new road capacity and improves connections to employment destinations, truck routes, and freight hubs. | Provides limited new road capacity and limited new connections to employment destinations, truck routes, and freight hubs.<br><br>Some corridors in the network have reduced road capacity due to lane conversion for transit lanes. | Provides limited new road capacity and limited new connections to employment destinations, truck routes, and freight hubs.<br><br>Many corridors in the network have reduced road capacity due to lane conversion for transit lanes. |
| | **Score / Rank** | | **Poor** | **Good** | **Good** | **Acceptable** |
| | Be financially feasible / sustainable | Capital costs | Limited improvements will result in lower capital costs. | New roads and road widenings are a significant capital investment. | Provides several LRT / BRT corridors, which are a significant capital investment. | Provides the most LRT / BRT corridors, which are a significant capital investment. |
| | | Operating costs | Limited improvements will result in lower O+M costs. | The addition of several new roads and road widenings will have high O+M costs. | Many roads will have high quality infrastructure (such as dedicated transit lanes and separated cycling facilities), resulting in the high long term O+M costs. | Most roads will have high quality infrastructure (such as dedicated transit lanes and separated cycling facilities), resulting in the highest long term O+M costs. |
| | **Score / Rank** | | **Preferred** | **Good** | **Acceptable** | **Poor / Acceptable** |

# Brampton Mobility Plan
## Evaluation

| Guiding Principle | Goal | Metric | Do Nothing | BAU (2015 TMPU) | Brampton Plan | Bold |
|---|---|---|---|---|---|---|
| 2. Improve environmental sustainability | Reduce GHG emissions and improve air quality | Vehicles-kilometres travelled (VKT) | 1.64 million VKT | 1.65 million VKT | 1.62 million VKT | 1.59 million VKT |
| | | Adoption of electric or other low-emission vehicles. | No new infrastructure or policies to promote adoption of EV or low-emission vehicles. | Infrastructure and policies provide limited support for adoption of electric and low-emission vehicles. | Infrastructure and policies support adoption of electric and low-emission vehicles. | Infrastructure and policies strongly support adoption of electric and low-emission vehicles. |
| | **Score / Rank** | | **Poor** | **Poor** | **Acceptable** | **Acceptable** |
| | Reduce impacts to environmental features | Number of new crossings of watercourses and natural heritage system areas. | No new crossings of watercourses or natural heritage areas | Many new road crossings or road widenings over watercourses or natural heritage areas. (Approx 150) | Some new crossings or widenings across watercourses or natural heritage areas. (Approx 100) | Some new crossings or widenings across watercourses or natural heritage areas. (Approx 120) |
| | | Incorporate Low Impact Development (LID) facilities in transportation projects. | No change from existing | More opportunities to incorporate LID with proposed road/transit works. | Opportunities to incorporate LID with transit and complete streets projects. | More opportunities to incorporate LID with proposed transit and complete streets projects. |
| | **Score / Rank** | | **Good** | **Poor** | **Preferred** | **Acceptable** |
| 3. Integrate transportation and land use planning | Transportation Network supports planned land use. | | No change to existing. Transportation network does not support future growth areas. | Transportation network as proposed in 2015 TMP supported previous assumptions on anticipated growth in Brampton but current growth plans have changed. | Transportation network supports urban centres, town centres, major transit station areas, and other growth areas. | Transportation network supports urban centres, town centres, major transit station areas, and other growth areas. |
| | **Score / Rank** | | **Poor** | **Acceptable** | **Good** | **Good** |

# Brampton Mobility Plan
## Evaluation

| Guiding Principle | Goal | Metric | Do Nothing | BAU (2015 TMPU) | Brampton Plan | Bold |
|---|---|---|---|---|---|---|
| 4. Advance multi-modal transportation equity | Improve access to opportunities and community amenities | Jobs within 800 m of a rapid transit stop. | 24,300 (6%) jobs | 151,500 (38%) jobs | 149,900 (38%) jobs | 227,900 (58%) jobs |
| | | Schools (all types) within 800 m of a rapid transit stop | 6 of 240 | 49 of 240 | 53 of 240 | 120 of 240 |
| | | Access/connections to community services, recreation, parks, healthcare, grocery stores. | No change from existing | Some connections with lower transportation barriers (such as lower costs or improved safety) are provided to access community services, recreation, parks, healthcare, and grocery stores. | Several connections with lower transportation barriers (such as lower costs or improved safety) are provided to access community services, recreation, parks, healthcare, and grocery stores. | Many connections with lower transportation barriers (such as lower costs or improved safety) are provided to access community services, recreation, parks, healthcare, and grocery stores. |
| | | Roads planned/designed with a Complete Streets approach. | No change from existing | Major roads are planned to include walking, cycling and transit facilities. But an explicit Complete Streets approach is not identified. | All roads are planned and designed using a Complete Streets approach to balance modal priorities of all road users | All roads are planned and designed using a Complete Streets approach to balance modal priorities of all road users |
| | **Score / Rank** | | **Poor** | **Acceptable** | **Good** | **Preferred** |
| | Improve mobility for households and individuals in **high equity need and high access need** areas. | Length of higher order and priority transit corridors in high equity need / high access | 31.9 of 79 km (40%) | 56.7 of 161.5 km (35%) | 72.1 of 162.1 km (44.5%) | 132 of 308.3 km (43%) |
| | | Proportion of high equity need / high access need population within 800 m of a rapid transit stop. | 1% | 8% | 11% | 53% |
| | | Transit travel time - in vehicle + wait for high equity need / high access need areas (weighted average) | 59.4 min | 55.9 min | 53.1 min | 48.4 min |
| | | Length of cycling facilities in high equity need / high access need areas. | 228.3 km (37%) | n/a | 337.9 km (35%) | 337.9 km (35%) |
| | | Coverage of sidewalk facilities in high equity need / high access need areas. | Existing network. No improvements in high equity need / high access need areas. | Walking network as proposed in 2015 TMP includes some improvements in high equity need / high access need areas. | Follows Brampton Plan (i.e. 2019 Active Transportation Master Plan with updates).<br>Assumes that all Higher Order Transit projects will include enhanced walking facilities.<br>Includes improvements in high equity need / high access need areas. | Expands on Brampton Plan scenario. Provides additional connectivity across barriers such as Highway 410, Highway 407, freeway interchanges and railway lines.<br>Assumes that all Higher Order Transit projects will include enhanced walking facilities.<br>Includes new connections in Downtown Brampton.<br>Includes improvements in high equity need / high access need areas. |
| | **Score / Rank** | | **Poor** | **Acceptable** | **Good** | **Preferred** |

# Brampton Mobility Plan
## Evaluation

| Guiding Principle | Goal | Metric | Do Nothing | BAU (2015 TMPU) | Brampton Plan | Bold |
|---|---|---|---|---|---|---|
| 5. Protect public health and safety | Prioritize vulnerable road users | Vision Zero considerations, including dedicated and separated facilities for walking and cycling. | No change from existing. | Less focus on safety (Vision Zero had not yet been adopted by Brampton at the time of plan development) but safety for pedestrians, cyclists and transit is emphasized. | Vision Zero is considered at all project phases and at the intersection, segment, and network level. | Vision Zero is considered at all project phases and at the intersection, segment, and network level. |
| | **Score / Rank** | | **Poor** | **Acceptable** | **Preferred** | **Preferred** |
| | Promote active living | Designs incorporate pedestrian and cyclist safety. | No change from existing. | The 2015 TMP proposed facilities and measures designed to improve safety for pedestrians and cyclists. | Complete Streets designs consider pedestrian and cyclist safety. | Complete Streets designs consider pedestrian and cyclist safety. |
| | | Designs incorporate streetscape improvements. | No change from existing. | Streetscape improvements were not identified in the 2015 TMP. | Complete Streets designs improve streetscape environment. | Complete Streets designs improve streetscape environment. |
| | | Results of World Health Organization Health Economic Assessment Tool (HEAT). | Premature deaths prevented = -1.2/year. Costs of $7.6 M /year. | n/a | Premature deaths prevented = 3.5/year. Savings of $22.5 M /year. | Premature deaths prevented = 3.8/year. Savings of $25 M /year. |
| | **Score / Rank** | | **Poor** | **Acceptable** | **Good** | **Preferred** |
| | Reduce traffic noise / vibrations | Complete Streets / enhanced streetscape improvements | No change from existing. | Major roads are planned and designed using a Complete Streets approach to balance modal priorities of all road users. | All roads are planned and designed using a Complete Streets approach to balance modal priorities of all road users. | All roads are planned and designed using a Complete Streets approach to balance modal priorities of all road users. |
| | **Score / Rank** | | **Poor** | **Acceptable** | **Good** | **Preferred** |
| 6. Leverage technology | Optimize existing road network capacity | Use of technology, advanced traffic management, and transportation demand management (TDM) measures. | No change from existing. | Infrastructure and policies support traffic management and travel demand management. | Infrastructure and policies strongly support technology and management measures to optimize existing road network capacity. | Infrastructure and policies strongly support technology and management measures to optimize existing road network capacity. |
| | **Score / Rank** | | **Poor** | **Acceptable** | **Good** | **Good** |
| | Create a future-ready system | Accommodate emerging mobility and other new travel technologies. | No change from existing. | The 2015 TMP provided limited accommodation for new mobility options and travel technologies. | Infrastructure and policies accommodate emerging mobility and other new travel technologies. | Infrastructure and policies strongly accommodate emerging mobility and other new travel technologies. |
| | **Score / Rank** | | **Poor** | **Poor** | **Good** | **Good** |
| **Overall Score / Rank** | | | **Poor** | **Acceptable** | **Carried Forward** | **Carried Forward** |