

WELCOME

to the

Bramalea Road Corridor Improvements

Municipal Class Environmental Assessment Study

From Queen Street East to the South City Limit

Public Information Centre #1

January 11, 2021 to February 8, 2021

Study Area and Objectives

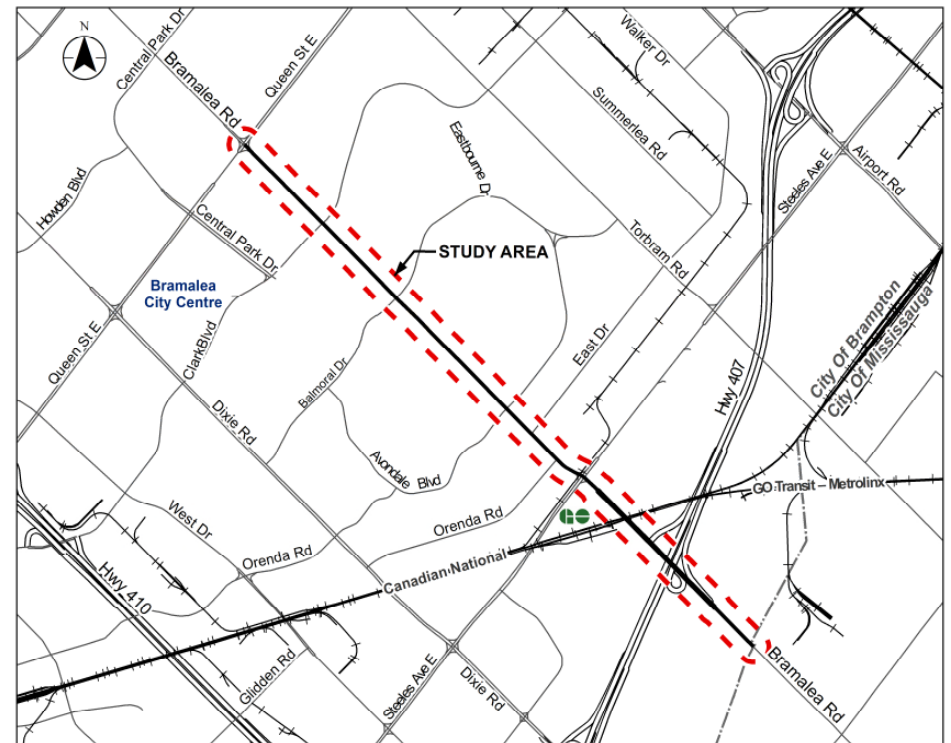
The City of Brampton has initiated a Municipal Class Environmental Assessment (MCEA) study for improvements to Bramalea Road from Queen Street East to the south City limit, approximately 790m south of Highway 407.

Study Area

Bramalea Road is classified as a Minor Arterial Road with a right of way width of 36m. The existing corridor consists of 4 general purpose travel lanes, with sidewalks on the east and west sides of the corridor, which become discontinuous south of Steeles Ave. The Bramalea GO Station is located within the corridor.

Study Objectives

Accommodate current and future transportation needs for all modes of travel, including pedestrian, cyclists, transit users and motorists.



Study Process

- The MCEA study process frames the planning and implementation of municipal infrastructure.
- An MCEA is a planning process for municipal infrastructure, legislated by the *Ontario Environmental Assessment Act*. This MCEA Study is being conducted as a Schedule 'C' project under the MCEA document (October 2000, as amended).
- This EA covers Phases 1 to 4.



Planning and Policy Context

Recommendations from Key Planning Documents

- Achieve safe, convenient and attractive transportation options for pedestrians and cyclists within, and where feasible between settlement areas
- Create a balanced, integrated and sustainable transportation system
- Promote and encourage the increased use of Public Transit and other sustainable modes of transportation
- Maximize capacity of the transportation system by focusing on moving people and goods rather than on moving vehicles

Regional Plans



Municipal Plans



Provincial Plans



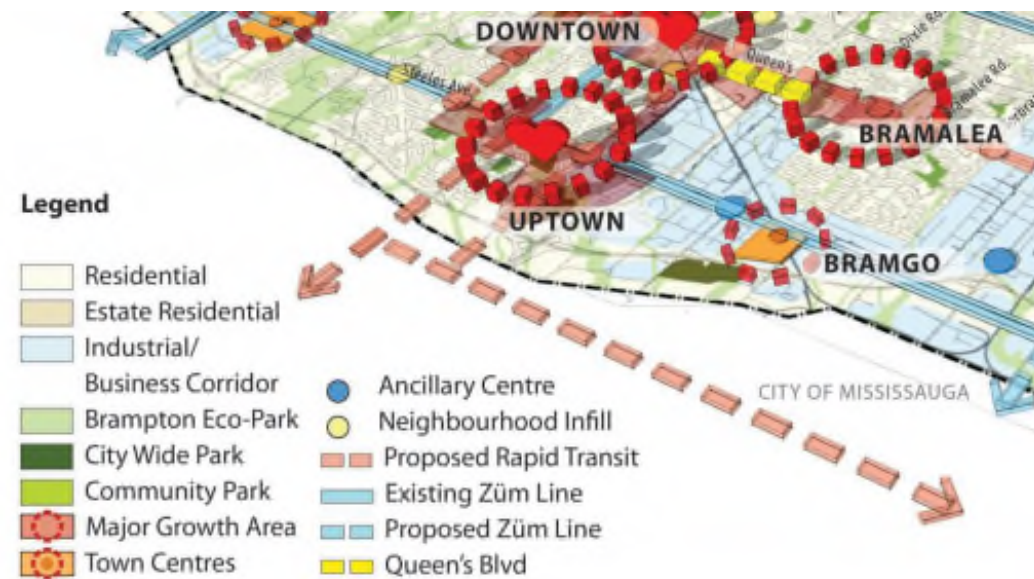
Planning and Policy Context

Brampton 2040 Vision (2018)

By the year 2040, the City of Brampton is expecting to experience a 63% increase in population.

The study area is surrounded by Major Growth Areas, suggesting the need for improvements for all modes of transportation for improved travel demand and network connectivity.

The 2040 Vision proposes a transportation system which prioritizes walking, cycling, transit and private vehicles, in order to prioritize and increase the mode shares of trips made using sustainable modes of transportation.



25-30 Year Growth Projections

	Existing 2016	New Growth	2040+
Dwelling Units	170,000	136,000	306,000
Population	615,000	385,000	1,000,000
Jobs	205,000	185,000	390,000

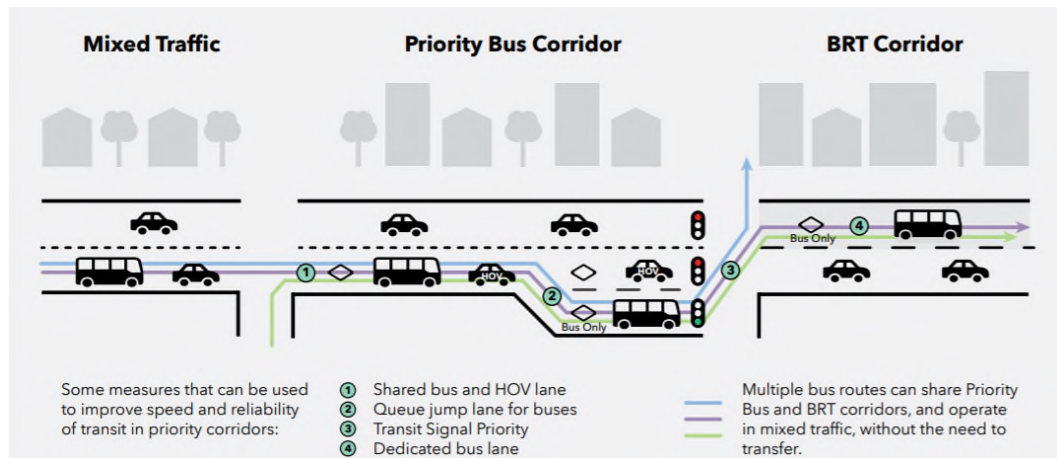
Reference: Page 10 - Brampton 2040 Vision, 2018

Planning and Policy Context

Metrolinx 2041 Regional Transportation Plan (RTP)

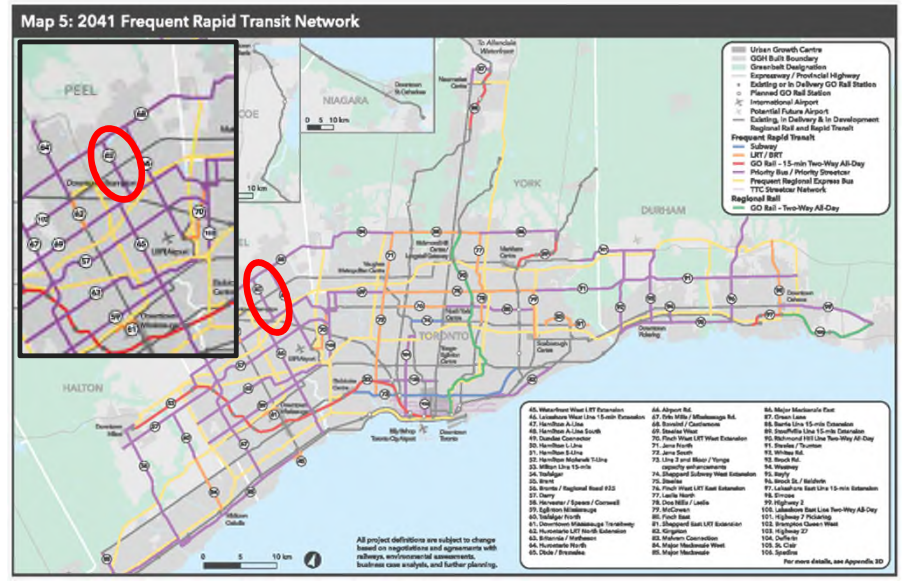
The RTP identifies the Dixie/Bramalea corridor as Priority Bus. Key characteristics of Priority Bus corridors include:

- Enforced HOV lane or other traffic restrictions
- Typically aligned to curb
- Queue jump lanes and signal priority at intersections
- Faster operating speed than mixed-traffic operation



Reference: Figure 20 from Metrolinx 2041 RTP

Reference: Figure 18 from Metrolinx 2041 RTP



Study Background – Transportation Planning

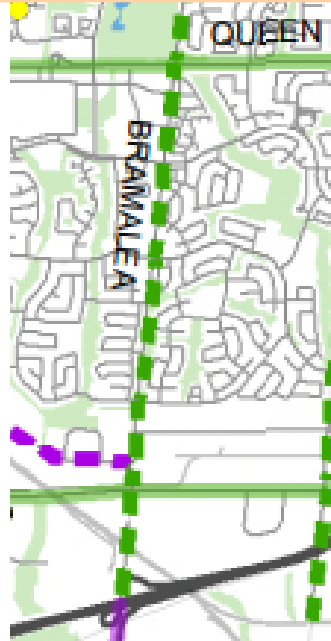
City of Brampton Transportation Master Plan (TMP) (2015)

Identifies improvements along the Bramalea Road Corridor to support future road, transit and active transportation networks.

City of Brampton Active Transportation Master Plan (ATMP) (2019)

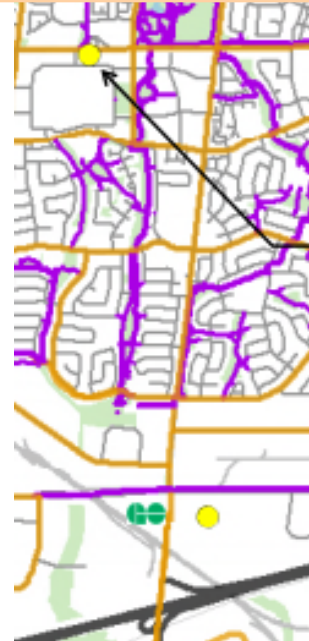
Recommends a multi-use/boulevard path along the Bramalea Road corridor.

2041 TMP Road Network



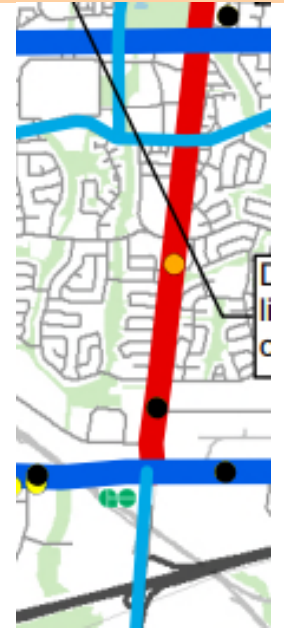
Widen Bramalea Road to 6 lanes

2041 TMP AT Network



Multi-use path/boulevard path for Active Transportation (pedestrians and cyclists)

2041 TMP Transit Network

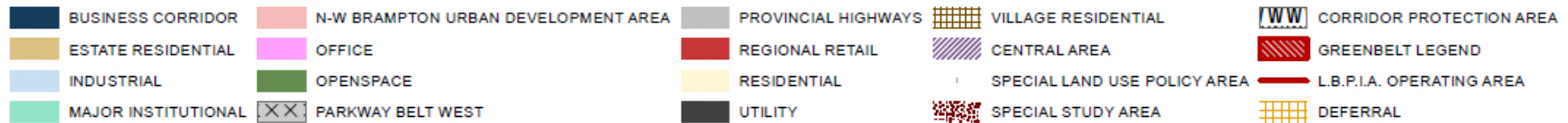
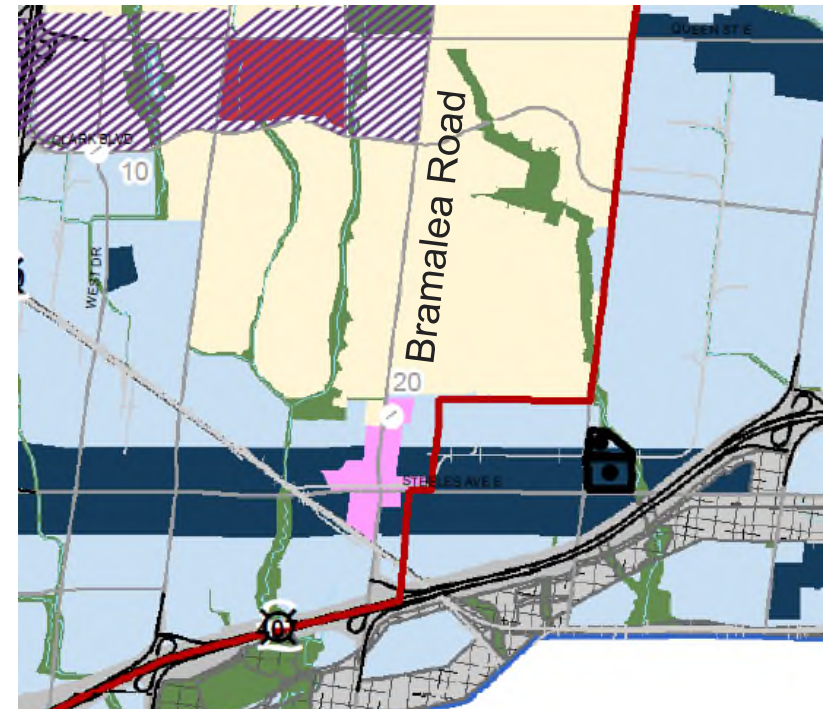


ZUM corridor connecting into a support corridor south of Steeles Avenue

Existing Conditions – Land Use

City Of Brampton Official Plan

- The study area is primarily Residential, with Industrial, Office and Business Corridor designated lands to the south.
- West of Bramalea Road, from Queen Street East to Clark Boulevard, is a designated 'Growth Centre', and is an important Regional Node which includes significant Civic, Institutional, Cultural, Entertainment, Commercial, Employment and Residential uses.



Existing Conditions – Land Use

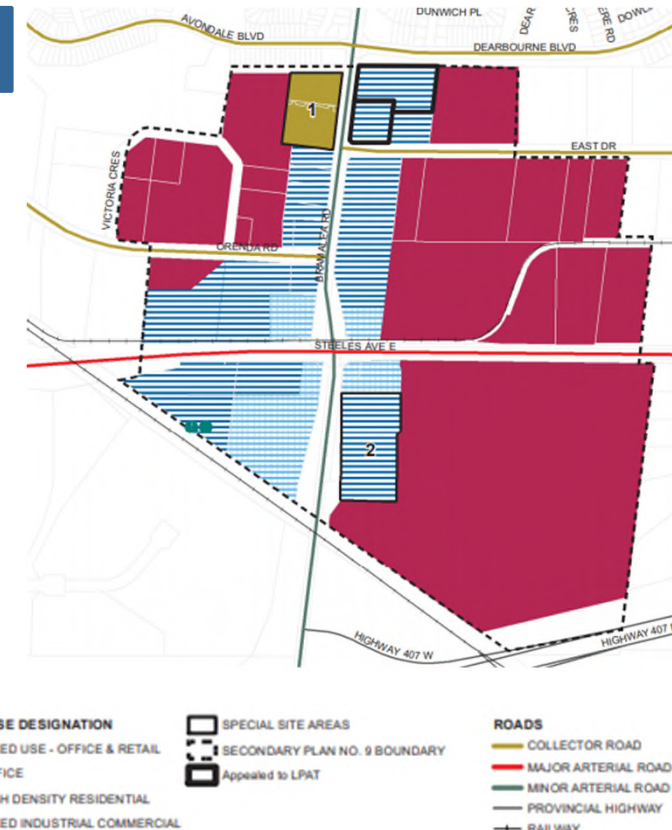
City Of Brampton Official Plan – Secondary Plan Areas

There are 5 Secondary Plans which surround the Study Area:

- Queen Street Corridor Secondary Plan
- Southgate Secondary Plan
- Avondale Secondary Plan
- Steeles Industrial Secondary Plan
- Bramalea Mobility Hub Secondary Plan

Bramalea Mobility Hub Secondary Plan

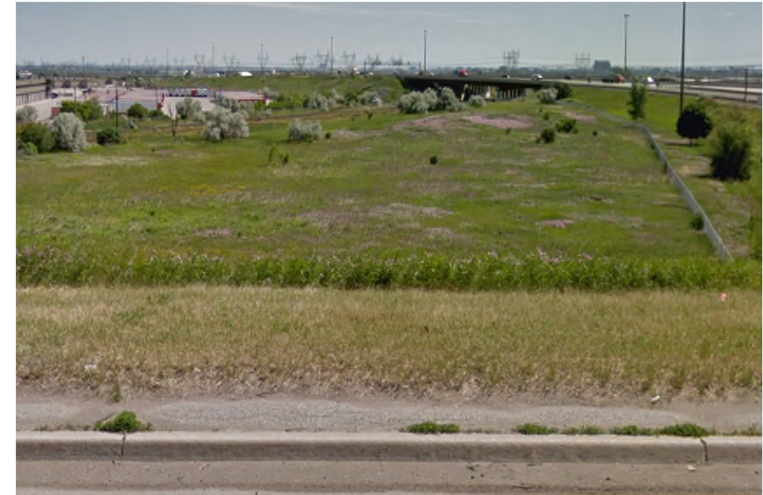
- A hub planned to accommodate a concentration of higher density mixed uses and have a built form and streetscape that are pedestrian friendly and support a compact and transit supportive node.
- Supports appropriate road widening of Bramalea Road from Steeles Avenue to Avondale/Dearbourne Avenue from 4 to 6 lanes, transit improvements including High Occupancy Vehicle or Reserved Bus Lanes (HOV/RBL), and local bicycle routes.



Existing Conditions – Natural Environment

Terrestrial Habitat

- A Terrestrial Habitat Assessment, Ecological Land Classification (ELC) mapping and Significant Wildlife Habitat (SWH) assessment were completed.
- Trees in the right-of-way were assessed by a certified arborist.
- Meadow habitat (pictured) in the southern section of the study area has the potential to provide habitat for Common Nighthawk, Eastern Meadowlark, Monarch and Rusty-patched Bumblebee.
- No species at risk (SAR) or SAR habitat was identified in the study area.



Fish and Fish Habitat

- There are no aquatic features in the study area.

Existing Conditions – Cultural Heritage

Built Cultural Heritage and Cultural Heritage Landscapes

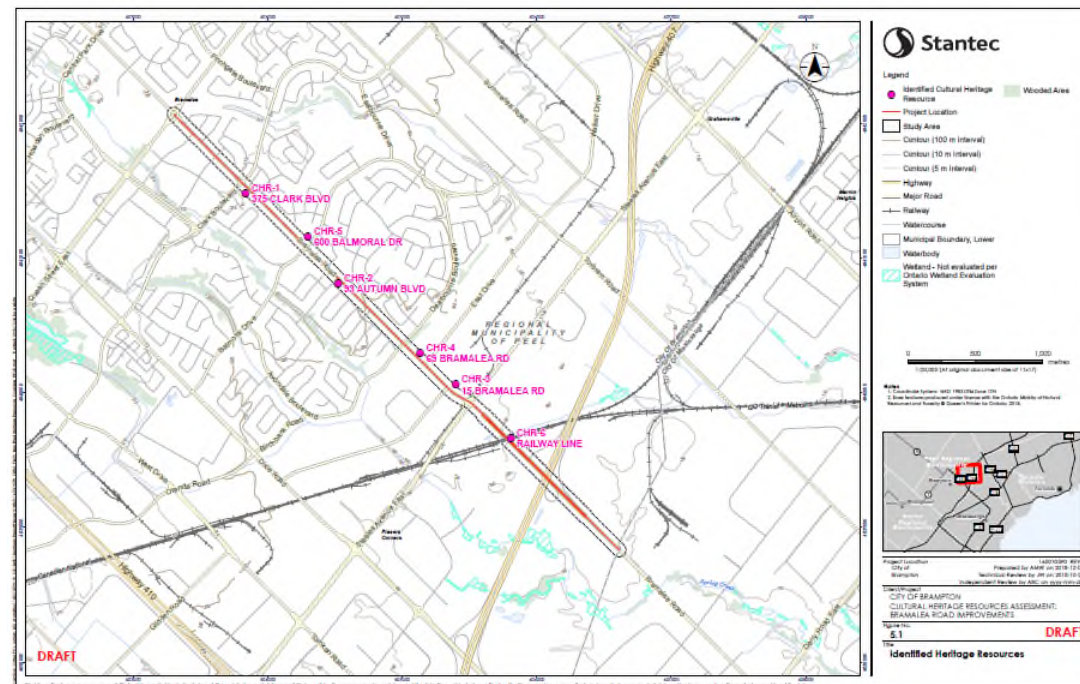
A Cultural Heritage Assessment has been completed.

- 3 properties in proximity to/within the study area are listed on the City's Municipal Register of Cultural Heritage Resources.
- 6 properties were determined to have Cultural Heritage Value or Interest, under O. Reg. 9/06.
- No provincial heritage properties are within or adjacent to the Study Area.

Archaeological Resources

A Stage 1 Archaeological Assessment has been completed. Previously disturbed areas along the Bramalea Road Corridor retain low to no archaeological potential.

A Stage 2 archaeological assessment is required for areas which remain undisturbed, as there is potential for archaeological resources.



Existing Conditions - Transportation

Bramalea Road is a 4-lane Minor Arterial Road, designated as a Primary Transit Corridor.

Cycling Facilities



The only available cycling facility within the study area is a Multi-Use Path on the east side of the Bramalea Road corridor. The path runs from Balmoral Drive to Dearbourne Boulevard.

Transit Services



Serviced by GO Transit, Brampton Transit with bus stops provided along the corridor. Transit is part of mixed-use traffic on Bramalea Road. Bramalea GO Station is located at south end of Study Area.

Pedestrian Facilities



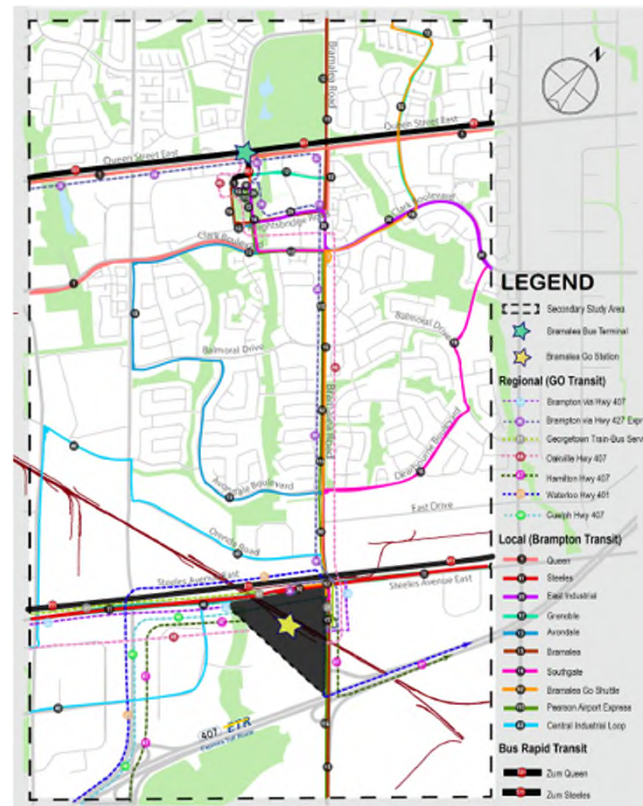
Bramalea Road has existing sidewalks along the east and west sides of the corridor, which become discontinuous south of Steeles Avenue.

Existing Conditions - Transportation

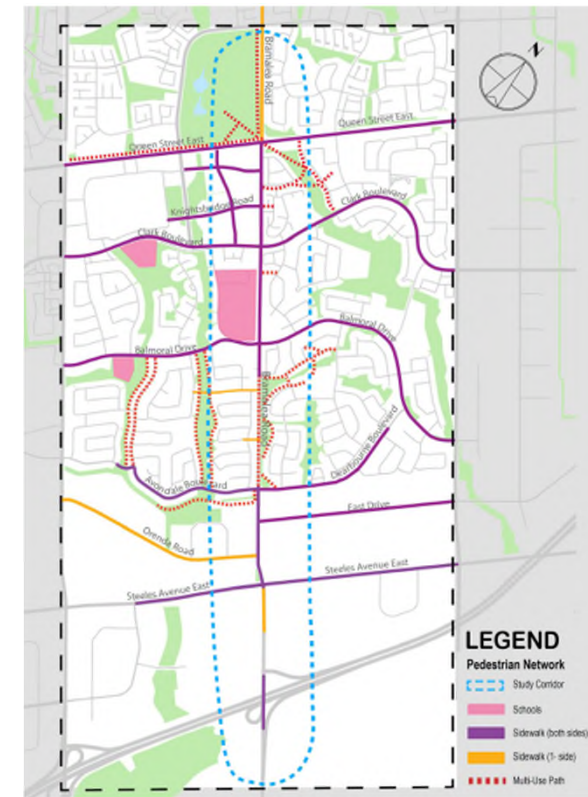
An existing conditions assessment was completed to identify the transportation problems in the corridor and evaluate alternatives which best serve all modes of transportation.

Existing Conditions Assessment

- Population & Employment Characteristics
- Land Use Characteristics
- Transit Routes
- Active Transportation Facilities
- Network Capacity Assessment
- Synchro & VISSIM Modelling
- Multi-Modal analysis, which looks at the benefits to transit, cycling, pedestrian, truck, and automotive Levels Of Service (MMLOS).








Existing Transit Routes



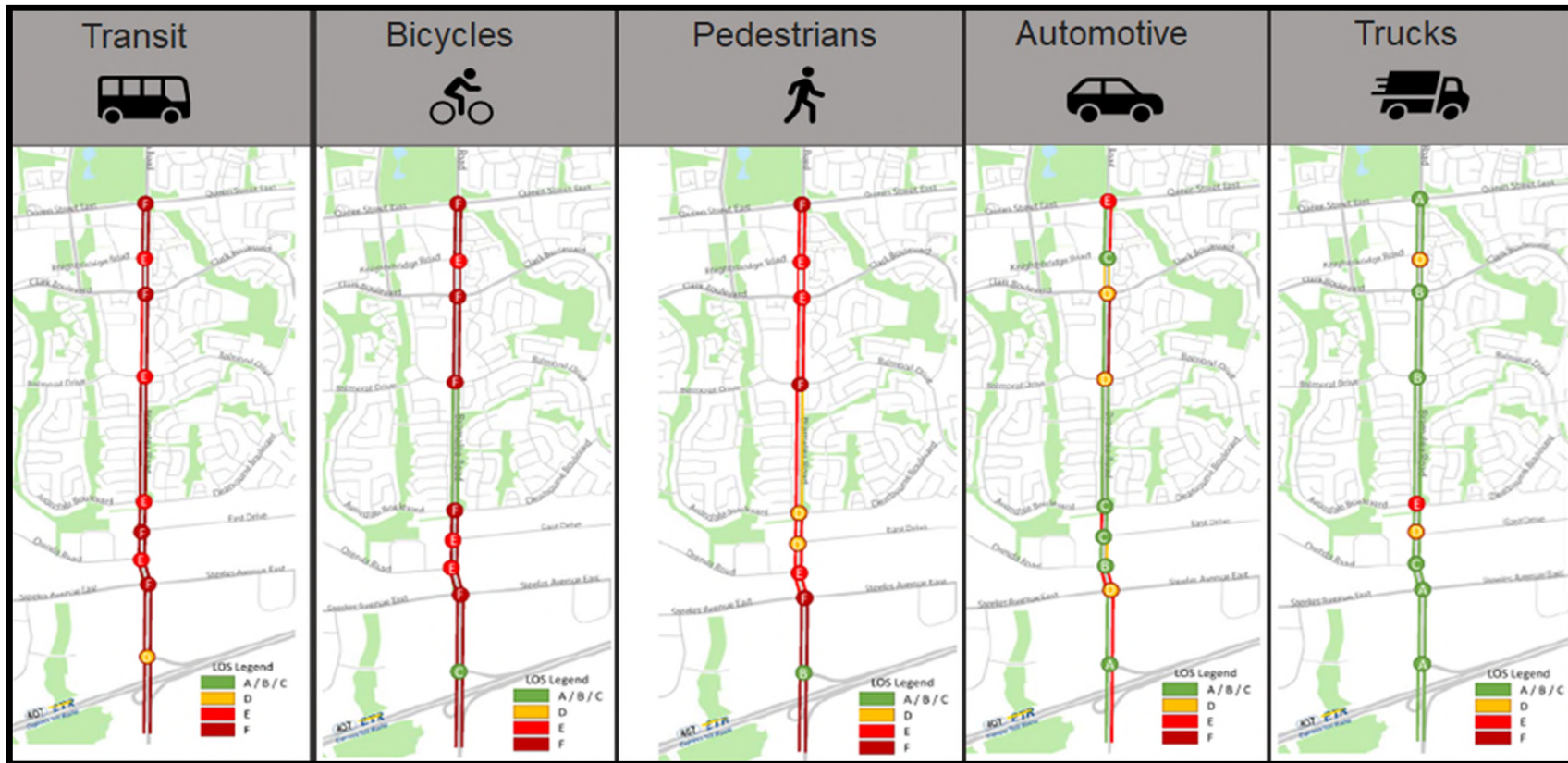
Existing Active Transportation Facilities

Existing Conditions – Multi-Modal Level of Service

Level of Service (LOS) is a mechanism used to determine how well a transportation facility is operating from a traveler's perspective. The following LOS criteria was used to analyze the Bramalea Road corridor:

Mode	High Level of Service (LOS A, B, C, D)		Low Level of Service (LOS E, F)	
	A / B / C	D	E	F
Transit 	Short delays, high levels of reliability		Long delays, low levels of reliability	
Bicycles 	High level of comfort, low level of risk/stress		Low level of comfort, high level of risk/stress	
Pedestrians 	High level of comfort, low risk, short delays		Low level of comfort, high risk, long delays	
Automotive 	Low lane utilization		High lane utilization	
Trucks 	Unimpeded movement, short delays		Impeded movement, long delays	

Existing/Future (2041) Do Nothing - Transportation



The Multi-Modal Level of Service (MMLOS) along the existing corridor is similarly represented as the Future (2041) Do Nothing MMLOS.

Existing Conditions – Safety

The overall recorded collisions have dropped significantly between 2012 and 2017.

Intersection Safety

The highest number of collisions along the corridor were reported at the intersections of Bramalea Road with Queen Street East and Steeles Avenue East. Intersection improvements will consider upgrades to the pedestrian crossings, removal of the channelized right turns, inclusion of crossings for cyclists, and interaction with the rail crossing at Steeles Avenue.



Mid-Block Safety

The segments north and south of Steeles Avenue, and the segment between Clark Boulevard and Balmoral Drive experienced the highest number of collisions. Access points will be reviewed for access management improvements as part of the overall preferred plan. In addition, the overall traffic speeds will be reviewed.



Problem & Opportunities

The City of Brampton is transitioning from a historically “suburban” to a more “urban” development context. New infrastructure, transportation services, and travel demand management measures are required to accommodate this rapid growth while protecting established communities and businesses. The City of Brampton aims to curb urban sprawl, develop “complete communities”, protect employment lands, foster intensified development, and is committed to rethinking how their transportation system can meet future demand.

Active Transportation

Poor pedestrian and bicycle level of service due to narrow sidewalks, high traffic volumes and operating speeds, along with missing sidewalks at the south limit of the study area. Bicycle facilities are generally missing throughout the corridor.

Transit

Operates generally at a poor level of service because of buses travelling in mixed traffic and in congested conditions during peak periods, with no transit priority measures.

Automobiles

Shows issues with level of service at certain locations that will worsen by 2031 and 2041.

Goods Movement

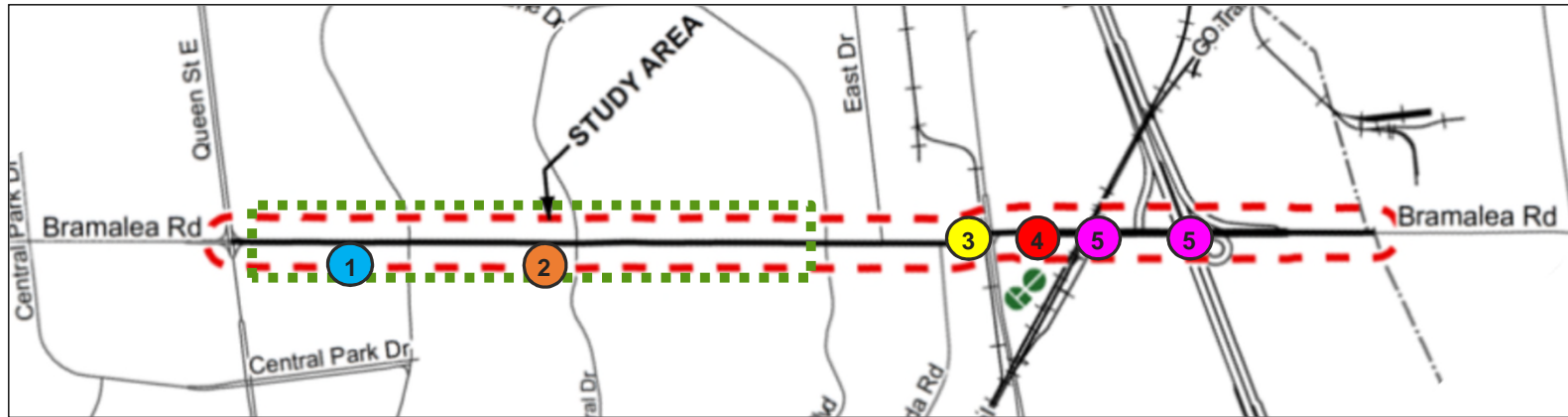
Shows issues with level of service at certain locations that will worsen by 2031 and 2041.

Due to projected growth in travel demand, Bramalea Road corridor is forecasted to experience multi-modal deficiencies. If not addressed, the road will become more congested, and alternative modes of transportation will continue to be underutilized.


Alternative Solutions Considered

Alternative Solution		Description
1	Do Nothing	Maintain existing conditions, including the number of lanes, discontinuous sidewalks and no cycling facilities.
2	Improvements to Other Roadways	Capacity improvements would take place on parallel roadways (e.g., Dixie Road, Torbram Road) to attract auto users away from Bramalea Road.
3	Transportation Demand Management (TDM)	Implement transportation demand management measures to reduce travel demand and encourage use of sustainable modes of transportation.
4	Active Transportation (AT) Improvements (Pedestrian and Cyclists)	Widen right-of-way enough to accommodate continuous cycling and pedestrian facilities along Bramalea Road through the implementation of multi-use paths along the corridor that are maintained year-round, with signalized crossrides. Improve pedestrian comfort and reduce intersection delay by reducing the speeds along Bramalea Road and increasing the effective walk time.
5	Widen Corridor to Accommodate Transit Queue Jump Lanes (with AT improvements)	Maintain the existing number of lanes and widen corridor enough to accommodate queue jump lanes for buses.
6	Conversion of Curb Lanes to Dedicated HOV/Transit Lane ("Road Diet") (with AT improvements)	Maintain existing number of lanes and convert the farthest right lane (in each direction) into dedicated Transit/HOV lanes.
7	Widen Corridor to Accommodate 4 General Purpose Lanes (GPL) and 2 Dedicated Transit/HOV Lanes, including AT improvements	Widen right-of-way to 6 lanes with dedicated transit/HOV lanes.

Corridor Constraints



Key Features of the study area include:

- 1 Underground parking infrastructure near right of way
- 2 Bramalea Secondary School
- 3 At grade rail crossing at Steeles Avenue
- 4 Discontinuous sidewalks and cycling facilities
- 5 Structures over Highway 407 and rail line
-  Residential properties in close proximity to right of way



Factors for Analysis and Evaluation

Alternative Solutions were assessed using the factors and criteria below, and will integrate comments received from agencies, stakeholders and members of the public.



Technical Considerations

- Accommodation of Future Travel Demands
- Safety
- Road Network Compatibility/Connectivity
- Public Transit Service
- Accommodation of Pedestrians/Cyclists
- Response Times/Access for Emergency Vehicles
- Neighbourhood Traffic Infiltration – Local Access
- Accessibility
- Travel Time
- Services/Utilities
- Costs
- Benefit of Transportation Investment
- Construction Staging



Socio-Economic Environment

- Land and Regional Planning
- Community/Urban Design
- Compatibility with Existing and Proposed Developments
- Aesthetics
- Property Impacts
- Business Operations
- Noise Impacts



Planning Objectives

- Consistent with Provincial Plans and Policies
- Consistent with Regional Plans and Policies
- Consistent with Municipal Plans and Policies



Natural Environment

- Vegetation and Wildlife
- Air Quality
- Climate Change
- Groundwater



Cultural Environment

- Archaeological Resources
- Cultural Landscapes
- Built Heritage Resources

Alternative Solutions

Evaluation Criteria	Planning Objectives	Technical Considerations	Natural Environment	Cultural Environment	Socio-Economic Environment	Recommendation
	Alternatives:					
1. Do Nothing						<i>Not Recommended</i>
2. Improvements to Other Roadways						<i>Not Recommended</i>
3. Travel Demand Management (TDM)						Carried forward as part of overall recommended solution.
4. Active Transportation (AT) Improvements (Pedestrian and Cyclists)						Carried forward as part of overall recommended solution.
5. Widen Corridor to Accommodate Transit Queue Jump Lanes (with AT Improvements)						Carried forward as part of overall recommended solution.
6. Conversion of Curb Lanes to Dedicated HOV/Transit Lane ("Road Diet") (with AT Improvements)						<i>Not Recommended</i>
7. Widen Corridor to Accommodate 4 General Purpose Lanes and 2 Dedicated /HOV Lanes (with AT Improvements)						<i>Not Recommended</i>

Most Preferred

Moderately Preferred

Least Preferred

Preliminary Preferred Alternative Solution

To support future growth and travel demands within the City of Brampton, and to improve capacity along the Bramalea Road corridor, the following combination of alternative solutions are recommended to allow flexibility to address the identified problems and opportunities:

- Transportation Demand Management
- Active transportation improvements (pedestrian and cyclists)
- Widen the northern portion of the corridor to accommodate transit queue jump lanes
- Widen the southern portion of the corridor to accommodate 4 general purpose lanes and due to closely spaced intersections, queue jump lanes are extended throughout as continuous transit lanes

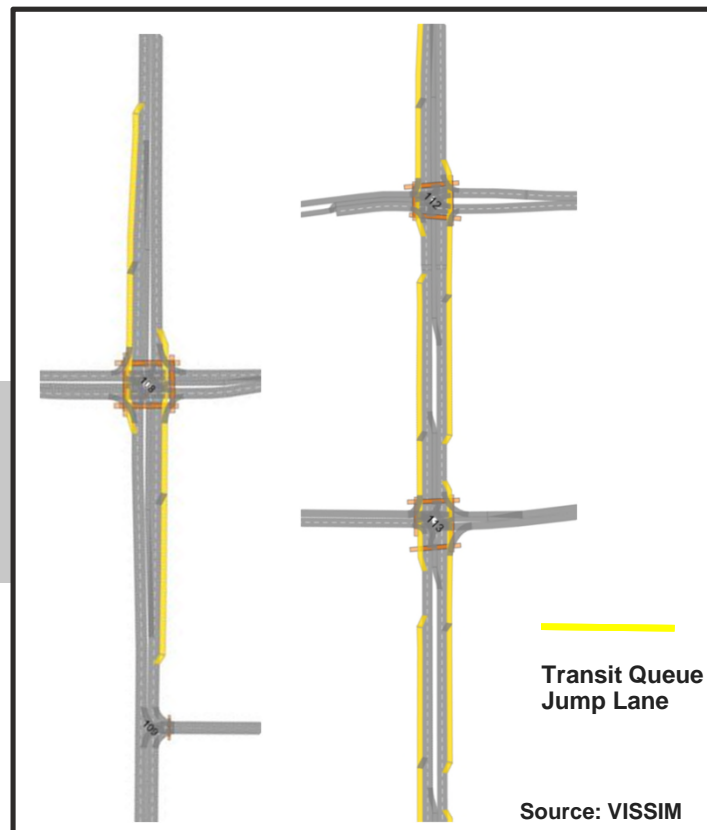
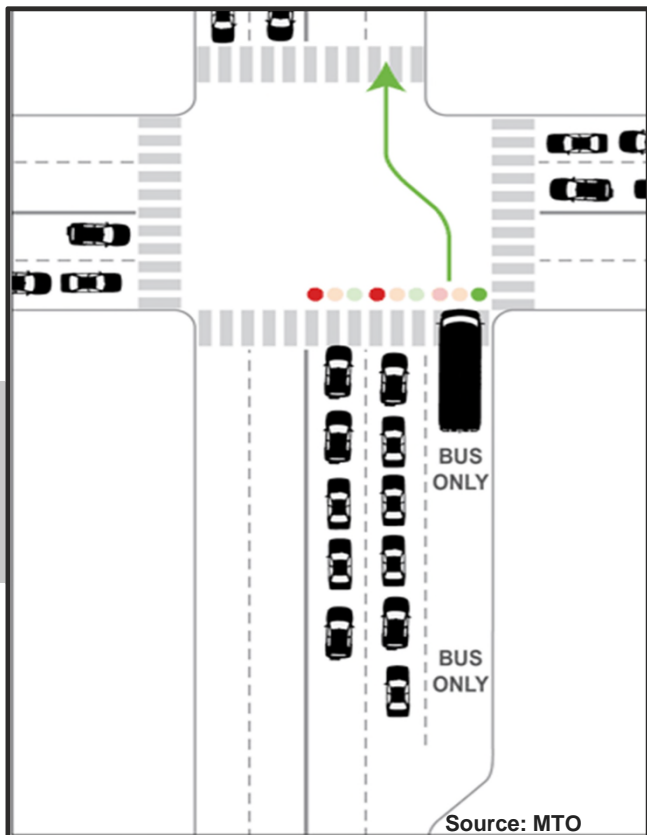
This combination of alternative solutions will prioritize the needs for pedestrians, cyclists, transit *then* auto users, providing sufficient capacity for future growth and development in the City.

Transportation Demand Management

The City of Brampton is looking toward TDM to provide techniques to alter travel behaviour; assist in the management of transportation impacts; and address travel demand associated with the anticipated population growth of the City over the next 30 years. A few program options in the City's TDM Toolkit include a Workplace Commuter Program, Rideshare, and Carshare.

Preliminary Preferred Alternative Solution

Queue Jump Lanes (with signal priority) can assist transit to "jump" the queue of vehicles at an intersection and reduce their time in congested mixed traffic.



Conceptual illustration of Queue Jump Lane layout at an intersection.

Technical Studies

Several technical studies are used to inform the evaluations and identify impacts of the proposed alternative solutions. The following studies have been completed:

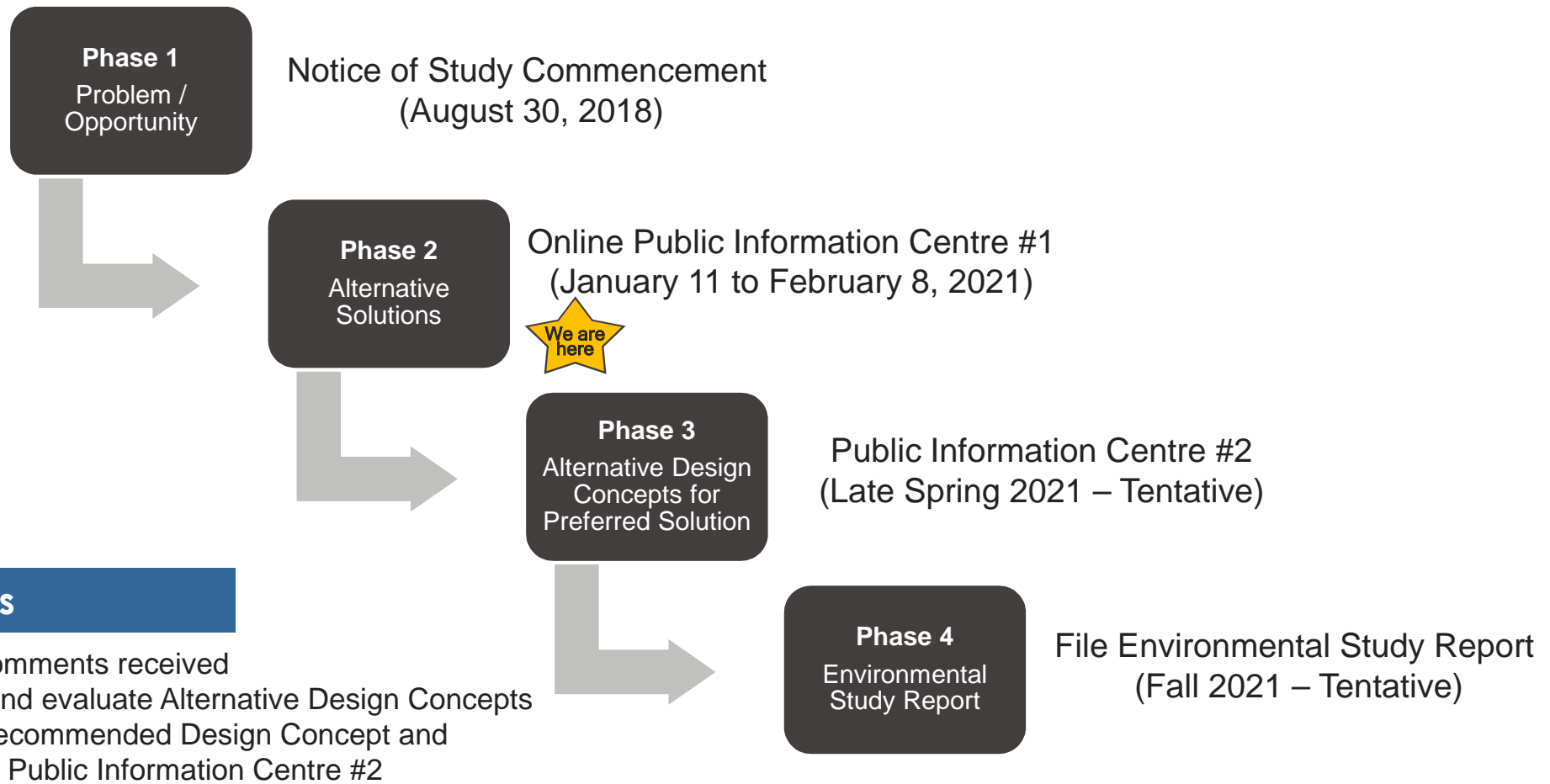
Natural Environment Assessment	Socio-Economic Environment	Stage 1 Archaeological Assessment
Built and Cultural Heritage Assessment	Transportation and Traffic Multimodal Analysis	Safety Assessment

The following studies are currently underway and will be completed in next phase of the study:

Stormwater Management Report	Phase 1 Environmental Site Assessment	Structural Assessment
Hydrogeological Investigations	Noise Assessment	Geotechnical Investigations

Findings and recommendations from the technical studies will refine the preferred solution and will appear in the final Environmental Study Report (ESR).

Study Schedule



Thank you for attending!

Please complete the online comment form or contact us by email or phone to share your thoughts by February 8, 2021.



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Community Outreach



Direct Mail Notices



Public Information Centre



City of Brampton Social Media



Newspaper Notices



Agency Meetings



Stakeholder Group Meetings



For more information, visit us at: www.Brampton.ca/BramaleaEA