

WELCOME

**Williams Parkway Capacity Improvements Review
(from McLaughlin Road to North Park Drive)**

Council Workshop

Date: June 15, 2020

Agenda

- Why are we here?
- The motion
- Background information for Williams Parkway
 - Scope of work, schedule
 - What happened along the way
- Review of options
- Going forward...

Why are we here?

- Many influences on a road project (long timelines, many different points of view, different vision, changing legislation)
- Brampton is at a pivotal point in development
- We cannot keep doing things the same way
- Contrasting views on increasing people moving capacity vs. congestion
- Williams Parkway is the first of several previously identified 6 lane widening projects currently pending

Why are we here?

- Today's presentation has been developed with input from staff from various City divisions, the Region of Peel, and the Ontario Ministry of Transportation
- We are here to discuss the issues, present options and then after getting public input, take your direction as a unified team for Williams Parkway

Key issues identified by the community

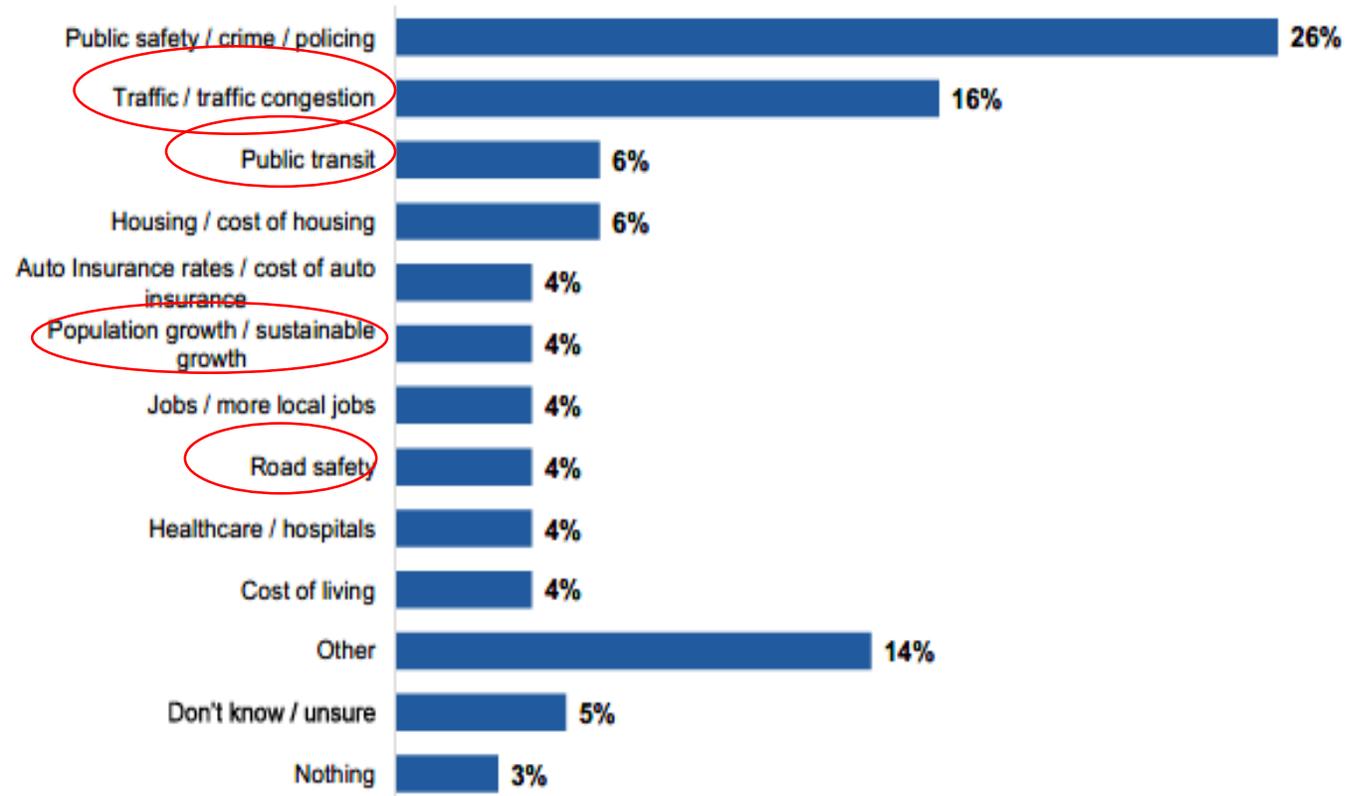
In 2019, a quarter of Brampton residents say the most important local problem facing Brampton today is **public safety, crime, and policing**. The second most important problem is **traffic and congestion**.

Similarly in the focus groups, participants talked about traffic/congestion, crime/safety, and cost of living/taxes.

In 2015, residents said **traffic on city streets** (20%) was the most important problem facing Brampton. Only 2% in 2015 said **crime** was the most important problem facing Brampton.

*Note: Not directly comparable to 2019 due to differences in coding.

Most Important Local Problem Facing Brampton (Top 10)



Council Motion – October 23, 2019

Minutes Committee of Council

2. Staff review include a council workshop to solicit comments on options and opportunities for managing traffic congestion due to growth and for increasing and maximizing people-moving capacity in the Williams Parkway corridor, through travel demand management opportunities, improvements to active transportation (walking, cycling) and transit infrastructure and services, and operational interventions and improvements, in particular at intersections. The review should consider:
 - Impacts on the use of Development Charge funding
 - Consideration of current strategic documents (Growth Plan, Official Plan, Transportation Master Plan, impact on existing Environmental Assessments...)
 - Impacts on surrounding local streets for traffic
 - Impact on the Regional road network and goods movement
 - Green House Gas considerations
 - Work that is done in partnership with the Region, utilities...
 - A review of the current 6 lane road widening projects that are underway and 'meantime' strategies (current EA's, land protection, utility relocation, design progression)
 - Strategy for a robust communication plan

Carried

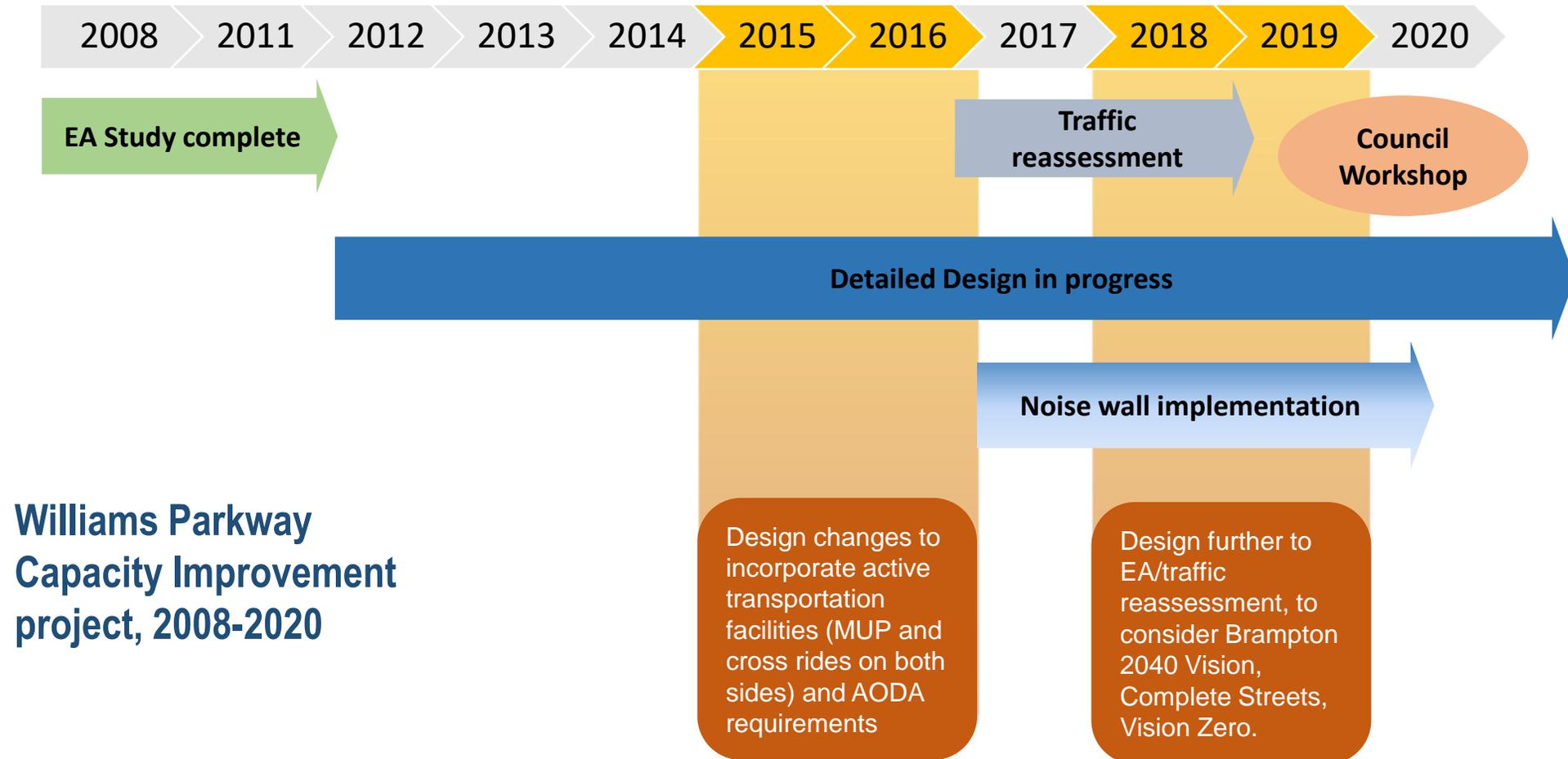
Background

- 2004** The City's Transit and Transportation Master Plan (TTMP) identifies Williams Parkway widening to 6 lanes between McLaughlin Road and North Park Drive for potential network capacity improvement.
- 2006** The City's Official Plan identifies Williams Parkway as minor Arterial and an important east-west connection.
- 2009** The City's updated Transit and Transportation Master Plan (TTMP) continues to show widening of Williams Parkway to 6 lanes from McLaughlin Road to North Park Drive.
- 2011** Class Environmental Assessment recommends widening of Williams Parkway between McLaughlin Road and North Park Drive to 6 lanes.
- 2015** Updated Transportation Master Plan (TMP) includes previous conclusions regarding widening of Williams Parkway to 6 lanes by 2021.

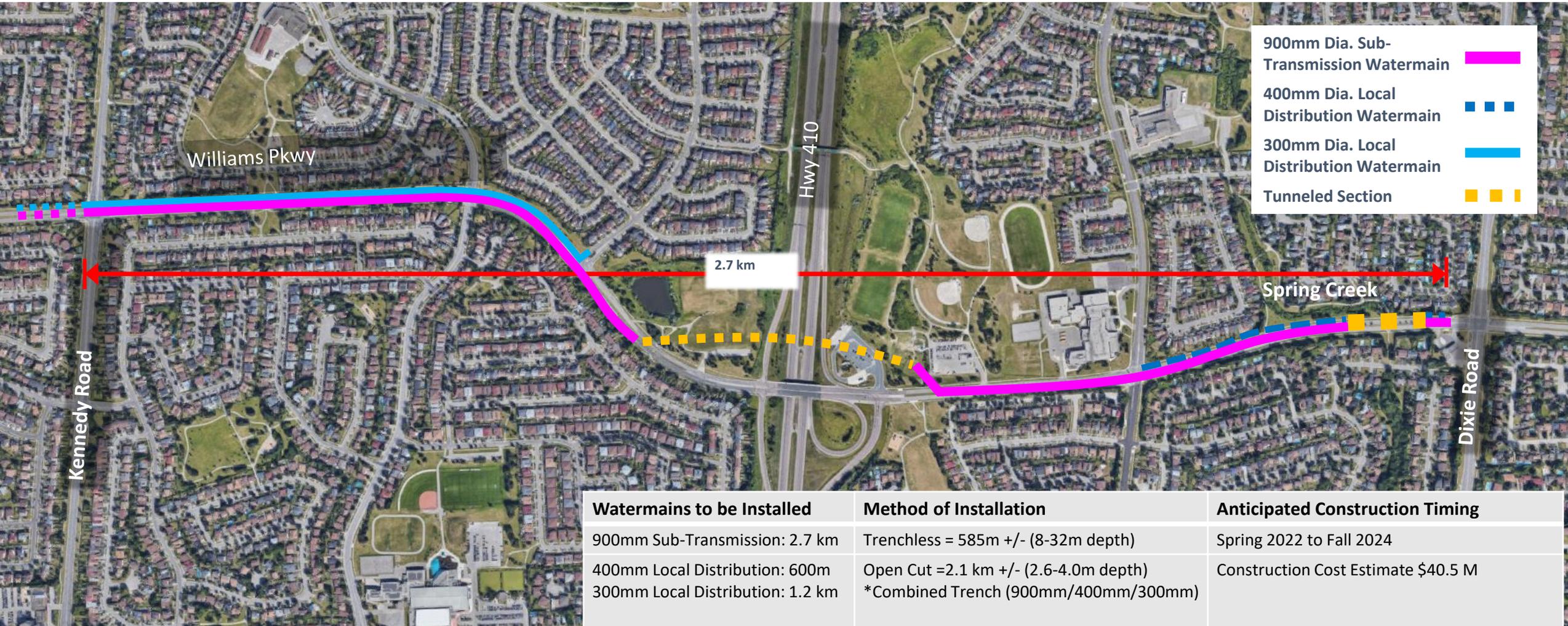
Background

- 2018** Multi-modal transportation reassessment study completed. Recommends widening of Williams Pkwy to 6 lanes from McLaughlin Road to North Park Drive, with additional lanes to serve HOV/Transit.
- 2018** Council endorses 2018-2028 Roads Capital Program, that includes Williams Parkway widening between McLaughlin Road and North Park Drive.
- 2018** Council endorses *Living the Mosaic: Brampton's 2040 Vision*, which includes reshaping Brampton's approach to transportation planning, with priority on alternative transportation modes and vulnerable road users.
- 2019** Council passes a motion for staff to review options and opportunities to maximize people movement capacity on Williams Parkway corridor.

How we got here...



Region of Peel Watermain works (Kennedy Rd to Dixie Rd)



900mm Dia. Sub-Transmission Watermain █

400mm Dia. Local Distribution Watermain - - -

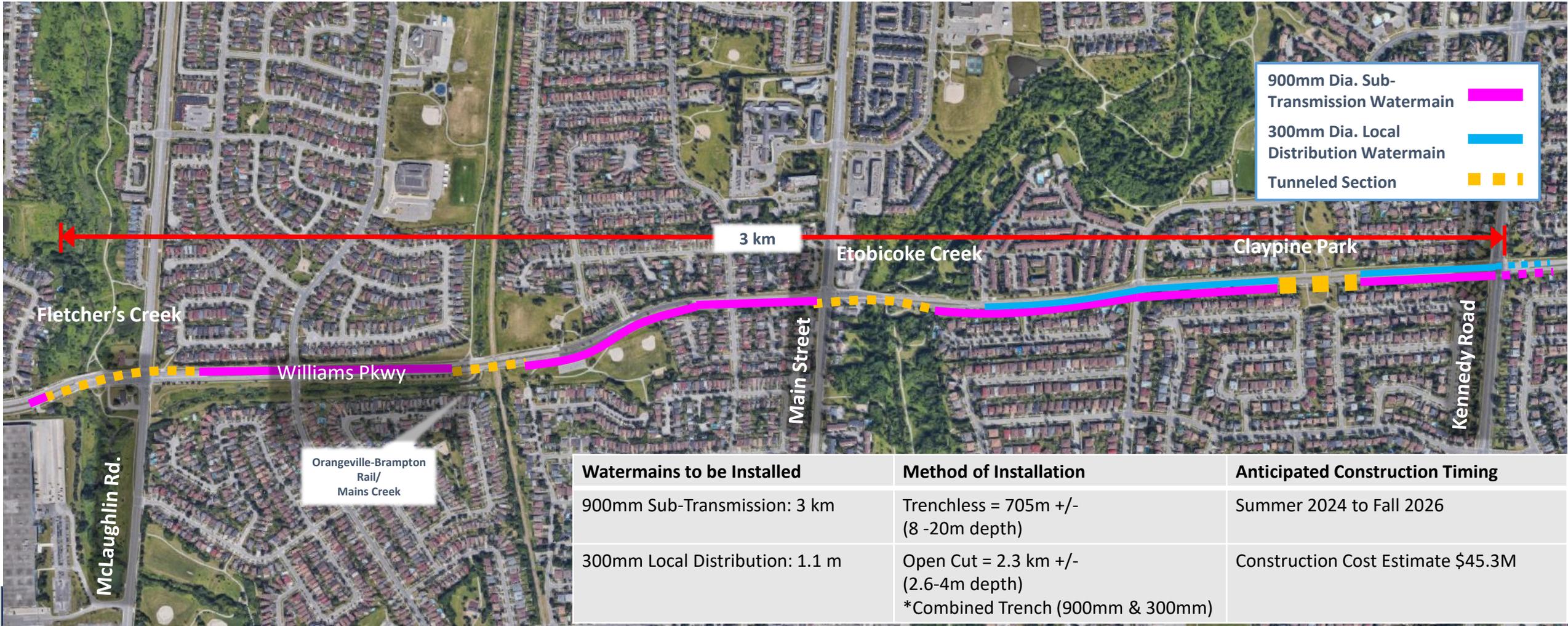
300mm Dia. Local Distribution Watermain █

Tunneled Section - - -

2.7 km

Watermains to be Installed	Method of Installation	Anticipated Construction Timing
900mm Sub-Transmission: 2.7 km	Trenchless = 585m +/- (8-32m depth)	Spring 2022 to Fall 2024
400mm Local Distribution: 600m	Open Cut = 2.1 km +/- (2.6-4.0m depth)	Construction Cost Estimate \$40.5 M
300mm Local Distribution: 1.2 km	*Combined Trench (900mm/400mm/300mm)	

Region of Peel Watermain works (Kennedy Rd to McLaughlin Rd)



900mm Dia. Sub-Transmission Watermain	█
300mm Dia. Local Distribution Watermain	█
Tunneled Section	█ █ █

Watermains to be Installed	Method of Installation	Anticipated Construction Timing
900mm Sub-Transmission: 3 km	Trenchless = 705m +/- (8 -20m depth)	Summer 2024 to Fall 2026
300mm Local Distribution: 1.1 m	Open Cut = 2.3 km +/- (2.6-4m depth) *Combined Trench (900mm & 300mm)	Construction Cost Estimate \$45.3M

Coordination with adjacent Peel projects

SERVICING & GROWTH

- The West Bram Watermain (900mm dia.) represents a major interconnection of the backbone of Peel's water supply network to ensure service continuity to the City of Brampton.

COORDINATION ISSUES

- Potential for general coordination with other future projects.
- Watermain constructed concurrently with the road widening project will mitigate construction impact to area.
- Local (small dia.) WM replacement could proceed in advance of the Williams Pkwy widening project.

COST & TIMING

- Deferred projects will see increased construction costs.
- Deferral of all WM work will increase reliance on older infrastructure, potentially increasing repair and restoration costs.
- Capacity will depend on rate of development

Rehabilitation of Williams Parkway bridge over Highway 410 (MTO)



Construction Start: Spring 2023
Construction End: Fall 2024

Estimated Cost for MTO: \$4.0 Million

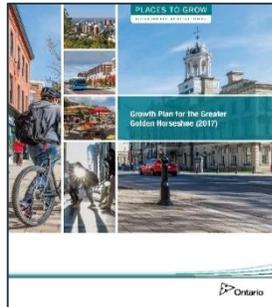
This work will be included in the City's contract on behalf of MTO as long as construction starts prior to Spring 2023.

Proposed Schedule

Project Milestone Description	Construction Start Date
Phase 1 – Construction of Noise wall along Williams Parkway between Harridine Road and North Park Drive	Late 2018
Phase 2 – Implementation of Williams Parkway Improvement between Kennedy Road and North Park Drive	Spring 2022
Phase 3 – Implementation of Williams Parkway Improvement between Kennedy Road and McLaughlin Road	Spring 2024



Planning and Policy Context



Provincial Growth Plan (2019)



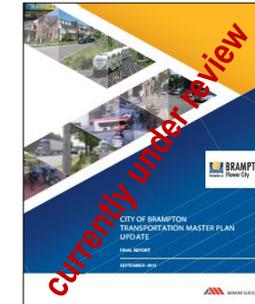
Region of Peel Official Plan with amendments (2018)



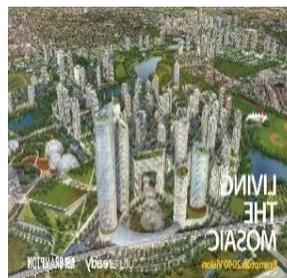
Region of Peel Long Range Transp. Plan (2019)



City of Brampton Official Plan OMB approved (2008)



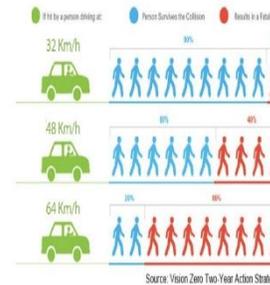
City of Brampton updated Transportation Master Plan (2015)



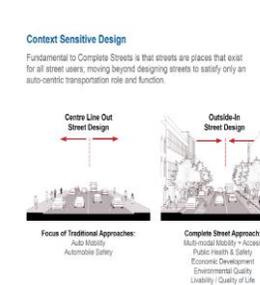
Brampton Vision 2040 (2018)



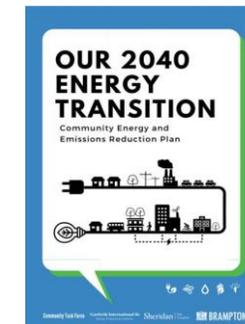
City of Brampton Active Transportation Master Plan (2019)



Council approved vision zero for road safety (2019)



Complete Street context design study (in progress)



Community Energy and Emission Reduction Plan (in progress)

Brampton 2040 Vision

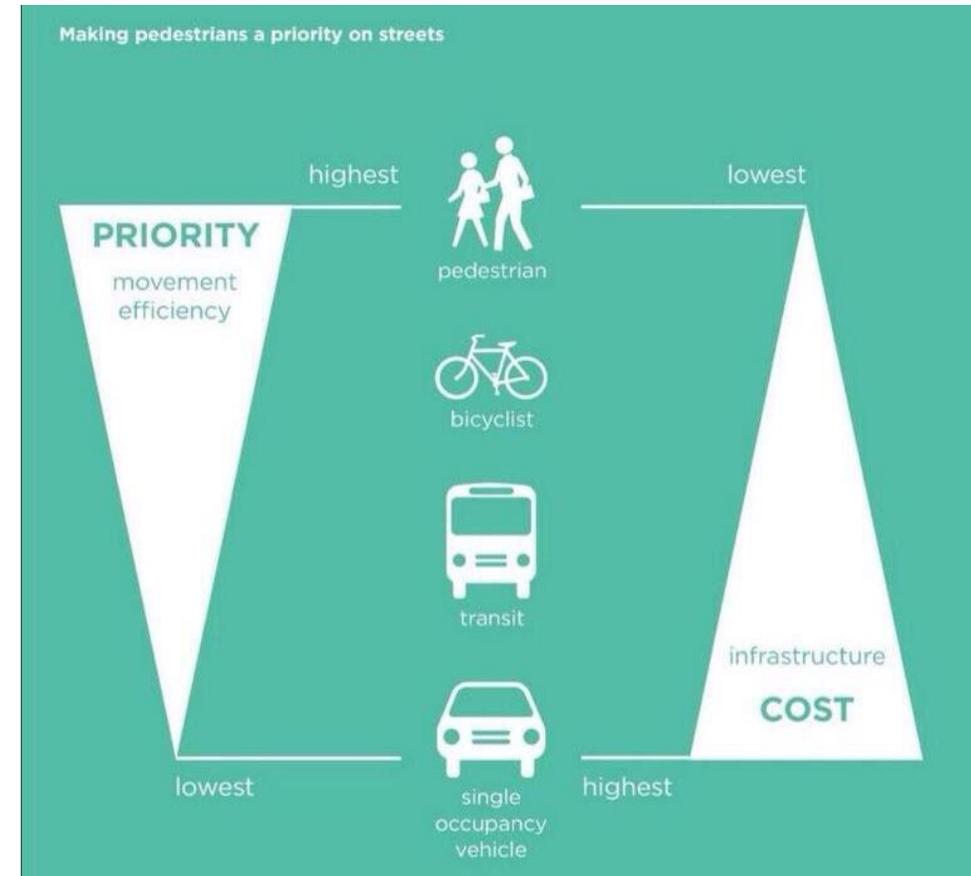
Living the Mosaic - Vision #4

Brampton will be a mosaic of safe, integrated transportation choices and new modes, contributing to civic sustainability, and emphasizing walking, cycling, and transit.

“The primary direction for transportation planning and management is providing travel choices as alternatives to the car and reclaiming road space for other activities.”

“People also want more safety in the transportation system ... No one wants even a single person sacrificed to the demands of fast mobility.”

“Priorities in the civic transportation agenda will be: first walking, then cycling, transit, goods movement, and then shared vehicles and private vehicles.”

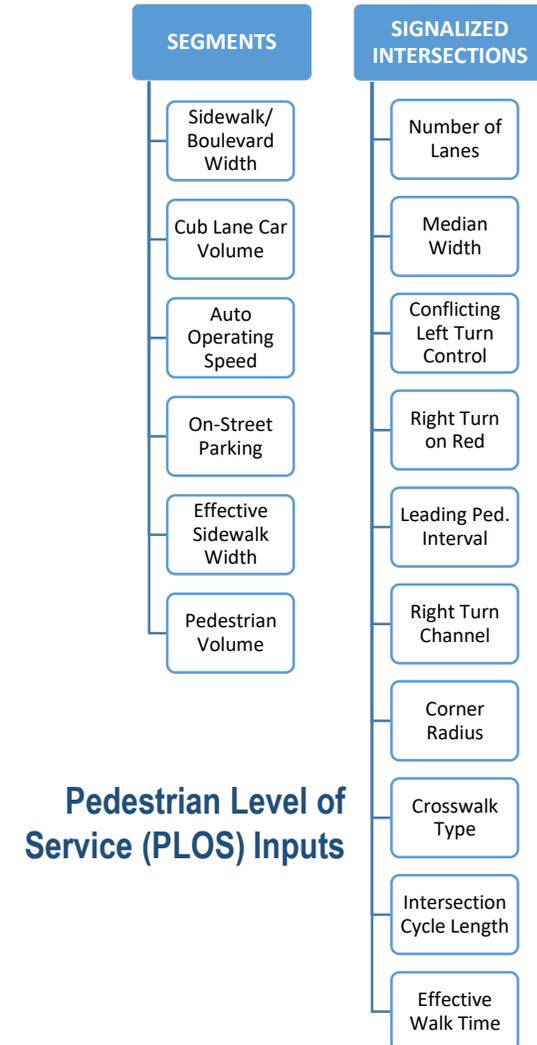


Complete Streets for Brampton...

- Create and support a healthy, prosperous, and beautiful city.
- Provide safe, equitable and convenient travel for people of all ages and abilities and accommodate all users.
- Incorporate green infrastructure to enhance the city's environmental quality.
- Recognize existing and planned land use contexts and apply to all street projects.
- Not all streets are the same (even within the same functional classification) and different priorities related to context will inform overall design.



An Alternative Perspective: MMLoS



Demographic Trends

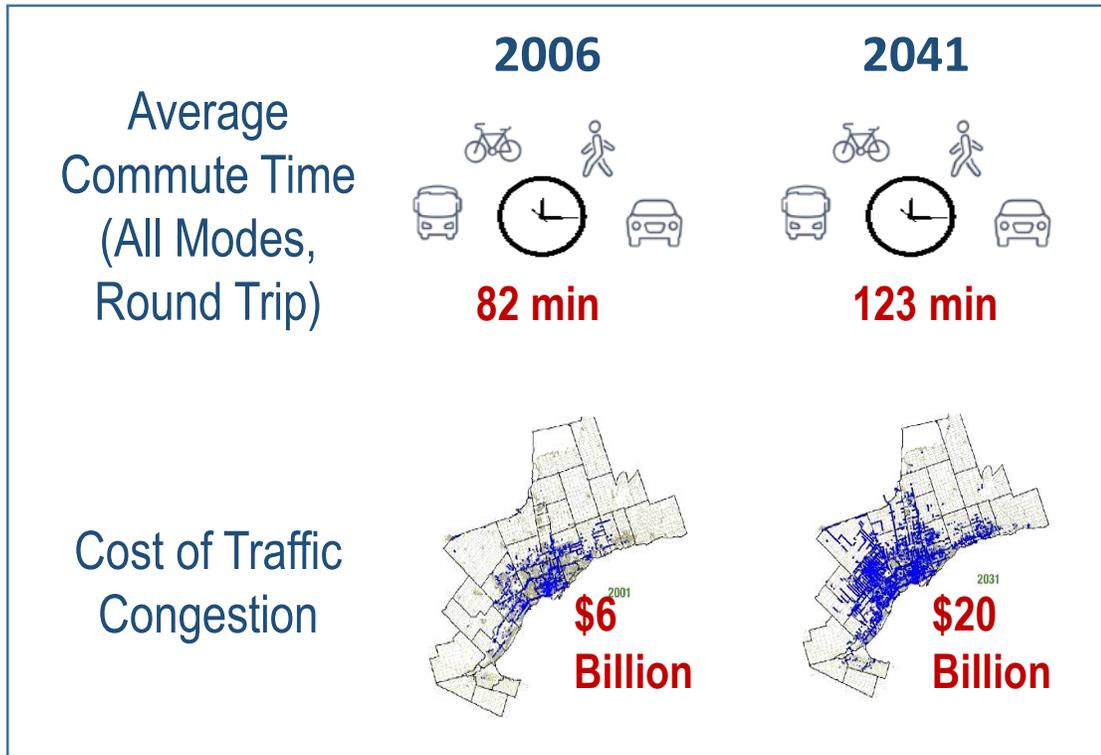
- Strong population and employment growth is forecast for Brampton, Peel Region and the GTHA between 2016 and 2041.
- Brampton's population and employment are forecast to grow by approximately 45% and 70%, respectively, between 2016 and 2041.
- If the current travel choices and patterns of Brampton and Peel residents stay the same, the additional trips from this growth will put significant strain on the City and Regional transportation network.

	Population			Employment		
	2016	2041	Growth	2016	2041	Growth
City of Brampton	615,700	890,000	45%	191,600	325,000	70%
Region of Peel	1,433,100	1,970,000	37%	695,500	970,000	39%
GTHA	6,954,000	10,130,000	46%	3,610,000	4,820,000	34%

Sources: Region of Peel preliminary forecasts, Growth Plan for the Greater Golden Horseshoe, 2016 Census

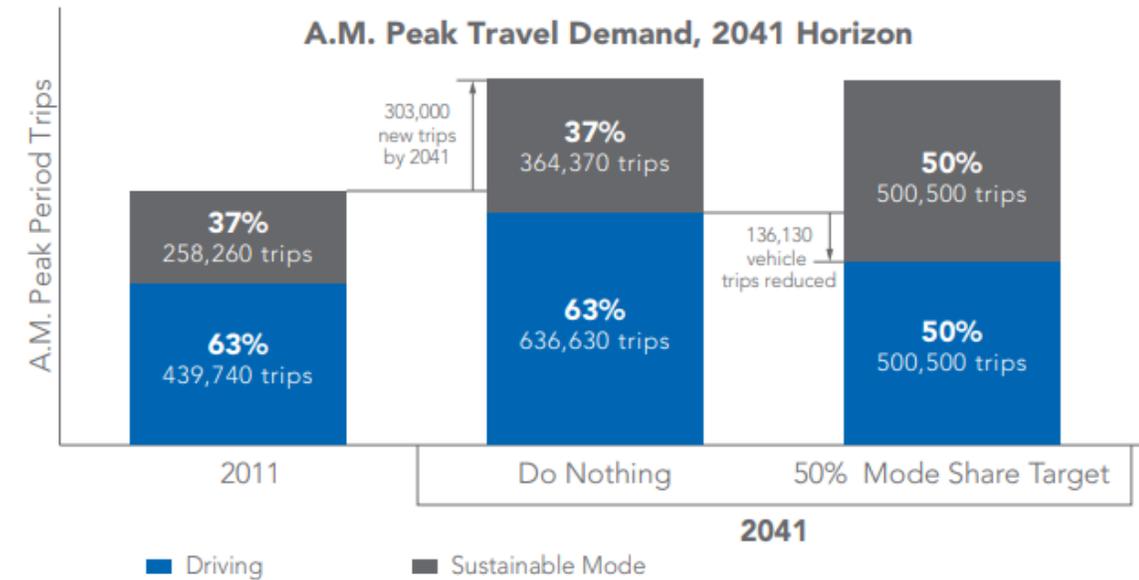
Transportation Trends

GTHA



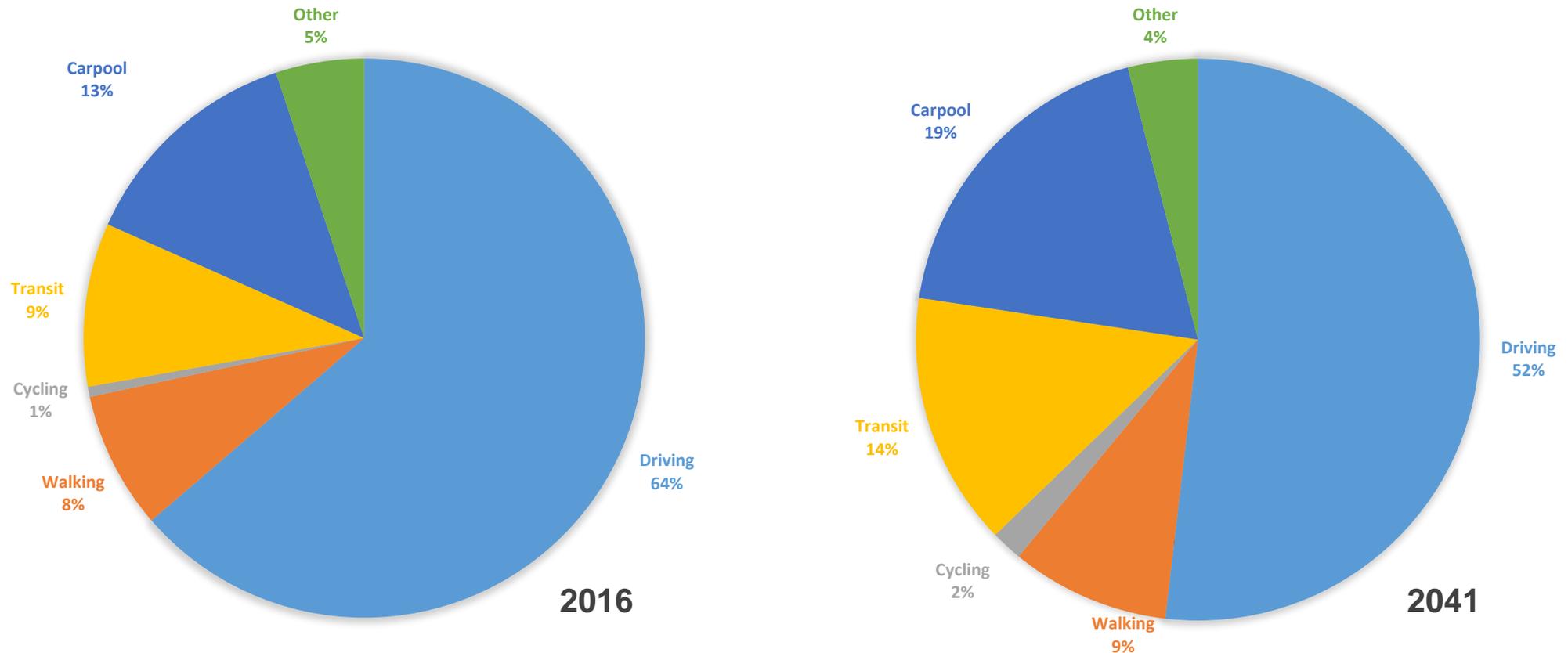
Region of Peel

FIGURE 5
AM Peak Period Travel Demand Into 2041 Horizon Year



Trips by Mode of Travel

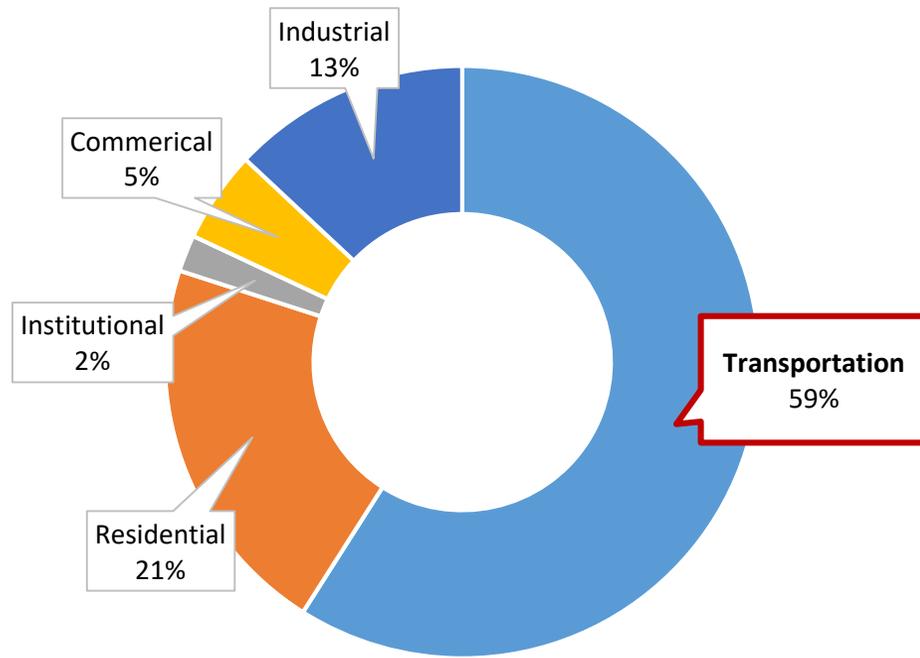
Brampton Mode Share by Number of Trips (PM peak period)



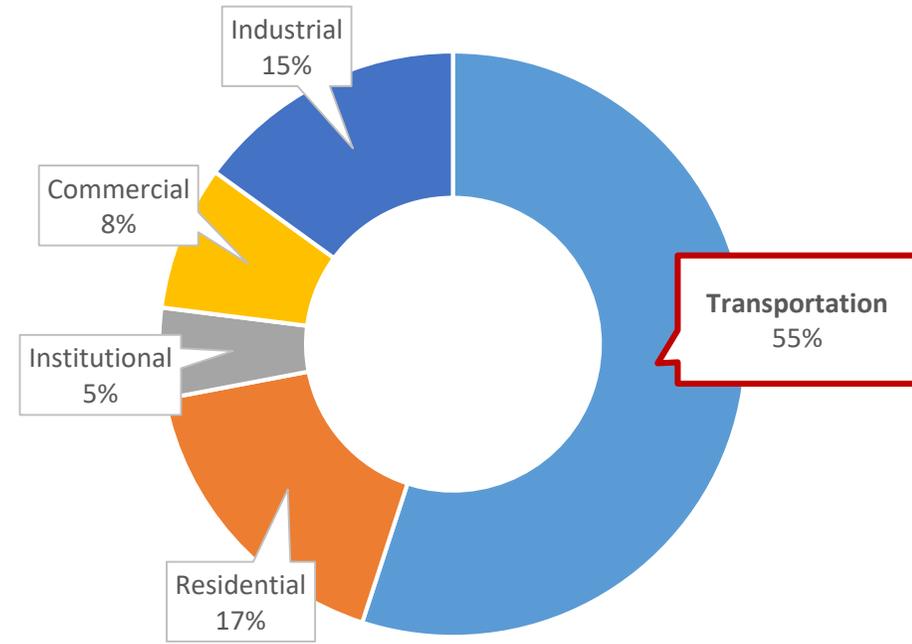
Sources: Transportation Tomorrow Survey, Peel Sustainable Transportation Strategy

GHG and energy impacts of transportation

- Brampton's residents and business spend approximately \$990M on gasoline and diesel annually



Brampton GHG Emissions by Sector (2016)

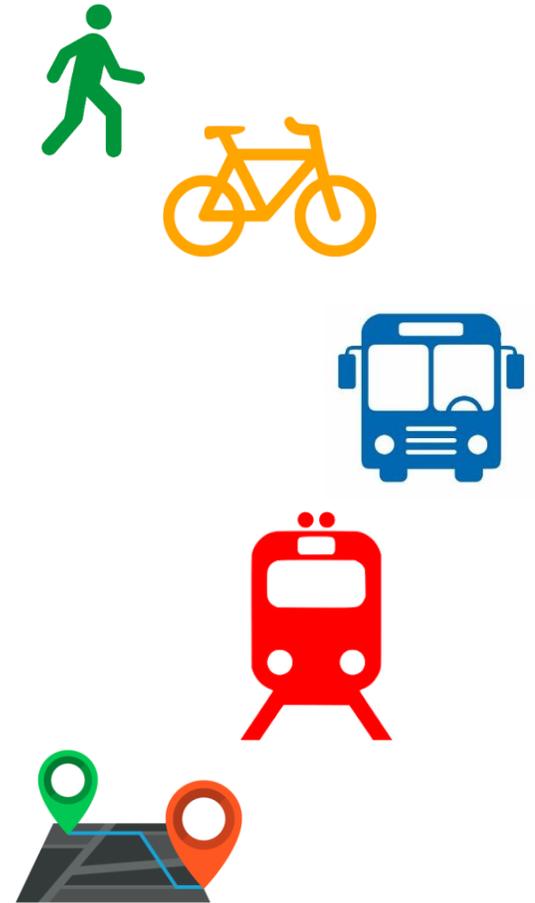


Brampton Energy and Water Costs by Sector (2016)

Community Energy & Emissions Reduction Plan

2040 Targets:

- Increase trips by bus and GO Train
 - Increase share of passenger kilometers travelled (PKT) by Brampton and GO Transit systems by 20%
- Increase sustainable transportation trips to 50% of all trips (transit, walking, cycling, carpooling)
- Reduce average trip length
 - Reduce average trip length by 7.5% for light-duty vehicles from 2016 levels
- Increase trips by walking and cycling
 - Increase share of passenger kilometers travelled walking and cycling to 10%



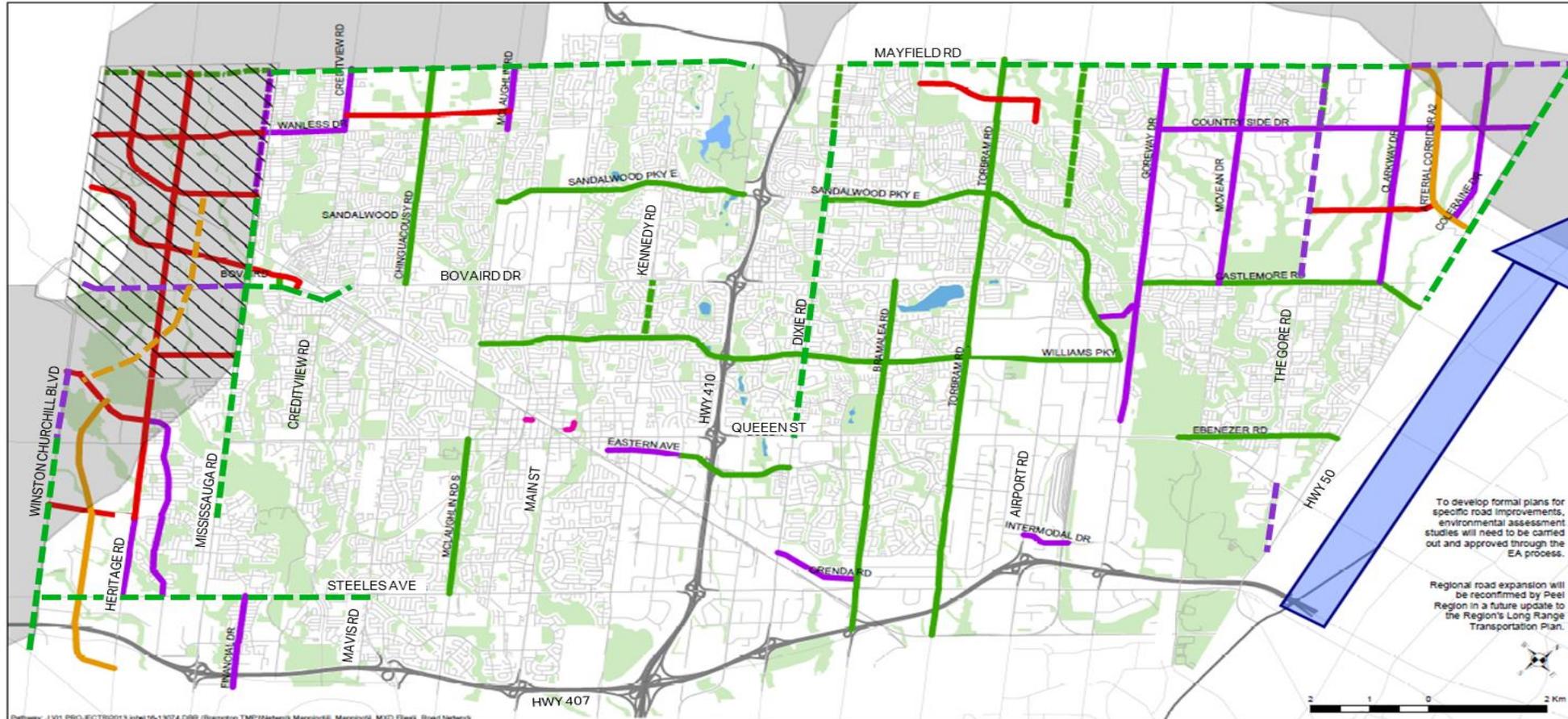
Ways To Reduce GHG Impact



Traffic Impacts on Regional Roads

- Region of Peel's Transportation Model (used in the Long Range Transportation Plan) assumes Williams Parkway is to increase capacity to six general purpose lanes between McLaughlin Rd and North Park Drive by 2041
- If the capacity increase does not occur, traffic will be diverted to the surrounding road network by 2041:
 - Preliminary analysis show up to 25% of the diverted traffic will utilize Bovaird Drive which is forecasted to be at or over capacity.
 - Detailed analysis required to better understand congestion impacts to the road network (including Bovaird Drive and Queen Street)
- Other considerations:
 - Factors such as arrival of connected and autonomous vehicles
 - Plans for Bus Rapid Transit (BRT) on key East-West arterials such as Queen Street and Steeles Avenue

2041 Road Improvement Projects



To develop formal plans for specific road improvements, environmental assessments will need to be carried out and approved through the EA process.

Regional road expansion will be reconfirmed by Peel Region in a future update to the Region's Long Range Transportation Plan.



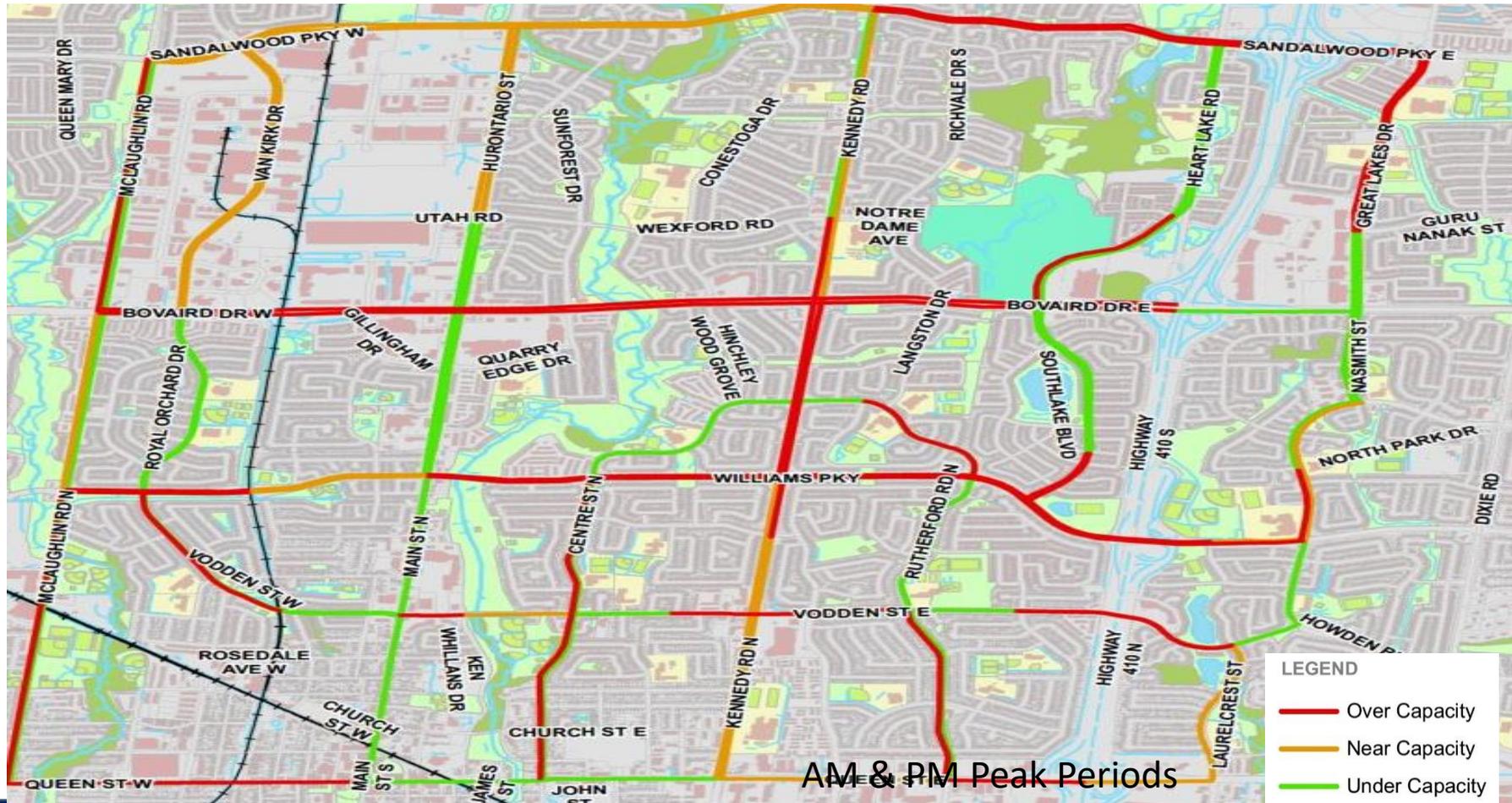
Source: City TMP Update (dated 2015) and Region of Peel Public Works Road Program Funding to 2031 (dated November 28, 2013)

Legend

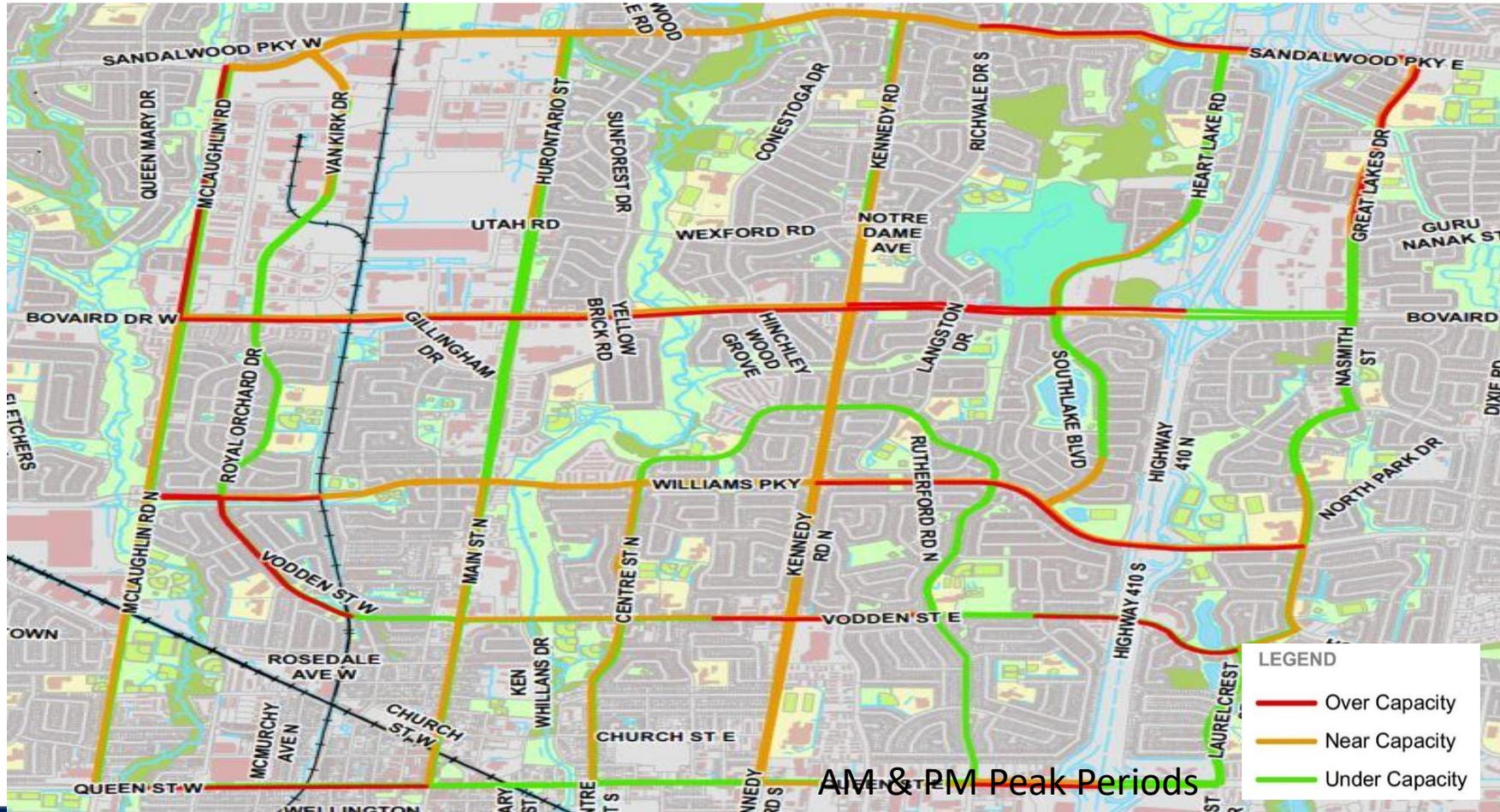
- ▬▬▬ City Road Expanded to Four Lanes
- ▬▬▬▬▬ Regional Road Expanded to Four Lanes
- ▬▬▬ City Road Expanded to Six Lanes
- ▬▬▬▬▬ Regional Road Expanded to Six Lanes
- ▬▬▬▬▬ New City Road Construction Six Lanes
- ▬▬▬▬▬ New City Road Construction Four Lanes
- ▬▬▬▬▬ Provincial Highway
- ▬▬▬ New Regional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

Recommended City Road Network Needs to 2041

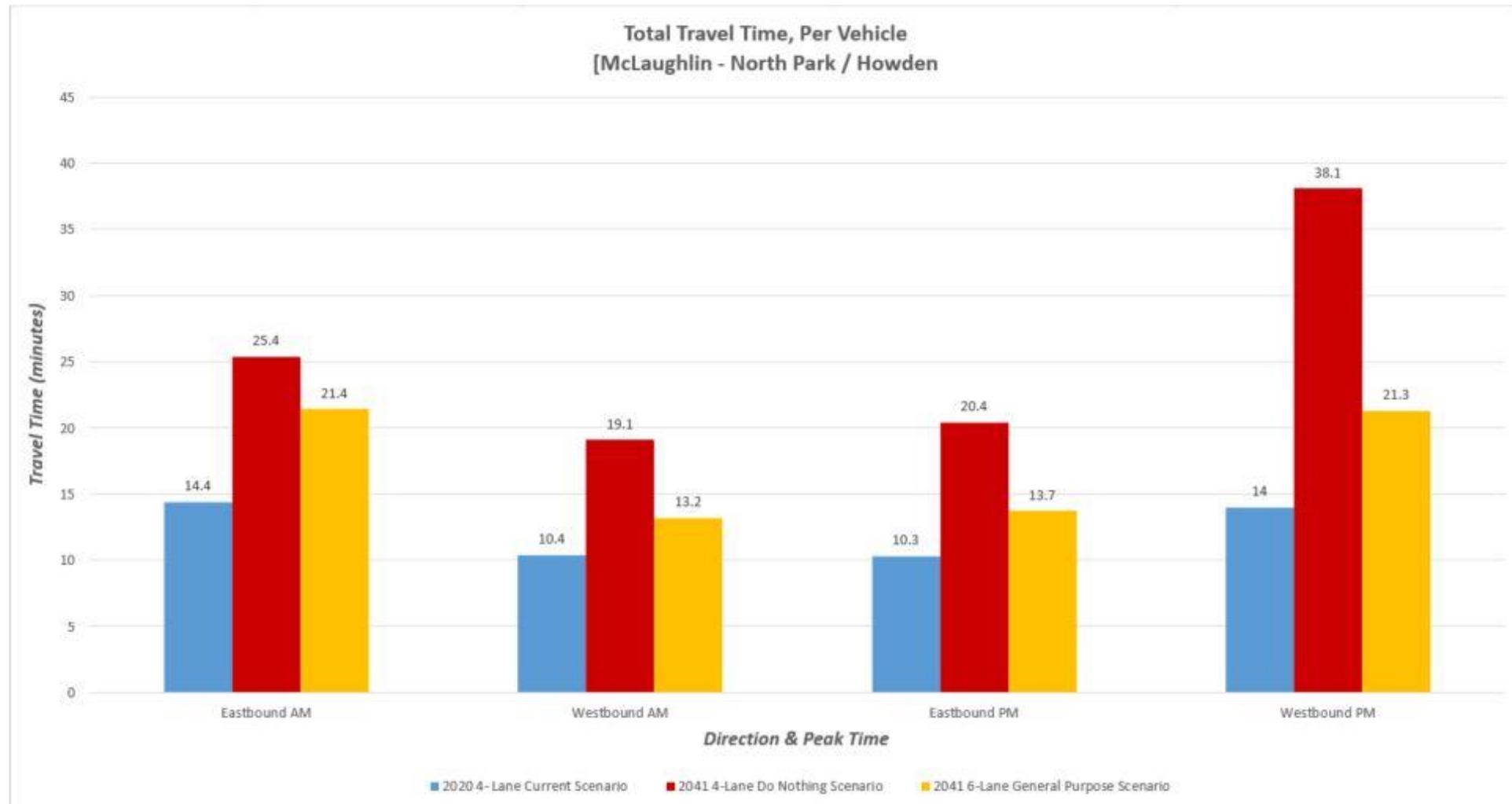
2041 Capacity Analysis: Williams Parkway @ 4 General Purpose Lanes



2041 Capacity Analysis: Williams Parkway @ 6 General Purpose Lanes



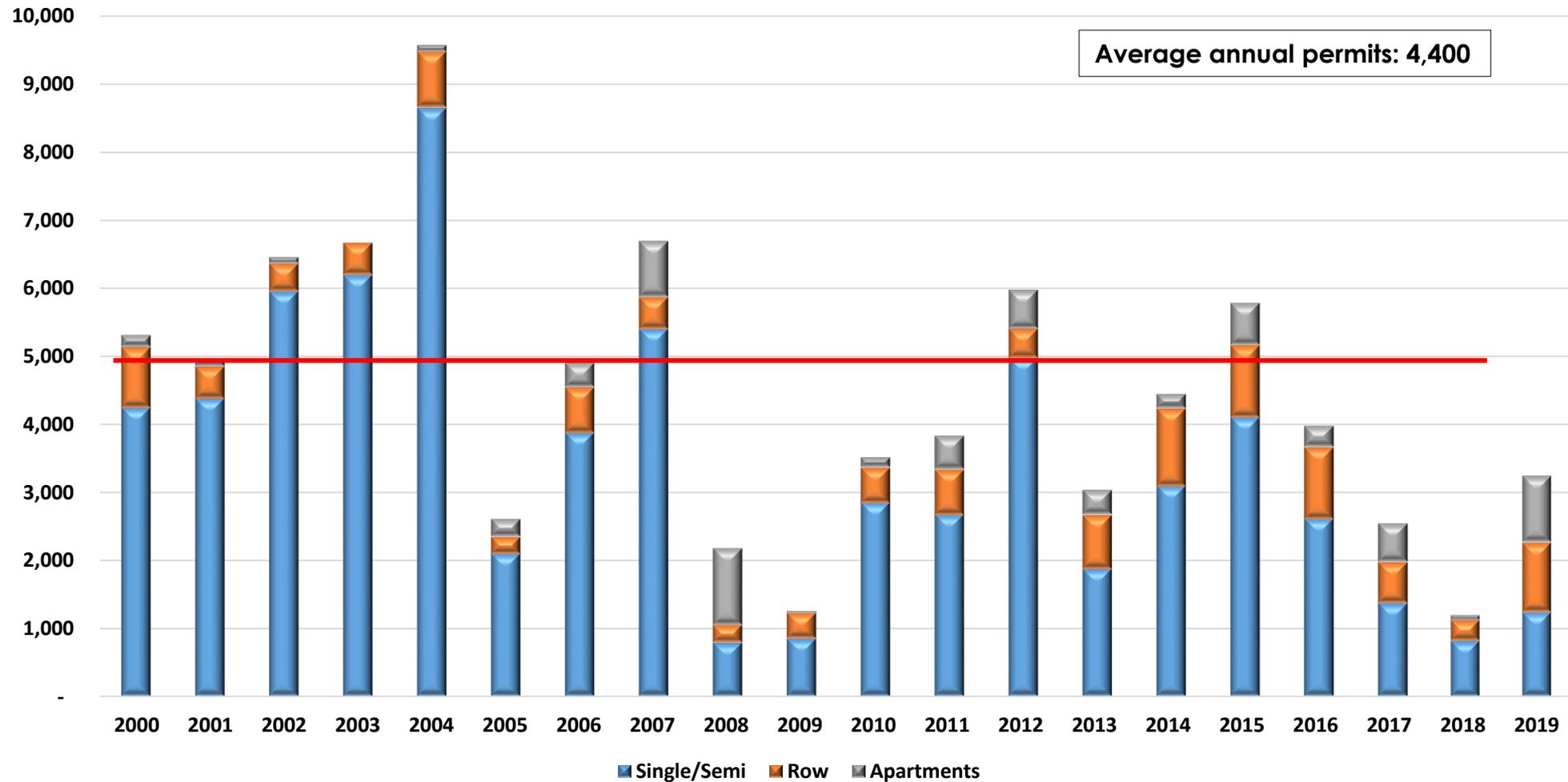
Williams Parkway: Total Travel Time Comparison



Use Of Development Charges Funding

- **DC Act dictates what you can collect for and how you can use the reserve funds**
 - Roads DCs can only fund capital projects that add capacity to the vehicular transportation network, required as a result of new growth
- **DCs intended to fund first round of construction**
 - If multi-use path replaces sidewalks on Williams Parkway, then staff would need to examine what cost share could be DC funded
- **Permit issuance has been decreasing since the high growth era of the 1990s and early 2000s**
 - DC funds are not unlimited; need to plan out growth projects to ensure adequate DC funding

Historical Residential Permits Issued (New Builds)



Options under consideration

Four options:

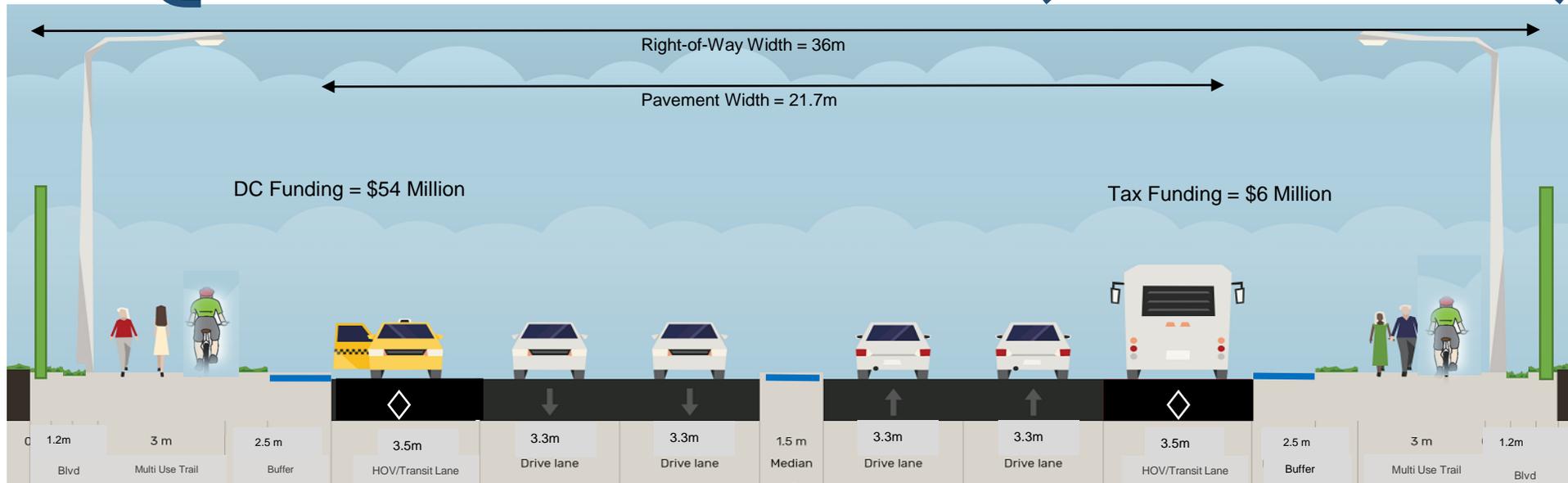
1. Six lanes with HOV/Transit opportunities (4 general purpose lanes + 2 HOV/Transit)
2. Four general purpose lanes
3. Four general purpose lanes with reduced centre median
4. Resurfacing of existing pavement only

Not considered – added lane for single occupancy vehicles/general use

All options include:

- Boulevard multi-use path on both sides
- Cross-rides (cycle crossing) at intersections
- Signal optimization
- Reduced lane widths (to moderate motor vehicle speed)
- As much streetscaping as geometrically possible
- Widening of existing or adding new structures to include for MUP for option 1-3

Option 1 @ midblock: Six lanes (4 GP + 2 HOV)



OPPORTUNITIES

1. Less traffic congestion and infiltration to road network
2. Encourages move to multiple occupancy with HOV lanes to connect to highway and carpool lot
3. Promotes more efficient Transit service.
4. Aligns with EA and current traffic reassessment work
5. Provides the most people moving capacity
6. Allows for traffic capacity during nearby construction projects and future road diets

ISSUES

1. Highest capital cost
2. Limited opportunities for landscaping along large areas of the corridor
3. HOV lanes do not extend to Williams Parkway on 410 at this time
4. No City policy regarding HOV lanes
5. Transit is not considering this corridor as a future Zum or BRT route
6. Reduced perceived safety for pedestrians and cyclists
7. Less aesthetic public realm with less street trees, more hard surfaces, wide road width

Highway 410 Improvements (MT0) Queen Street to Countryside Drive



Project to include extension of
HOV Lanes

Anticipated EA Study Start:
TBD. Contingent on funding

Anticipated Completion:
TBD

**Current Construction
Status:** This project is
currently not funded for
construction and is listed as “
Planning for the Future”.

Option 1 – Six lanes (4 GP + 2 HOV) Rendering



VIEW EAST OF MURRAY STREET AND WEST OF MAIN STREET, LOOKING EAST

Option 1 – Six lanes (4 GP + 2 HOV) Landscape Plan



Option 1 – Six lanes (4 GP + 2 HOV) Landscape Plan



Option 2 (Four GP lanes) @ midblock:



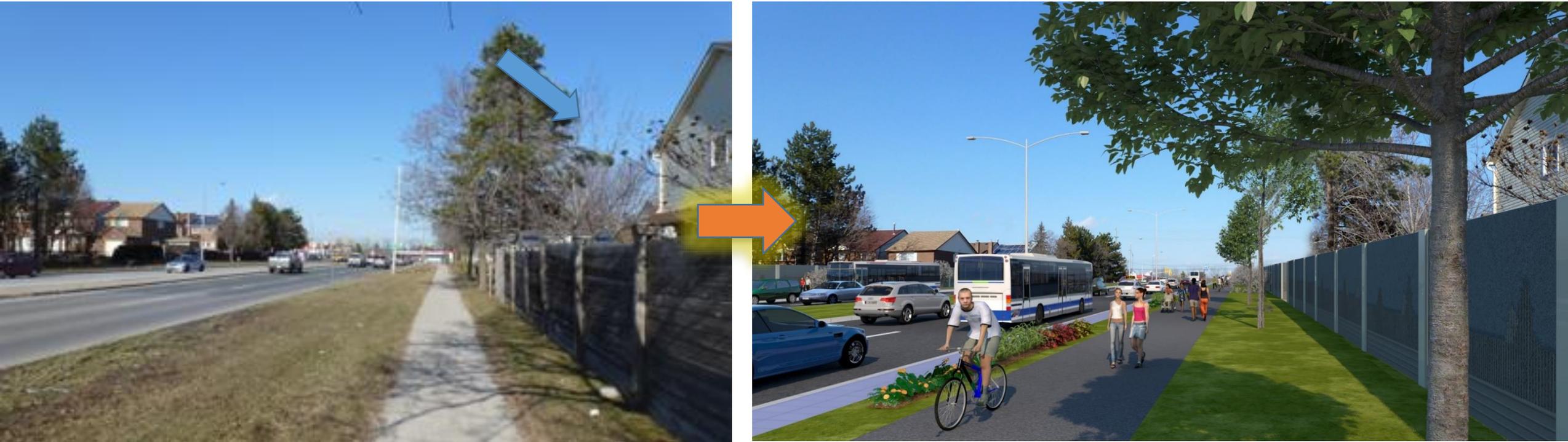
OPPORTUNITIES

1. More opportunities for landscaping along the corridor with shrubs and trees
2. Least initial capital cost for construction
3. More pleasing aesthetic public realm with less street trees, less hard surfaces
4. More perceived safety for pedestrians and cyclists
5. Does not change current road cross section
6. Less utility relocation costs

ISSUES

1. Increase traffic on balance of road network
2. Slower transit service and fewer opportunities to encourage mode shift away from single occupancy vehicle
3. Does not align with EA or traffic reassessment work
4. Noise wall would not have been required
5. Increased costs for landscape maintenance for shrubs
6. Redesign required, delay to construction start

Option 2 (Four GP lanes) Rendering

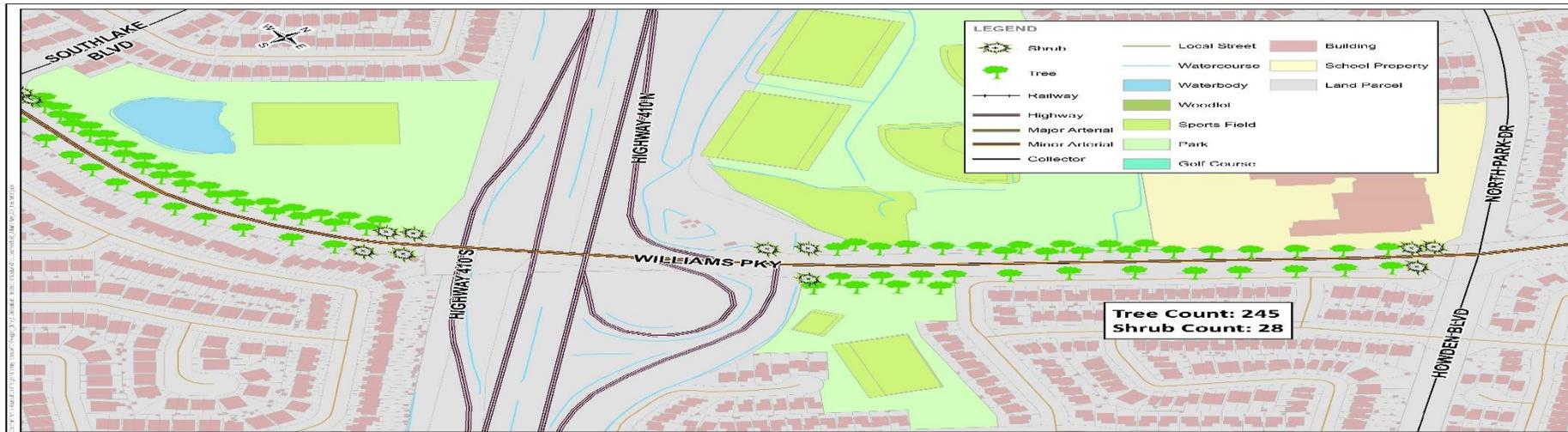
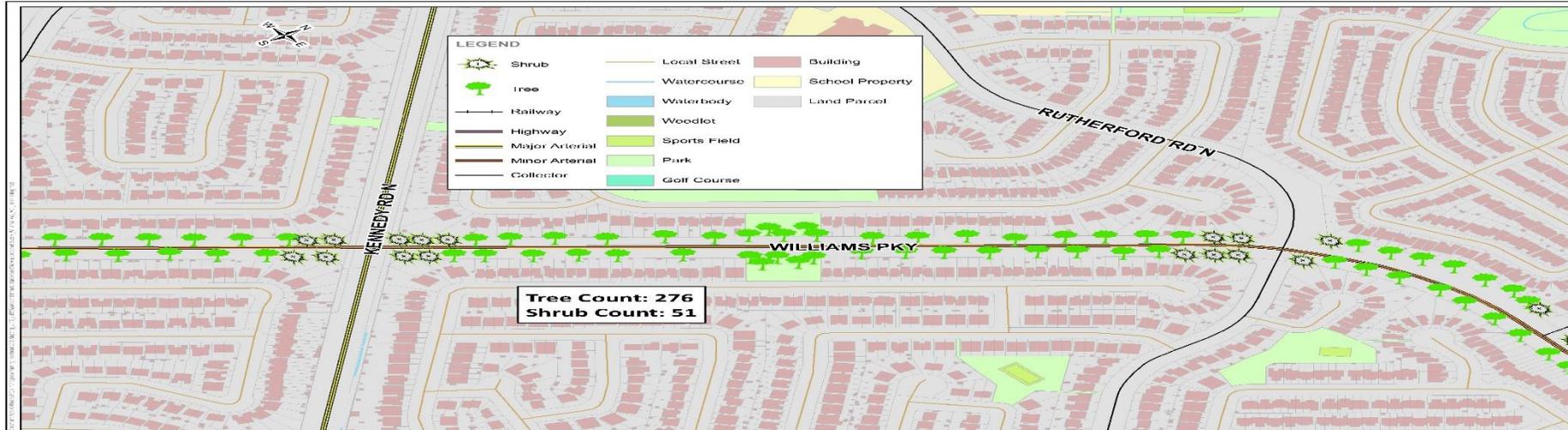


VIEW EAST OF MURRAY STREET AND WEST OF MAIN STREET, LOOKING EAST

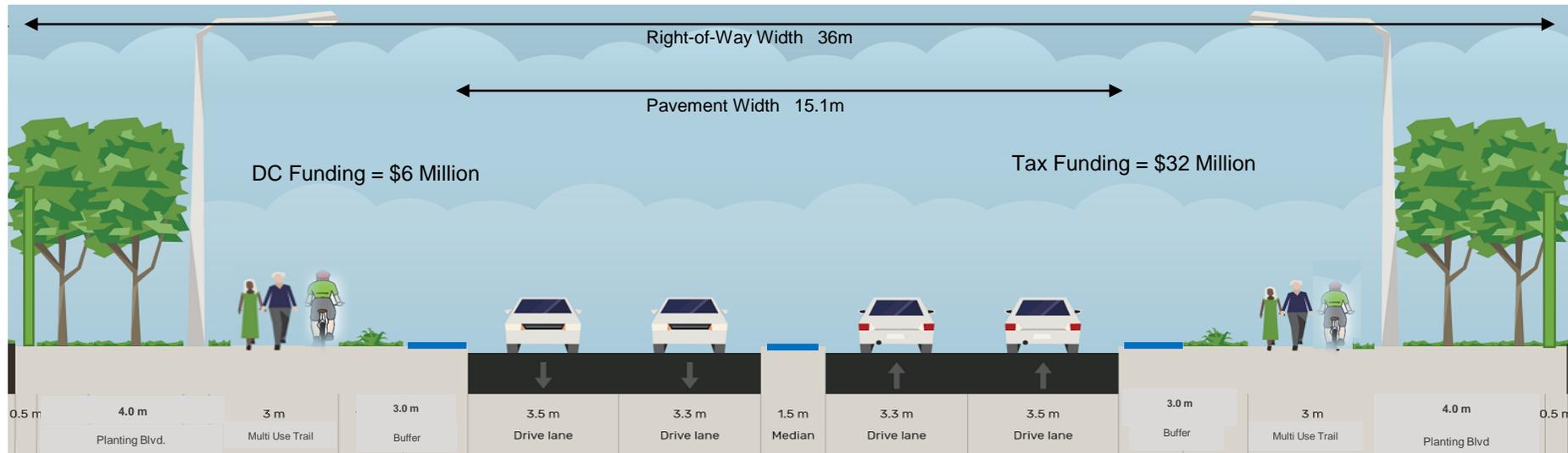
Option 2 (Four GP lanes) Landscape Plan



Option 2 (Four GP lanes) Landscape Plan



Option 3 (Four GP Lanes & Reduced Centre Median) @ mid-block



OPPORTUNITIES

1. The most opportunities for landscaping along the corridor with shrubs and double staggered trees
2. Moderate initial capital cost for construction
3. Results in the most aesthetic public realm with more street trees, less hard surfaces
4. The highest perceived safety for pedestrians and cyclists
5. The least amount of pavement width

ISSUES

1. Increase traffic on balance of road network
2. Slower transit service and fewer opportunity to encourage mode shift away from single occupancy vehicle
3. Does not align with EA or traffic reassessment work
4. Noise wall would not have been required
5. Complete redesign; delay to construction start
6. Increased costs for landscape maintenance

Option 3 (Four GP Lanes & Reduced Centre Median) Rendering

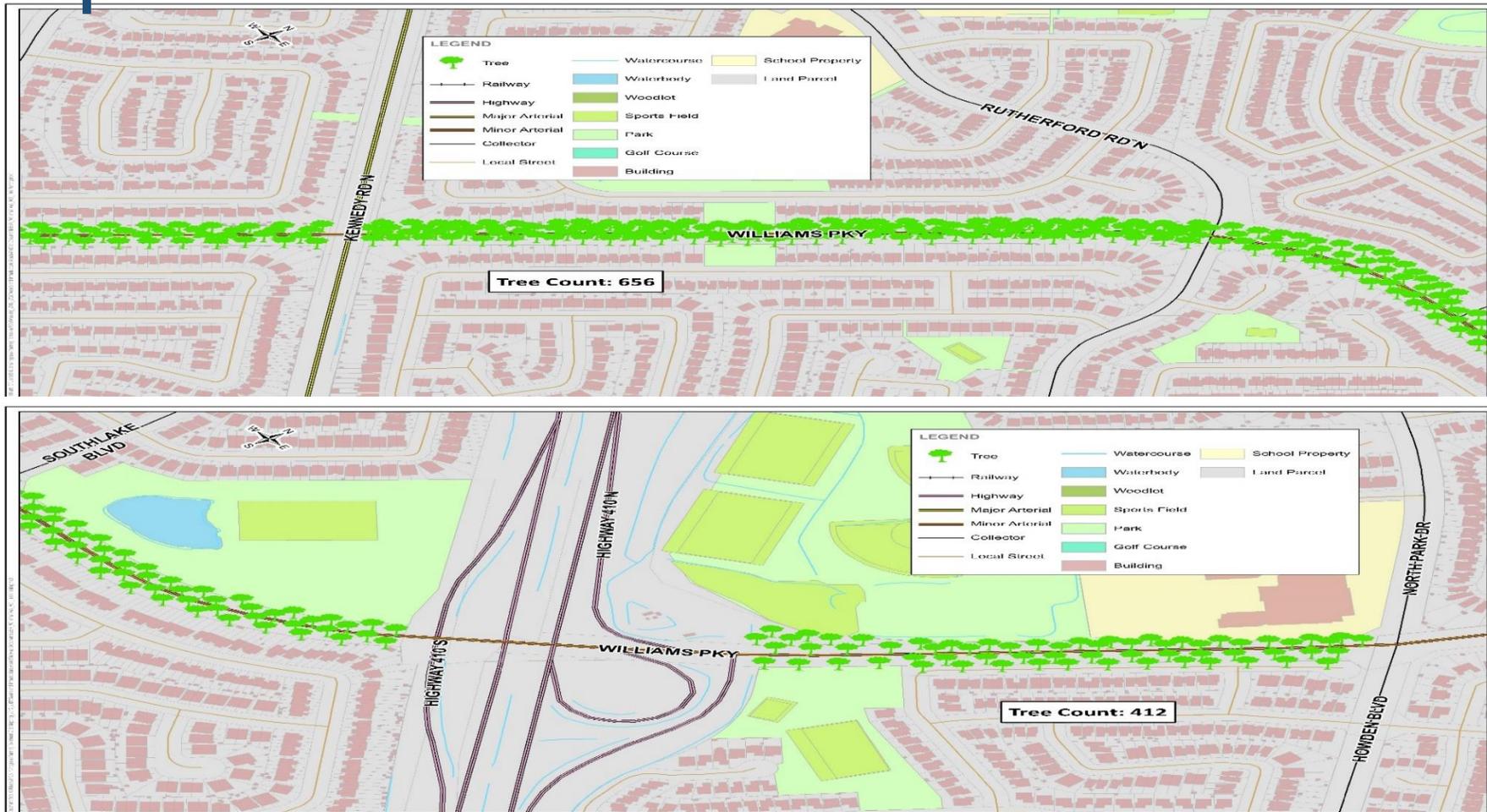


VIEW EAST OF MURRAY STREET AND WEST OF MAIN STREET, LOOKING EAST

Option 3 (Four GP Lanes & Reduced Centre Median) Landscape Plan



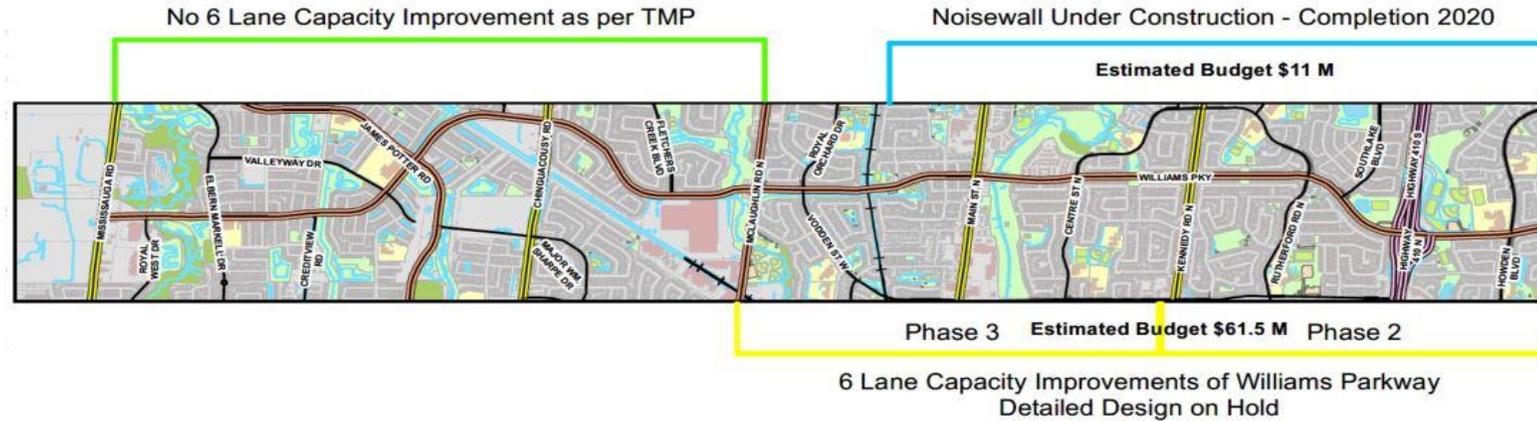
Option 3 (Four GP Lanes & Reduced Centre Median) Landscape Plan



Preliminary Cost Estimates and Life expectancy

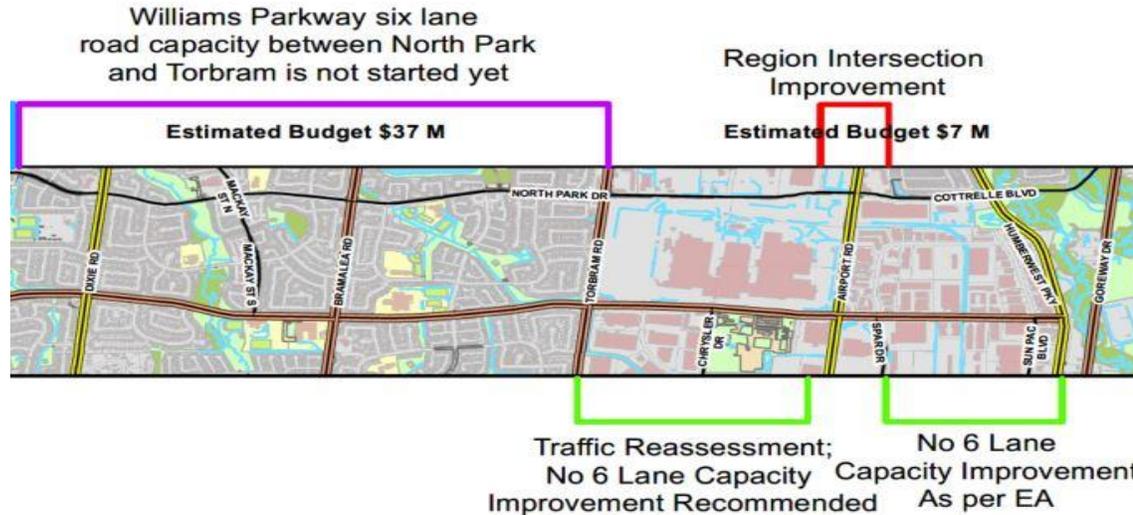
Options	DC Funding (Million)	Tax Funding (Million)	Total Cost (Million)	Recovery From Region (Million)	End Of Life Cycle (Years)	Maintenance Life Cycle / Estimated Current Cost
Option 1 – Six lanes (4 GP + 2 HOV/Transit)	\$54	\$6	\$60	\$1.5	30	Resurfacing every 15 years / \$6 million
Option 2 – Four GP lanes	\$6	\$21	\$27	\$1.5	30	Resurfacing every 15 years / \$5 million
Option 3 – Four GP Lanes with reduced centre median	\$6	\$32	\$38	\$1.5	30	Resurfacing every 15 years / \$5 million
Option 4 – Partial depth 90mm pavement reconstruction (resurfacing)	\$0	\$5	\$5	\$0	15	Full depth reconstruction end of life cycle / \$15 million

Cost Estimate and Status of Ongoing Capital Projects



West Leg:

East of
Mississauga Rd. –
East of North
Park Dr.

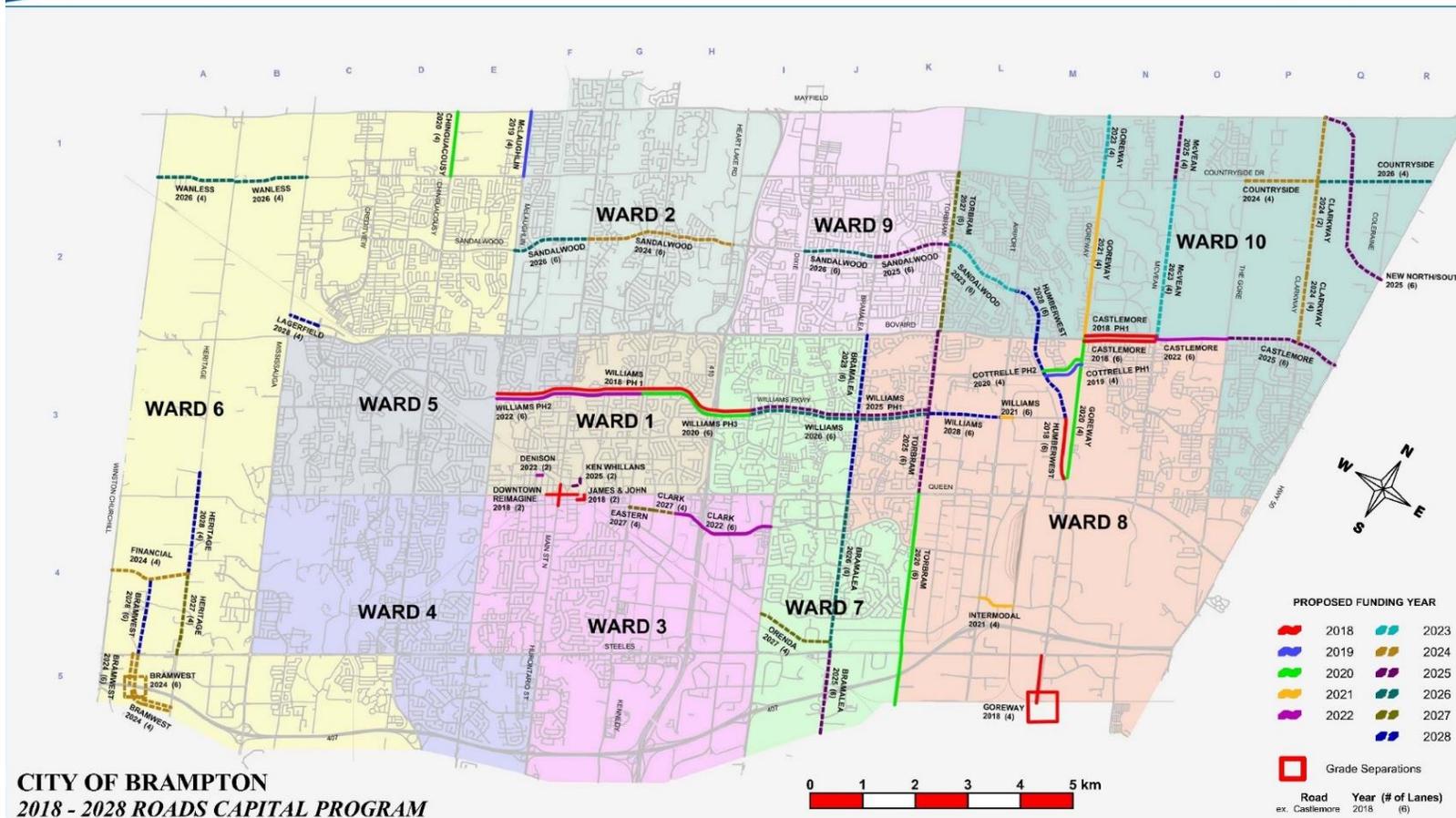


East Leg:

East of North
Park Dr.
– Humberwest
Parkway

2018-2028 Capital Program

Brampton



Active Six Lane Road Improvement Projects

PROJECT	WARD	STATUS	ESTIMATED COST*
Bramwest Parkway from Steeles Avenue to Financial Drive	4 & 6	EA Complete	\$50M
Sandalwood Parkway from Dixie Road to Airport Road	9 & 10	EA Complete	\$58M
Clark Boulevard from 500m East of Dixie Road to Rutherford Road	3 & 7	EA Complete	\$20M
Williams Parkway from Torbram Road to Humberwest Parkway	8	EA Complete	\$32M
Humberwest Parkway from Castlemore Road to Williams Parkway	8 & 10	EA complete	\$17M
Sandalwood Parkway from McLaughlin Road to Heart Lake Road	2 & 6	EA in Progress	\$66M
Torbram Road from Queen Street to Bovaird Drive	8, 9 & 10	EA in Progress	\$38M
Bramalea Road from South City limit to Queen Street	7 & 8	EA in Progress	\$67M
Castlemore Road from McVean Drive to Highway 50	8 & 10	Design not started	\$51M
Torbram Road from Queen Street to South City limit	7 & 8	Detailed design in progress	\$49M
Williams Parkway from McLaughlin Road to North Park Drive	1, 5 & 7	Detailed design in progress	\$60M
Total			\$508M
Humberwest Parkway from Williams to Exchange	8	Construction in progress	\$10M
Castlemore Road from Goreway to McVean	8 & 10	Construction in progress	\$15M
Total			\$25M

*Road improvements required for growth are DC eligible

Planned Six Lane Road Improvement Projects

PROJECT	WARD	STATUS	ESTIMATED COST*
Williams Parkway from North Park Drive to Torbram Road	7 & 8	EA not started	\$37M
Bramalea Road from Queen Street to Bovaird Drive	7, 8 & 9	EA not started	\$27M
Chinguacousy Road from Bovaird Drive to Wanless Drive	5 & 6	EA not started	\$34M
McLaughlin Road from Queen Street to Steeles Avenue	1, 3, 4 & 5	EA not started	\$30M
Torbram Road from Bovaird Drive to Mayfield Road	8, 9 & 10	EA not started	\$60M
Ebenezer Road from Queen Street to Highway 50	8 & 10	EA not started	\$30M
Humberwest Parkway from Airport Road to Castlemore Road	8 & 10	EA not started	\$13M
		Total	\$231M

**Road improvements required for growth are DC eligible*

Recommendation

- PWE Recommendation is Option #1
- Allows for maximum people moving capacity
- Encourages behavioral change to other modes of transportation aligning with approved vision documents
- Allows for use of DC funds vs tax
- No consensus on this recommendation amongst staff

Go Forward Plan

- Public consultation through the website to solicit comments.
- Outreach through social media, postcards to residents along corridor, signage along corridor.
- Bring back report to Council in September 2020 for direction on moving forward.
- Develop framework with staff and Region on how future 6 lane road widening's will be developed for council approval.



BRAMPTON
Flower City
brampton.ca

