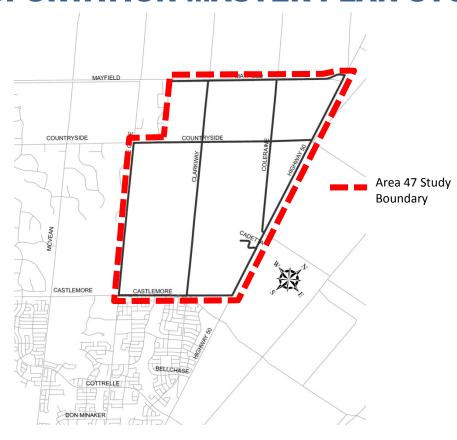


# PUBLIC INFORMATION CENTRE

# **HIGHWAY 427 INDUSTRIAL**

**SECONDARY PLAN (AREA 47)** 

### TRANSPORTATION MASTER PLAN STUDY



Wednesday, June 27, 2012 6pm – 9pm

**Riverstone Golf and Country Club** 

195 Don Minaker Drive, Brampton





### **POLICY FRAMEWORK**

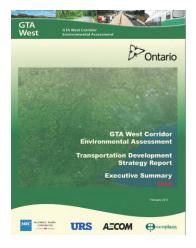
### Brampton's Official Plan designates Area 47 as:

- A Complete Community with residential, commercial, institutional and employment uses
- Community served by multimodal transportation network with strong support for transit
- Community that promotes culture of conservation and preservation of natural heritage



- Identifies a Preliminary Route Planning Study Area for a transportation corridor to include:
  - Multimodal facility west of Highway 427
  - Consideration for High Occupancy Vehicle (HOV) lanes and/or truck-only lanes to support goods movement
  - A dedicated transitway with stations to transfer to/from other transit routes or private vehicles
  - Interchanges with major arterials and a potential interchange with a future extension of Highway 427





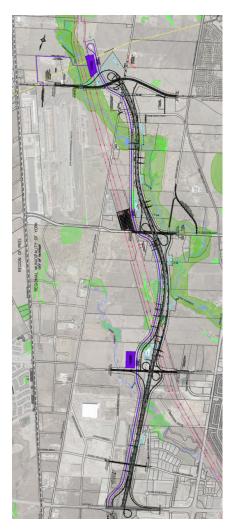






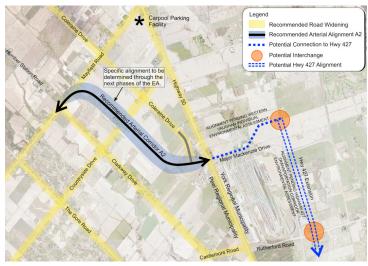
# Highway 427 Extension Environmental Assessment (Ministry of Transportation Ontario, January 2010):

- Extension of Highway 427 from its current terminus at Zenway Blvd (North of Highway 7) north to Major Mackenzie Drive
- 427 Transitway with stations to transfer to/from other transit routes or private vehicles
- Transit station and Park and Ride lot at Major Mackenzie Drive
- Connection to York Region Transit's (YRT) planned Rapid Transit service on Major Mackenzie Drive



# Highway 427 Extension Area Transportation Master Plan (Region of Peel, July 2009):

- Identified a preferred arterial road system in Peel to connect with the future Highway 427 Extension
- A new major arterial road (A2)



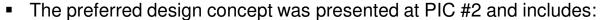






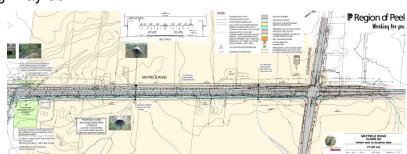
# Highway 50 & Mayfield Road Environmental Assessment (Region of Peel, on-going)

- Highway 50 and Mayfield Road are major arterials and goods movement corridors
- Preliminary recommendations include:
  - Highway 50 at 6 lanes (Mayfield to Castlemore)
  - Mayfield Road at 4 lanes (Hwy 50 to Coleraine)
  - Urban cross-section, sidewalks and multi-use paths
  - o Roundabout at Pillsworth Rd/ carpool lot entrance



 3 through-lanes and dual left turn lanes at the intersection of Arterial A2/Major Mackenzie Drive and Highway 50

# Mayfield Road EA from Coleraine Drive to Airport Road (Region of Peel, ongoing)



- PIC #2 was held in November 2011 and recommended the following:
  - Ultimate 6 lane cross-section from Airport Road to the future connection with Arterial A2, 4 lanes from A2 to Coleraine Drive
  - o Urban cross-section with sidewalks and multi-use path
  - Future connection with Arterial A2 to be determined by the Arterial A2 Environmental Assessment
  - Mayfield Road is limited to two access roads between concessions
  - Signalized intersection with The Gore Road
  - o Transit infrastructure including bus bays and shelters



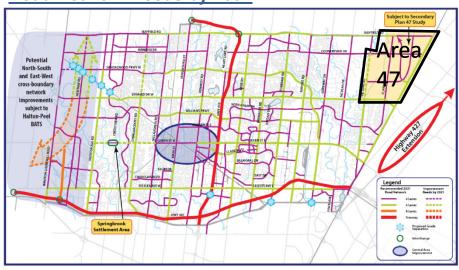
**Mackenzie** 



### Brampton's Transportation and Transit Master Plan 2010

 Sets forth the long term transportation and transit vision for the City of Brampton, including Area 47 needs from a city-wide perspective

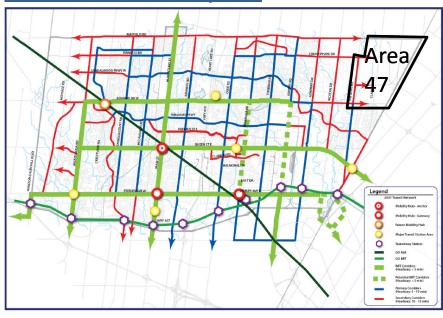
### Road Network Needs by 2031



# TTMP road network for Area 47:

- Confirmed the need for Arterial A2
- Realignment of Coleraine Drive
- East-west connector from The Gore Road to Arterial A2
- Details to be addressed by this Transportation Master Plan for Area 47

### **Transit Network Needs by 2031**



# TTMP transit network for Area 47:

- Secondary Transit
   Corridors (10-15 minute headways)
  - o Mayfield Road
  - o Countryside Drive
  - East-west connector
  - o Castlemore Road
- Other routes and details to be addressed by this Transportation Master Plan for Area 47





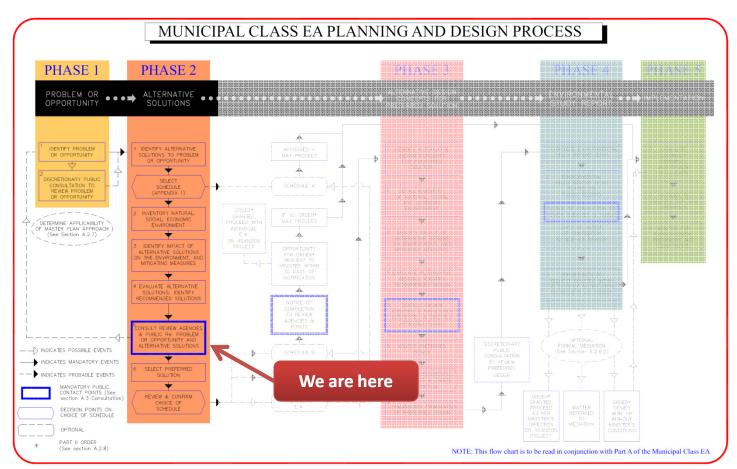
### **SP47 TRANSPORTATION MASTER PLAN**

### **Study Goal:**

 Develop a sustainable and multimodal transportation network capable of supporting the City's and Region's growth objectives.

### **Study Process:**

 Transportation Master Plan (TMP) process as defined by Phase 1 and 2 of the Municipal Class Environmental Assessment Process Schedule C (October 2000, as amended in 2011).

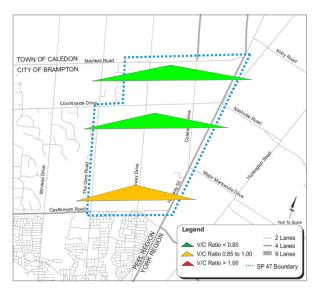


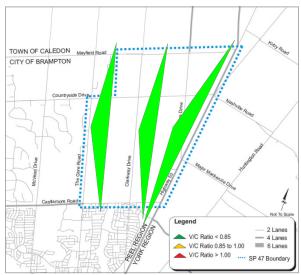




### **EXISTING TRANSPORTATION CONDITIONS**

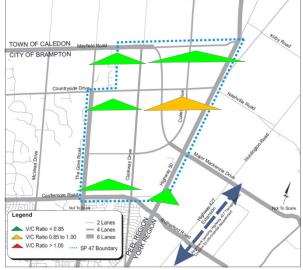
- · Existing road network, afternoon peak hour traffic
- Northbound peak direction is moderately congested north of Castlemore Road

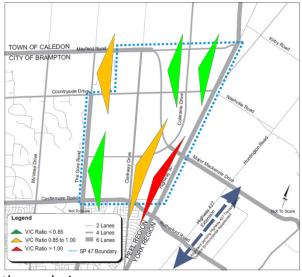




### **FUTURE TRANSPORTATION CONDITIONS**

- Afternoon peak hour traffic
- Assuming currently planned road improvements by 2031





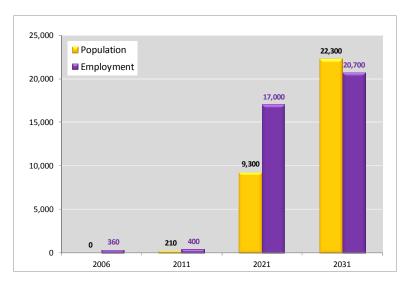
HDR

Note: GTA West corridor is not included in the analysis



### **GROWTH ASSUMPTIONS**

- By 2021, Area 47 is projected to be partially developed with 9,300 people and 17,000 jobs
- By 2031, Area 47 is projected to be nearing full build out with approximately 22,300 persons and 20,700 jobs



### PROBLEM AND OPPORTUNITY STATEMENT

The Highway 427 Industrial Secondary Plan Area (Area 47) is projected to be home to an estimated 22,300 residents and support 20,700 jobs.

The existing transportation system of roads, transit, pedestrian and cycling pathways will be supported by **future transportation improvements to the surrounding** regional and municipal arterial roads **but lacks an internal transportation network**.

**Even with these surrounding transportation network improvements, additional capacity** is required to respond to travel demand and mobility needs of future residents, employees and businesses within Area 47.





### **AREA 47 TRANSPORTATION MASTER PLAN**

### **GUIDING PRINCIPLES:**

- A sustainable and multi-modal transportation network
- Transportation network planned to minimize impact on the natural and cultural environment
- Area 47 roads designed to consider and accommodate all users: Pedestrians, cyclists, transit buses, autos and trucks
- Grid or grid-like road system providing enhanced connectivity in support of:
  - Currently planned Provincial, Regional, and Municipal initiatives
  - The efficient movement of people between various land uses
  - Access to major Regional and provincial corridors to facilitate goods movement
  - A variety of modal choices to reduce air pollution and GHG emissions
- Opportunity for streetscape / landscape enhancements
- Structured parking (above-ground) provided, where feasible
- On-street parking in support of mixed-use, main street areas



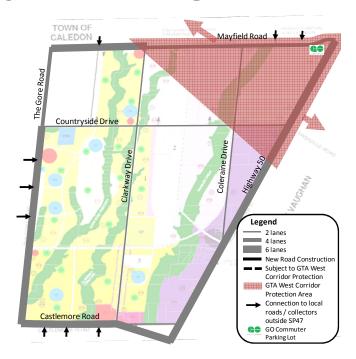


### AREA 47 TRANSPORTATION MASTER PLAN

### TRANSPORTATION PLANNING ALTERNATIVES

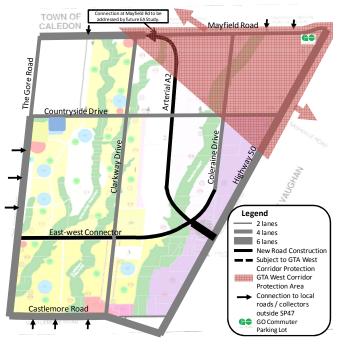
### **Alternative 1: Do Nothing**

- No road or transit improvements within Area 47 beyond existing conditions
- Improvements to roads and transit beyond Area 47 implemented as planned



### **Alternative 2: As Planned**

- Planned road and transit improvements within and beyond Area 47
- Major MacKenzie extension (Arterial A2) connecting to Mayfield Road
- EW Connector and Coleraine Road intersect with each other at Arterial A2







# Alternative 3: Network Connectivity Options

### Option 3A:

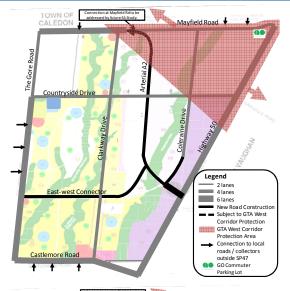
- EW Connector West of Rainbow Creek to minimize environmental impacts
- Realigned Coleraine connected to Arterial A2
- A2 at 6 lanes between Highway 50 and EW Connector

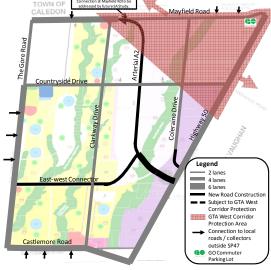
### Option 3B:

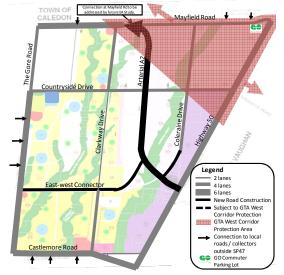
- EW Connector West of Rainbow Creek
- Coleraine Drive connected to Highway 50

### Option 3C:

- EW Connector West of Rainbow Creek
- Coleraine Drive connected to Arterial A2
- Arterial A2 at 6 lanes
- Clarkway Drive at 2 lanes (Countryside Dr to EW Connector)











# AREA 47 TRANSPORTATION MASTER PLAN EVALUATION OF ALTERNATIVES

### **Evaluation Methodology**

Performance Indicator	Description
Transportation Services	<ul> <li>Minimize travel delay</li> <li>Road capacity and volumes consistent with its function</li> <li>Provides a sustainable multi-modal transportation network</li> <li>Supports City's and Region's growth objectives</li> </ul>
Policy Environment	<ul> <li>Support for provincial, regional and municipal policy goals of building sustainable, multimodal transportation networks capable of supporting growth</li> <li>Addresses Study Goals</li> </ul>
Natural and Cultural Environment	<ul> <li>Minimize adverse impacts on Natural Heritage System</li> <li>Minimize adverse effects on air quality</li> <li>Minimize impacts on archeological resources</li> </ul>
Economic Environment	<ul> <li>Maximizes access for goods movement and planned industry</li> <li>Supports planned development</li> </ul>





## **Impact on Transportation Services**

	Alt 1	Alt 2	Alt 3A	Alt 3B	Alt 3C
Trips by transit	None	Low	Moderate	Moderate	Moderate
Internal SP47 travel time (minutes)	6.8	5.9	5.8	5.9	5.9
Congested lane-km (% of the network)	38%	14%	15%	14%	14%
Network utilization (VKT)	Low	High	High	High	Highest
Annual GHG due to congestion	24,500	22,160	22,400	22,000	22,200
Supports alternative travel modes	Least support	Moderate support	Moderate support	Moderate support	Most supportive
Network connectivity	Poor	High	Medium- High	Moderate	High

## **Impact on Policy Environment**

	Alt 1	Alt 2	Alt 3A	Alt 3B	Alt 3C
Support for provincial policy goals	Not supportive	Moderate support	Strong support	Strong support	Very strong support
Support for regional policy goals	Not supportive	Moderate support	Strong support	Strong support	Very strong support
Support for municipal policy goals	Not supportive	Moderate support	Strong support	Strong support	Very strong support
Addressing Study Goals	Not supportive	Moderate support	Very strong support	Strong support	Strong support





## **Impact on Natural and Cultural Environments**

	Alt 1	Alt 2	Alt 3A	Alt 3B	Alt 3C
Impact on aquatic resources	No impact	Four new creek crossings , major impact to Clarkway Tributary	Three new creek crossings, major impact to Clarkway Tributary	Three new creek crossings, major impact to Clarkway Tributary	Lowest impact Three new creek crossings
Impact on air quality	High impact	Moderate impact	Moderate impact	Lowest impact	Moderate impact
Impact on archeological resources	No impact	Moderate site disruption	Moderate site disruption	Moderate site disruption	Moderate site disruption

## **Impact on Economic Environment**

	Alt 1	Alt 2	Alt 3A	Alt 3B	Alt 3C
Maximizes access for goods movement and planned industry	Insufficient access; low to no connectivity to provincial corridors	Moderate access; improved connectivity to provincial network	Good access; good connectivity to provincial network	Good access; good connectivity to provincial network; Increased congestion on Highway 50	Best access option; HOV lanes to free capacity for trucks; good connectivity to provincial network
Supports planned development	No support	Moderate support	Strong support	Moderate support	Best option. Provides HOV advantage





### **AREA 47 TRANSPORTATION MASTER PLAN**

### **EVALUATION OF ALTERNATIVES**

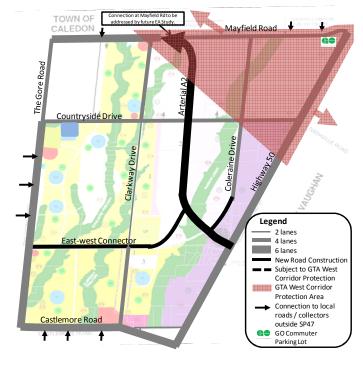
### **Preliminary Results of the Evaluation**

Criteria	Alternative 1	Alternative 2	Alternative 3A	Alternative 3B	Alternative 3C
Transportation Service					
Policy Environment					
Natural and Cultural Environment					
Economic Environment					
Recommendation	Not Recommended	Not Recommended	Not Recommended	Not Recommended	Preliminary Preferred

#### **LEGEND**

The Planning Alternative 3C has been identified as the Preliminary Preferred Alternative.

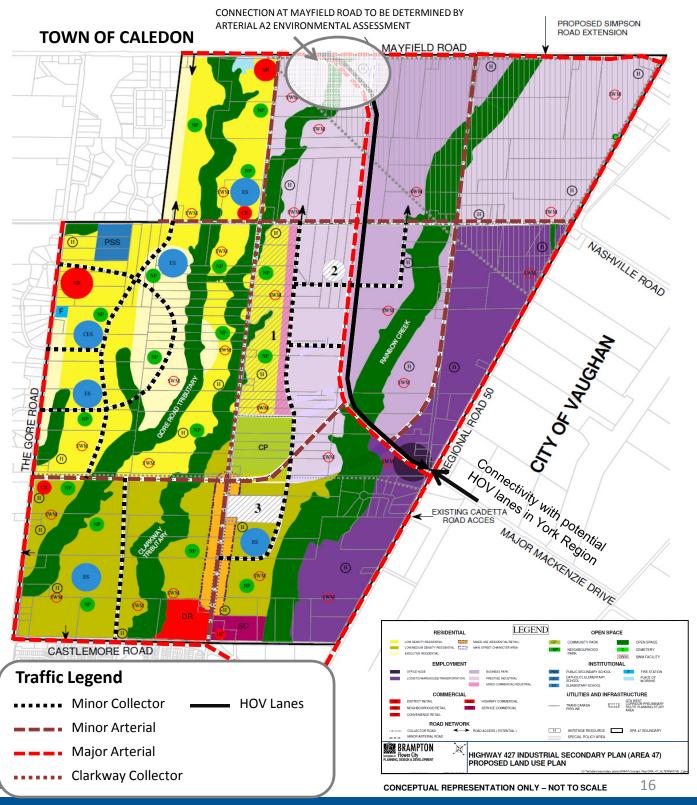
This alternative will be further refined following input received at today's Public Information Center.





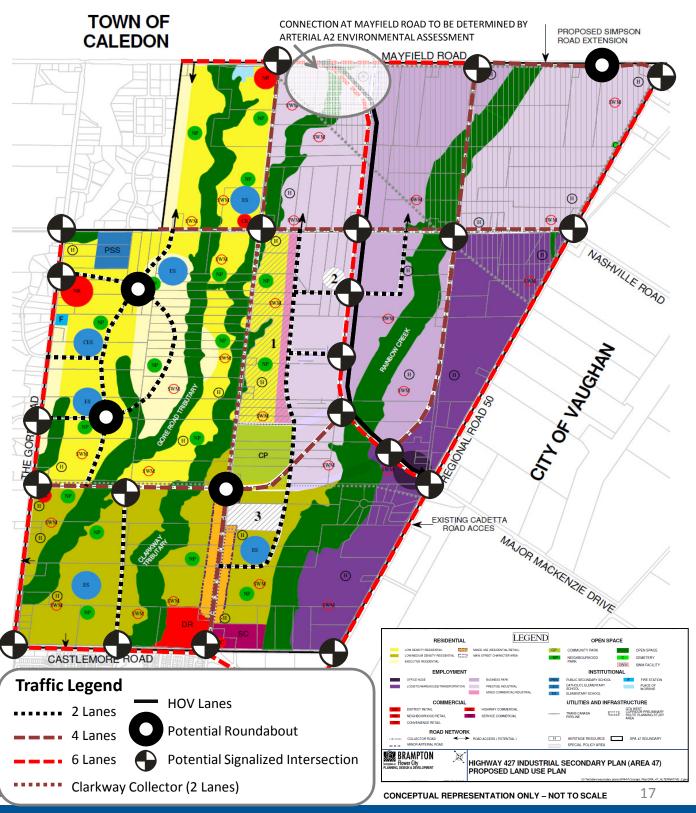


### **ALTERNATIVE 3C PRELIMINARY PREFERRED ROAD NETWORK**



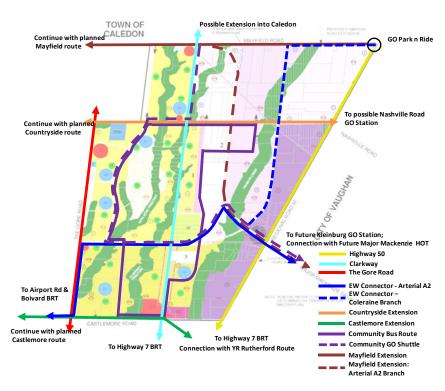


### PRELIMINARY NO. OF LANES AND INTERSECTION TYPES





### TRANSIT NETWORK ALTERNATIVES



#### TOWN OF Possible Extension into Caledon Continue with planned CALEDON GO Park n Ride Mayfield route Continue with plan Countryside route To Future Kleinburg GO Station; ction with Future Major Mackenzie HOT Highway 50 Clarkway The Gore Road To Airport Rd & EW Connector - Arterial A2 EW Connector Coleraine Branch Countryside Extension Continue with plan Castlemore Extension To Highway 7 BRT Community GO Shuttle Mavfield Extension Mayfield Extension: Arterial A2 Branch

### **Alternative 1:**

- Transit service provided on all major and minor arterial roads
- Community based service on collector roads
- Better connectivity to York Region Transit
- Higher operating cost
- Plans for connections / GO Shuttle service to future GO Stations
- Preliminary Preferred

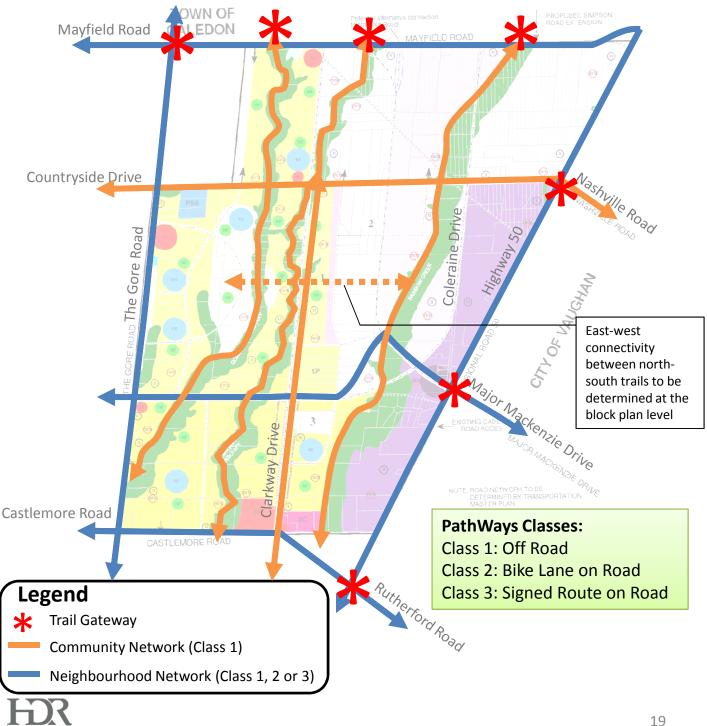
### **Alternative 2:**

- Transit service provided on all major and minor arterial roads
- Extension of Countryside Drive and Castlemore Road Routes will serve collector roads
- Lower operating cost



### **ACTIVE TRANSPORTATION NETWORK**

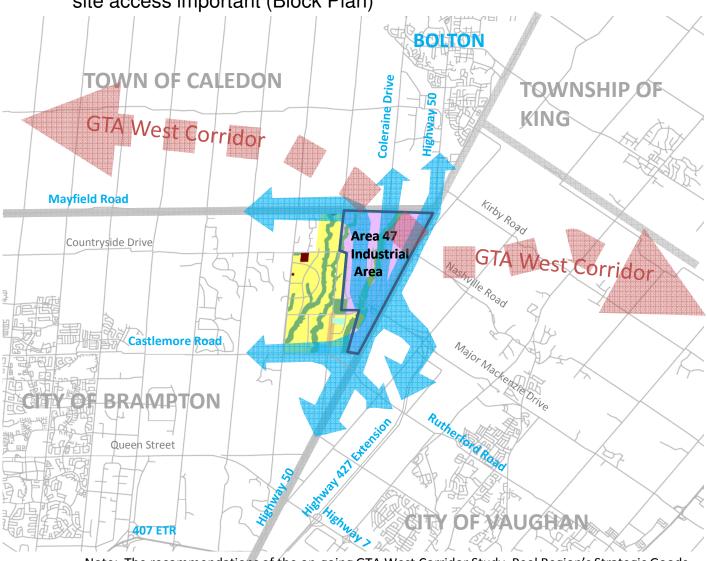
Building on the Pathways Master Plan, 2002





### TRUCKS AND GOODS MOVEMENT

- Efficient and effective access to GTA markets for goods is paramount for the economy of the area
- Protecting for access to future corridors (such as GTA West and Highway 427) is vital
- Access to arterial and collector network design standards and site access important (Block Plan)



Note: The recommendations of the on-going GTA West Corridor Study, Peel Region's Strategic Goods Movement Network Study and Roads Characterization Study will be crucial in the long-term development of the goods movement network in Area 47.



### **NEXT STEPS**

- Draft report in October 2012
- Final report in November 2012
- Transportation Master Plan Study completion in November 2012

### **CONTACT US!**

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Email: elizabeth.szymanski@hdrinc.com



Your comments and suggestions are greatly appreciated.

