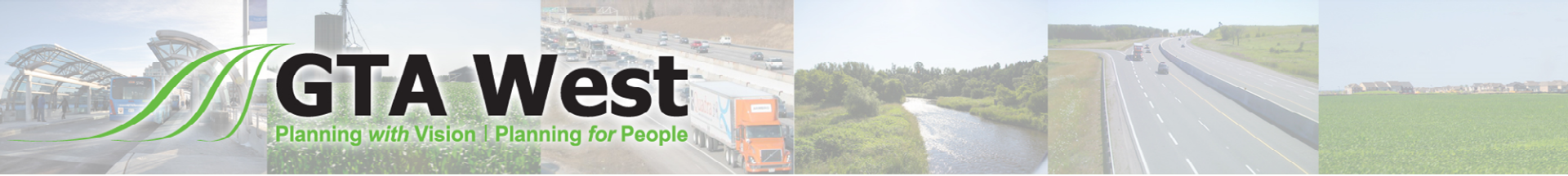


# GTA West Transportation Corridor Route Planning and EA Study – Stage 2

Town of Caledon Committee of the Whole  
November 19, 2019



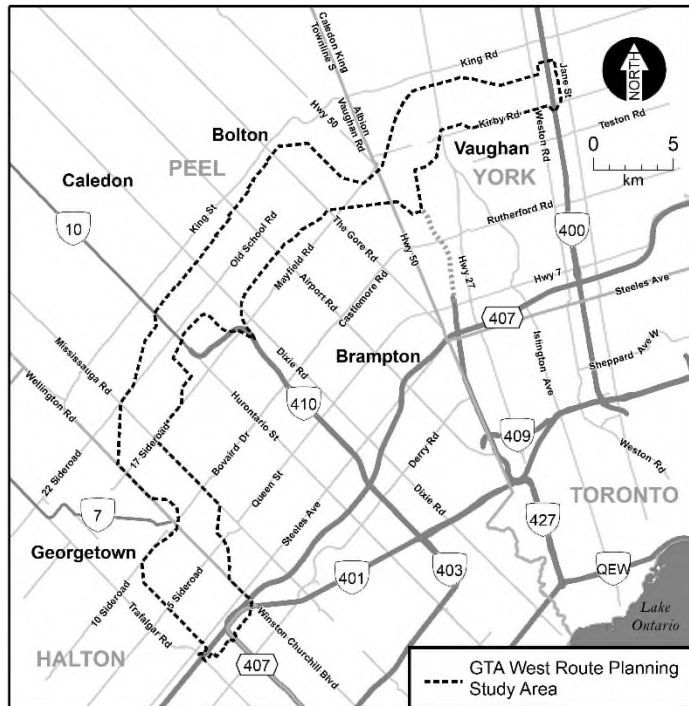
## STUDY OVERVIEW

### June 2019: GTA West Study resumed

- GTA West Study will protect lands for a future multimodal transportation corridor
- Northwest GTA Corridor Identification Study discontinued
- Ministry of Energy, Northern Development and Mines and Independent Electricity System Operator initiated a separate study to identify an adjacent electricity transmission corridor

### Stage 2: GTA West Study focuses on a new multimodal transportation corridor:

- Extending from Highway 400 in the east to the Highway 401/407 ETR interchange area in the west
- Includes a 400-series highway, transitway, and potential goods movement priority features



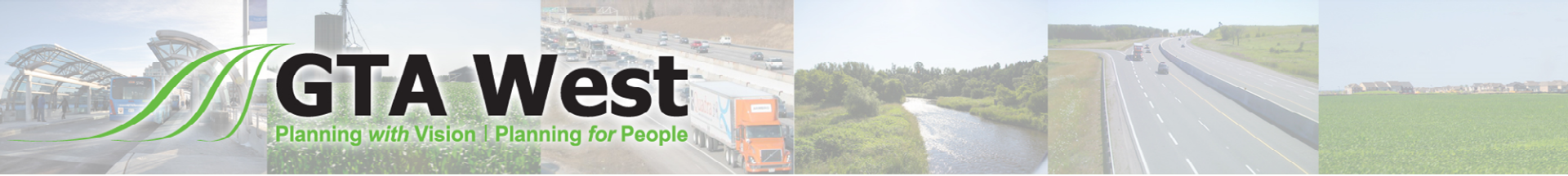




# PLANNING *WITH* VISION, PLANNING *FOR* PEOPLE

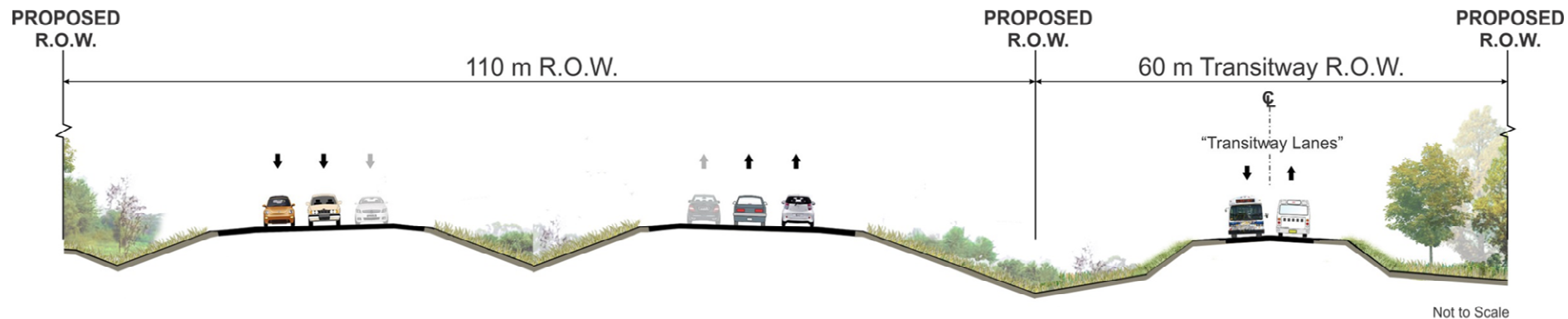
- The need for the GTA West Study remains and is strengthened by the GGH population and employment growth forecasts, reflecting more people and jobs by 2041. It is good practice to do long-range planning for areas under development pressure
- Committed to an open and transparent process that provides opportunities for all stakeholders to help shape the outcome of the project
- Strive to arrive at a recommended solution that provides the best balance of benefits and impacts for the local communities and the users of the transportation system

***To accomplish this, we are committed to engaging our municipal and agency partners in open two-way communication that leads to meaningful discussions, proactive information exchange and a constructive working relationship***



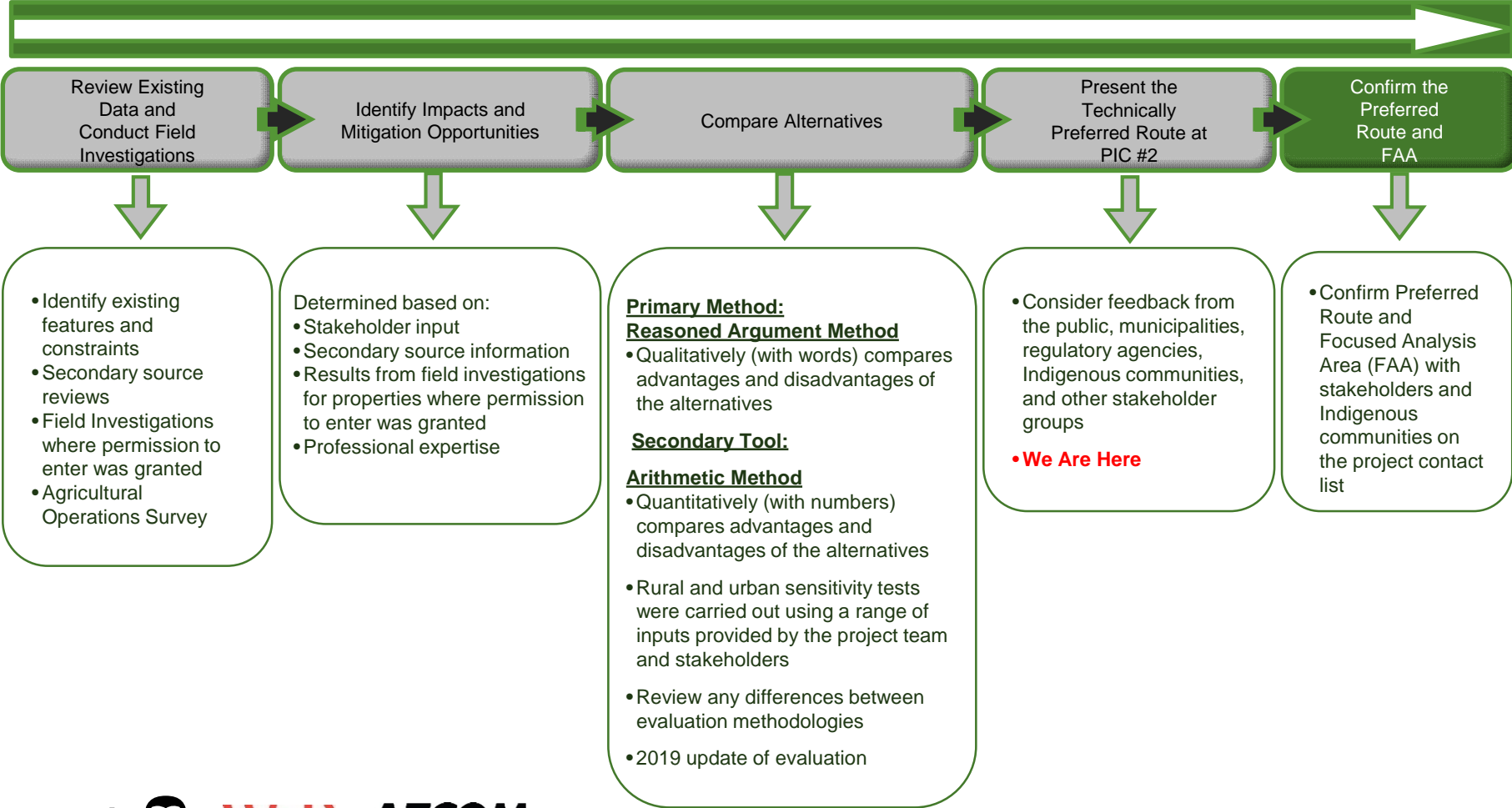
# THE NEW MULTIMODAL CORRIDOR

- The multimodal transportation corridor will initially be designed as a 4- to 6-lane highway with a separate adjacent transitway
- The total proposed right-of-way (ROW) will be 170m





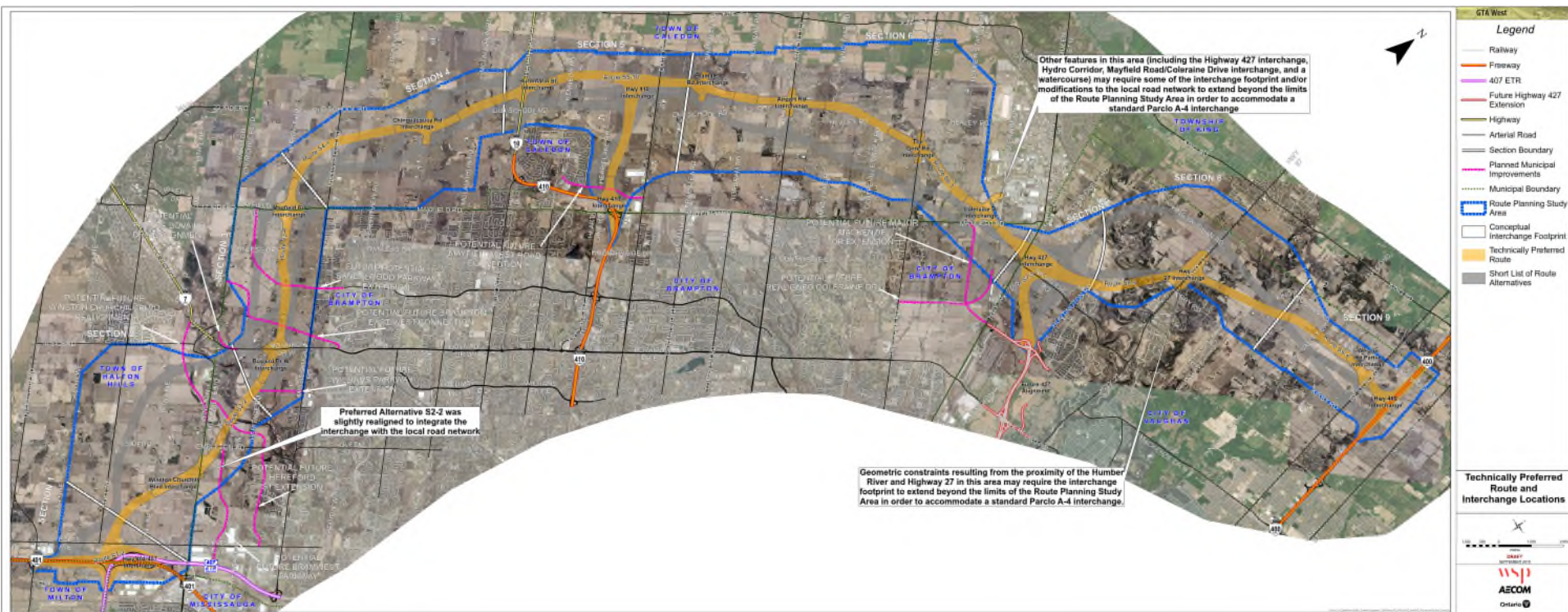
# ROUTE EVALUATION PROCESS







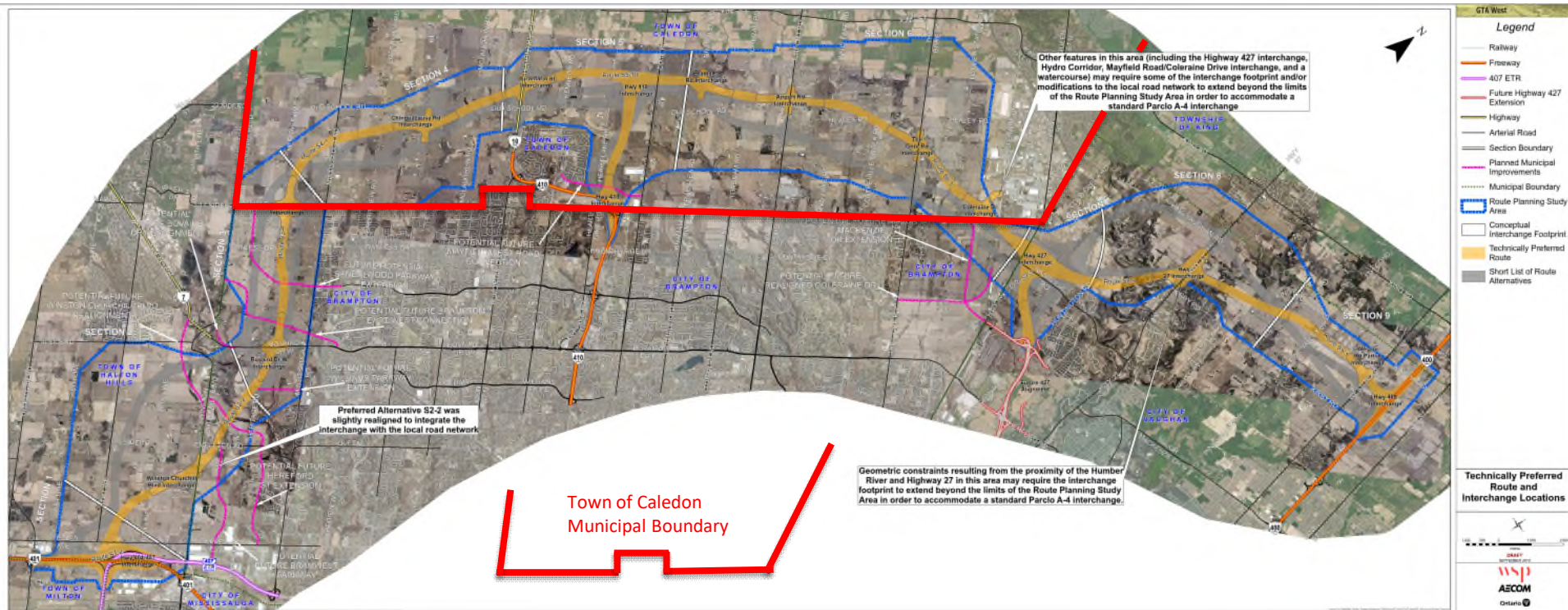
# TECHNICALLY PREFERRED ROUTE



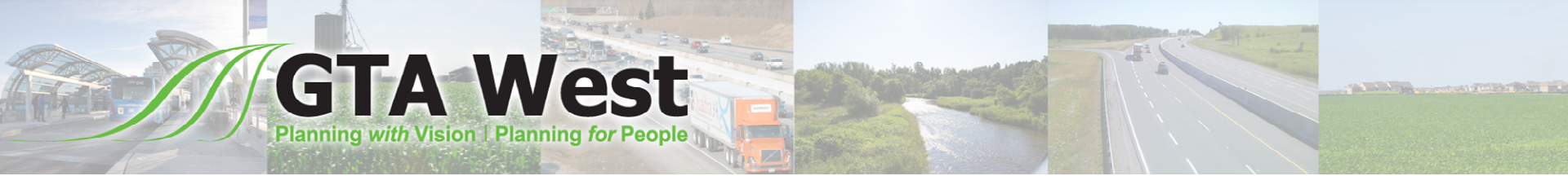




## TECHNICALLY PREFERRED ROUTE







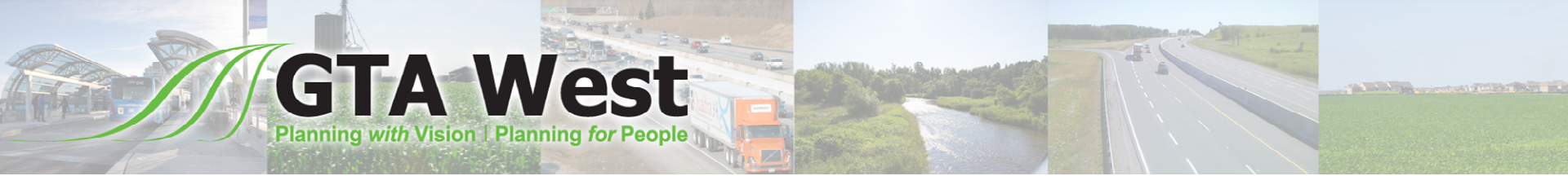
## SECTION 3 PREFERRED ALTERNATIVE: S3-4

### Preferred from a Transportation perspective:

- Minimizes wildlife habitat, wetland, and woodland community removal
- Avoids impacts to designated natural areas, including Greenbelt lands
- Connects well to the preferred crossing of the Credit River in Section 2
- Minimizes significant impacts to existing institutional facilities.
- Opportunities to avoid/minimize impacts to proposed Catholic Cemetery may be possible through design refinements
- Generally aligns with future land uses
- Considered the most constructible
- Provides the best opportunity for an interchange at Bovaird Drive
- Supports traffic safety and operations







## SECTION 4 PREFERRED ALTERNATIVE: S4-1

**Preferred from Natural, Land Use / Socio-Economic, Cultural and Transportation perspectives:**

- Minimizes impacts to watersheds and sub-watersheds, wetlands, woodlands and designated areas (e.g. Greenbelt)
- Has the fewest residential impacts (direct impacts and secondary noise impacts)
- Most preferred from an agricultural perspective as it has the lowest overall impacts
- Connects well with the preferred Section 3 alternative
- Has similar cost, traffic operations and level of constructability as the other well ranked alternatives





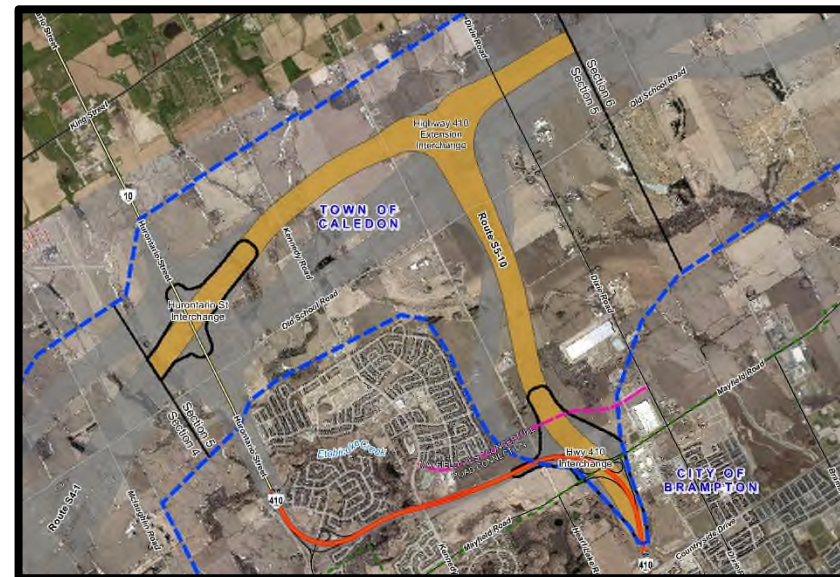
## SECTION 5 PREFERRED ALTERNATIVE: S5-10

A new Highway 410 alignment was preferred over the existing Highway 10/410,

A new alignment to the east was preferred over a new alignment to the west of Heart Lake Road,

Alternative S5-10 is preferred from Land Use / Socio-Economic and Transportation perspectives:

- Minimizes impacts to fish and fish habitat, and wetlands
- Avoids impacts to large volume wells
- Avoids existing residential subdivisions in Valleywood and minimizes direct residential impacts elsewhere
- Minimizes impacts to agricultural lands and operations
- Minimizes impacts to built heritage resources
- Avoids impacts to commercial and industrial properties
- Minimizes impacts to future urban development including the Mayfield West planned community and Mayfield West employment lands
- Less complex Highway 410/GTA West freeway-to-freeway interchange design (connections to Hurontario Street are provided by a separate interchange)
- Better ability to implement a transitway in the new Highway 410 corridor
- Supports network compatibility, lower relative cost



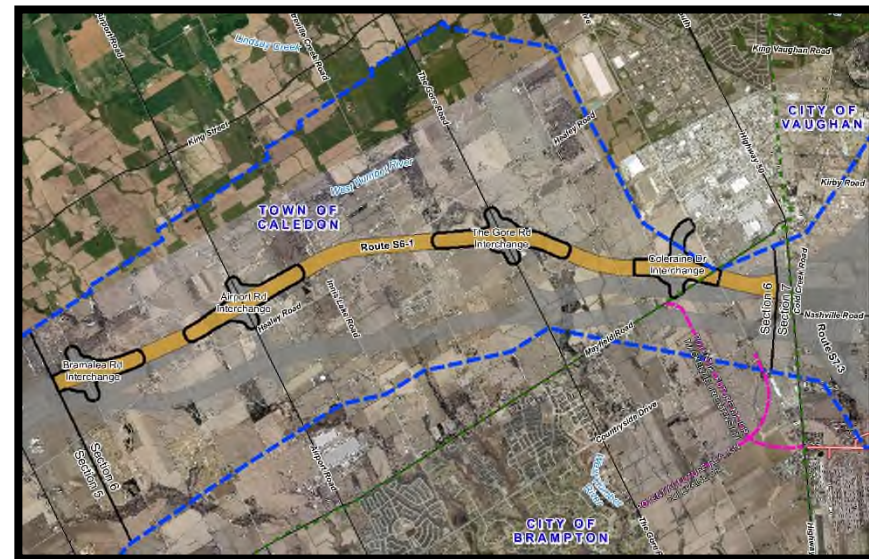




## SECTION 6 PREFERRED ALTERNATIVE: S6-1

### Preferred from Natural, Land Use / Socio-Economic and Transportation perspectives:

- Least impact to fish and fish habitat, minimizes impacts to wildlife and wildlife habitat, wetlands
- Impacts the fewest residential properties and private wells
- Low impacts to commercial/industrial properties and future development
- Avoids impacts to high-investment farming operations
- Accommodates a full moves interchange in the area of Coleraine Drive (realignment likely required to achieve an acceptable separation distance to the Highway 427 extension)
- Has a moderate relative cost to the other well ranked transportation alternative (S6-4)
- Connects well to the preferred Section 5 alternative

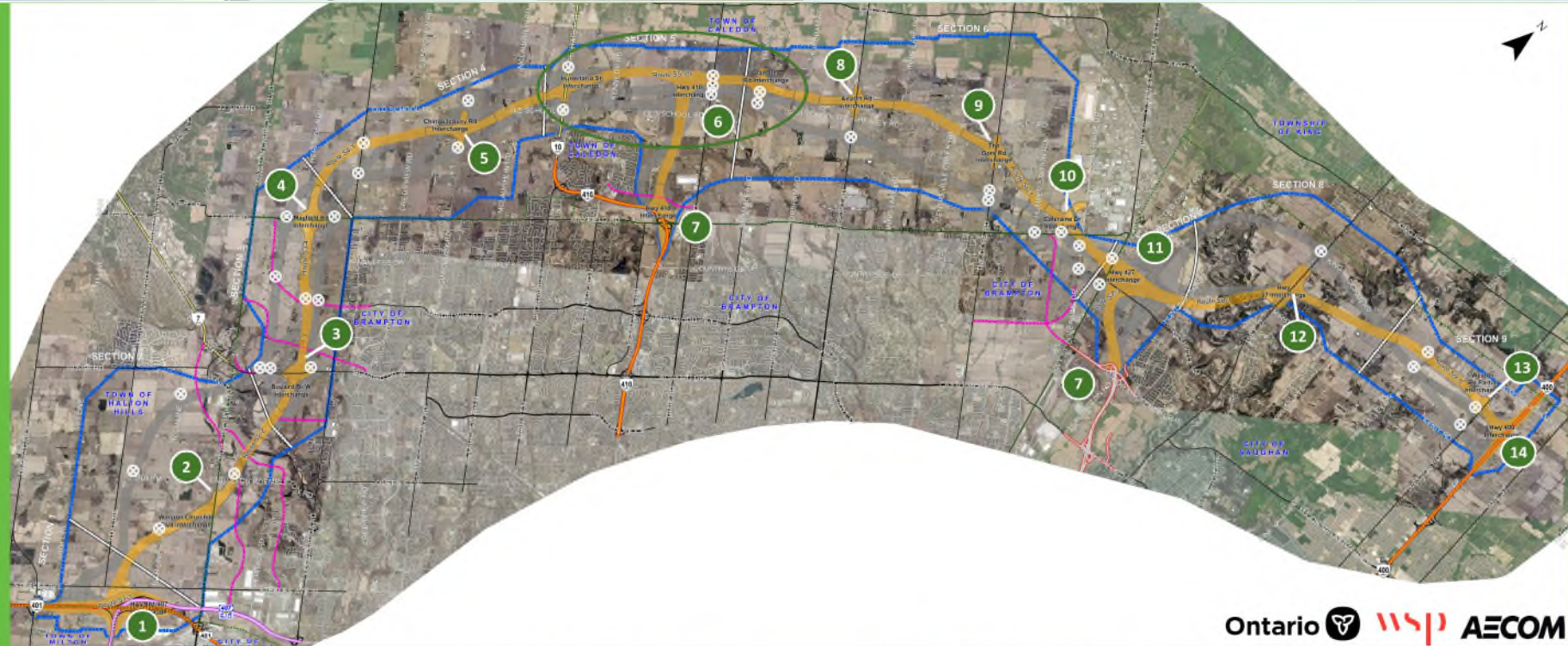




# EVALUATION CRITERIA FOR SELECTING PREFERRED INTERCHANGE LOCATIONS

- Potential interchange locations along each route alternative were selected based on:
  - Level of connectivity to the highway network
  - Level of connectivity to the municipal road network and initiatives
  - Level of connectivity to transit
  - Traffic demand
  - Spacing between interchanges
- Potential interchange locations on the short list of route alternatives were discussed with municipal staff prior to the 2015 evaluation of route alternatives
- Key trade-offs between potential interchange location alternatives were considered in the evaluation of route alternatives
- After selection of the Technically Preferred Route, the potential interchange locations along that route were reviewed again using the above criteria and the preferred interchange locations were selected



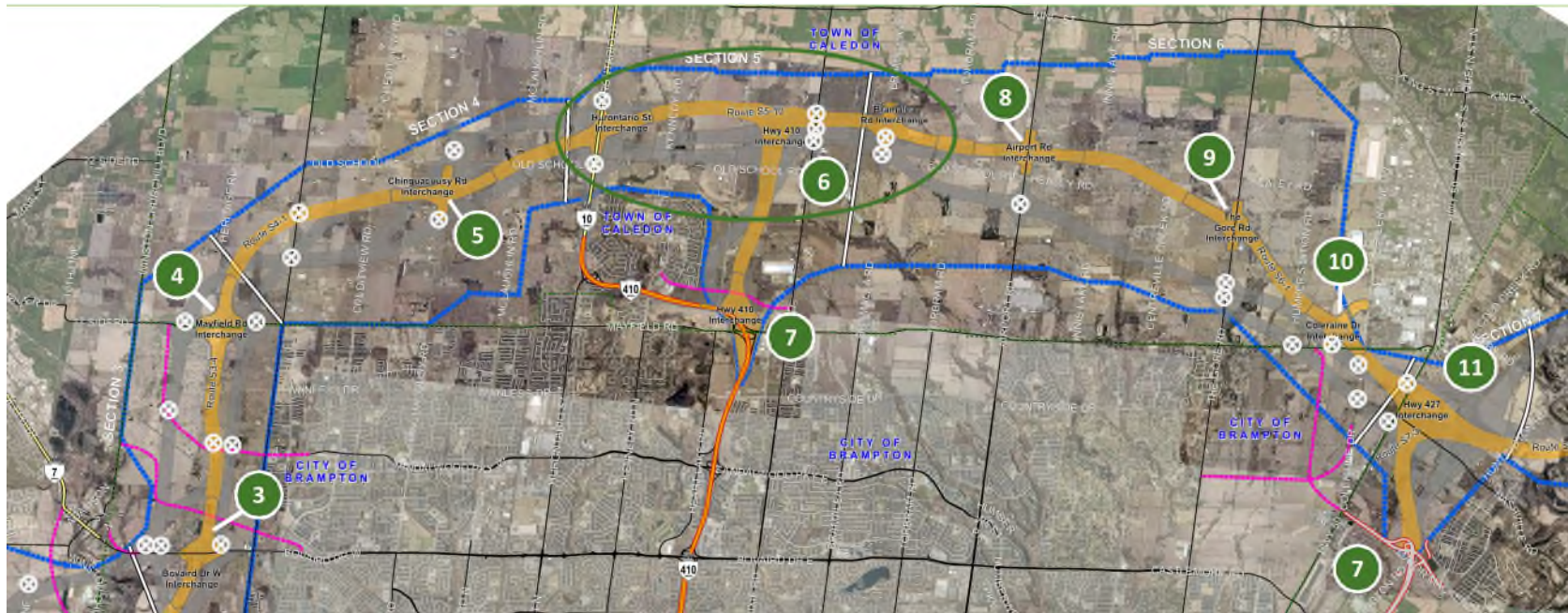


<b>1</b>	<b>Highway 401/407 ETR freeway-to-freeway interchange – Aligns with Technically Preferred Route for Section 1</b>	<b>8</b>	<b>Airport Road Interchange – Aligns with Technically Preferred Route for Section 6</b>
<b>2</b>	<b>Winston Churchill Boulevard, Tenth Line or Embleton Road Interchange: Winston Churchill Boulevard preferred</b> <ul style="list-style-type: none"> <li>Winston Churchill Boulevard provides better connections to urban growth centres and appropriate interchange spacing to provide desirable connections to the municipal road network</li> <li>Opportunity to integrate with future municipal road improvements such as realigned Winston Churchill Boulevard and/or Bram West Parkway (planned municipal initiative)</li> </ul>	<b>9</b>	<b>The Gore Road Interchange – Aligns with Technically Preferred Route for Section 6</b>
<b>3</b>	<b>Heritage Road, Bovaird Drive or Future Sandalwood Parkway Extension: Bovaird Drive preferred</b> <ul style="list-style-type: none"> <li>Provides appropriate connections with the municipal road network and provides desirable interchange spacing</li> <li>Bovaird Drive is the major east/west arterial connecting urban centres in Halton Hills and Brampton</li> <li>Bovaird Drive provides better interchange spacing to the Winston Churchill Boulevard interchange than at Heritage Road</li> <li>Better road geometry for an interchange at Bovaird Drive than at Heritage Road</li> <li>An interchange at the future Sandalwood Parkway Extension is not precluded from future consideration by municipalities</li> </ul>	<b>10</b>	<b>Coleraine Drive/Mayfield Road Area Interchange</b> <ul style="list-style-type: none"> <li>A full moves interchange is desirable to connect to existing and future urban growth centres</li> <li>Local municipalities support a full interchange with a road that runs north-south (like Coleraine Drive)</li> <li>Proximity to the GTA West/Highway 427 freeway-to-freeway interchange creates a constraint to locating the interchange on Coleraine Drive (not enough spacing between interchanges)</li> <li>Proposed strategy is to realign Coleraine Drive and then provide a full interchange</li> </ul>
<b>4</b>	<b>Mayfield Road or Mississauga Road Interchange: Mayfield Road preferred</b> <ul style="list-style-type: none"> <li>Based on continuity and proximity to the GTA West Corridor, Mayfield Road is envisioned to be a key east-west route</li> <li>There is better road geometry at Mayfield Road than at Mississauga Road</li> </ul>	<b>11</b>	<b>Highway 427 freeway-to-freeway interchange and Highway 50 Interchange: Freeway-to-freeway Interchange at Highway 427 Preferred</b> <ul style="list-style-type: none"> <li>Based on the Technically Preferred Route, an interchange at both Highway 427 and Highway 50 is not possible</li> </ul>
<b>5</b>	<b>Chinguacousy Road Interchange – Aligns with Technically Preferred Route for Section 4</b>	<b>12</b>	<b>Highway 27 interchange – Aligns with Technically Preferred Route for Section 8</b>
<b>6</b>	<b>Highway 410, Hurontario Street, Dixie Road and Bramalea Road Interchanges: Freeway-to-freeway interchange at New Highway 410 Connection (along the extension of Highway 410 to the north) plus Interchanges at Hurontario Street and Bramalea Road preferred</b> <ul style="list-style-type: none"> <li>Since a new Highway 410 connection is preferred, a freeway-to-freeway interchange is recommended at Highway 410 in the area of Dixie Rd</li> <li>Interchanges at Hurontario Street and Bramalea Road are spaced at a desirable distance from the freeway-to-freeway interchange and will provide good access to the municipal road network</li> <li>An interchange at Dixie Road would result in undesirable grades and interchange spacing which would result in weaving concerns with the freeway-to-freeway interchange</li> </ul>	<b>13</b>	<b>Pine Valley Drive Interchange or Partial Interchange at Weston Road: Partial interchange at Weston Road preferred</b> <ul style="list-style-type: none"> <li>An interchange to the west of Highway 400 provides a desirable connection with the municipal road network</li> <li>Pine Valley Drive is not continuous north or south of the study area and there are no planned urban growth centres along Pine Valley Drive</li> <li>Weston Road provides a connection to a planned urban growth centre</li> </ul>
<b>7</b>	<b>Modifications to Existing Highway 410/Mayfield Road and Highway 427/Major Mackenzie Drive Interchanges – Aligns with Technically Preferred Routes for Sections 5 and 11</b>	<b>14</b>	<b>Highway 400 freeway-to-freeway interchange – Aligns with Technically Preferred Route for Section 9</b>





# PREFERRED INTERCHANGE LOCATIONS



- 3 Heritage Road, Bovaird Drive or Future Sandalwood Parkway Extension: Bovaird Drive preferred**
  - Provides appropriate connections with the municipal road network and provides desirable interchange spacing
  - Bovaird Drive is the major east/west arterial connecting urban centres in Halton Hills and Brampton
  - Bovaird Drive provides better interchange spacing to the Winston Churchill Boulevard interchange than at Heritage Road
  - Better road geometry for an interchange at Bovaird Drive than at Heritage Road
  - An interchange at the future Sandalwood Parkway Extension is not precluded from future consideration by municipalities
- 4 Mayfield Road or Mississauga Road Interchange: Mayfield Road preferred**
  - Based on continuity and proximity to the GTA West Corridor, Mayfield Road is envisioned to be a key east-west route
  - There is better road geometry at Mayfield Road than at Mississauga Road
- 5 Chinguacousy Road Interchange – Aligns with Technically Preferred Route for Section 4**
- 6 Highway 410, Hurontario Street, Dixie Road and Bramalea Road Interchanges: Freeway-to-freeway interchange at New Highway 410 Connection (along the extension of Highway 410 to the north) plus Interchanges at Hurontario Street and Bramalea Road preferred**
  - Since a new Highway 410 connection is preferred, a freeway-to-freeway interchange is recommended at Highway 410 in the area of Dixie Rd
  - Interchanges at Hurontario Street and Bramalea Road are spaced at a desirable distance from the freeway-to-freeway interchange and will provide good access to the municipal road network
  - An interchange at Dixie Road would result in undesirable grades and interchange spacing which would result in weaving concerns with the freeway-to-freeway interchange
- 7 Modifications to Existing Highway 410/Mayfield Road and Highway 427/Major Mackenzie Drive Interchanges – Aligns with Technically Preferred Routes for Sections 5 and 11**

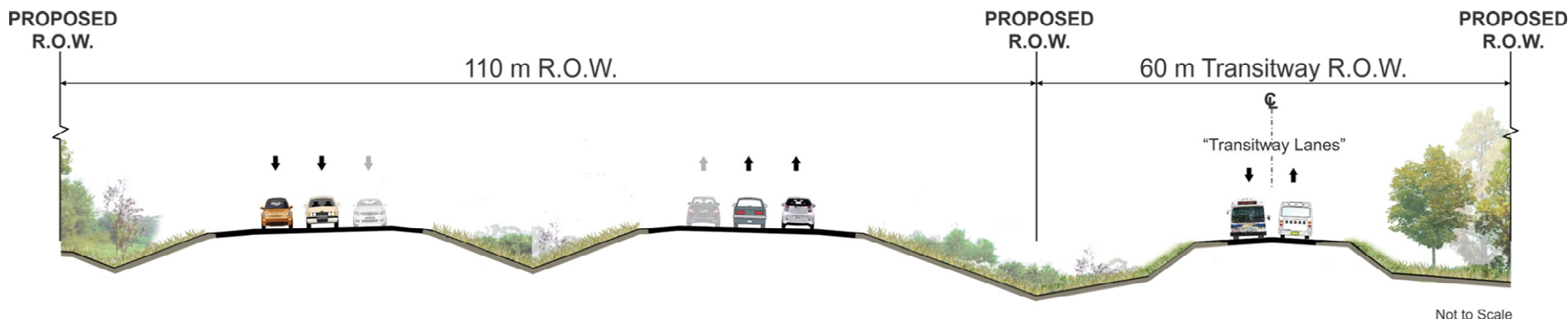
- 8 Airport Road Interchange – Aligns with Technically Preferred Route for Section 6**
- 9 The Gore Road Interchange – Aligns with Technically Preferred Route for Section 6**
- 10 Coleraine Drive/Mayfield Road Area Interchange**
  - A full moves interchange is desirable to connect to existing and future urban growth centres
  - Local municipalities support a full interchange with a road that runs north-south (like Coleraine Drive)
  - Proximity to the GTA West/Highway 427 freeway-to-freeway interchange creates a constraint to locating the interchange on Coleraine Drive (not enough spacing between interchanges)
  - Proposed strategy is to realign Coleraine Drive and then provide a full interchange
- 11 Highway 427 freeway-to-freeway interchange and Highway 50 Interchange: Freeway-to-freeway Interchange at Highway 427 Preferred**
  - Based on the Technically Preferred Route, an interchange at both Highway 427 and Highway 50 is not possible





# THE GTA WEST TRANSITWAY

- The GTA West transitway will run parallel to the GTA West highway and will:
  - Allow buses (and potentially in the future, light rail vehicles) to operate on express schedules
  - Include stations at strategic locations and provide transit connections with buses onto major arterial roadways, Highway 401, 407ETR, Highway 427, Highway 410, and Highway 400
- The transitway will be further developed to confirm:
  - Alignment, roadway crossing details, terminus configurations
  - Opportunities to integrate with existing and future transit services
  - Station locations and layouts
  - Opportunities to integrate with existing and future development





# GOODS MOVEMENT PRIORITY FEATURES

- Potential goods movement features have been screened:

Feature	Screening
Truck only lanes	✓ Carry forward for further consideration
Combined truck/transit lanes	✗ Do not carry forward <ul style="list-style-type: none"> <li>Reduces level of service of the transitway by introducing additional traffic</li> <li>The transitway requires restricted access which prohibits use by other traffic</li> </ul>
Truck use of potential HOV lanes during off-peak hours	✗ Do not carry forward <ul style="list-style-type: none"> <li>No operational benefits in off-peak hours</li> <li>Introduces additional lane changes for trucks to access HOV Lanes</li> </ul>
Intelligent Transportation Systems (ITS) features, such as variable message signs and real time traveler information	✓ Carry forward for further consideration
Longer speed change lanes	✓ Carry forward for further consideration
Enhanced design to accommodate Long Combination Vehicles	✓ Carry forward for further consideration
Truck only interchange ramps, where warranted by truck volumes	✗ Do not carry forward <ul style="list-style-type: none"> <li>Creates additional enforcement requirements</li> <li>Interchanges are provided for key freight trip generators, and there is insufficient space for additional ramps in these areas without compromising highway design guidelines</li> </ul>
Truck parking facilities	✓ Carry forward for further consideration
Enforcement features (weigh and inspection stations), including automated weigh stations	✓ Carry forward for further consideration

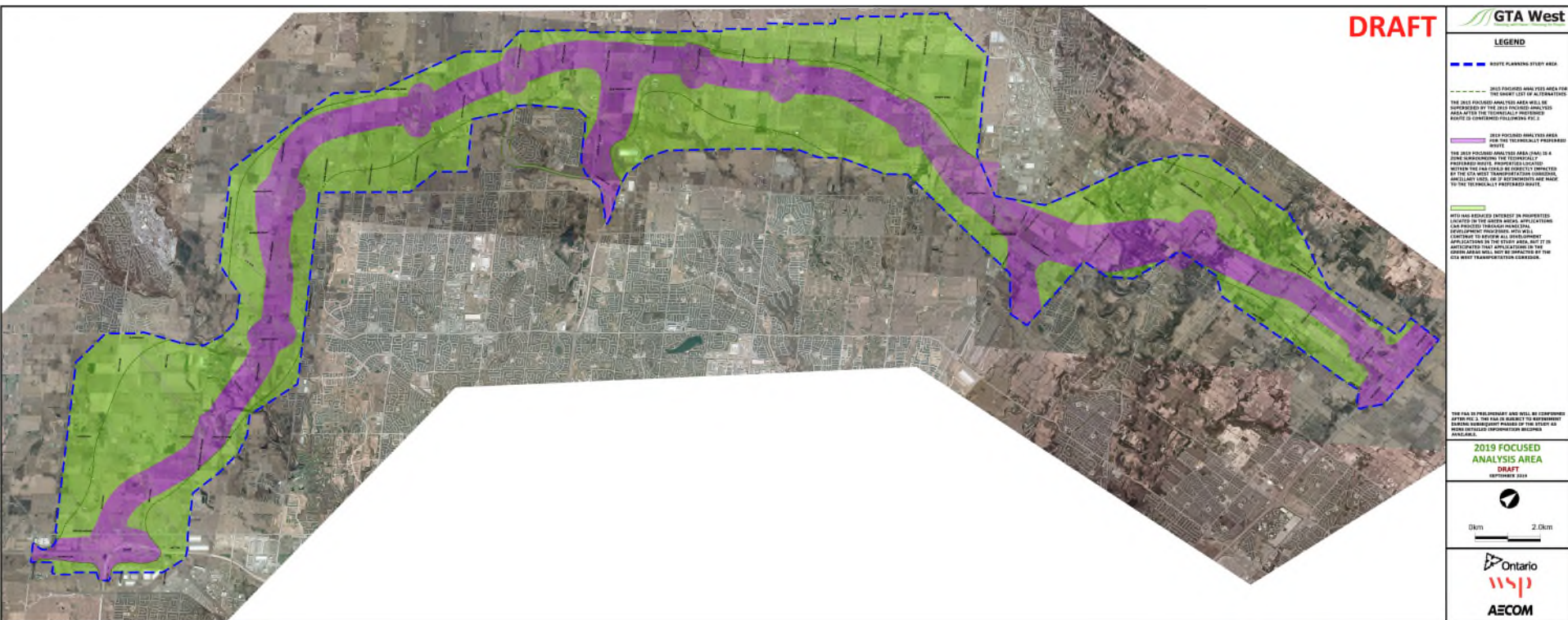




# GTA West

Planning with Vision | Planning for People

## 2019 FOCUSED ANALYSIS AREA





## WHAT WE HEARD AT PIC #2

- Approx. 979 stakeholders attended, 79 written comments received
- Mixture of support and opposition for the Technically Preferred Route but majority of input was supportive:
  - The transportation corridor is needed, expedite the EA process, start construction as soon as possible
  - Protect for extra land now so that widening of the right-of-way is not required in the future
  - Concern about congestion on connecting roads (e.g. Mayfield Road, Highway 400, Highway 401, Coleraine Drive, Weston Road, etc.)
  - The transportation corridor should go west to Guelph, east past Highway 400 and be closer to Highway 9 in the north
  - Concern about impacts to nearby property owners (noise, air quality, etc.) and inquiries about mitigation measures
  - Mixed feelings about impacts to agricultural and Greenbelt lands. Some felt these features were given priority in the evaluation and appropriately influenced route selection (i.e. crossing of Credit and Humber Rivers) while others expressed concern about ability to support food production and ecosystem services
  - Preferred Routed S4-1 minimizes impacts to the natural environment (including agriculture) and residential properties but impacts the Mayfield West Phase 2 development
  - Support for new extension of Highway 410 rather than using existing Highway 410 (minimizes impacts to Valleywood) in Section 5
  - Mixed feelings about proximity to Brampton-Caledon Airport. Concern regarding potential impacts to operations while others want the route moved closer to condense land uses
  - The interchange at Coleraine Drive in Section 6 conflicts with an approved development to the north
  - Support for Preferred Route S6-1 as it minimizes impacts to natural environment, residential/commercial/industrial/agricultural properties





## WHAT WE HEARD AT PIC #2

- Support for the transitway
  - The transitway only makes sense if it connects to other mass transit systems
  - Incorporate active transportation along the transitway
  - Support for transition from BRT to LRT
  - Consider both buses and trucks using the transitway
- Support for goods movement priority features
  - Support for truck only lanes
- Support for the 2019 Focused Analysis Area
  - Appreciate that over 60% of the Route Planning Study Area is in the green area (area of reduced interest)
  - Inquiries about when development restrictions will be lifted
- Other
  - Inquiries about timing of expropriation, permission to enter process, possibility of tolling, scope of separate electricity transmission study
  - Requests for digital mapping of Technically Preferred Route to understand impacts and coordinate works
  - The Project Team did a good job evaluating the route alternatives and explaining the rationale for their decisions



## CONSULTATION & ENGAGEMENT

- Public Information Centres (3 rounds)
- Community workshops (4 rounds)
  - 2 rounds focused on Community Value Plans
- Ongoing consultation with Indigenous Communities
- Stakeholder advisory groups, municipal working groups, meetings with landowners, and Council presentations
- Website, email, toll-free telephone, Twitter, Ontario Government Notices and brochures







## NEXT STEPS

Fall 2019	<ul style="list-style-type: none"> <li>Project Team to review and respond to comments received at PIC #2:</li> <li>Meetings with Indigenous communities, Advisory Groups and Regional Municipal Councils</li> </ul>
Spring 2020	<ul style="list-style-type: none"> <li>Confirm the Preferred Route and Focused Analysis Area</li> <li>Commence preliminary design of the Preferred Route, which includes:</li> <li>Additional field investigations where permission to enter is granted</li> <li>Consultation with property owners directly impacted by the Preferred Route</li> </ul>
Fall 2020 / Spring 2021	<ul style="list-style-type: none"> <li>Develop Community Value Plans (the focus of Community Workshops #3 and #4)</li> </ul>
Spring / Summer 2021	<ul style="list-style-type: none"> <li>Meetings with Indigenous communities, Advisory Groups and Regional Municipal Councils</li> </ul>
Fall / Winter 2021	<ul style="list-style-type: none"> <li>Present the preliminary design of the Preferred Route at PIC #3</li> </ul>
Late 2022	<ul style="list-style-type: none"> <li>Anticipated submission of Final Environmental Assessment Report to MECP</li> </ul>

\* Schedule is subject to change