



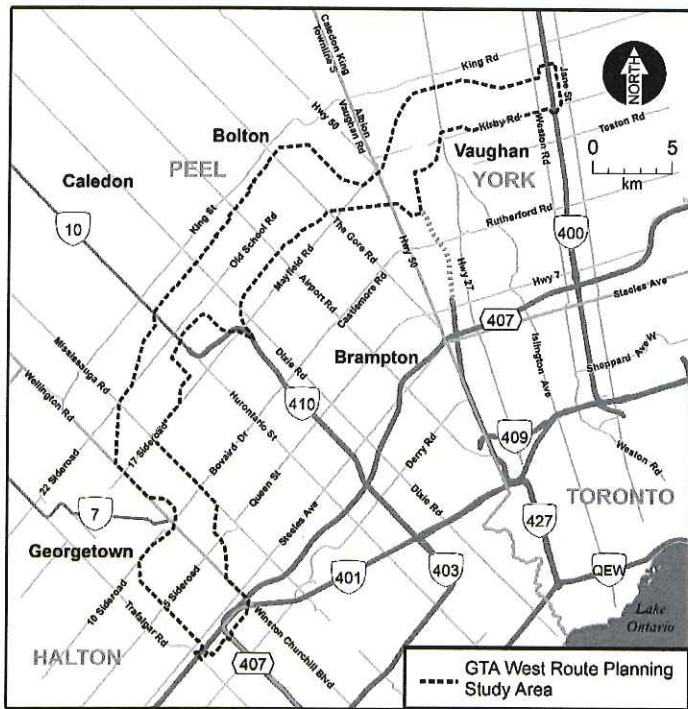
GTA West Transportation Corridor  
Route Planning and EA Study –  
Stage 2

City of Vaughan Committee of the Whole  
November 12, 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

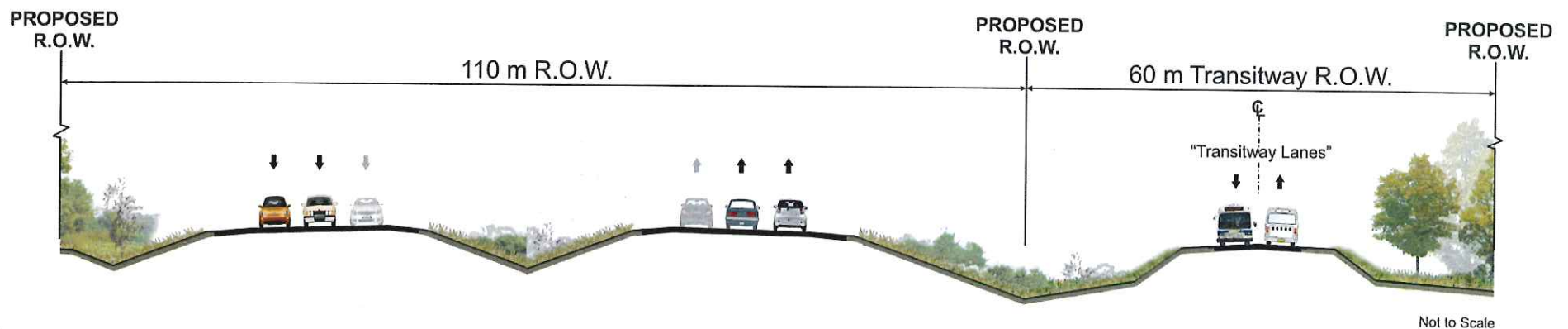
*To accomplish this, we are committed to engaging our municipal and agency partners in open two-way communication that leads to meaningful discussions, proactive information exchange and a constructive working relationship*





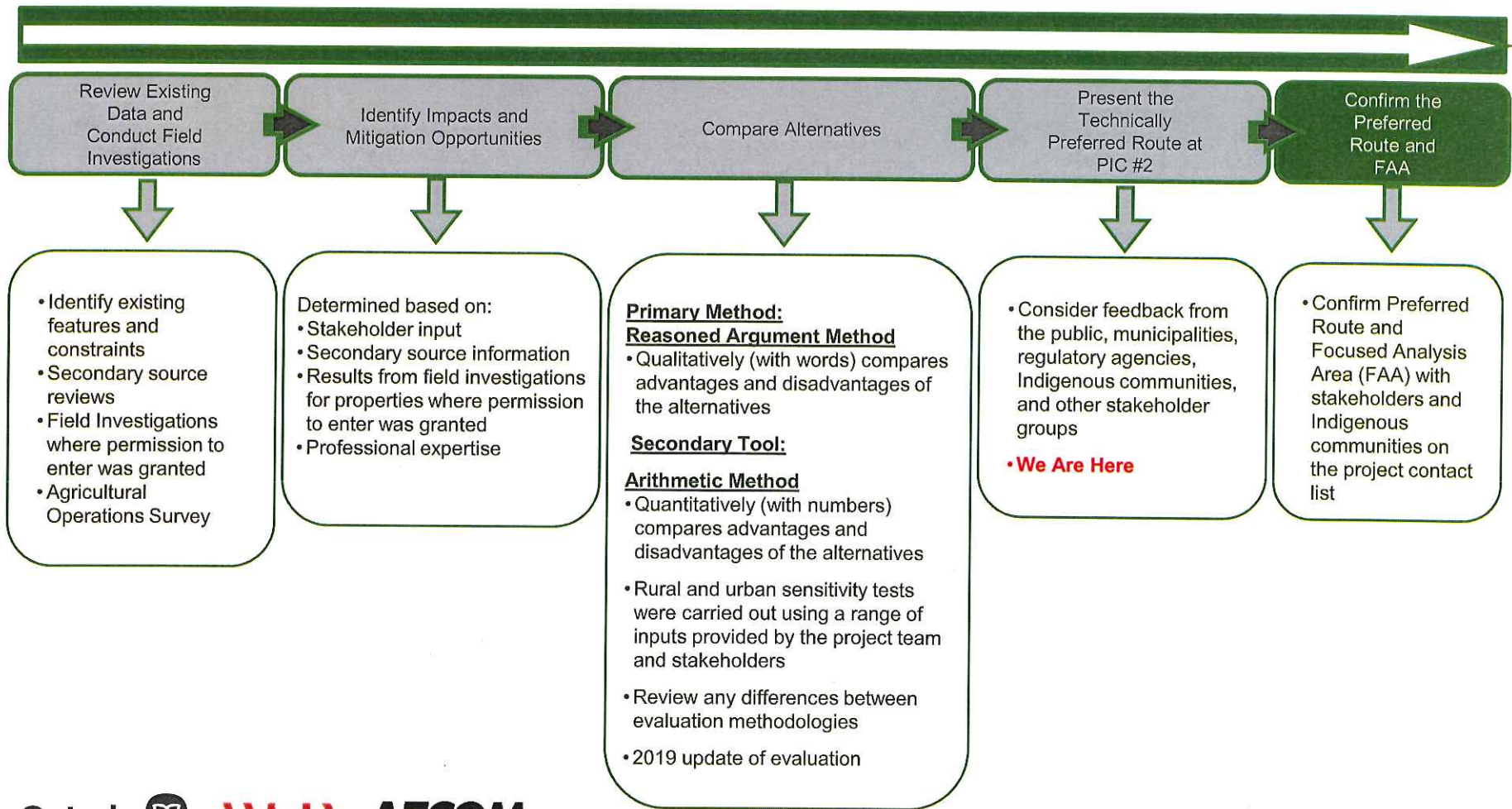
## THE NEW MULTIMODAL CORRIDOR

- 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





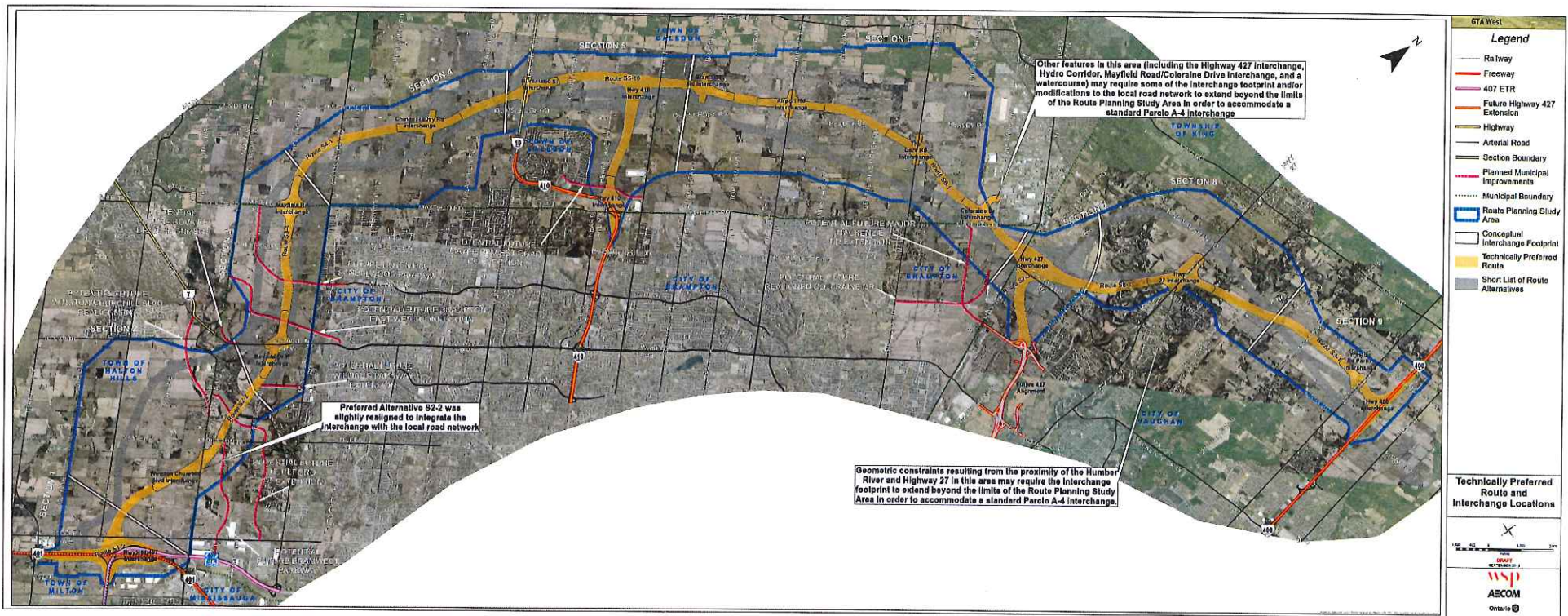
# ROUTE EVALUATION PROCESS







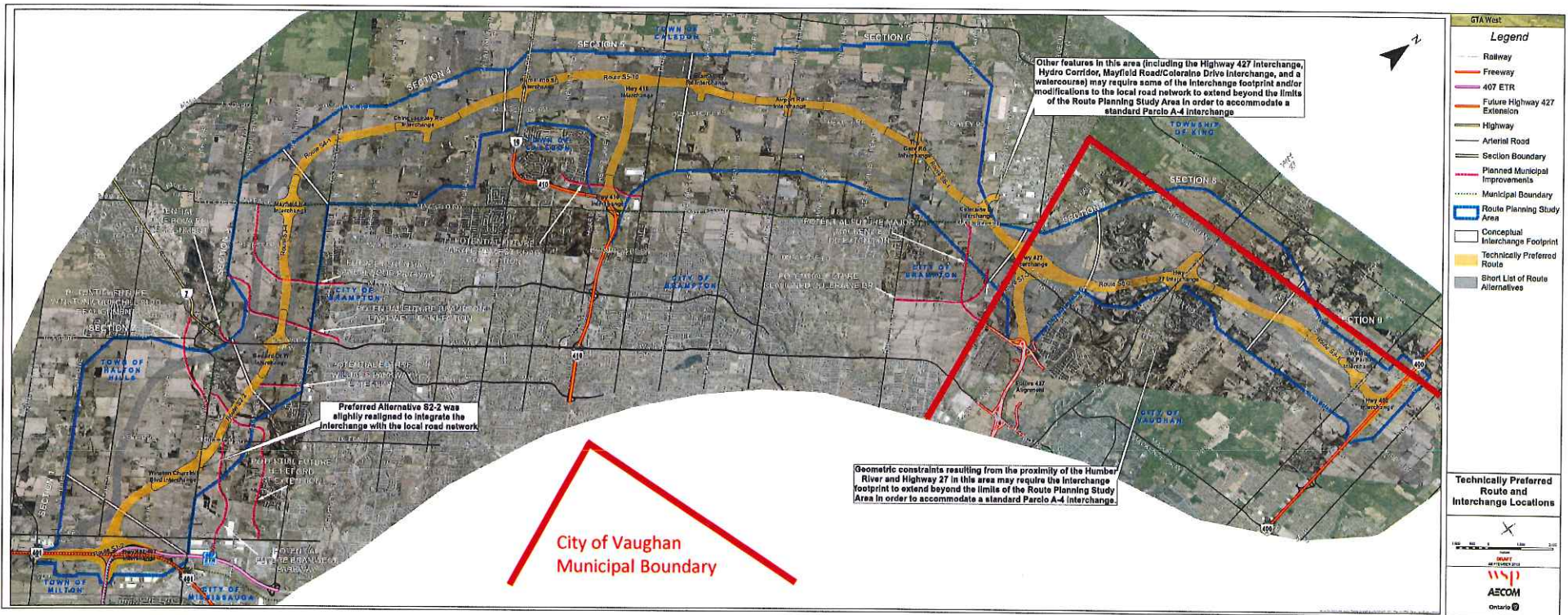
# TECHNICALLY PREFERRED ROUTE







# TECHNICALLY PREFERRED ROUTE







## SECTION 7 PREFERRED ALTERNATIVE: S7-3

The Project Team identified the best route east and west of the hydro corridor and then compared them to select the overall preferred route for Section 7.

The preferred route west of the hydro corridor was Alternative S7-3. The preferred route east of the hydro corridor was Alternative S7-9. Alternative S7-3 is preferred overall versus S7-9:

- Less impacts to groundwater sensitive ecosystems and wellhead protection areas
- Less noise impacts to existing and proposed residences to the east
- Moderate impacts to built heritage resources and cultural heritage landscapes
- Minor impacts to the hydro corridor, railway and TransCanada pipeline
- 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 and optimize traffic operations to/from Coleraine Drive interchange)
- Constructability and connectivity were principle considerations in Section 7. S7-3 is considered the most constructible and it connects well to the Section 8 Humber River crossing, reducing overall environmental impacts



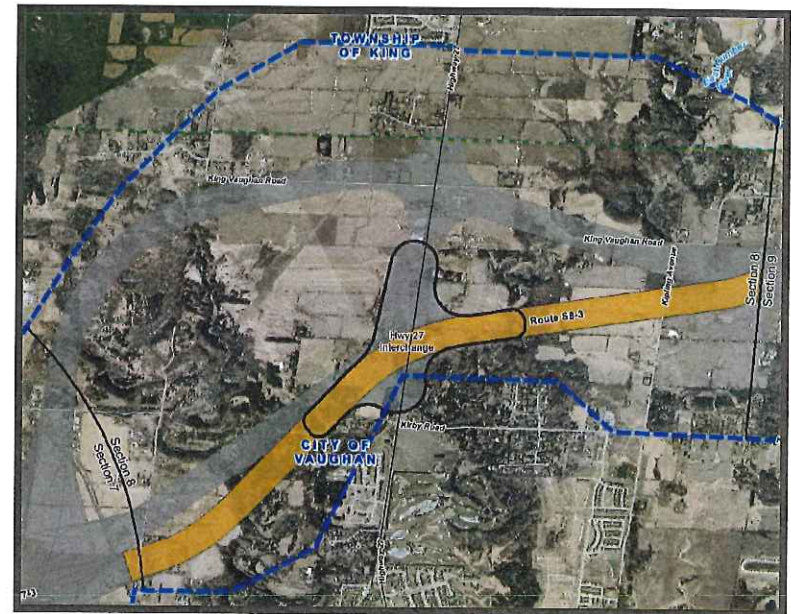




## SECTION 8 PREFERRED ALTERNATIVE: S8-3

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

- Lowest overall impacts to fish and fish habitat, wildlife and wildlife habitat, woodlands and vegetation, watersheds, and surface water
- Best location with most flexibility for the Humber River crossing due to its distance from the large meander
- Impacts the least amount of Greenbelt and agricultural lands and is preferred from a provincial land use policy perspective
- Impacts more residential properties but minimizes impacts to commercial properties, avoids impacts to high-investment farming operations, and has a higher probability of avoiding a waste disposal site
- Low construction cost and is considered the most constructible







## SECTION 9 PREFERRED ALTERNATIVE: S9-1

### Preferred from Natural, Cultural and Transportation perspectives:

- Minimizes impacts to fish and fish habitat, designated areas and ecosystem services, with relatively simple and perpendicular watercourse crossings
- Least impact on Greenbelt lands
- Minimizes impacts to employment and future urban area lands
- Low residential property impacts
- Low potential for constructability issues
- Better angle of approach for the Highway 400 interchange







## 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



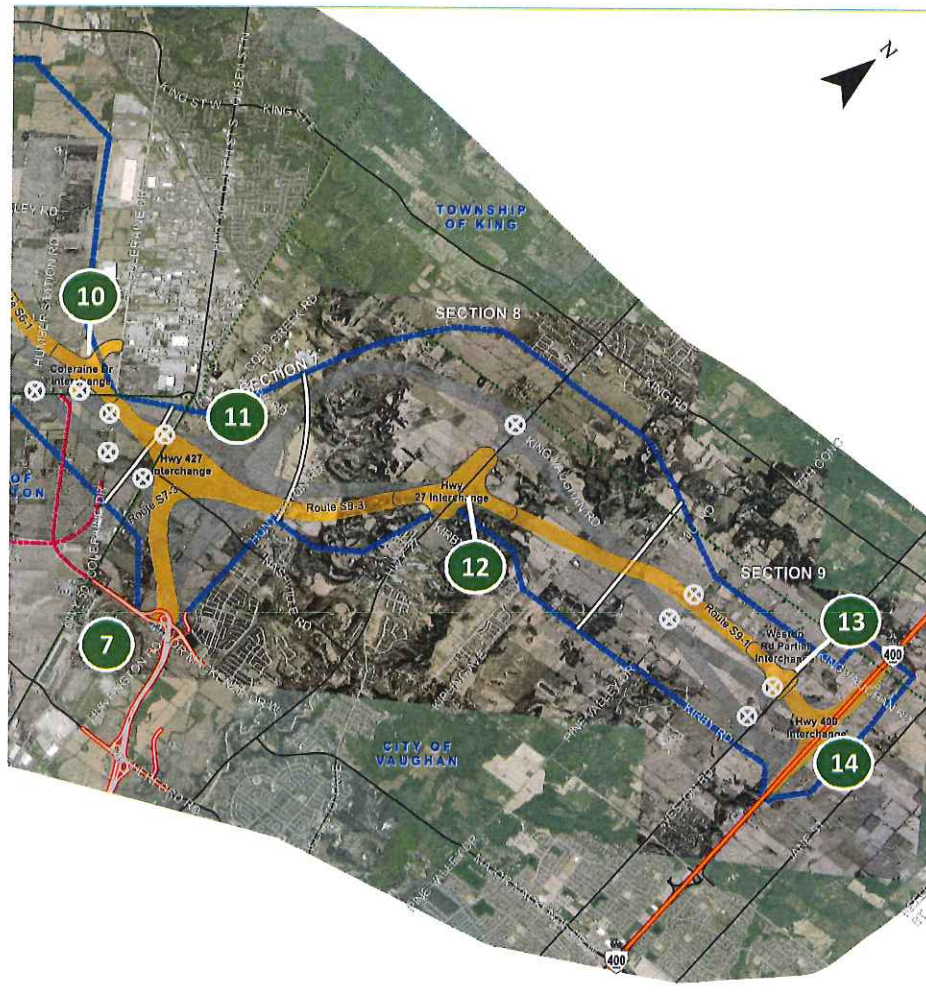


|   |   |
|---|---|
| <p><b>1 Highway 401/407 ETR freeway-to-freeway interchange – Aligns with Technically Preferred Route for Section 1</b></p>  | <p><b>8 Airport Road Interchange – Aligns with Technically Preferred Route for Section 6</b></p>  |
| <p><b>2 Winston Churchill Boulevard, Tenth Line or Embleton Road Interchange: Winston Churchill Boulevard preferred</b></p> <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>  | <p><b>9 The Gore Road Interchange – Aligns with Technically Preferred Route for Section 6</b></p>   |
| <p><b>3 Heritage Road, Bovaird Drive or Future Sandalwood Parkway Extension: Bovaird Drive preferred</b></p> <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>   | <p><b>10 Coleraine Drive/Mayfield Road Area Interchange</b></p> <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> |
| <p><b>4 Mayfield Road or Mississauga Road Interchange: Mayfield Road preferred</b></p> <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>   | <p><b>11 Highway 427 freeway-to-freeway Interchange and Highway 50 Interchange: Freeway-to-freeway Interchange at Highway 427 Preferred</b></p> <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>   |
| <p><b>5 Chinguacousy Road Interchange – Aligns with Technically Preferred Route for Section 4</b></p>   | <p><b>12 Highway 27 interchange – Aligns with Technically Preferred Route for Section 8</b></p>   |
| <p><b>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</b></p> <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> | <p><b>13 Pine Valley Drive Interchange or Partial Interchange at Weston Road: Partial Interchange at Weston Road preferred</b></p> <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>  |
| <p><b>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</b></p>   | <p><b>14 Highway 400 freeway-to-freeway interchange – Aligns with Technically Preferred Route for Section 9</b></p>   |





# PREFERRED INTERCHANGE LOCATIONS



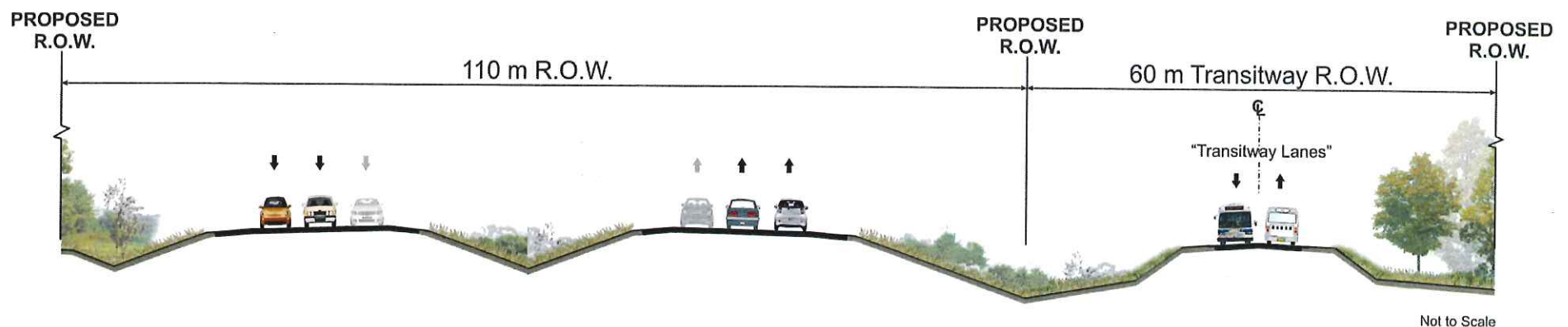
- 10 Coleraine Drive/Mayfield Road Area Interchange**
  - A full moves interchange is desirable to connect to existing and future urban growth centres
  - Local municipalities support a full interchange with a road that runs north-south (like Coleraine Drive)
  - Proximity to the GTA West/Highway 427 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
- 12 Highway 27 interchange – Aligns with Technically Preferred Route for Section 8**
- 13 Pine Valley Drive Interchange or Partial Interchange at Weston Road: Partial interchange at Weston Road preferred**
  - An interchange to the west of Highway 400 provides a desirable connection with the municipal road network
  - 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
  - Weston Road provides a connection to a planned urban growth centre
- 14 Highway 400 freeway-to-freeway interchange – Aligns with Technically Preferred Route for Section 9**





## 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   |





# 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
  - The interchange at Coleraine Drive in Section 6 conflicts with an approved development to the north
  - Extend Highway 427 to Highway 9 in Section 7
  - The emphasis on protecting Greenbelt lands and the Humber River in Sections 8 and 9 appropriately influenced route selection





## WHAT WE HEARD AT PIC #2

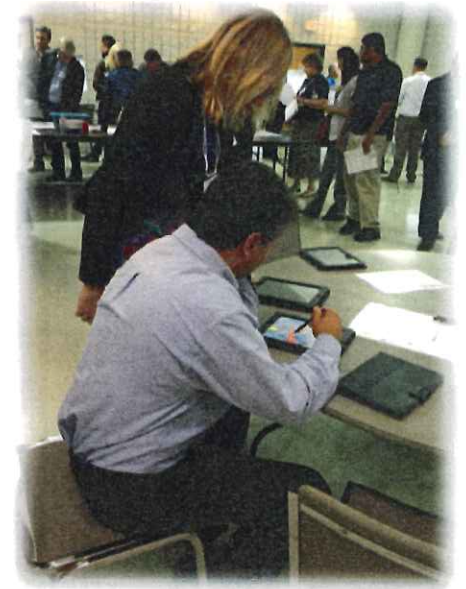
- Support for the transitway:
  - The transitway only makes sense if it connects to other mass transit systems
  - Incorporate active transportation along the transitway
  - Support for transition from BRT to LRT
  - Consider both buses and trucks using the transitway
- Support for goods movement priority 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

|                                |  |
|--------------------------------|--|
| <b>Fall 2019</b>               | <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>  |
| <b>Spring 2020</b>             | <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> |
| <b>Fall 2020 / Spring 2021</b> | <ul style="list-style-type: none"> <li>• Develop Community Value Plans (the focus of Community Workshops #3 and #4)</li> </ul>   |
| <b>Spring / Summer 2021</b>    | <ul style="list-style-type: none"> <li>• Meetings with Indigenous communities, Advisory Groups and Regional Municipal Councils</li> </ul>  |
| <b>Fall / Winter 2021</b>      | <ul style="list-style-type: none"> <li>• Present the preliminary design of the Preferred Route at PIC #3</li> </ul>  |
| <b>Late 2022</b>               | <ul style="list-style-type: none"> <li>• Anticipated submission of Final Environmental Assessment Report to MECP</li> </ul>  |

\* Schedule is subject to change