

Highway 401 Kingston to Gananoque

Preliminary Design and Class Environmental Assessment Study from 1 km West of Highway 15 to 1 km East of Highway 2 / King Street, Including the Thousand Islands Parkway and Highway 2 Interchange, GWP 4049-22-00

Public Information Centre #1

October 2, 2025

Welcome to Public Information Centre #1

The purpose of this Public Information Centre (PIC) is to present:

- Project overview and the process being followed.
- The need for the improvements.
- Existing conditions.
- Alternatives being considered:
 - Bridge rehabilitations/replacements.
 - Interchanges.
 - Future Highway 401 footprint for six and eight lanes.
- Evaluation process and criteria.
- Next steps.

We are here to listen to your input and answer your questions about the study. Please let us know if you require accommodation to participate.



Sign in



Chat with the Project Team



Fill out a comment sheet

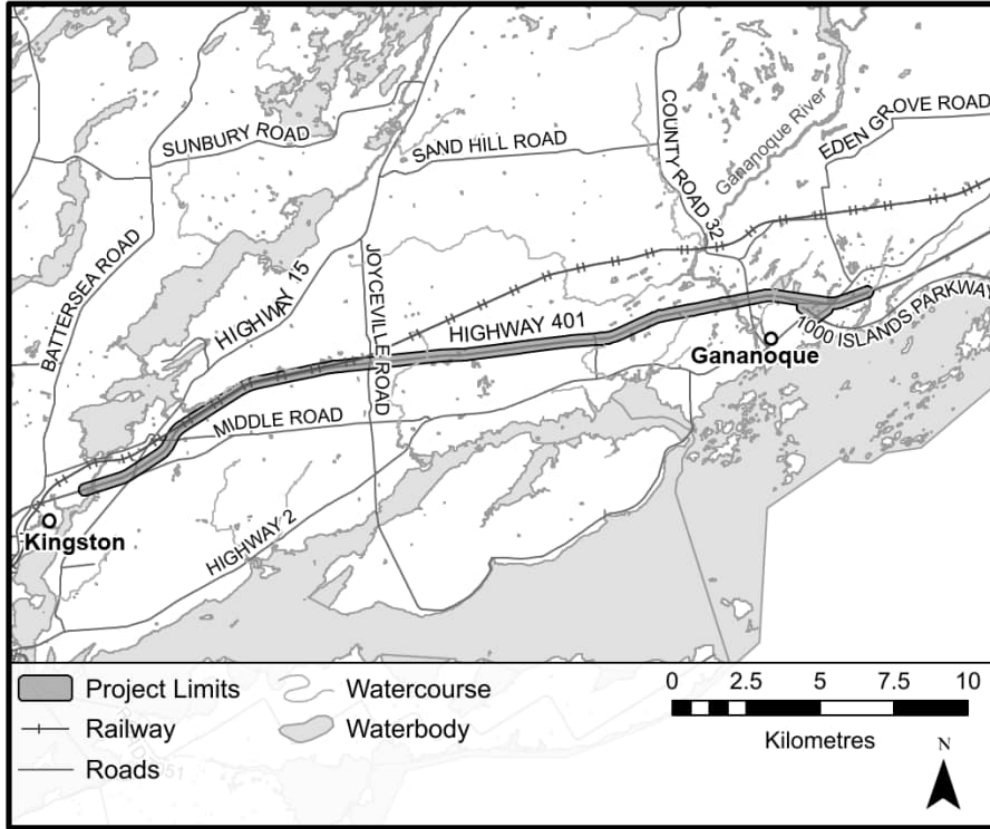


View the displays at www.hwy401kingstontogananoque.ca



Contact us any time at:
projectteam@hwy401kingstontogananoque.ca
or 1-844-650-2008

Project Overview



- Preliminary Design and Class Environmental Assessment (EA) Study focusing on the replacement and rehabilitation of structures, interchange improvements, and establishing the footprint of Highway 401 for future interim six and ultimate eight lanes from 1 km west of Highway 15 to 1 km east of Highway 2/King Street (approximately 27 km), including the Thousand Islands Parkway/Highway 2 interchange.
- The study area falls within the City of Kingston, United Counties of Leeds and Grenville, Township of Leeds and the Thousand Islands, and the Town of Gananoque.

Adjacent active studies:

- Highway 401 Planning, Preliminary Design and Class EA Study from Belleville to Kingston (GWP 4022-21-00 and GWP 4016-21-00), hwy401bellevilletokingston.ca
- Highway 401 Planning, Preliminary Design and Class EA Study from Gananoque to Mallorytown (GWP 4050-22-00), hwy401gananoquetomallorytown.ca
- Highway 401 Planning, Preliminary Design and Class EA Study from Mallorytown to Brockville (GWP 4011-22-00), hwy401mallorytowntobrockville.ca

Key Study Components



Key study components include:

- Environmental studies to better understand the natural, socio-economic and cultural heritage aspects. This helps us identify existing conditions, potential impacts, and the best ways to avoid or reduce them.
- Analyzing traffic patterns to understand how the corridor is used today and how it might function in the future.
- Inspecting bridges and culverts to determine if they need to be rehabilitated or replaced to ensure safety and long-term durability.
- Reviewing drainage and stormwater systems to support the proposed improvements and solve existing water-related issues.
- Reviewing electrical systems, including illumination upgrades, modifications to traffic signals, and needs at commuter parking lots.
- Updating geotechnical work, like studying foundations and pavement, to help shape the early design.
- Exploring how construction might be sequenced and staged to keep things running as smoothly as possible during the work.

We are looking at ways to improve interchanges along the corridor so they can accommodate necessary bridge replacements, accommodate the future highway footprint, handle future traffic volumes and meet today's design standards. This includes improvements at the following interchange locations:

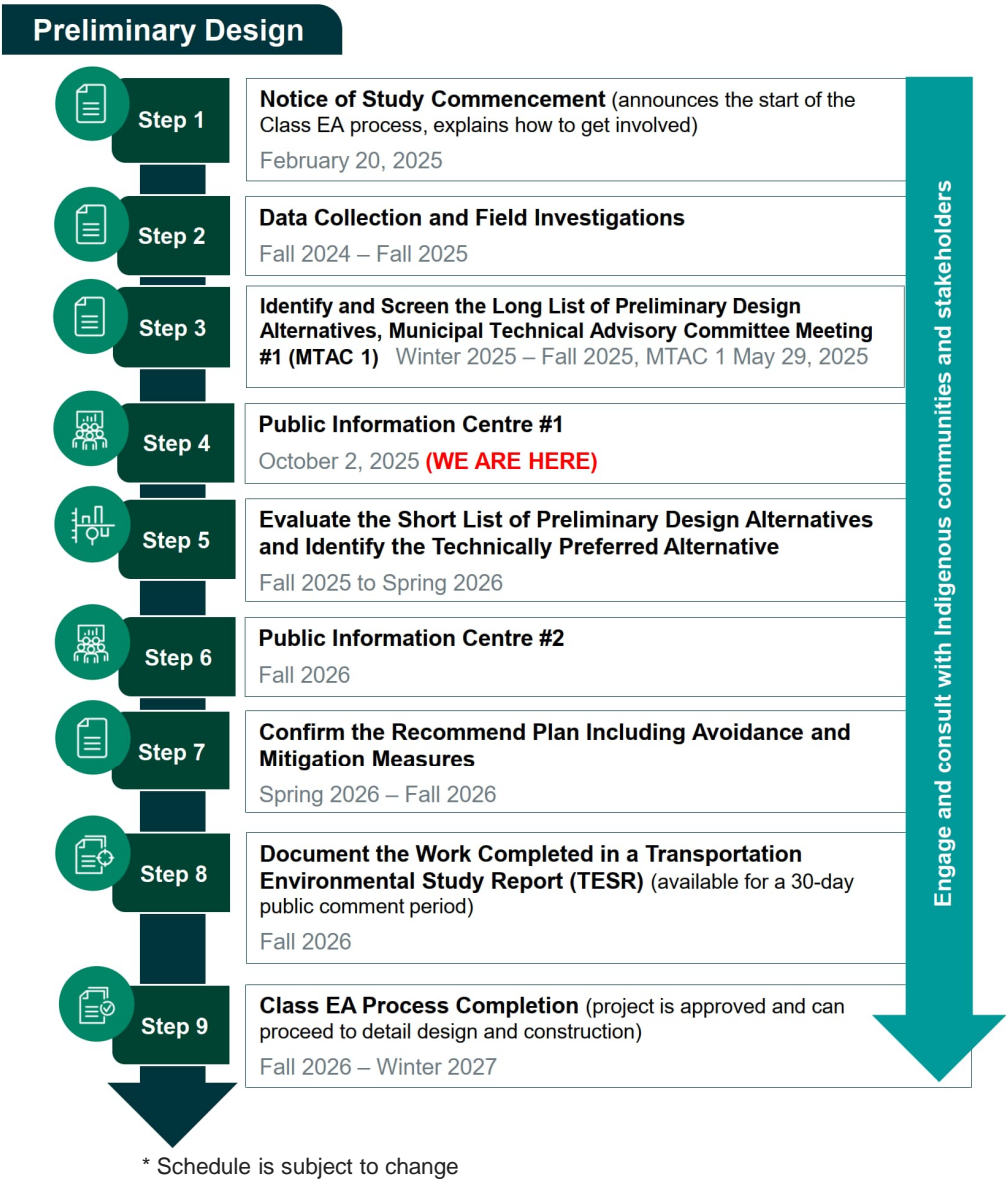
- Highway 401/Joyceville Road
- Highway 401/County Road 32
- Highway 401/Highway 2
- Thousand Islands Parkway/Highway 2
- Highway 401/ Thousand Islands Parkway

Class Environmental Assessment Process

The study is being undertaken as a Group ‘B’ project under the 2024 Class Environmental Assessment (EA) for Provincial Transportation Facilities and Municipal Expressways, which is an approved process for highway planning, design and construction projects. Group ‘B’ projects modify access or add capacity to existing provincial transportation facilities or municipal expressways.

Ongoing consultation program:

- With Indigenous communities, municipal staff and Council, emergency service providers, regulatory and review agencies, transit and rail operators, and members of the public (including directly impacted property owners).
- Outreach via direct mail letters, website, toll-free telephone line, e-mail, flyer delivery, newspaper notices, meetings.



Class Environmental Assessment Process

In 2019, modernization of the MTO Class EA (2000) was initiated to optimize the Class EA process by removing redundancies and expediting planning to facilitate a more streamlined implementation process. Amendments to the Class EA were approved in December 2023 and February 2024, and Class EA was renamed the Class EA for Provincial Transportation Facilities and Municipal Expressways (2024). As part of the amendments, the EA process is now complete at the end of Preliminary Design, following the 30-day comment period for the Notice of Completion. As part of the new MTO Class EA (2024), Preliminary Design is the primary opportunity to provide feedback on the project. After Preliminary Design, opportunities for public stakeholder engagement on this project will be limited. However, the ministry will continue to engage with Indigenous communities and remains committed to fulfilling its Duty to Consult.

At the end of the study, a Transportation Environmental Study Report (TESR) will be prepared to document the work completed and will be available for a 30-day public comment period.

Class Environmental Assessment for Provincial Transportation Facilities and Municipal Expressways

2024

Ontario

Problems and Opportunities

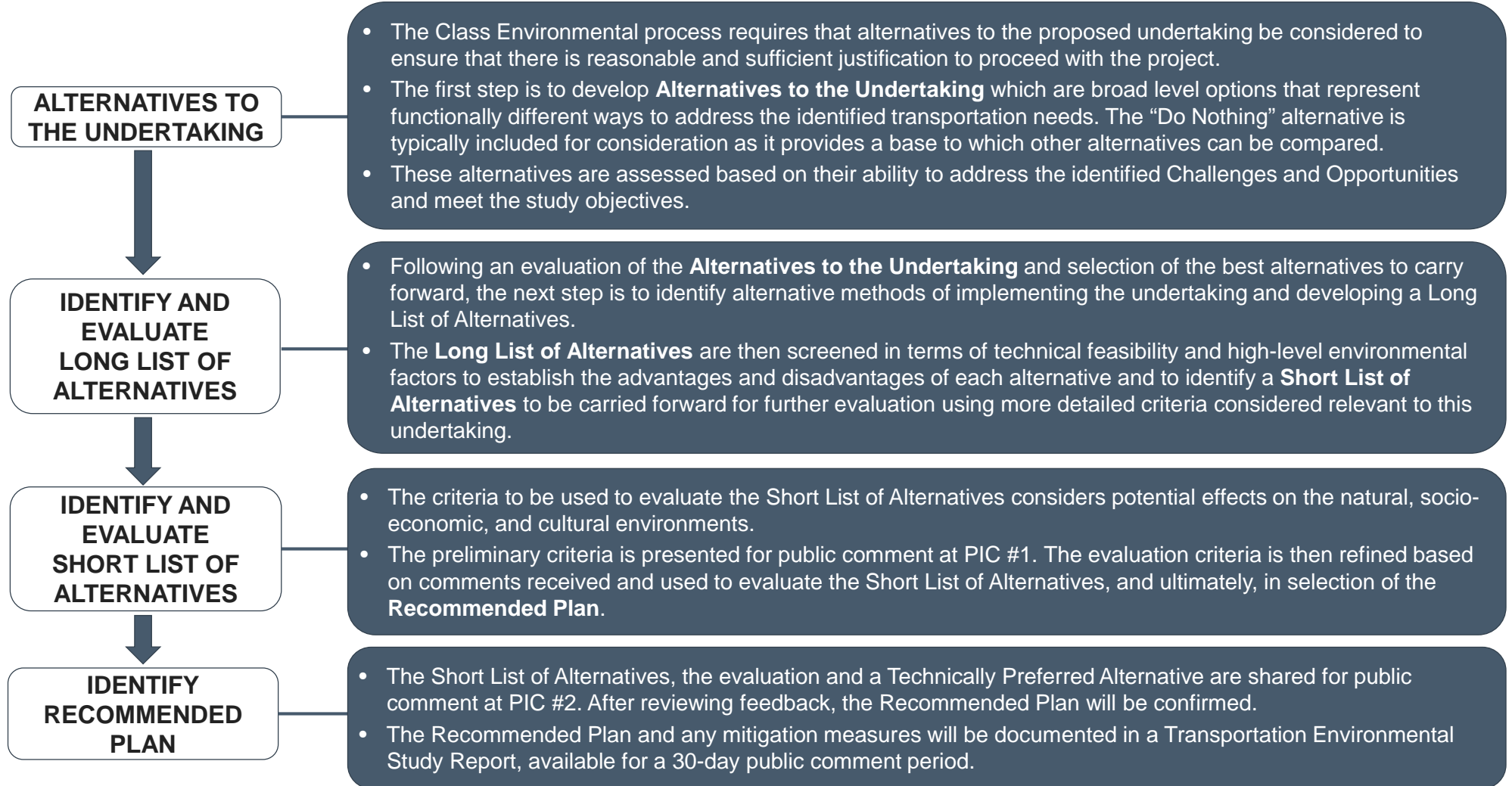
Problems

- Many of the bridges and culverts in the study area are nearing the end of their service life and will require rehabilitation or replacement in the foreseeable future.
- The existing Highway 401 platform cannot accommodate the traffic staging required to rehabilitate or replace the structures in the study area.
- It is increasingly difficult to undertake routine maintenance of highway infrastructure without significant impacts to traffic.
- The existing interchanges require improvements to accommodate the structural rehabilitations or replacements, the ultimate footprint of Highway 401, and to address the current and future operational and geometric conditions.
- There is a need to identify the footprint of a widened Highway 401, particularly at the interchanges, to ensure that the bridge and interchange designs permit the network to continue operating efficiently into the future and to address commercial and residential development pressures along the corridor.

Opportunities






- Establishing the interim and ultimate footprint of Highway 401 now will allow the structural rehabilitations and replacements to be implemented efficiently and cost-effectively, while maintaining the safe operation of the highway.
- Identifying the future interchange configurations will allow MTO to manage future development and access.

Evaluation Process and Selection of the Recommended Plan



Alternatives to the Undertaking

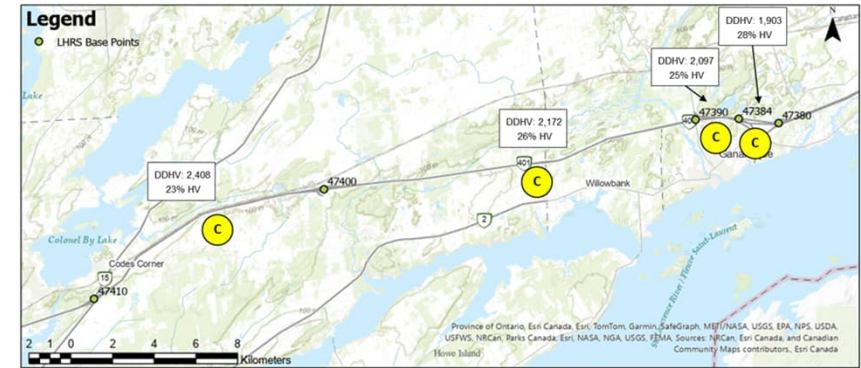
“Alternatives To” the project – which are functionally different ways of addressing the identified Problems and Opportunities – were developed and screened:

“Alternatives To” The Project	Do They Address The Problems and Opportunities?
Do Nothing <ul style="list-style-type: none">The status quo, where improvements to Highway 401 are limited to maintenance of current infrastructure.	<ul style="list-style-type: none">Does not address the structural needs and anticipated future growth needs. Do not carry forward. 
Transportation Demand Management (TDM) <ul style="list-style-type: none">TDM includes strategies that help reduce traffic congestion and aim to reduce the number of single-occupant vehicles on the road, encourage people to travel at less busy times, and promote alternative ways of getting around — such as public transit, cycling, and walking.	<ul style="list-style-type: none">Does not address the structural needs. Do not carry forward. 
Improvements to Adjacent Road Systems <ul style="list-style-type: none">Expansion of existing municipal and regional road networks.	<ul style="list-style-type: none">Does not address the structural needs. Do not carry forward. 
Improvements to the Highway 401 <ul style="list-style-type: none">Establish an interim six lanes and ultimate eight lanes of Highway 401 and modify the configuration of existing interchanges to accommodate the rehabilitation and replacement of bridges and culverts.	<ul style="list-style-type: none">Addresses structural needs and anticipated future growth needs. Carry forward. 
New Provincial Transportation Facility <ul style="list-style-type: none">A new highway and/or transitway to accommodate capacity needs and potentially enhance the performance of the transportation network.	<ul style="list-style-type: none">Does not address the structural needs. Do not carry forward. 

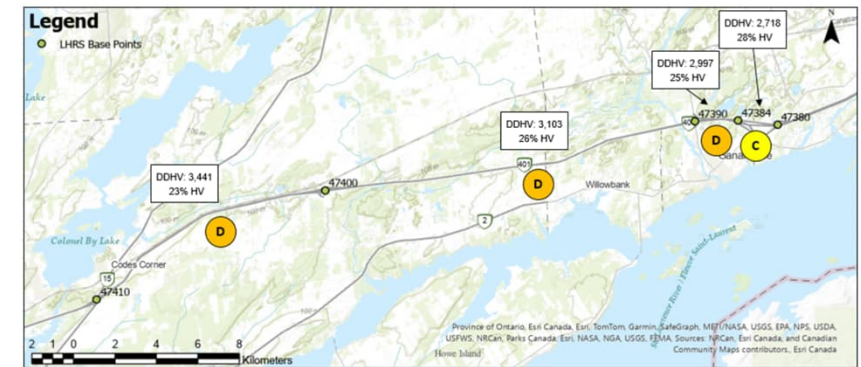
Existing & Future Traffic Conditions (Mainline)

- A Traffic Operational Analysis has been undertaken to understand how traffic moves today (2025) and how it may operate in the future (2044 / horizon year). The study has looked at traffic with and without six and eight lane footprints of Highway 401.
- Traffic operations have been measured based on Level of Service (LOS), which describes how freely vehicles can move along the highway (refer to descriptions below).
- The analysis identified that current level of service is acceptable (LOS 'C'); however, the highway is approaching capacity during peak periods.
- In the “low growth” scenario, operations along the corridor will deteriorate due to increased volumes (LOS 'D').
- In the “high growth” scenario, the future Level of Service in the “Do Nothing” scenario will degrade to unstable, with frequent drops in speed and unpredictable travel times (LOS 'E / F').

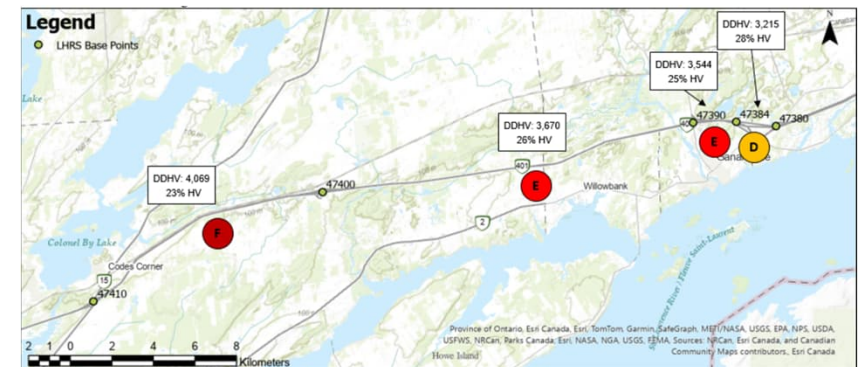
Level of Service & Description	
A	Traffic flows at or above posted speed limit
B	Slightly congested
C	Stable flow of traffic but road is close to capacity
D	Speeds are reduced, approaching unstable flow of traffic
E	Unstable flow of traffic
F	Frequent drops in speed and travel time is unpredictable



Existing Conditions (2025) – LOS








Future Conditions (2044) – Low Growth, Do Nothing Scenario – LOS







Future Conditions (2044) – High Growth, Do Nothing Scenario – LOS




Existing Bridge Conditions & Requirements

Structure Site	Overview	Requirements
Highway 15 Underpass Site 07X-0071/B0	 <ul style="list-style-type: none"> • Single span rigid frame bridge. • Constructed in 1955 and rehabilitated in 1996 and 2023. 	<ul style="list-style-type: none"> • Bridge is in fair condition, remaining service life approximately 5-10 years. • Recommend replacement (<i>note: bridge requirements previously reviewed as part of separate January 2016 Highway 15 Study</i>).
John F. Scott Road Underpass Site 07X-0072/B0	 <ul style="list-style-type: none"> • Four span precast concrete girder bridge. • Constructed in 1966 and rehabilitated in 1975 and 2003. 	<ul style="list-style-type: none"> • Bridge is in good condition, remaining service life approximately 20 years. • Recommend replacement at end of service life.
Joyceville Side Road Underpass Site 07X-0073/B0	 <ul style="list-style-type: none"> • Four span precast concrete girder bridge. • Constructed in 1967 and rehabilitated in 1986 and 2003. 	<ul style="list-style-type: none"> • Bridge is in good condition, remaining service life approximately 5-10 years. • Recommend replacement at end of service life.
4th Concession Road/Deer Ridge Road Overpass Site 16X-0099/B0	 <ul style="list-style-type: none"> • Single span rigid frame bridge. • Constructed in 1958 and rehabilitated in 1999. 	<ul style="list-style-type: none"> • Bridge is in good condition, remaining service life approximately 5-10 years. • Recommend replacement at end of service life.
CNR/Gananoque River Bridge Site 16X-0100/B0	 <ul style="list-style-type: none"> • Two span steel plate girder bridge. • Constructed in 1958 and rehabilitated in 1980 and 2009. 	<ul style="list-style-type: none"> • Bridge is in fair condition, remaining service life approximately 5-10 years. • Recommend replacement at end of service life.

Existing Bridge Conditions & Requirements

Structure Site		Overview	Requirements
County Road 32 Underpass Site 16X-0101/B0		<ul style="list-style-type: none">• Single span rigid frame bridge.• Construct in 1958 and rehabilitated in 1980 and 2009.	<ul style="list-style-type: none">• Bridge is in fair condition, remaining service life approximately 5-10 years.• Recommend replacement at end of service life.
Highway 2 Overpass Site 16X-0102/B0		<ul style="list-style-type: none">• Single span steel plate girder bridge.• Constructed in 1957 and rehabilitated in 1980 and 2007.	<ul style="list-style-type: none">• Bridge is in good condition, remaining service life approximately 5-10 years.• Recommend replacement at end of service life.
Thousand Islands Parkway Underpass Site 16X-0159/B0		<ul style="list-style-type: none">• Three span precast concrete girder bridge.• Constructed in 1965 and rehabilitated in 1984 and 2014.	<ul style="list-style-type: none">• Bridge is in good condition, remaining service life approximately 20 years.• Recommend replacement at end of service life.
County Road 2 Underpass Site 16X-0137/B0		<ul style="list-style-type: none">• Four span steel plate girder bridge.• Constructed in 1966 and rehabilitated in 1976, 1985 and 2011.	<ul style="list-style-type: none">• Bridge is in good condition, remaining service life approximately 20 years.• Recommend replacement at end of service life.

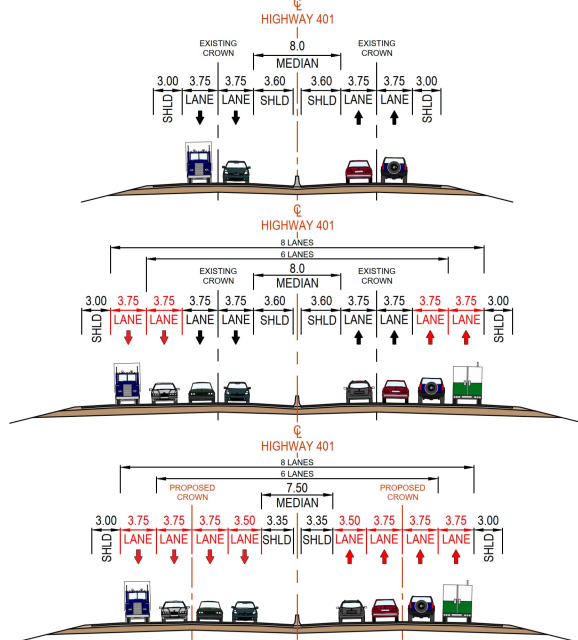
Existing Culvert Conditions & Requirements

Structure Site	Overview	Requirements
Steventown Creek Culvert Site 07X-0155/C0		<ul style="list-style-type: none"> • Single span open footing concrete culvert with a 3 m span and 52 m long. • Constructed in 1957 and rehabilitated in 2014.
Grass Creek Culvert (2.0 km East of Joyceville Road) Site 07X-0156/C0		<ul style="list-style-type: none"> • Single span open footing concrete culvert with a 3.66 m span and 51 m long. • Constructed in 1956 and rehabilitated in 1999.
Joyceville Creek Culvert Site 07X-0162/C0		<ul style="list-style-type: none"> • Single span concrete box culvert with a 3.1 m span and 73 m long. • Constructed in 2016 (no prior rehabilitation).

Long List of Alternatives – Highway 401 Footprint

- Proposed interchange improvements and structural replacements will be designed to accommodate both a six-lane and ultimate eight-lane footprint of Highway 401.
- Cross-section alternatives to accommodate the future footprint of Highway 401 have been developed as illustrated below. The alternatives will be assessed in terms of property and environmental impacts, traffic staging and constructability.

EXISTING URBAN SECTION
WEST STUDY LIMITS TO 1 KM EAST OF COUNTY ROAD 32

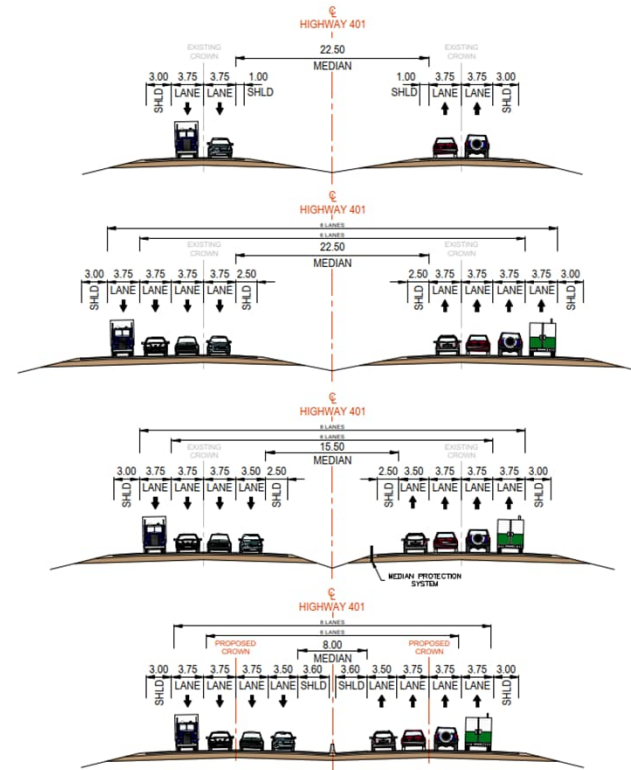


EXISTING 4 LANES,
8.0m URBAN MEDIAN

OPTION 1:
WIDEN TO OUTSIDE, MAINTAIN
EXISTING MEDIAN

OPTION 2:
RECONSTRUCT TO
7.5m URBAN MEDIAN

EXISTING RURAL SECTION
HIGHWAY 2 TO EAST PROJECT LIMITS



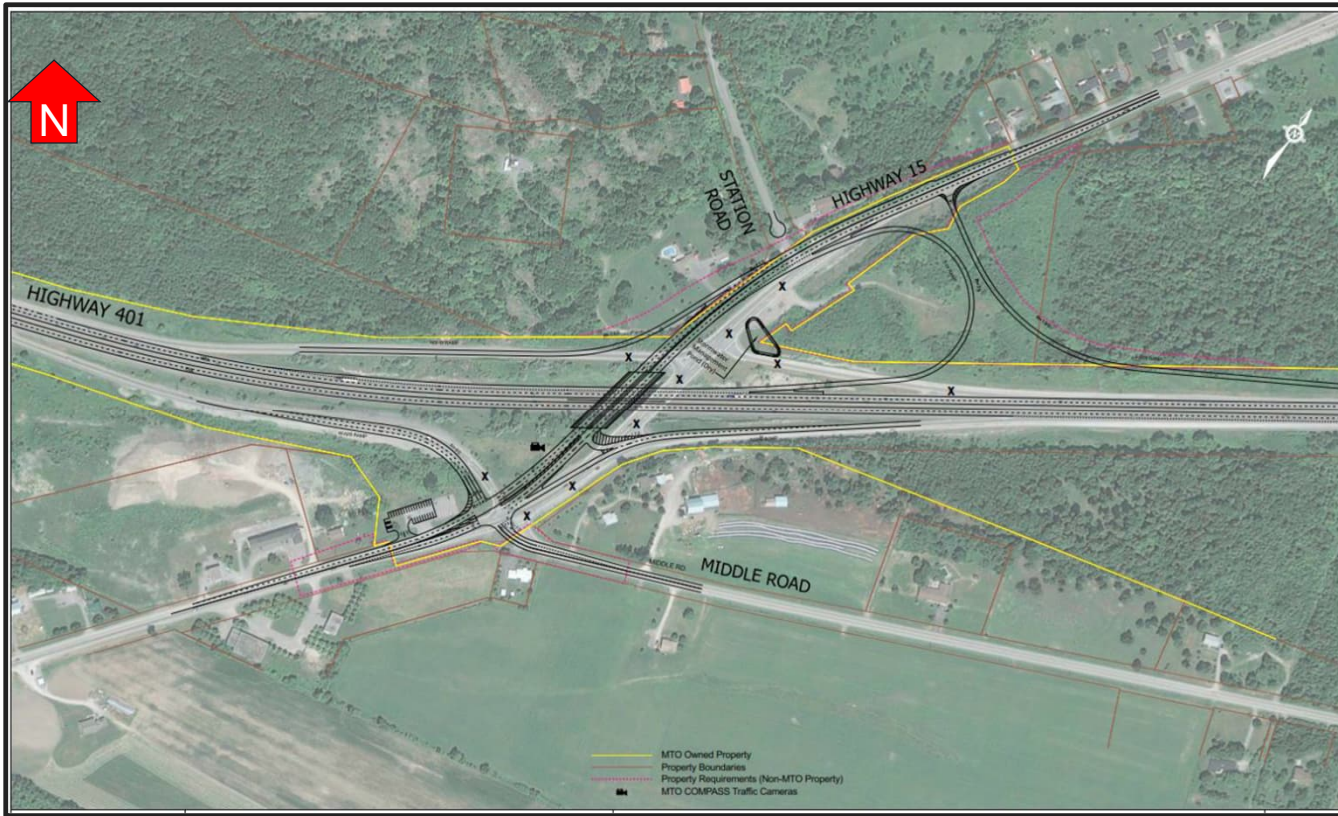
EXISTING 4 LANES,
22.5m RURAL MEDIAN

OPTION 1:
WIDEN TO OUTSIDE, MAINTAIN
22.5m RURAL MEDIAN

OPTION 2:
WIDEN 1 LANE TO INSIDE AND 1 LANE
TO OUTSIDE, 15.5m RURAL MEDIAN

OPTION 3:
WIDEN TO INSIDE,
8.0m URBAN MEDIAN

Highway 401/Highway 15 Interchange



Highway 401 / Highway 15 Interchange Technically Preferred Alternative (Long-Term Plan)

(Reference: Highway 401/Highway 15 Interchange Operational Improvements Preliminary Design and Class Environmental Assessment Study Transportation Environmental Study Report, January 2016)

- A Group 'B' Class Environmental Assessment was completed for the Highway 15 interchange in 2016.
- The study identified a recommended re-configuration of the interchange, and replacement of the Highway 15 bridge over Highway 401.
- As part of the current study, the previously approved design was revisited to assess compatibility with an interim and ultimate footprint of Highway 401, as well as accommodation of a potential 130 km/h design speed of Highway 401.
- Based on this review, no significant modifications to the previously approved configuration are recommended.

Other Bridge Sites

Two crossing road structures and one river crossing structure are being evaluated as part of this design study. They include:

John F. Scott Underpass

- Underpass to be replaced either along existing alignment (requiring full road closure), to the east or to the west.

4th Concession Road/Deer Ridge Road Overpass

- Overpass expected to be replaced at the same location or immediately north or south of the existing location.

Gananoque River Bridge

- Bridge is expected to be replaced at the same location or immediately north or south of the existing location.
- Design requirements including width and span arrangement for replacement of the bridge will be reviewed following selection of a preferred alternative for the County Road 32 interchange.

Alternatives will be reviewed closer following selection of a preferred Highway 401 alignment and cross-section.



John. F. Scott Plan View



John. F. Scott Underpass



4th Concession Road Plan View



4th Concession Road Overpass



Gananoque River Plan View



Gananoque River Bridge

Culvert Alternatives and Drainage Improvements

Structure Site	
Steventown Creek Culvert Site 07X-0155/C0	 A photograph of a concrete culvert structure with a rectangular opening, situated in a grassy field with a stone wall on the left and a road in the background.
Grass Creek Culvert (2.0 km East of Joyceville Road) Site 07X-0156/C0	 A photograph of a concrete culvert structure with a rectangular opening, situated in a grassy field. A timestamp "Sept 11, 2023 3:49:11 pm" and location "Macdonald-Cartier Freeway Joyceville" are visible in the bottom right corner.
Joyceville Creek Culvert Site 07X-0162/C0	 A photograph of a concrete culvert structure with a rectangular opening, situated in a grassy field. A timestamp "09/12/2021 10:33" is visible in the bottom right corner.

The following structural culvert improvement strategies will be reviewed with the preferred highway footprint alternative.

1. Replace the existing culvert with a new culvert. The new culvert length will accommodate the highway footprint.
2. Replace the existing culvert with a new bridge. The new bridge will accommodate the highway footprint.
3. Rehabilitate the existing culvert and construct culvert extensions at either end to accommodate the highway footprint.
4. Rehabilitate the existing culvert and construct retaining walls at each end to support the steeper embankments associated with the highway footprint.

Short List Evaluation Criteria

The following draft evaluation criteria have been identified by the Project Team to evaluate the Short List of Alternatives:



Natural Environment

- Fish and Fish Habitat
- Wildlife and Wildlife Habitat
- Species at Risk
- Surface Water / Groundwater
- Designated Natural Areas / Wetlands & Vegetation Communities
- Contamination



Socio-Economic Environment

- Community Impacts
- Existing & Planned Land Uses
- Noise & Air Quality
- Property Impacts
- Impacts to Emergency Services
- Recreational Trails / Active Transportation Networks
- Climate Change



Cultural Environment

- Archaeological resources
- Built Heritage and Cultural Heritage Landscapes



Transportation and Constructability

- Traffic Operations
- Geometrics
- Safety
- Constructability
- Potential to impact existing utility and servicing infrastructure



Cost

- Construction Costs
- Property Acquisition Costs
- Operational / maintenance Costs

After this Public Information Centre, we'll create an Evaluation Matrix to compare all the alternatives based on the key factors you see.

This process will help us select a Technically Preferred Alternative that addresses the issues in the corridor while aiming to minimize impacts.



Let us know what you think about the evaluation criteria

Designation and MTO Permit Control Areas

Once a Recommended Plan has been identified, the MTO may designate lands as highway and acquire property prior to Environmental Assessment process completion. A designation enables the Ministry to provide route/corridor protection through the application of development control measures along the corridor and in the vicinity of the designated lands. For more information about highway corridor management, please visit:

<https://www.ontario.ca/page/highway-corridor-management>.

- Any work on private property that is within 45 metres of the highway property or 395 meters from the centre point of an intersection or interchange requires approval from the MTO.
- Any work on private property that is within 800 metres of the highway property and that may have a large impact on traffic, is also subject to approval from MTO.
- For more details on requirements for permits, please visit: <https://www.Ontario.ca/page/highway-corridor-management> or make an inquiry regarding a specific property: <https://www.hcms.mto.gov.on.ca/>



Example of MTO Permit Control Areas:
Controlled-Access Highways (CAH)

Next Steps

- We will review and respond to the feedback we receive about this Public Information Centre.
We would appreciate your comments by November 3, 2025.
- We will complete a detailed evaluation of the Short List of Alternatives, taking into account potential impacts and ways to reduce them.
- Then, we will return for a second Public Information Centre—tentatively scheduled for Fall 2026—to share the results of that evaluation and present a Technically Preferred Alternative for your comment.

Freedom of Information and Protection of Privacy Act. Comments and information regarding this study are being collected to satisfy the requirements of the Ontario Environmental Assessment Act, and in accordance with the Freedom of Information and Privacy Act. With the exception of personal information, all comments will become part of the public record.

Ways to provide your comments:



Fill out a comment sheet and leave it in the box



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