



# Longwood to Lakeshore Project

Project update prior to  
Community Open House #2



# 2024 Project Update: Overview

- Explain the need for the project and other projects underway and planned in the region
- Provide an update on the Environmental Assessment (EA) process
- Share the route alternative identification process
- Provide information on the process to select a preferred route
- Present the three route alternatives, including variations
- Share the anticipated project schedule
- Answer questions and gather your feedback





# Southwest Ontario Transmission Projects

## Under Development and to be Constructed

- ① Between Chatham and Lakeshore 230 kV Transmission Line (end of 2024)
- ② St. Clair 230 kV Transmission Line (2028)

Construction

EA complete

## To be Developed and Prioritized for Construction

- ③ Between Longwood and Lakeshore 500 kV Transmission Line (2030)  
*Exact route has not been determined*

## To be Developed

- ④ Between Longwood and Lakeshore 500 kV Transmission Line  
*Exact route has not been determined*
- ⑤ Between Windsor and Lakeshore 230 kV Transmission Line  
*Exact route has not been determined*

## Map Legend

- Transformer Station
- City/Town
- Highway
- First Nation



# Electricity demand in Southwest Ontario is anticipated to quadruple by 2035



For illustrative purposes only and not reflective of preferred routes.

# Need for the Longwood to Lakeshore Project

## Fall 2021

The IESO identified the need for one single-circuit 500 kilovolt transmission line between Longwood Transformer Station (TS) in the Municipality of Strathroy-Caradoc and Lakeshore TS in the Municipality of Lakeshore to be in-service by 2030 or sooner.

## Spring 2022

With significant growth underway across the region, the Government of Ontario advised Hydro One to conduct early development work on a second Longwood-to-Lakeshore transmission line. This allows for more efficient planning, as well as more meaningful and transparent consultations with Indigenous Communities, residents, municipalities, and stakeholders, while the IESO further assesses the future energy needs of the region.

## Early 2023

Hydro One began planning activities for the Longwood to Lakeshore project, including issuing a Notice of Commencement of a Terms of Reference, information gathering and engagement.

## Early 2024

The Government of Ontario announced changes to modernize environmental assessments for certain types of projects, including transmission projects. As a result, the Longwood to Lakeshore project is moving forward as a Class Environmental Assessment (EA).



# What is a Class Environmental Assessment?

## Steps of a Class EA

- Engage with Indigenous communities, the public, municipalities, interest groups and government agencies
- Collect environmental information
- Identify potential environmental effects and mitigation measures
- Identify and evaluate route alternatives
- Select a preferred route
- Prepare a draft Environmental Study Report (ESR) that will be made available for a 30-day public review and comment period
- Submit the Final ESR



Ongoing Engagement



## How is a Class EA different from a Comprehensive EA?

A Comprehensive EA requires an initial step: the development of a project-specific Terms of Reference which outlines how the EA would be completed.

For Class EA projects, the process is standardized and projects can proceed provided they successfully complete the approved process, as well as other necessary approvals.

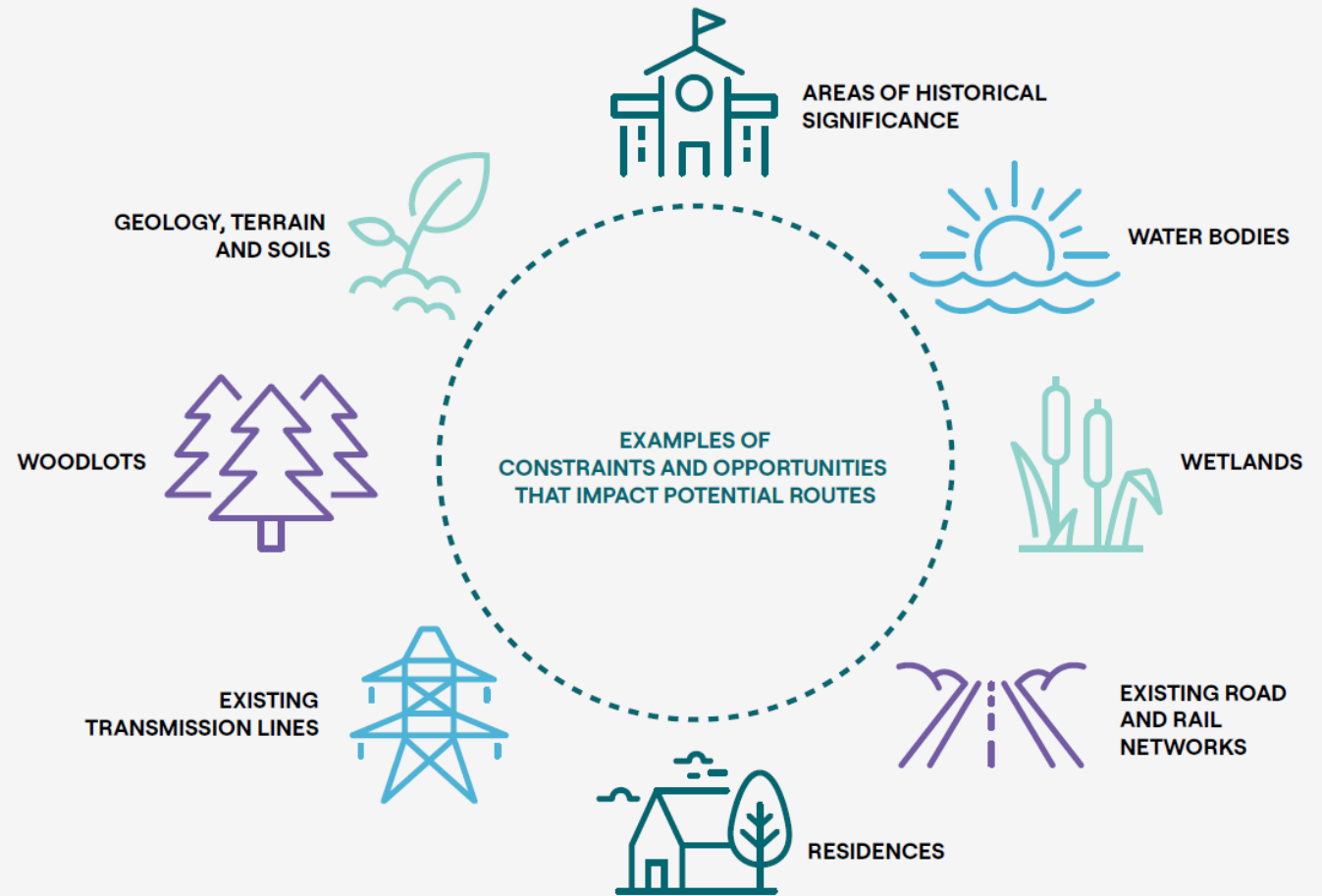
# Developing the route alternatives



Constraints and opportunities impacting potential routes were identified and prioritized with input from Indigenous communities, government agencies, and interest groups with local knowledge.

A GIS/computer model of preliminary route alternatives was developed using the routing criteria.

Preliminary route alternatives were then refined based on technical information, stakeholder input and lessons learned from Hydro One's other projects in the area.



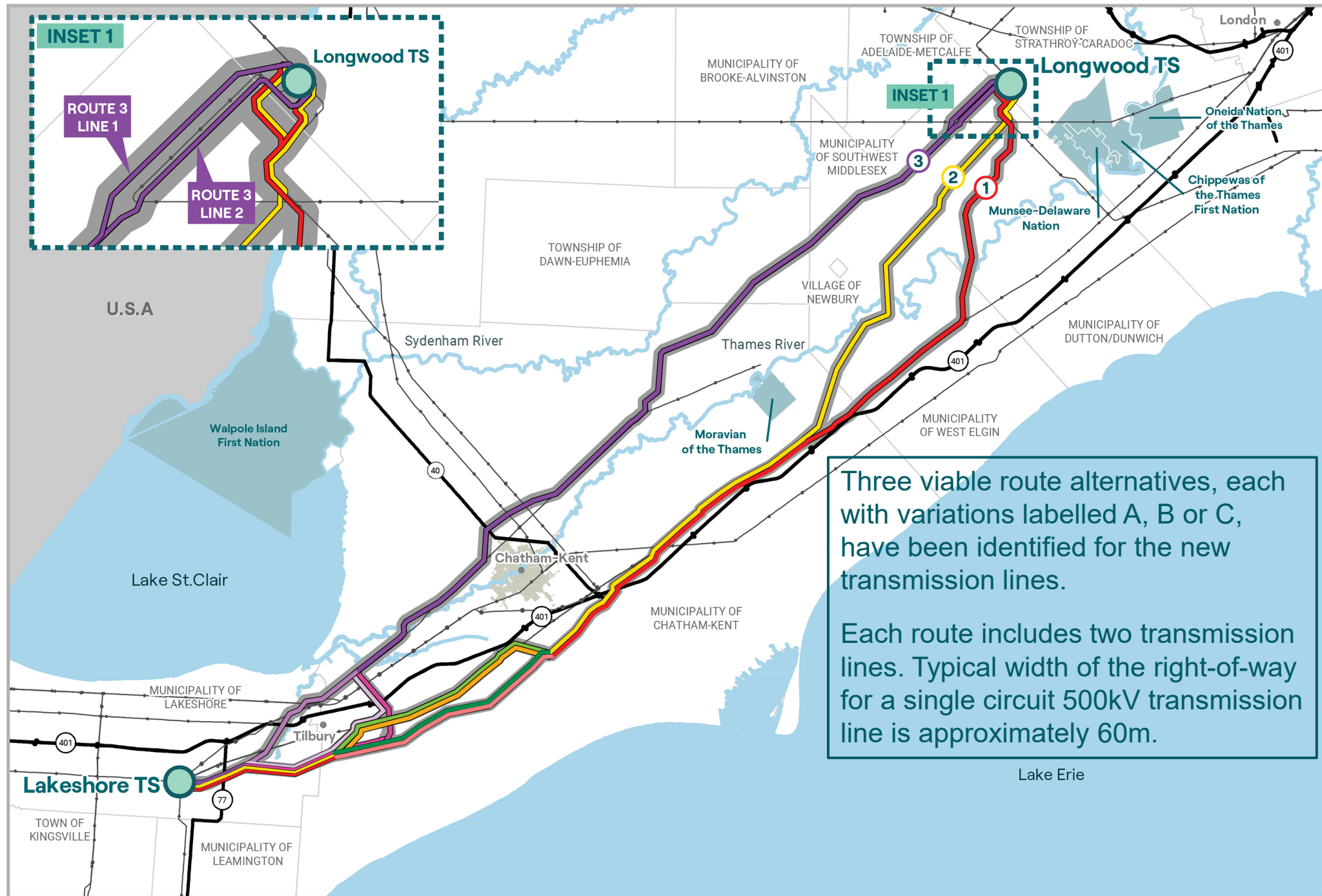


# Longwood to Lakeshore Project

## Map Legend

- Transformer Station (TS)
- Route 1 (A/B Core Alignment)
  - Route 1A
  - Route 1B
- Route 2 (A/B Core Alignment)
  - Route 2A
  - Route 2B
- Route 3 (A/B/C Core Alignment)
  - Route 3A
  - Route 3B
  - Route 3C
- All Routes (1A/1B/2A/2B/3A/3B/3C)
- Local Study Area (500 m buffer on either side of the route alternatives)
- Existing Transmission Line
- Highway
- Municipal Boundary
- Waterbody
- First Nation
- Built Up Area

Note: With the exception of the section of Route 3 shown in inset 1, each route represents two transmission lines with parallel alignments. Each line has an assumed 60m right of way, pending detailed engineering.



Three viable route alternatives, each with variations labelled A, B or C, have been identified for the new transmission lines.

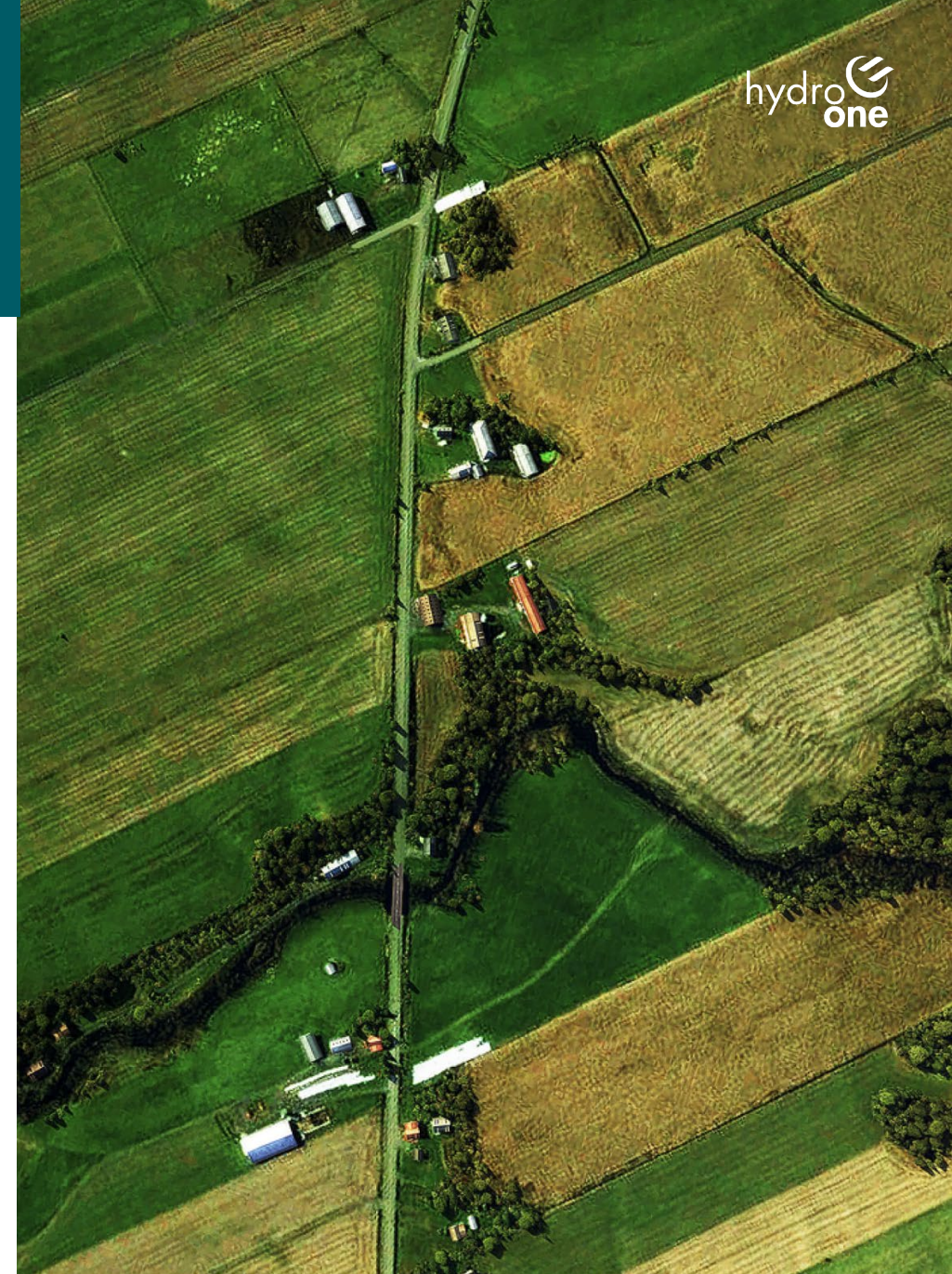
Each route includes two transmission lines. Typical width of the right-of-way for a single circuit 500kV transmission line is approximately 60m.

# Evaluation of the routes

Over the course of the EA, we will continue to learn more about the existing environment within the study area by gathering:

- Information obtained through local community and Indigenous engagement
- Data from existing reports, plans, maps, aerial photographs and other sources
- Field data collected from environmental surveys such as breeding bird and vegetation surveys
- Project specific research such as an archaeological assessment

Through this process, we will evaluate and compare the advantages and disadvantages of each of the route alternatives to select the preferred route for the new transmission lines.





# Example evaluation criteria

The preferred route will be selected based on an evaluation process that balances project specific criteria in four categories:



## Categories



### Socio-Economic Environment

- Agricultural resources and operations
- Residential properties
- Business, recreational and other land uses
- Impacts on areas of cultural heritage value



### Natural Environment

- Wildlife habitat
- Species at Risk
- Wetlands, vegetation, natural hazards and floodplain areas



### Technical and Cost

- Line length and angles
- Crossing of existing infrastructure
- Real estate and land rights considerations
- Construction complexity



### Indigenous Culture, Values and Land use

- Areas that support hunting, trapping and/or harvesting grounds
- Areas that support fish bearing waters with identified or inferred habitat of game species
- Effects to rare, undisturbed native habitats or ecosystems

## Examples

# Working with landowners



Starting this month, we have begun engaging with landowners on each of the route alternatives by hand delivering a letter introducing the route alternatives with an appended personalized map showing where a proposed route crosses their property.



Over the next few months, we will be contacting some specific owners to request physical property access we can complete non-intrusive field studies on properties with environmental areas of interest identified along all route alternatives.



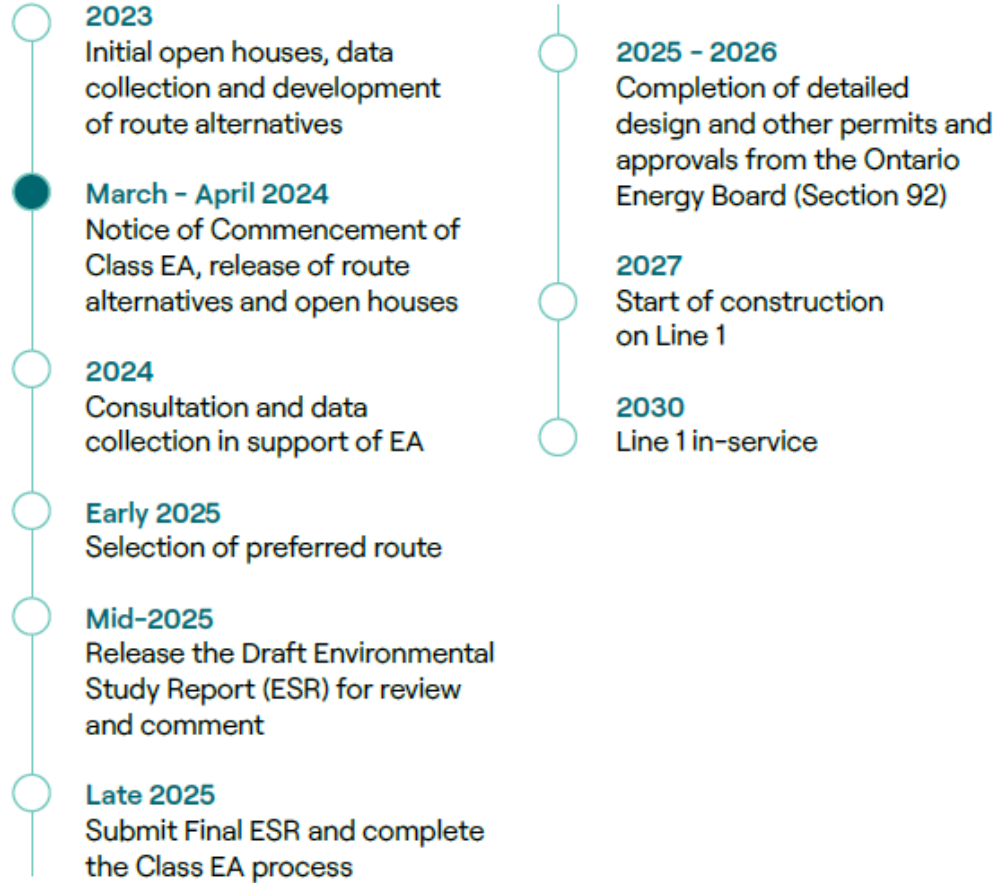
In early 2025, upon the selection of the preferred route, our dedicated real estate representatives will work with landowners along the preferred route on a one-on-one basis to discuss next steps.

Land acquisition principles will be shared once a preferred route is selected and applied in a fair, transparent and consistent manner in an effort to secure voluntary land rights.



# Project schedule\*

Ongoing Engagement



Line 2 construction and in-service date will be determined upon further planning by the IESO

\*Timelines are subject to change  
 \*\*Leave to Construct under Section 92 of the Ontario Energy Board Act is a regulatory process to obtain approval from the Ontario Energy Board to build and operate a transmission line.

# We want to hear from you

We rely on early, meaningful and open engagement to help shape project planning. Hydro One is listening to the community as we expand our electrical infrastructure to bring more power to Southwest Ontario.

We will host a wide range of engagement opportunities to gather input and feedback, which is critical as we plan the project.

- March 5: Notice of Commencement and letters to potentially impacted landowners delivered
- Community Open House #2:
  - Tuesday, March 26: Chatham
  - Wednesday, March 27: Comber
  - Wednesday, April 3: Thamesville
  - Thursday, April 4: Glencoe
  - Wednesday, April 24: Virtual/online
- Summer 2024: more opportunities for engagement, including as part of local events, and a regular presence in the community to meet with people one-on-one or in small group




# Thank you

Please get in touch with us to provide feedback or pass along questions from your community:

 1.877.345.6799

 [Community.Relations@HydroOne.com](mailto:Community.Relations@HydroOne.com)

 For the most up-to-date project information, visit our project website:  
[HydroOne.com/Longwood-to-Lakeshore](https://HydroOne.com/Longwood-to-Lakeshore)

