Welcome

St. Thomas Line Project

Community Open House #2

November 2024

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Why we're here

- Share the Preferred Route for the St. Thomas Line Project
- Provide an overview of the evaluation process and selection of the Preferred Route
- Present key milestones and next steps
- Answer questions and gather your feedback

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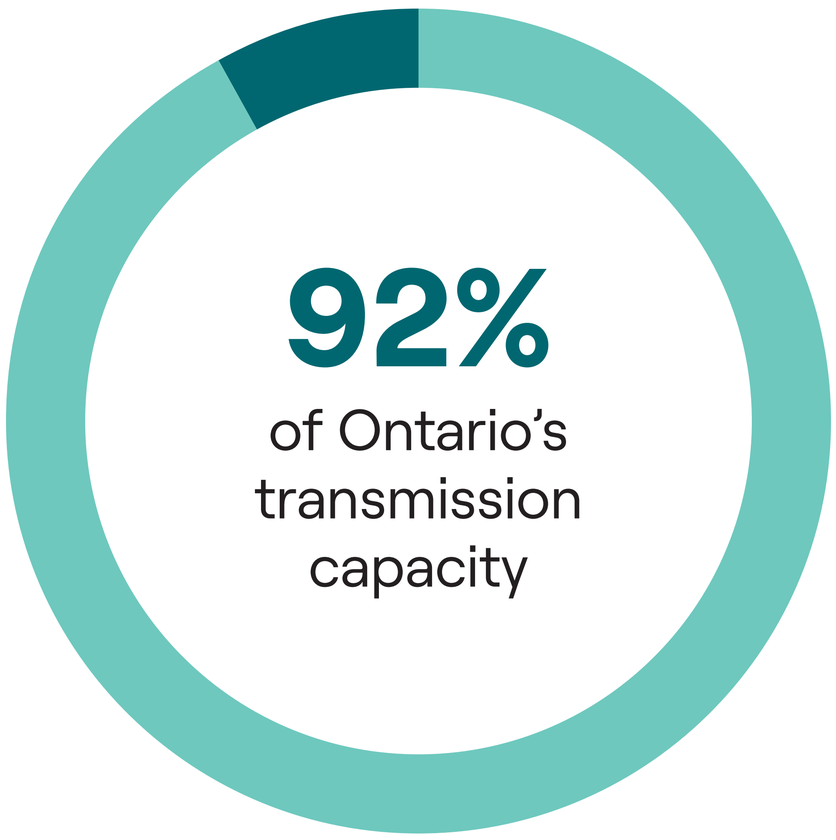
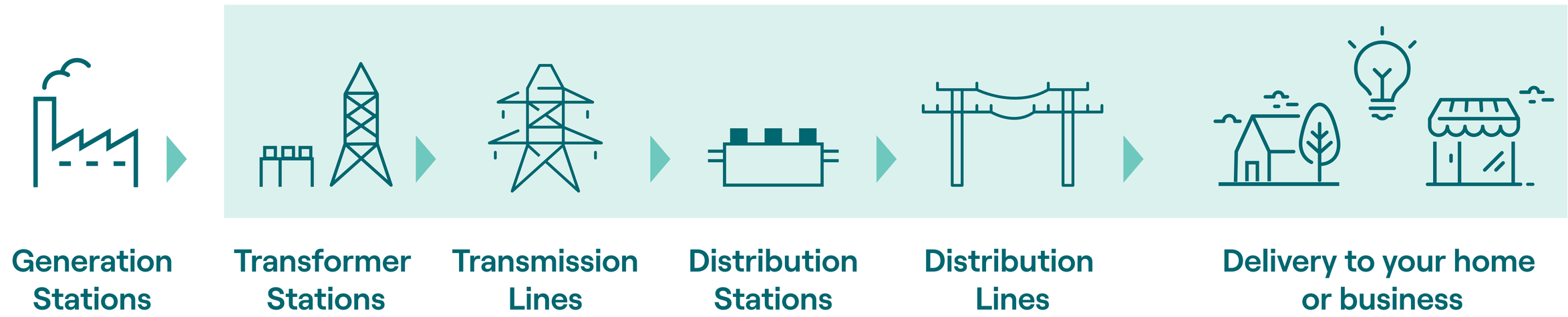
How the system works

Our team of approximately 9,300 skilled and dedicated employees proudly build and maintain a safe and reliable electricity system which is essential to energizing life in communities across the province.



Hydro One's role in the Ontario electric system



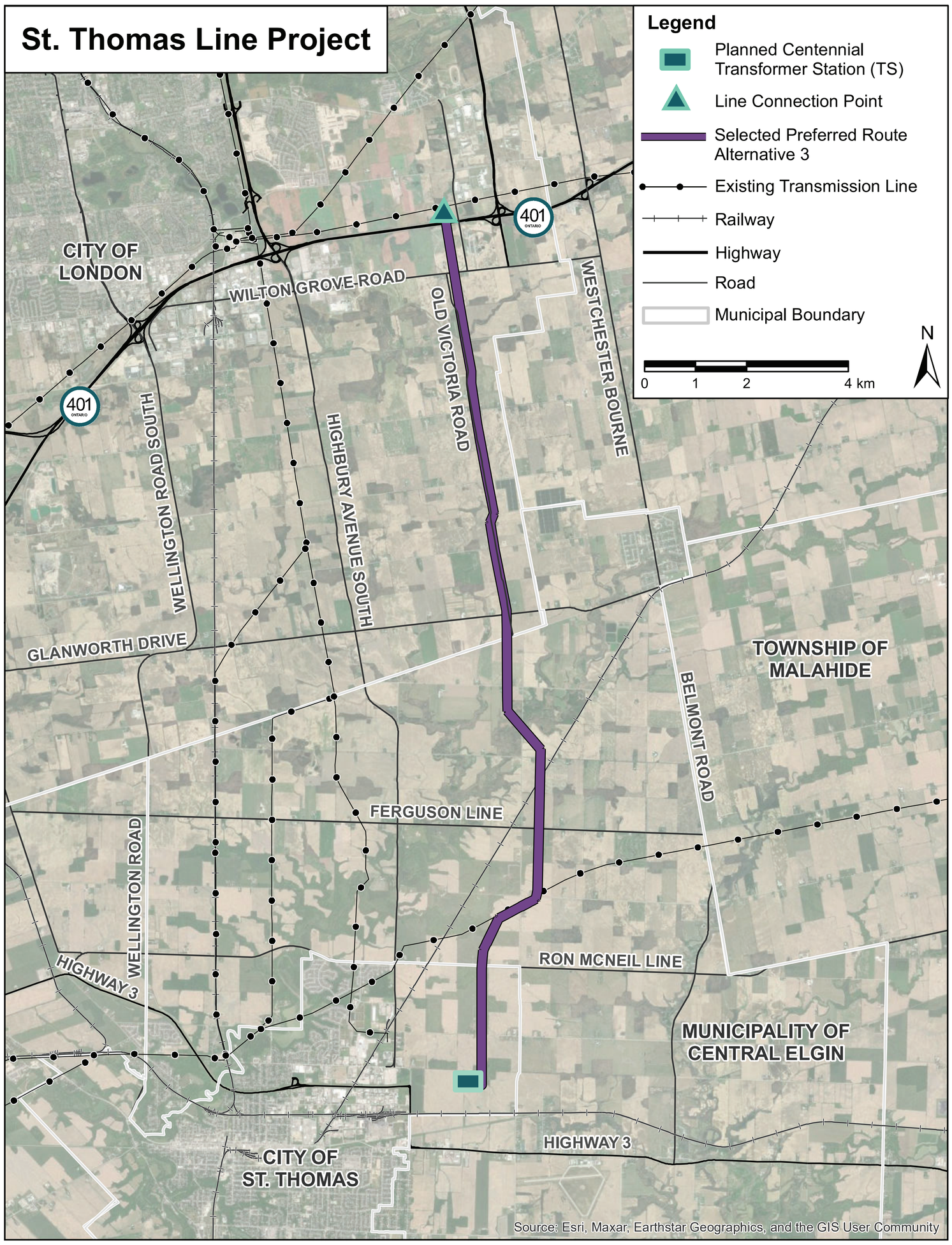
Project overview

- As southwestern Ontario continues to attract large investment to the region, we are committed to providing the power needed to support economic growth while continuing to provide reliability for homes and businesses
- The St. Thomas Line Project will connect PowerCo Canada Inc. (owned by Volkswagen Group) electric vehicle battery cell manufacturing facility in the City of St. Thomas to Ontario's clean energy grid
- To energize the future facility, Hydro One will construct a 230-kilovolt (kV) double-circuit transmission line that will extend approximately 20 kilometres from the existing transmission line north of Highway 401 in the City of London to the planned Centennial Transformer Station (TS) in St. Thomas
- We are currently completing a Class Environmental Assessment for Minor Transmission Facilities (2022) for the project, under the Ontario *Environmental Assessment Act*

Preferred route alternative

Benefits of route alternative 3

- The preferred route passes through the fewest environmentally sensitive features and causes the least disruption to species at risk and their habitats.
- Compared to all route alternatives, the preferred route has the least impact on residential properties within the right of way.
- Additionally, the preferred route won’t require any network outages during construction and minimizes the need for complex changes to any existing transmission lines.



Class Environmental Assessment

The Class Environmental Assessment (EA) for Minor Transmission Facilities (2022) is the first step towards completing the planning for this important project.

This process applies to transmission infrastructure projects that are carried out routinely and have predictable environmental effects that can be readily managed to ensure that potential effects are thoroughly considered before a project begins.

Steps of a Class EA:

- Consultation with Indigenous communities, property owners, community members, elected officials, interest groups and government agencies
- Collection of environmental (natural and socio-economic) data
- Identification and evaluation of alternative methods (ex. route alternatives)
- Identification of potential effects and mitigation measures
- ★ Selection of a preferred route alternative
- Preparation of a draft Environmental Study Report (ESR) that will be made available for a 30-day public review and comment period
- Submission of the Final ESR and Statement of Completion to the Ministry of Environment, Conservation and Parks

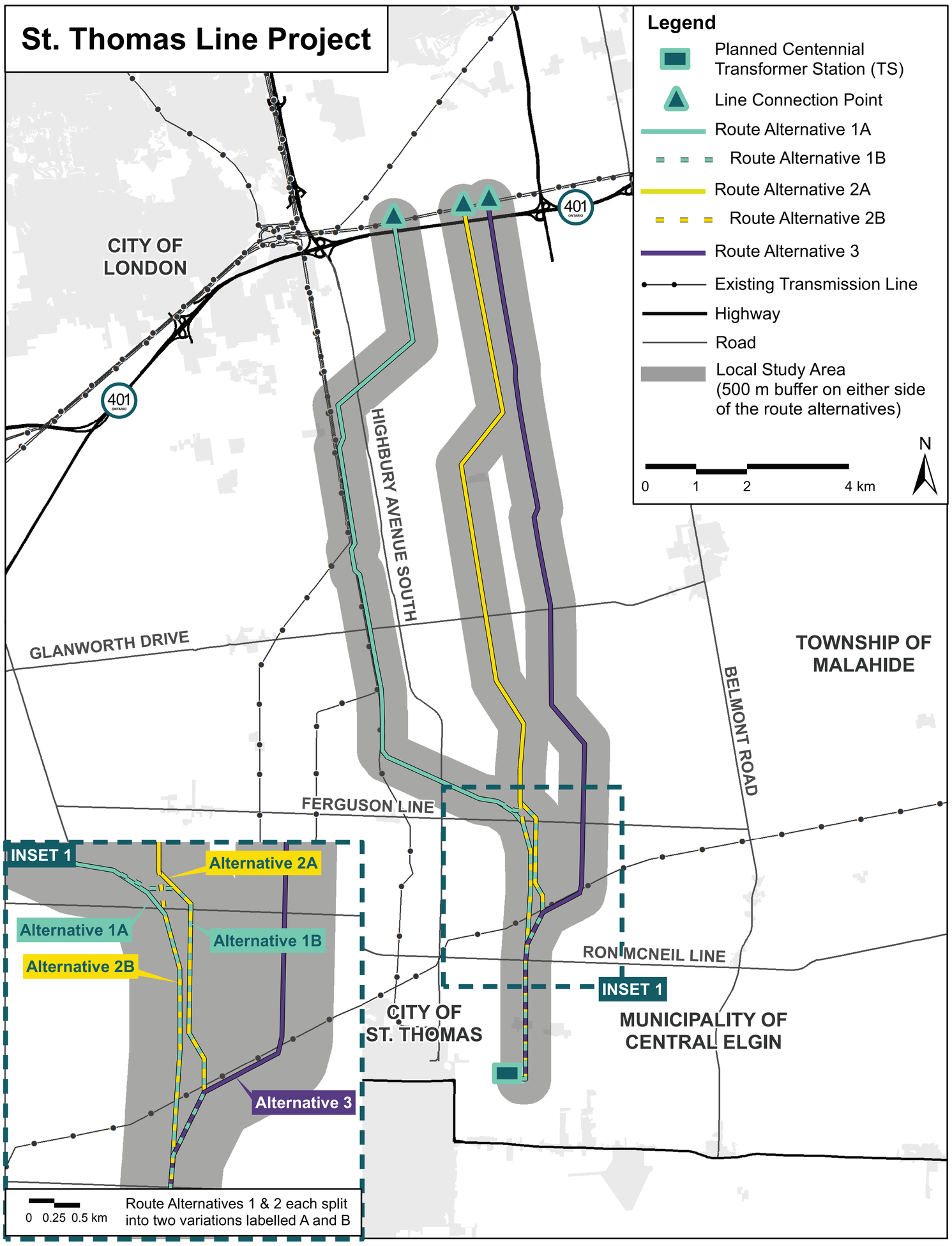
For more information, please see our handout or visit **HydroOne.com/ClassEA**

Route alternatives assessed

In January 2024, we identified three viable route alternatives, along with variations, to connect the new Centennial TS in St. Thomas to an existing Hydro One transmission line north of Highway 401 in the City of London.

Since January 2024, we have been collecting environmental and technical information, as well as holding a wide range of engagement opportunities to gather input and feedback.

In October 2024, following an evaluation of the route alternatives, Route 3 was announced as the preferred route.



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Your feedback informed the route evaluation

Community outreach:

Open houses, community drop-in hours, and registered mail to potentially impacted property owners

Ongoing calls and emails

Interactive map

Notices, newspaper, and social media ads

Meetings with Indigenous communities, local elected officials and regional leaders

What we've heard:

Consider effects to agricultural lands and operations

Maximize the use of existing transmission and infrastructure corridors

Consider species at risk and ecological restoration areas

Minimize effects to homes

Evaluation of the route alternatives

The route alternatives were evaluated based on environmental field studies, research, and feedback received regarding the advantages and disadvantages of each option based on four evaluation categories, which were applied to all routes in a fair and transparent manner:

Natural environment

- Surface water resources
- Vegetation
- Wildlife and wildlife habitat
- Species At Risk
- Wetlands, natural hazards and floodplain areas
- Designated natural areas and identified habitat restoration areas

Socio-economic environment

- Co-locating existing infrastructure
- Agricultural resources and operations
- Residential properties
- Source water protection
- Built heritage resources and cultural heritage landscapes
- Archaeological resources

Indigenous culture, values and land use

- Intersects areas of historical significance
- Areas that support hunting, trapping and/or harvesting grounds
- Areas that support fish bearing waters
- Effects to rare, undisturbed native habitats or ecosystems

Technical & cost

- Line length
- Crossings of existing infrastructure
- Co-location of existing transmission lines
- Real estate considerations
- System benefits and impacts
- Construction complexity

The preferred route best balances the evaluation categories overall

*not an exhaustive list of examples in each category

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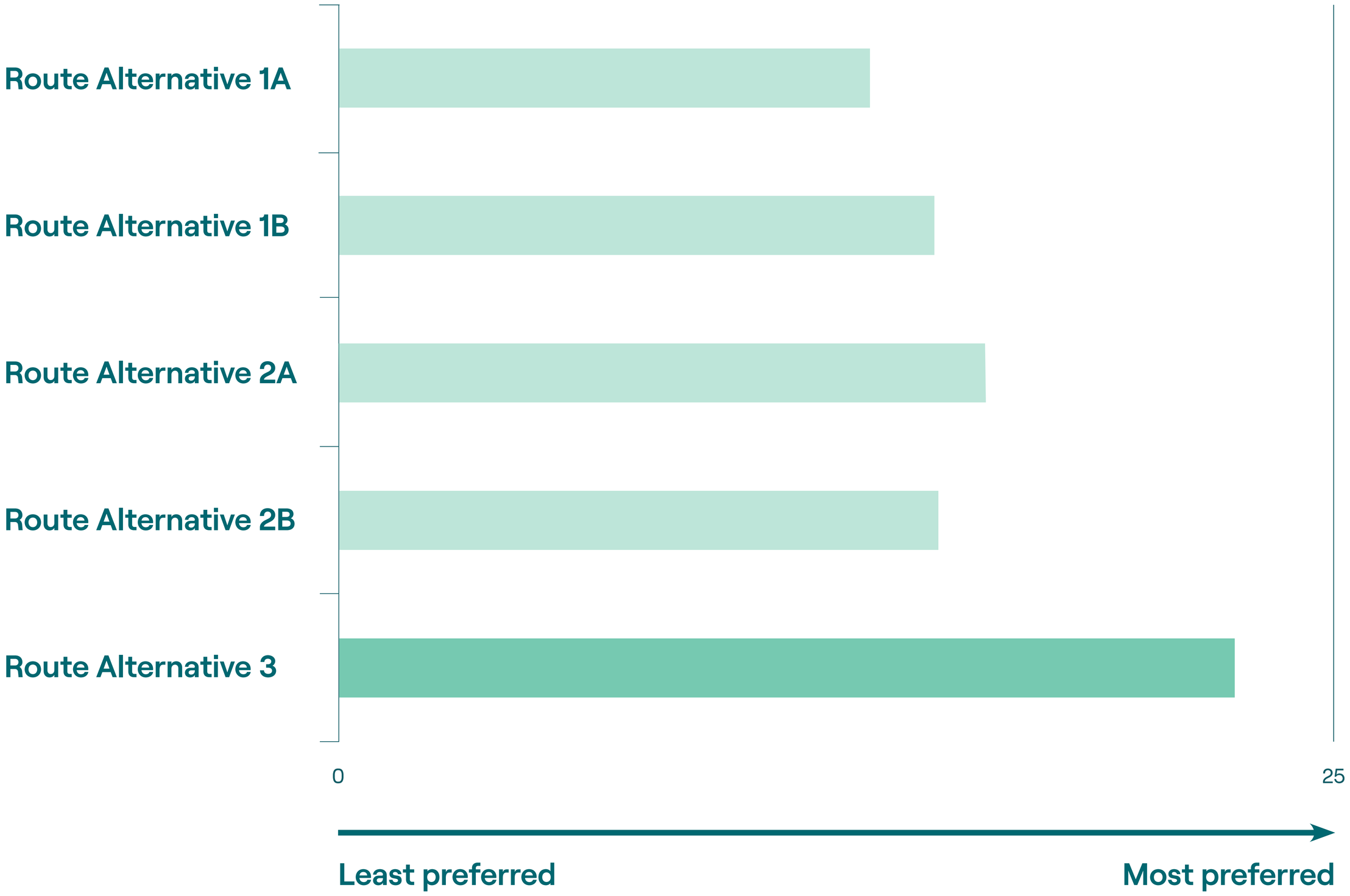
Evaluation summary

Natural environment

Route Alternative 3 scored the best overall in the Natural Environment category

- Minimizes vegetation removal
- Least effects to significant wildlife habitat and candidate significant wildlife habitat within the right of way
- Least effects to species at risk
- Least effects to significant valleylands, significant woodlands, provincially significant wetlands, environmentally sensitive areas, and restoration areas

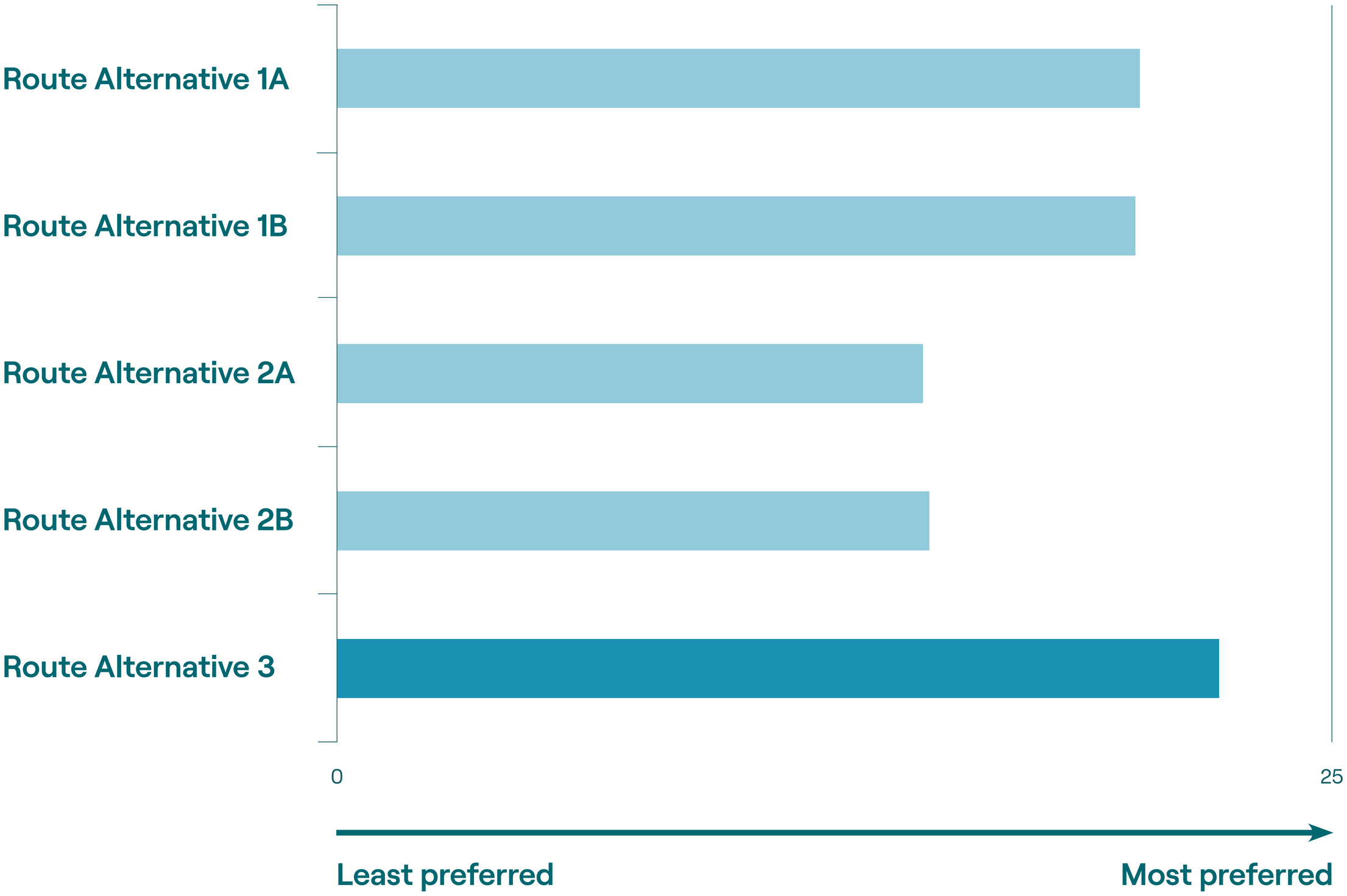


Evaluation summary

Socio-economic environment

Route Alternative 3 scored the best overall in the Socio-Economic Environment category

- Impacts the least amount of residential properties
- Least effects to source water protection areas
- Least effects to built heritage resources and cultural heritage landscapes
- Least effects to archaeological resources
- Effects to agricultural resources and operations were similar to other alternatives



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Evaluation summary

Indigenous culture, values and land use

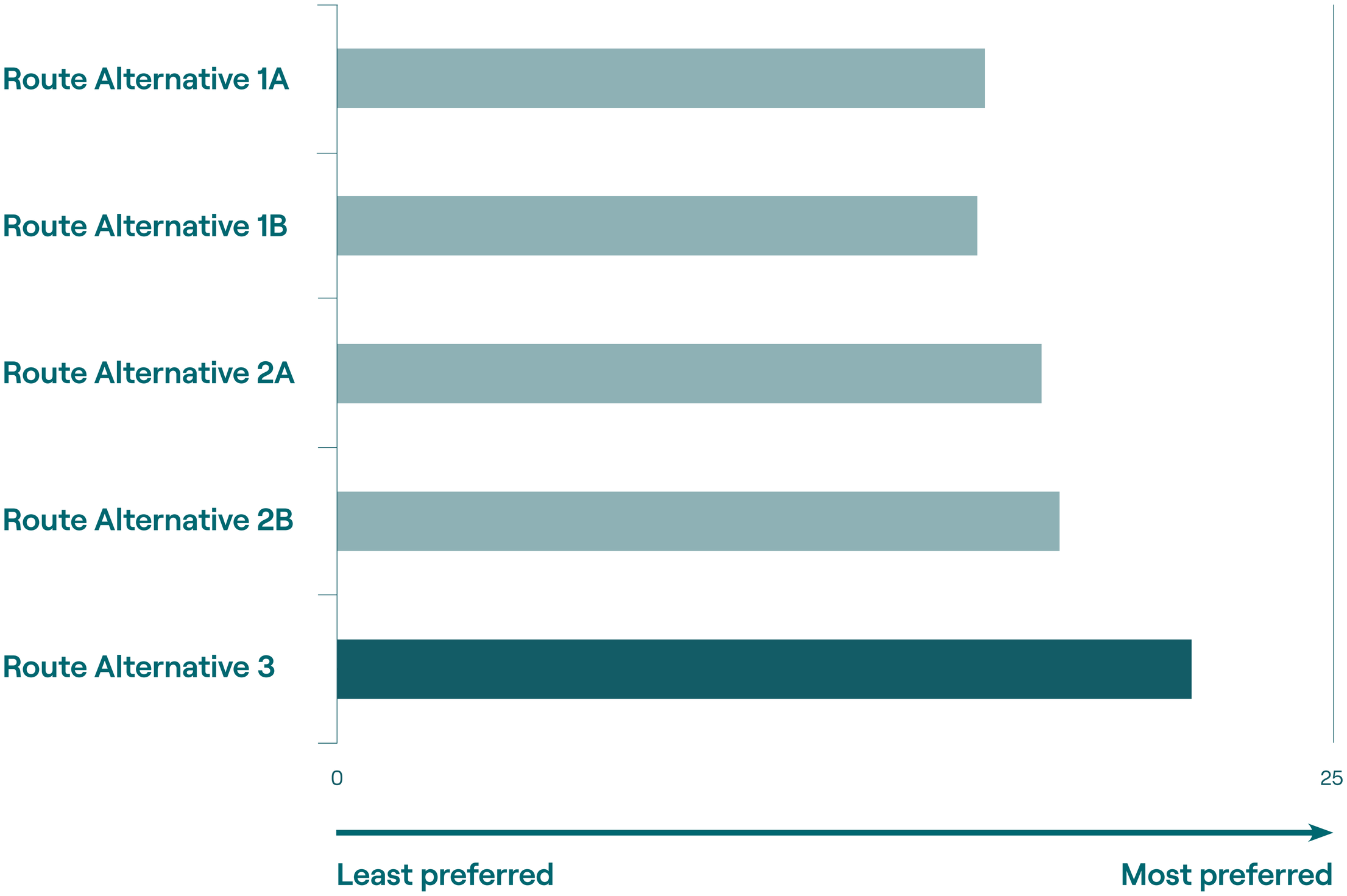
Route Alternative 3 scored the best overall in the Indigenous Culture, Values and Land Use category

- Least impacts to areas with the potential to support hunting, trapping and/or harvesting grounds
- Least effects to rare, undisturbed habitats and ecosystems including species at risk habitat, and confirmed and candidate significant wildlife

Evaluation summary
Technical and cost

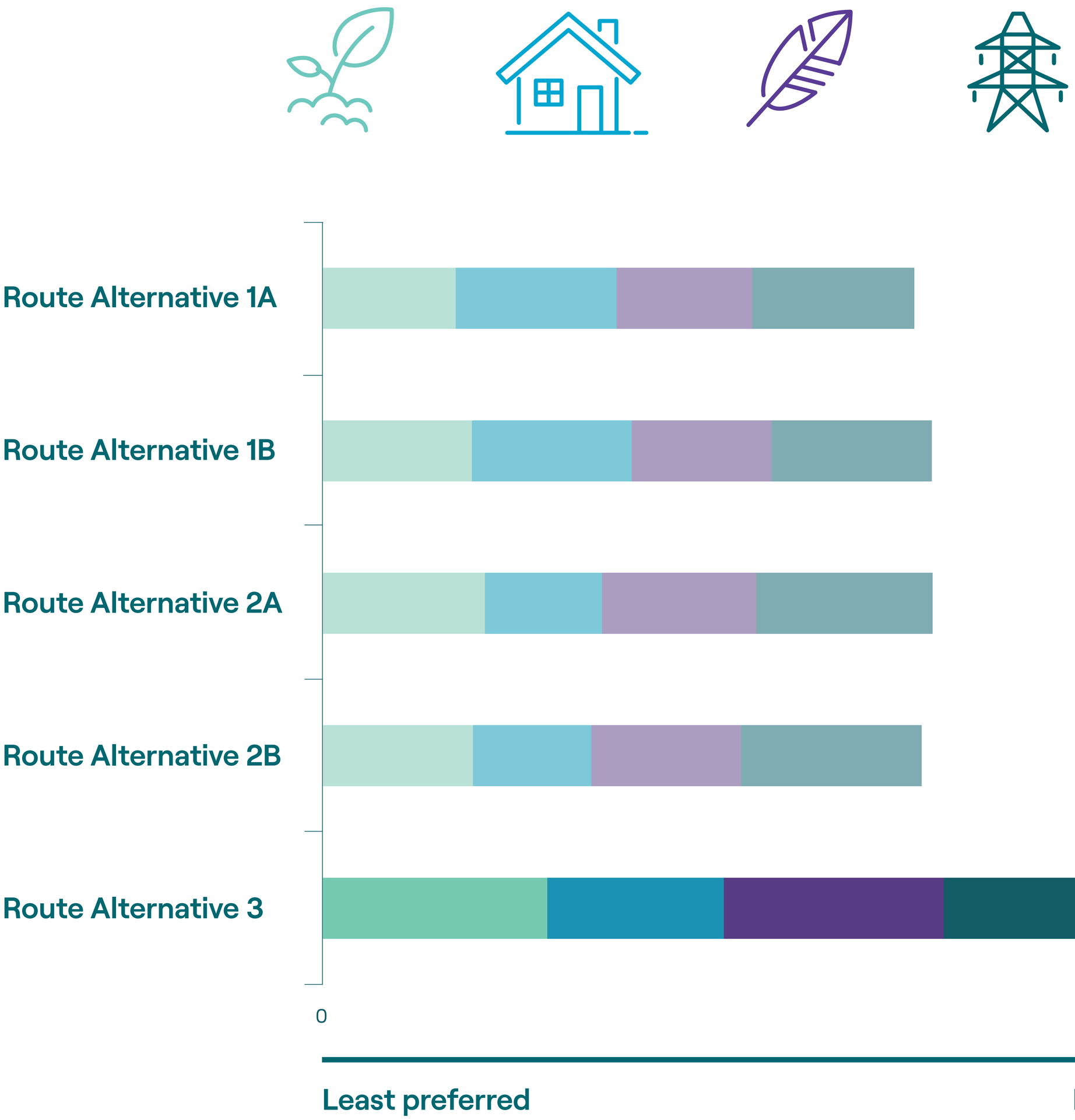
Route Alternative 3 scored the best overall in the Technical and Cost category

- Requires the least amount of pipeline crossings
- Impacts the least amount of properties
- Does not require bypasses, circuit modifications or outages



Evaluation results

The evaluation concluded Route Alternative 3 has overall more advantages compared to the other route alternatives identified through the environmental assessment.



Working with property owners

Hydro One is working closely with directly impacted property owners.

Property Owner Choice

Property owners have the choice between an easement or purchase

Independent Valuation

Offers are based on site-specific reports from independent third-party appraisers

Incentives

Monetary incentives will be offered in addition to market value compensation for voluntary property rights

Construction & Mitigation Physical Property Damages

Property owners will be reimbursed for project related losses such as out of production cropland during and after construction

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Mitigation and restoration opportunities

Based on our experience building transmission lines in agricultural areas, the following mitigation measures are being considered for constructing the line.

Use existing access and watercourse crossings as much as possible

Apply erosion and sediment controls when needed

Avoid and protect tile drainage as much as possible and repair any damage resulting from construction

Retain compatible vegetation

Employ dust control measures

Restore temporary access roads and work areas after construction

We want to hear your continued feedback to further enhance the planning of this project.

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Designing the transmission line

With the preferred route selected, detailed design for the transmission line will consider:

- Residential and business effects
- Structure heights and clearances
- Structure locations
- Environmental constraints
- Distance between structures
- Construction methodology
- Topography and soil conditions
- Right of way width

Over the next several months, we will complete more detailed environmental and technical studies to inform the design of the new line. We will also gather feedback from property owners on property specific features.

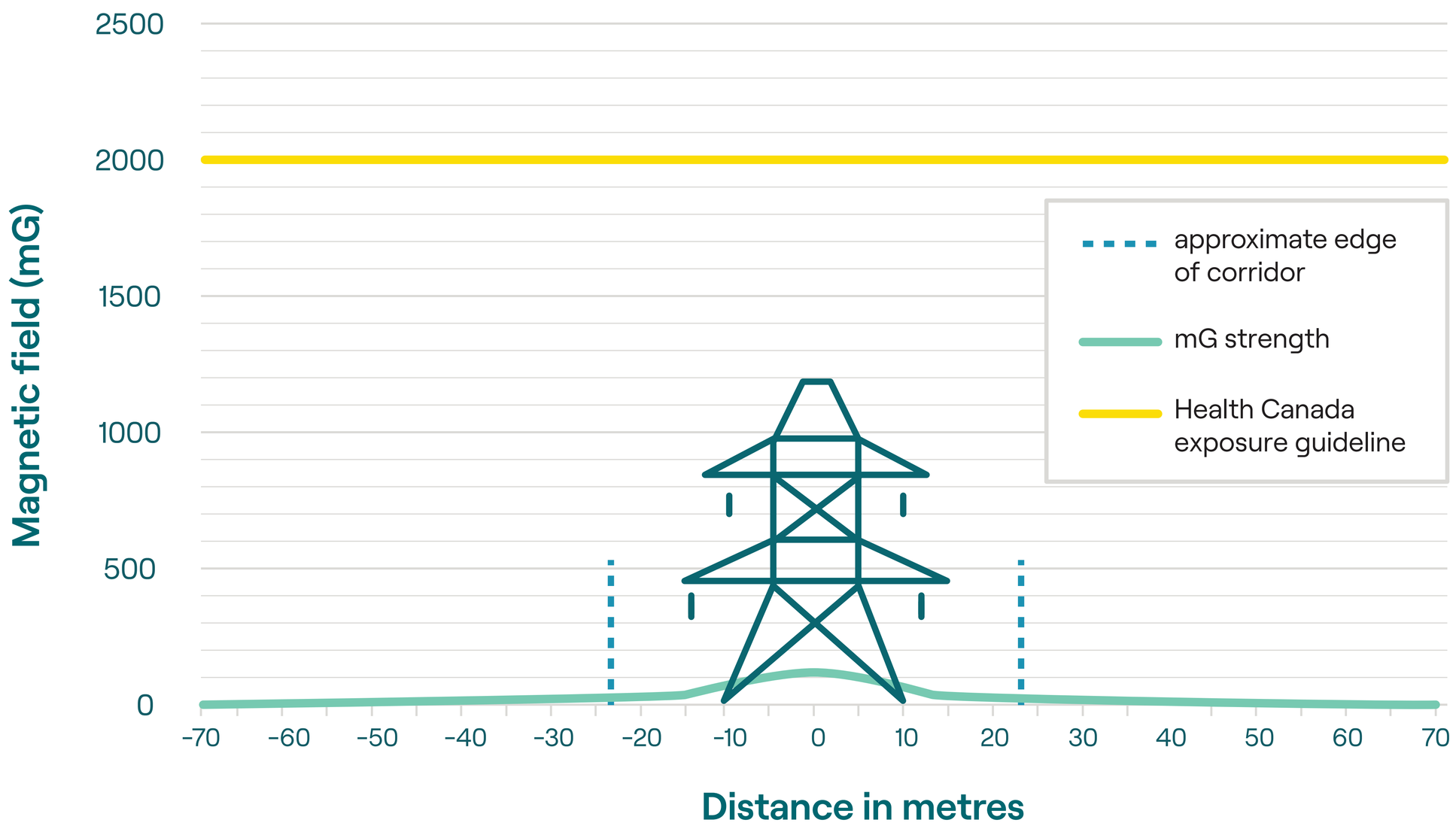
Electric and magnetic fields (EMF)

Hydro One is committed to meet safe EMF exposure levels to ensure members of the public are not exposed to elevated EMF levels. We look to scientific experts, like Health Canada, for guidance. Health Canada does not consider that any precautionary measures by the public are needed regarding daily exposure to EMFs at extremely low frequencies that are emitted from transmission lines.

Below is an example chart that shows a double-circuit 230kV transmission line. The green line represents magnetic field modelling as it extends from under the wires and to the edge of the right of way. This modelling is compared against Health Canada's recommended limit of 2000 mG (yellow horizontal line). The tower represents the middle of the transmission line.

mG of a typical double-circuit 230 kilovolt transmission line

Median magnetic field (mG) of common household appliances	
Vacuum cleaner	300 mG at 6 inches
Microwave	200 mG at 6 inches
Portable heater	100 mG at 6 inches
Washing machines	20 mG at 6 inches



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Project timeline

Ongoing consultation and engagement

Environmental studies & assessments

January 2024
Class EA Notice of Commencement

February 2024
Community Open House #1 and
community drop-in office from May-August

November 2024
Announcement of the preferred route and
Community Open House #2

Spring 2025
Release Draft Environmental Study Report (ESR)
for public review

Summer 2025
Finalize ESR to complete the Class EA, and
obtain applicable project permits and approvals

Late 2025
Construction start

2027
Line in-service

*All dates are subject to change

Thank you!

Your input is important to us. Please share your feedback with our team and complete a comment form before you go. To provide comments or to be added to the project contact list, please call or email:

1.877.345.6799

Community.Relations@HydroOne.com

For the most up-to-date project information and project updates, visit our project website:

HydroOne.com/StThomasLine