



Dean Lake Bridge Public Information Session

October 22, 2025

Welcome & Session Overview

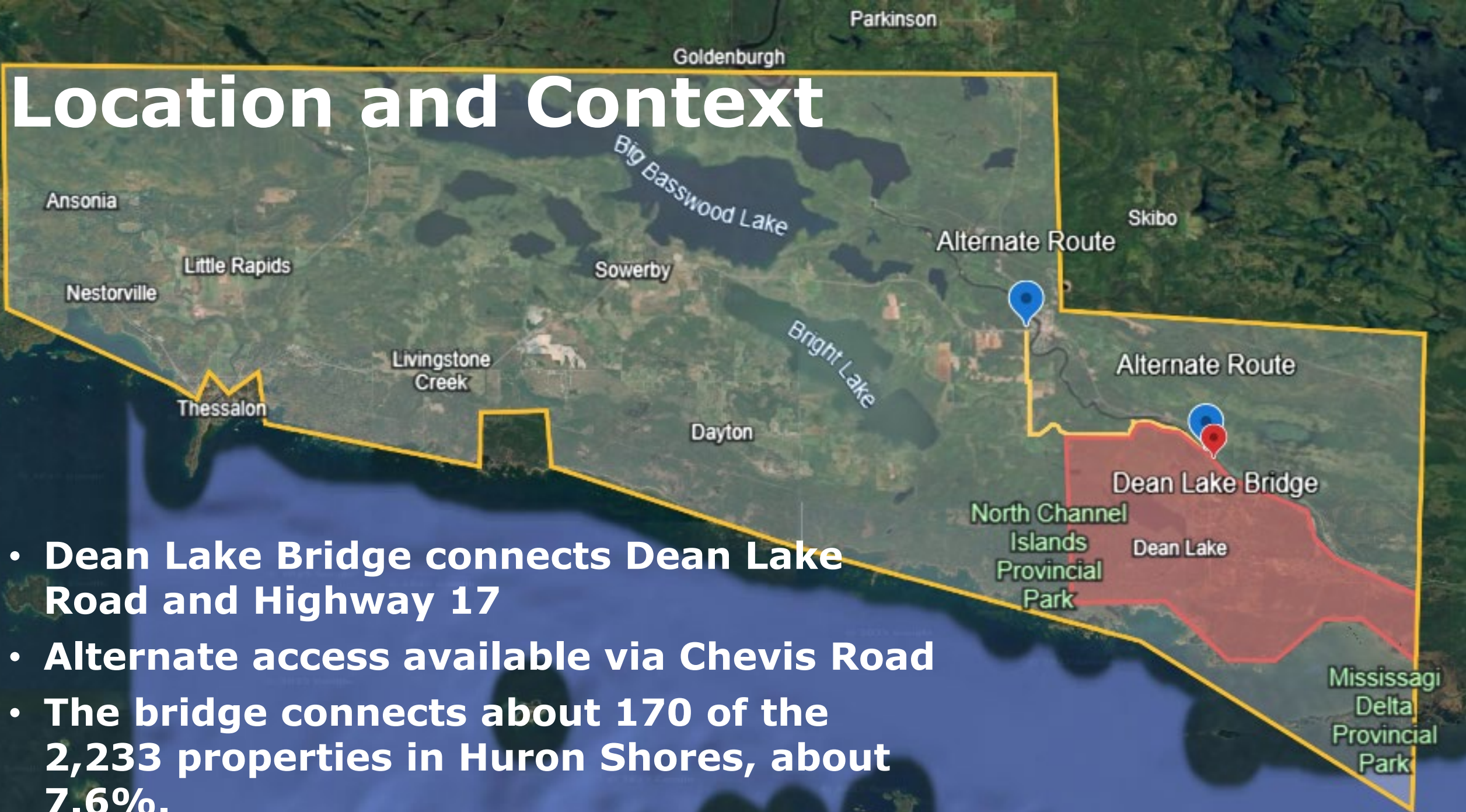
- The session is being recorded so a recording can be shared online.
- A short presentation will be provided, followed by a public feedback portion.
- During feedback, speakers may line up at the microphone, comments will be heard in order.
- Each person will have up to two minutes to share input.
- Comment sheets are available for anyone who prefers to write in afterwards.
 - Written feedback will be accepted until October 30, 2025 (email, website, or drop-off).
- Please keep all comments respectful and focused on the topic at hand.

Purpose of Tonight's Session

- Share the results of engineering inspections and cost estimates.
- Review the short-term and long-term options.
- Discuss financial and ratepayer impacts.
- Gather public feedback before Council decides how to proceed.

Location and Context

- **Dean Lake Bridge connects Dean Lake Road and Highway 17**
- **Alternate access available via Chevis Road**
- **The bridge connects about 170 of the 2,233 properties in Huron Shores, about 7.6%.**



Why We're Here

Brief timeline:

- **1908:** Dean Lake Bridge commissioned
- **1998:** Significant repairs (\$292k) to bridge structure.
- **2007:** Significant repairs (\$489k) to bridge structure.
- **2008:** Bridge decking replaced (\$297k).
- **2020:** Load Limit reduced to 10-tonne.
- **January 2025:** Load limit reduced to 6-tonne.
- **April 2025:** Culvert failure forcing full bridge closure.
- On-going dispute over culvert responsibility.

Inspections and Reports Completed

- **2020:** Structural Load Evaluation and Condition Assessment
- **2023:** OSIM Bridge Inspection
- **2024:** Steel Testing and Concrete Coring
- **2024/2025:** Feasibility Report; Underwater Assessment
- **2025:** Culvert Inspection
- **2025:** Chevis Road Assessment

What the Inspections Found

- Major corrosion in steel trusses and bottom chords.
- Concrete piers and abutments in poor condition.
- Bridge deck system retaining water and deteriorating.
- Culvert under Dean Lake Road has structurally failed, undermining road access.

What are our options?

- The bridge has reached the end of its safe service life.
- Council must now decide how to move forward.
- Three main options have been identified:
 - Decommission the Bridge.
 - Major rehabilitation.
 - Full Bridge replacement.

Summary of Short-Term Options

Options	Est. Cost	Description	Key Points
ST-1: Permanent Closure	\$110K- \$125K	Remove culvert and close the crossing.	<ul style="list-style-type: none">• No connectivity.• All traffic via Chevis Road.• Allows for long-term planning.
ST-2: Culvert + Interim Repair	\$800K - \$1.2M	Replace culvert and temporary bridge repairs.	<ul style="list-style-type: none">• Temporary (1-2 years).• Restores access under 6-tonne load limit.
ST-3: Modular Rental Bridge Over Culvert	\$380K- 415K (2-years)	Install short-term bridge over culvert.	<ul style="list-style-type: none">• Short-term connectivity. Requires MTO permits• Interim bridge repairs needed.

Long-Term Options Overview

- **LT-1:** Decommission Bridge – Remove structure, restore site.
- **LT-2:** Major Rehabilitation – Repair and repaint existing bridge.
- **LT-3:** Full Replacement – build new one-lane or two-lane bridge.

LT-1 – Decommission the Bridge

What it means:

- Permanently close the Dean Lake Bridge.
 - Remove bridge superstructure and rehabilitate the site, OR
 - Convert to pedestrian bridge.
- Maintain access via Chevis Road.

Pros:

- Lowest overall cost.
- Eliminates future liability and inspection costs.
- No long-term maintenance requirements.

Cons:

- Permanent loss of river crossing at that location.
- Permanent reliance on Chevis Road.

- **Estimated Cost: \$2.2M (Includes ST-1) + Chevis Road improvements (\$2.5M - \$5M) totaling roughly \$4.7-\$7M.**

LT-1 – Decommission the Bridge

(Continued)... Proposed Options for future consideration to upgrade Chevis Road:

Options	Description	Approx. Cost (excl. HST)
1. Full Upgrade of Existing Road	Reconstruct to 60 km/h design speed	\$4.5 M
2. Realignment A	Straighten first corner	\$1.2 M
3. Realignment B	Remove first corner, moderate grades	\$2.4 M
4. Realignment C	Rework east hill/corner	\$1.9 M
5. Woodside Extension A	New alignment	\$4.3M
6. Woodside Extension B	“Best-fit” Connection	\$3.2M

LT-2 – Major Rehabilitation

What it means:

- Replace bridge deck, repair trusses, restore concrete, and repaint.
- Keeps the existing bridge open but still load-posted.

Pros:

- Extends service life by up to 25 years.
- Maintains crossing for local traffic.

Cons:

- High cost for limited lifespan.
 - Bridge remains load-restricted.
 - Ongoing inspection and maintenance costs.
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- **Estimated Cost: \$7.4-\$7.8 M (includes ST-2) + Chevis Road Improvements (\$2.5M - \$5M) totaling roughly \$9.9M – \$12.8M.**

LT-3 – Full Bridge Replacement

What it means:

- Construct new one- or two-lane bridge to modern standards
- Full highway load capacity.

Pros:

- Provides long-term, full-load crossing.
- Lowest maintenance needs over time.
- Meets all current design standards.

Cons:

- Highest cost option by a large margin.
- Depends on securing significant external funding.
- **Estimated Cost: \$25-\$32 M (includes ST-2) + Chevis Road Improvements (\$2.5M - \$5M) totaling roughly up to \$37M.**

Financial Impact of Long-Term Options

Options	Est. Cost	Approximate Tax Impact (2025 Context)	Notes
LT-1: Decommission	\$2M	<ul style="list-style-type: none">• 43% if paid in one year or,• 3%/yr over 15 years	Could be managed through reserves, grant, or short-term financing.
LT-2: Major Rehab	\$5.8M-\$7.6M	<ul style="list-style-type: none">• 125-165% if paid in one year or,• 8-11%/year over 15 years	High cost for limited 20–25-year lifespan.
LT-3: Replacement	\$25M-\$32M	<ul style="list-style-type: none">• 540-700% if paid in one year or,• 36-46%/yr over 15 years	Would require long-term debt and external funding.

This does not include Chevis Road Improvements. Figures are order-of-magnitude estimates for contexts only. Impacts assume 100% municipal funding and do not account for potential grants, cost-sharing, interest on loans, or use of reserves.

Financial Impact on Property Taxes

*Approximate Tax Impact – Based on \$150,000 Assessed Value (MPAC 2016 Baseline)

Scenario	Approx. Cost	Tax Impact (1 Year)	If Financed (Over 15 Years)	Approx. Annual Tax Bill (on \$150,000 home)
T-1: Decommission	\$2M	+43%	+3%/yr	\$4,317 (+ \$1,298) OR (+\$90/yr over 15yrs)
T-2: Major Rehab	\$5.8–7.6M	+125–165%	+8–11%/yr	\$6,800 – \$8,000 (+ \$3,800 – \$5,000) OR (+\$240-\$330/yr over 15yrs)
T-3: Replacement	\$25–32M	+540–700%	+36–46%/yr	\$19,500 – \$24,200 (+ \$16,900 – \$21,200) OR (+\$1000-\$1400/yr over 15yrs)

*All figures are approximate. Calculations based on a 2016 MPAC assessed value of \$150,000 and a current Residential Tax rate of 0.02012907 (≈ \$3,019 annual tax).
Figures shown are illustrative to demonstrate scale, not proposed or actual increases.

Funding Options

- Increase levy for all residents
- Local Improvement By-law imposed on Dean Lake residents only.
- Grants (not currently available).
- Borrowing (spreads costs over future years, adds annual interest expense).
- 2025 Annual Borrowing Limit \$10,822,766 @ 5% for 20 years; \$9,200,337 @ 7% for 20 years (annual repayments \$868K).
- Bridge Replacement Reserves (limited).
- Combination

State of Infrastructure based on 2025 AMP:

Asset Category	Replacement Cost	Asset Condition
Road Network	\$114,914,299	Fair (43%)
Bridges & Culverts	\$40,636,292	Fair (49%)
Storm Sewer Network	\$1,746,065	Very Good (90%)
Buildings	\$25,625,252	Good (71%)
Machinery & Equipment	\$1,545,601	Fair (48%)
Vehicles	\$4,242,879	Good (69%)
Overall	\$188,710,388	Fair (53%)

State of Reserves:

Type	Projected December 31, 2024	Actual January 1, 2025	Projected December 31, 2025
Obligatory/Restricted	\$337,851	\$1,034,074	\$29,581
Discretionary	\$6,001,625	\$6,942,238	\$6,415,591
Total	\$6,339,476	\$7,976,312	\$6,474,752

Other Items For Consideration:

- The Bridge Reserve balance of \$2,123,887 at the end of 2024 is insufficient to cover the potential Dean Lake Bridge costs and other items that may be identified in the 2025 OSIM Bridge Inspections
- The Roads Reserve Balance of \$1,925,104 at the end of 2024, is insufficient if significant work is required to upgrade Chevis Road.
- Annual repayment limit (under O. Reg 403/02) regulates the Municipalities ability to borrow.
- The Municipality's Long-term Debt Management Policy (Res 19-12-27) guideline borrowing limits for improvement project is 80% of cost with repayment lengths of 10-15 years.
- Asset Management Plan has not been fully funded, decisions required.

Public Feedback

- The remainder of the session will be for public input.
 - Each person will have up to two minutes to share their thoughts so everyone gets a turn.
 - Comment sheets are available for anyone who prefers to write or share more detail later. Drop off at the Municipal Office.
 - Written feedback will be accepted until October 30, 2025: email@huronshores.ca.
- All information is available online at www.huronshores.ca.

Next Steps...

- **Council Meeting – November 12, 2025, 7:00PM.**
 - Council will review public input and make decisions on next steps.
- **Public Encouraged to Tune In**
 - The meeting will be live on Zoom and open to the public (*limited capacity*).
- **Written Feedback Deadline – October 30, 2025**
 - Comments can still be submitted by email, through the website, or dropped off at the Municipal Office.
- **Updates**
 - Meeting details and project updates will be shared on the Municipality of Huron Shores website and social media.