

MUNICIPALITY OF ARRAN-ELDERSLIE

Bridge Infrastructure Master Plan



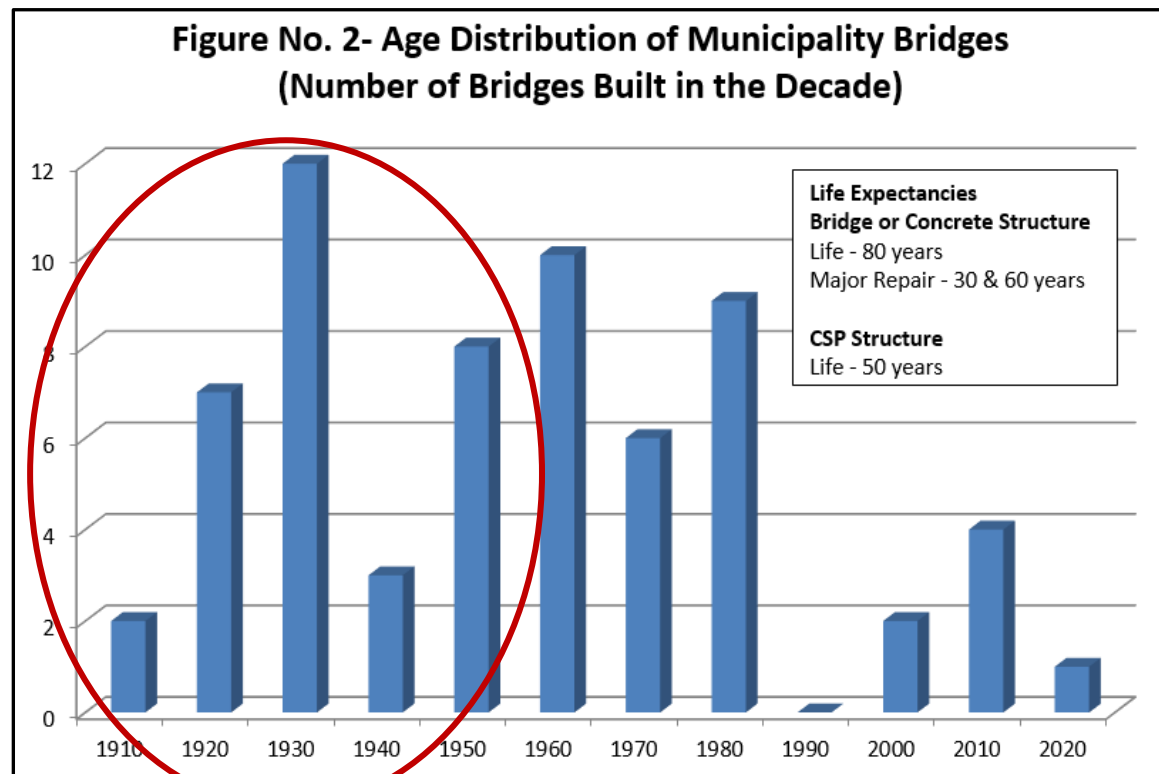
PUBLIC INFORMATION MEETING
December 17, 2025

Agenda

- Background
- Summary of Public Input
- Revised Evaluation Approach
- Recommended Approach
- Timeline
- Next Steps

Project Background

- Arran-Elderslie maintains 62 Bridges (>3m in length)
- The Infrastructure Master Plan is considering outcomes for only 17 of the oldest crossings in the Municipality
- The Master Plan process was initiated in 2019



Master Plan Timeline

- Initial Notice/Agency & FN Consult September 2019
- Cultural Heritage Evaluation Report March 2020
- Engineering Evaluation of Crossings 2021
 - Traffic Counts, Detour Options, BCI, Road Connectivity, Road Surface Condition, Load Limit
- Develop Preliminary Recommendations 2022
- Council Presentation February 2023
- Public Meeting September 2023
- Council Presentation January 2024
- Finalize Master Plan Process December 2025

Bridge Economics

- Arran-Elderslie maintains 62 Bridges (>3m span)
- Bridges are inspected every 2 years as per OSIM
- Bridge Needs Report prepared in 2024 listed repair or replacement needs for 20 structures over next 1-5 years
- Priority Repairs – 1 to 5 years - \$6,687,500
- Priority Repairs – Average amount/year \$1,337,500
(Includes some of the study bridges)
- Draft 2026 budget proposes \$303,218 to be put into reserves for bridge projects.
- Due for OSIM inspection and updated Needs Report in 2026

Study Bridges

A11-Wilson

A24-Ruff

A14-Arranvale

A5-Hunts

A29, A30

E22, E24

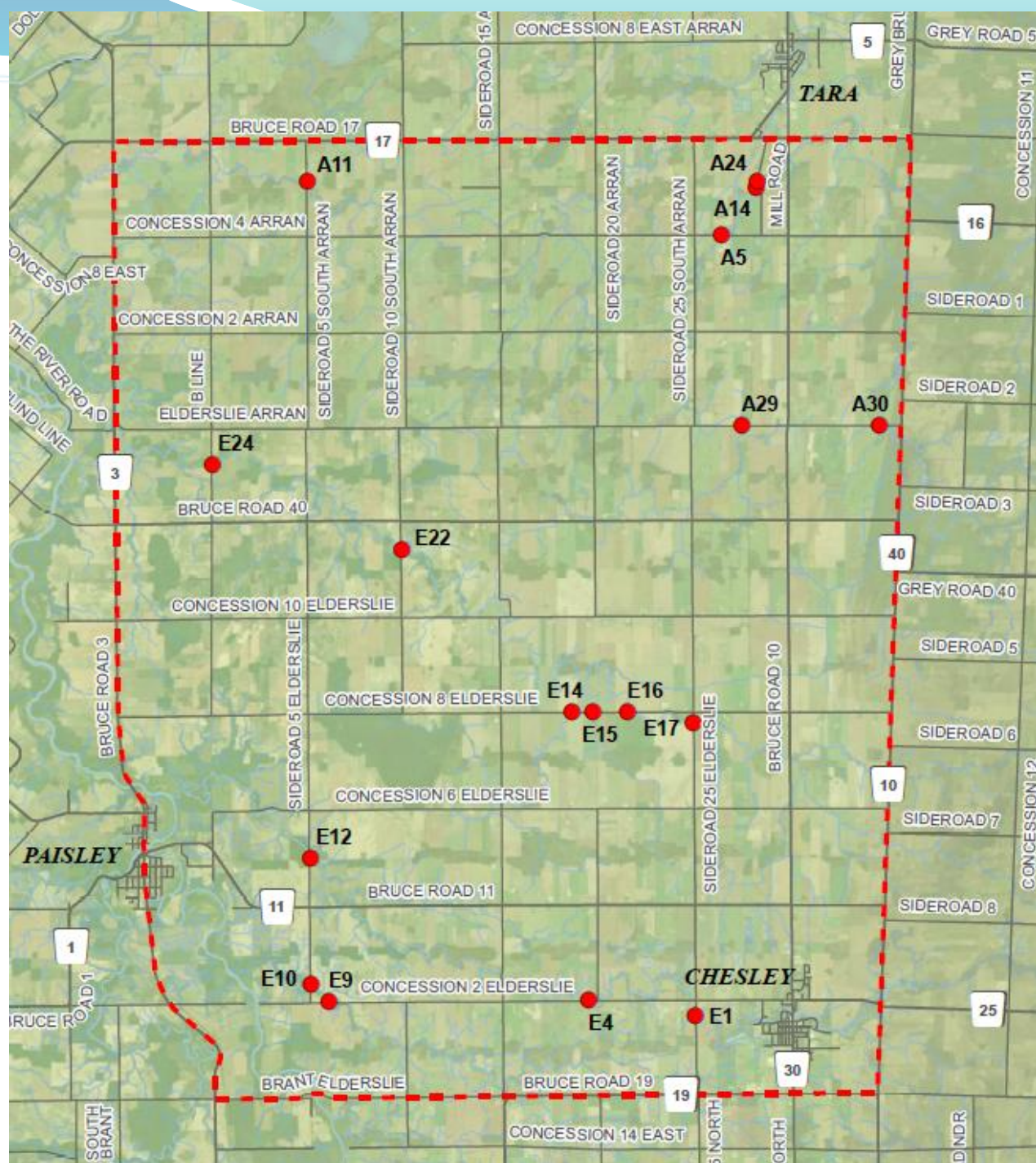
E14, E15, E16, E17

E12-Pearces

E9, E10

E4-Allens

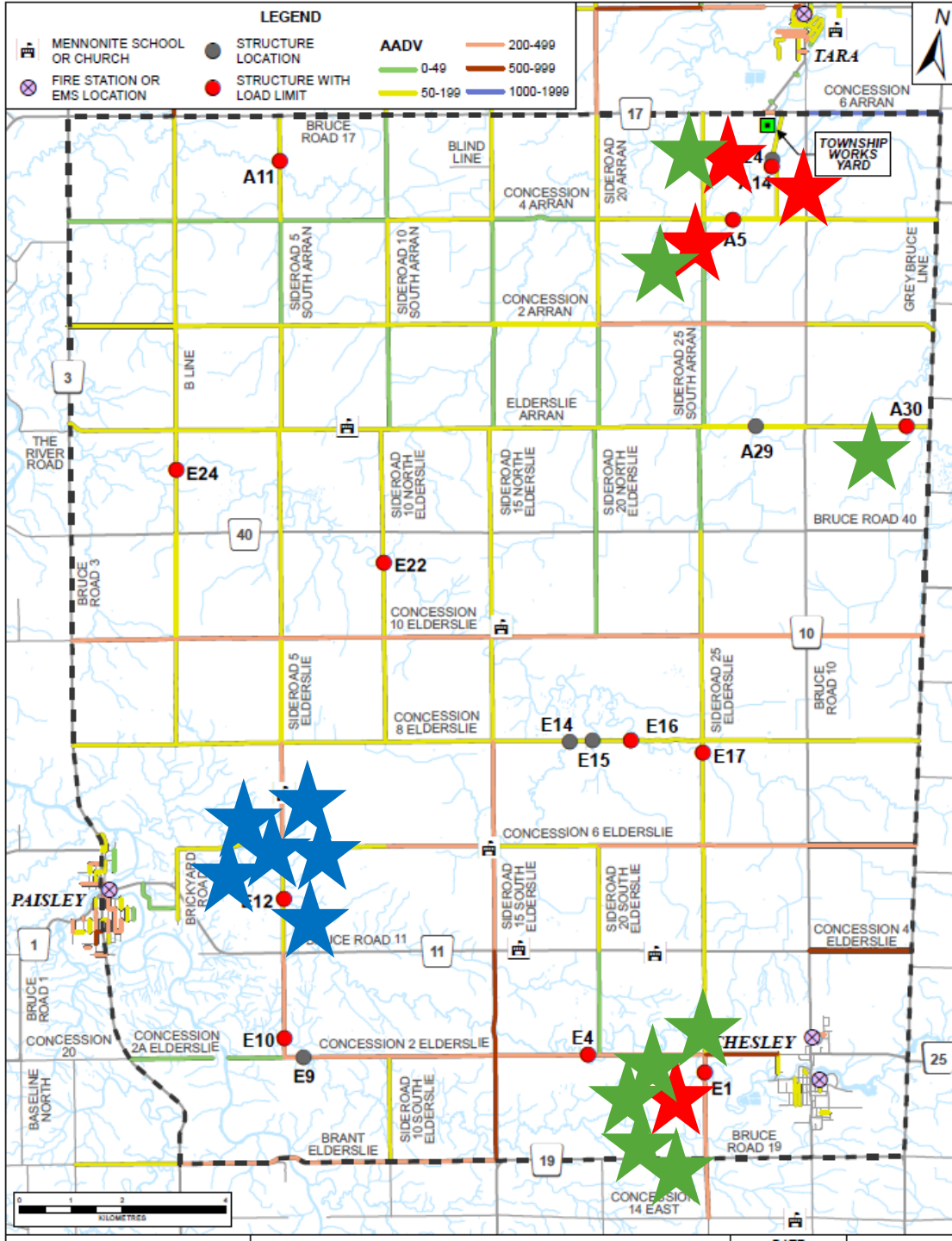
E1-Priebe



E1-Priebe

Feedback from Residents

- 8 written comments received following the September 2023 Public Meeting
- Majority of comments were specific to an individual bridge
- A number of comments were received from the horse & buggy community identifying a bridge that is used often by their community to access a school and church (E1 – Priebe)
- Residents were concerned with timelines for when bridges would eventually be closed
- A number of comments received from residents following the temporary closure of E12 – Pearces Bridge



Master Plan Public Comments

- ★ Comments made at the 2023 Public Meeting
- ★ Comments received following the 2023 Public Meeting
- ★ Comments received following closure of E12

Master Plan Alternatives

**Preferred
Approach**



- **Alternative 1** – Continue to repair or replace crossings. This option means that the Municipality would continue maintaining, repairing, and replacing bridge structures as necessary to ensure the transportation network stays safe and connected, provided these investments continue to be financially sustainable within municipal budgets.
- **Alternative 2** – Close some crossings and either replace or repair the remaining crossings. This option means that several bridges will be repaired as long as feasible and then eventually closed to traffic and removed, while the remaining crossings will be either repaired as required or replaced.
- **Alternative 3** – Do Nothing. The do nothing option, is a consideration during any Master Plan Class EA process. This option would propose that no commitment is made either way and improvements or changes to address problems will continue to be made on a case by case basis.

Evaluation Criteria

(Criteria that could be used if considering bridge closures.)

- **Traffic Counts** – Provided by Arran-Elderslie
- **Detour Options** – Shortest Route around if Bridge Closed
- **BCI** – Bridge Condition Index (Condition Score)
- **Road Surface** – Gravel/Pavement
- **Load Limit** – Based on Engineering Review
- **Road Connectivity** – Connection to County Roads or corridors through the Municipality
- **Cost Estimates** – Replacement/Repair

Evaluation of Alternatives

- Matrix developed to Evaluate Different Options
- A 'Community Features' component added after 2023 Public Meeting to capture schools/churches/Fire/EMS/Works Yard
- Approach #1
 - Approach #1 utilized BCI, Load Limit, Traffic Counts, Road Types, Detour Lengths (if closed), Road Connectivity, Replacement Costs, and **Community Features** to identify bridges for potential closure.
- Approach #2
 - Approach #2 removed the BCI and Load Limit Scores and just focused on Traffic Counts, Road Types, Detour Lengths (if closed), Road Connectivity, Replacement Costs and **Community Features** to identify bridges for potential closure. This approach focused more on the location and function of the bridges, rather than their condition.

Matrix Illustrating Approach #1

Structure ID	Type & Age	BCI	Score	Load Limit	Score	Avg. Traffic Counts	Score X 2	Road Type ¹	Score	Detour	Score	Replace\$	Score x 2	Road Connectivity	Score	Community Feature	Score	Revised Total
E4 - Allens	Truss-1920	50	10	18/29/36	10	459	10	HCB	5	8.2km	10	\$2,018,040	30	Yes	5	EMS Route	5	85
E9	Beam-1930	26	20	25	5	280	10	LCB	10	12.2km	5	\$875,850	10	Yes	5	EMS Route	5	70
E1 – Priebe	Truss-1938	40	15	10	15	216	10	Gravel	15	8.1km	10	\$2,194,590	30	Yes	5	School (near)	5	105
E10	T-Beam-1930	48	10	11	10	162	20	LCB	10	12.2km	5	\$1,015,710	10	Yes	5	EMS Route	5	75
E12 – Pearces	Truss-1930	46	10	8	15	162	20	Gravel	15	7.6km	10	\$2,544,240	30	Some	10	School (far)	10	120
A11 – Wilson	C. Arch-1910	45	10	12	10	112	20	Gravel	15	8.1km	10	\$689,370	10	None	15	None	15	105
A29	C. slab-1930	56	5	25	5	100	20	Gravel	15	7.9km	10	\$829,230	10	Some	10	None	15	90
A14 – Arranvale	Truss-1920	45	10	14	10	99	20	Gravel	15	5.2km	15	\$2,529,780	30	Yes	5	Work Shed	5	110
A24 – Ruff	C. slab-1920	29	20	25	5	99	20	Gravel	15	5.2km	15	\$673,830	10	Yes	5	Work Shed	5	95
E24	Truss-1920	53	5	10	15	98	20	Gravel	15	8.2km	10	\$1,614,000	20	Some	10	School (far)	10	105
A5 – Hunts	C. Arch-1910	63	5	9	15	84	20	Gravel	15	7.1km	15	\$1,155,570	10	Yes	5	Work Shed (far)	10	95
A30	C. slab-1930	38	10	12	10	77	30	Gravel	15	8.8km	10	\$1,598,460	20	Some	10	None	15	120
E22	Truss 1920	46	10	3	15	68	30	Gravel	15	8.1 km	10	\$1,691,700	20	None	15	School (far)	10	115
E16	T-Beam-1930	31	15	15	10	67	30	Gravel	15	12.2km	5	\$875,850	10	Some	10	None	15	110
E17	Truss-1930	38	15	11	10	53	30	Gravel	15	8.2km	10	\$1,963,650	20	None	15	None	15	130
E14	T-Beam-1930	34	15	25	5	50	30	Gravel	15	12.2km	5	\$899,160	10	Some	10	None	15	105
E15	T-Beam-1920	41	10	25	5	50	30	Gravel	15	12.2km	5	\$875,850	10	Some	10	None	15	100

Scoring System: ¹LCB – Low Class Bituminous, HCB – High Class Bituminous

BCI: <30 = 20
 30-40 = 15
 41-50 = 10
 >50 = 5
Load Limit: <10 = 15
 11-20 = 10
 > 20 = 5
Traffic: <80 = 15
 81- 200 = 10
 > 200 = 5
Road Type: Gravel = 15
 LCB = 10
 HCB = 5
Detour: < 7.5 = 15
 7.6-10 = 10
 >10.1 = 5
Replace \$: < 1.5 mil = 5
 1.5-2 mil = 10
 > 2 mil = 15
Rd Connection: none = 15
 some = 10
 Yes = 5
Community Feature: None = 15
 Some = 10
 Yes = 5

Preferred Approach

- Council has decided to continue to repair or replace crossings. This means that the Municipality would continue maintaining, repairing, and replacing bridge structures as necessary to ensure the transportation network stays safe and connected, provided these investments continue to be financially sustainable within municipal budgets.
- 2026 Budget includes funding to investigate the costs to replace E12-Pearces Bridge
- Contribution to Bridge Reserves to be increased Annually

Next Steps

- Council has selected Alternative 1 as their Preferred Approach for the Master Plan
- Obtain Additional Input from residents on this Alternative until mid-January
- Finalize Master Plan Report in early 2026
- Subject to Receipt of additional comments from residents a Notice of Master Plan Completion would be published in January for a 30 Day Mandatory Review Period
- Master Plan Report would be made available for review

Questions?