



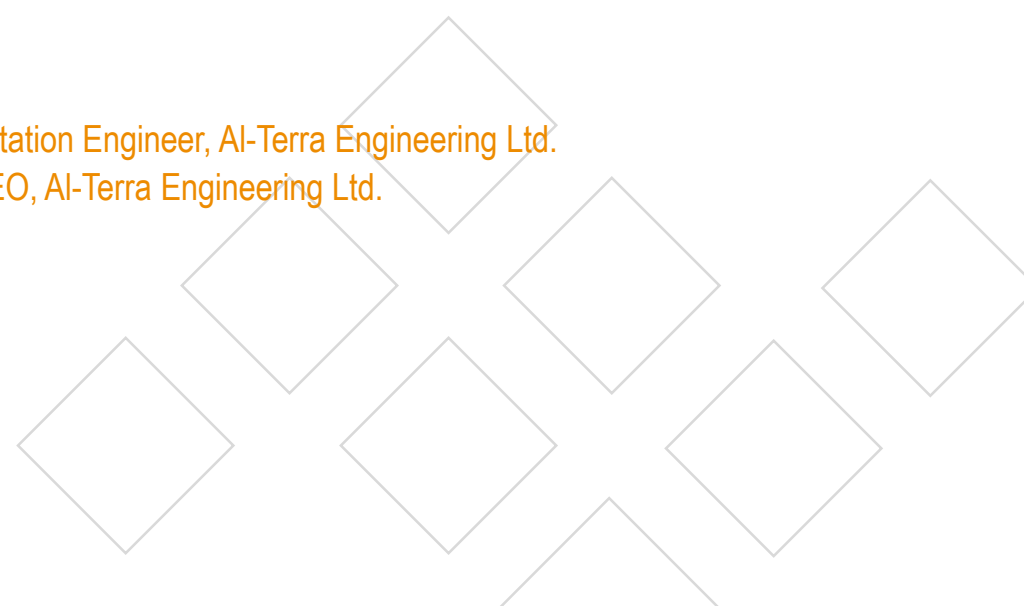
SUSTAINABLE RURAL ROADS MASTER PLAN

PROGRESS UPDATE

PRESENTERS:

Fred Greenhough, Senior Transportation Engineer, Al-Terra Engineering Ltd.

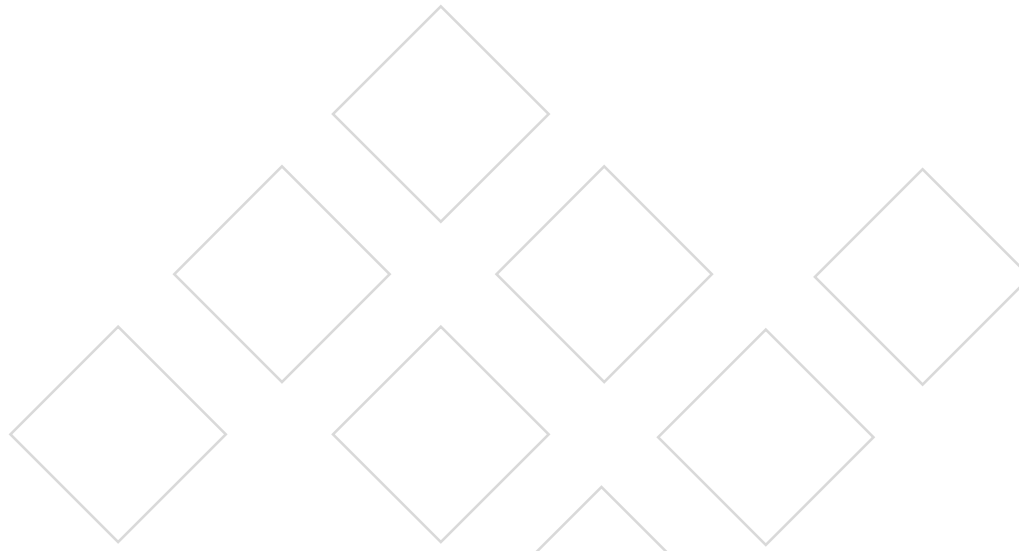
Sheldon Hudson, President and CEO, Al-Terra Engineering Ltd.





SRRMP Draft Update

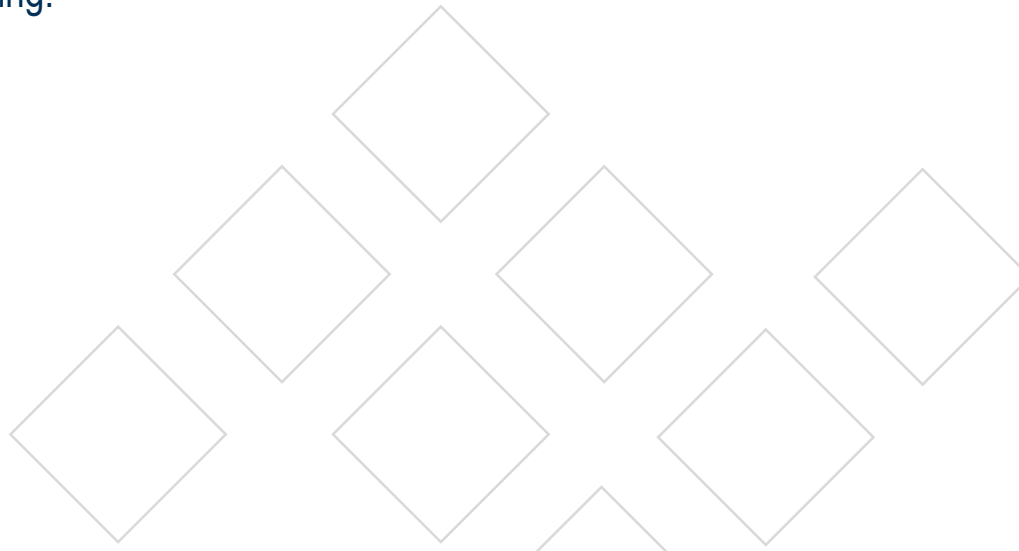
- ◆ About the SRRMP
- ◆ Value engineering session
- ◆ Key recommendations
- ◆ Public engagement update – Phase 2 “Report Back”
- ◆ Schedule





About the SRRMP

- ◆ The Sustainable Rural Roads Master Plan (2010) guides how rural roads are maintained and improved in Strathcona County.
- ◆ All range roads and township roads (grid roads) and roads within country residential subdivisions and rural hamlets are included in the plan.
- ◆ Principles:
 - ◆ Sustainably managed and operated road network
 - ◆ Asset focused decision making.

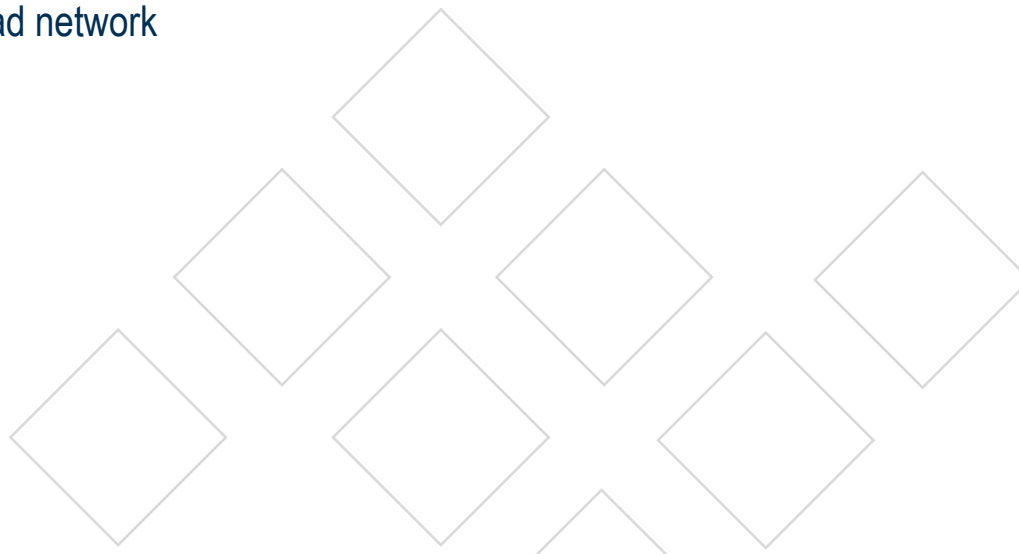




SRRMP Draft Update

The master plan update has reviewed the background data, maintenance practice and upgrades, as well as the methods and criteria for prioritization of the roads.

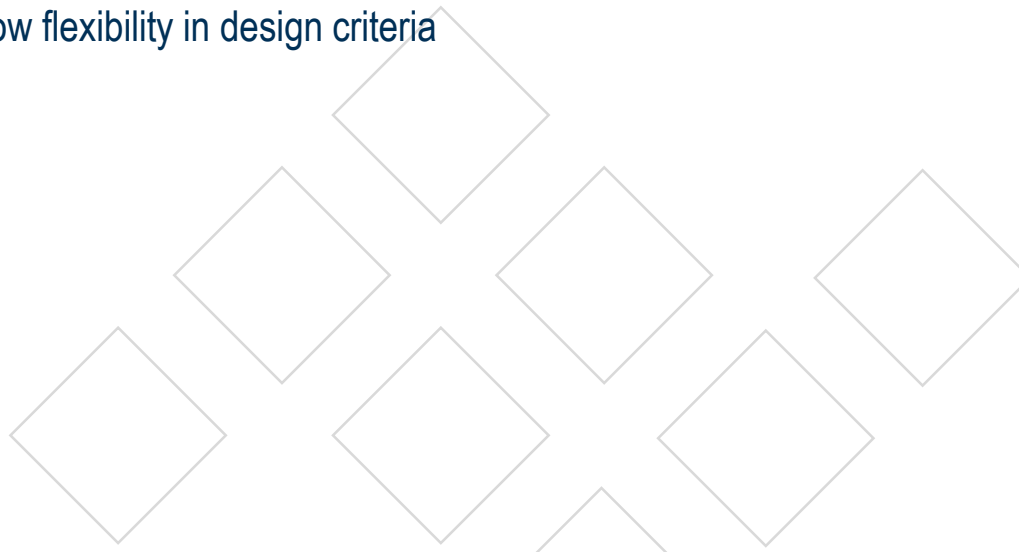
- ◆ As part of the plan update, the County considered:
 - ◆ Current road designs
 - ◆ Criteria for how roads are classified, which determines whether they have an asphalt, cold mix, dust-suppressed gravel or loose gravel surface
 - ◆ Rural road service levels and maintenance methods
 - ◆ Models for funding and prioritizing road improvements
 - ◆ Road safety programs
 - ◆ Sustainability of the rural road network





Value Engineering

- ◆ A Value Engineering Session was held April 15 and 16, 2021 and had participants from Strathcona County, Al-Terra Engineering, Leduc County, Parkland County, Sturgeon County, Park Paving, Carmacks Enterprises, Thurber Engineering and Leonard Dunn.
- ◆ The purpose of the session was to identify innovative ways to develop, maintain, rehabilitate and upgrade rural roads.
- ◆ Key ideas that were generated included
 - ◆ Establish a program for sharing information between municipalities
 - ◆ Develop formal trial project guidelines
 - ◆ Develop subclasses and allow flexibility in design criteria

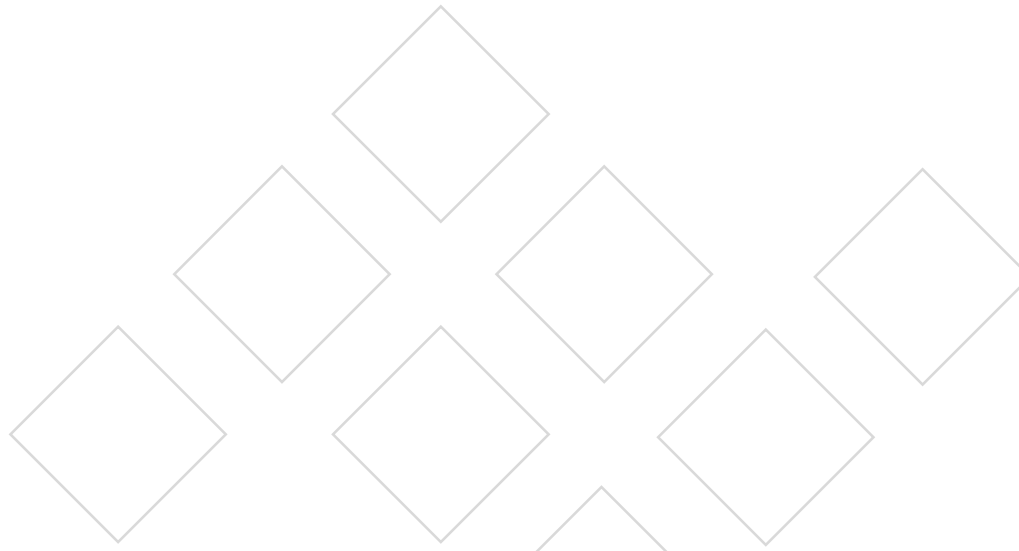




Key Recommendations

The following section will review the key recommendations being made for the SRRMP update. The sections include:

- ◆ Preservation of investment
- ◆ Network level classification plan
- ◆ Prioritization framework
- ◆ Safety measures
- ◆ Road classification and design standards
- ◆ Funding Requirements





Key Recommendations: Preservation of Investment

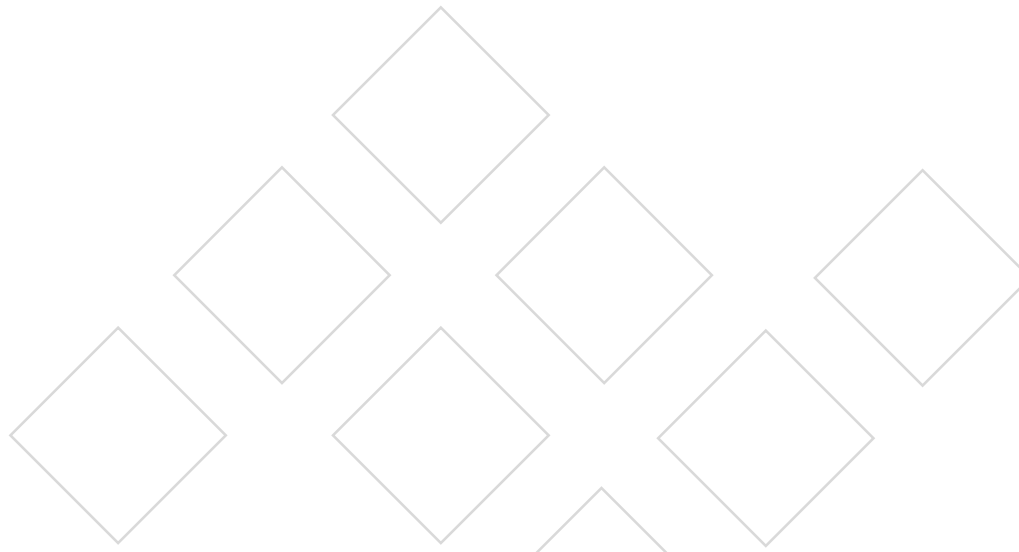
- ◆ Site specific engineering and geotechnical work should be performed to identify the proper rehabilitation or treatment method.
- ◆ Use a cost benefit analysis to evaluate the life cycle cost of proposed improvements and maintenance.
- ◆ Use technology to capture a richer data set when completing traffic counts.
- ◆ Strathcona County should talk to industry about directing employees to use specific routes to avoid shortcutting on local roads.
- ◆ Develop a formal process for trialing new products and construction methods.





Key Recommendations: Network Model Classification Plan

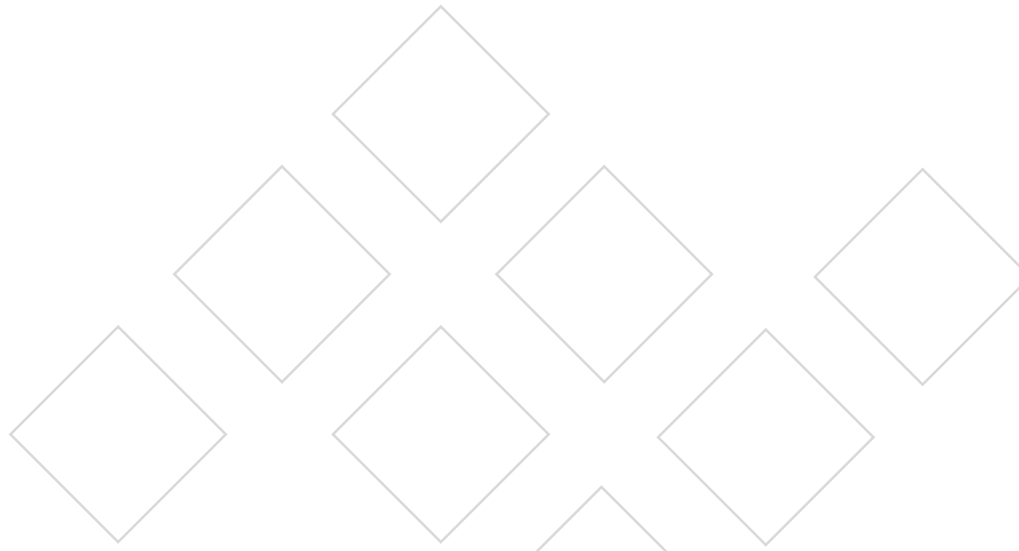
- ◆ Strathcona County has developed a long-range traffic model of the rural road network that models the traffic demand based on the Municipal development plan.
- ◆ Formalize and identify functional road classifications by key connections and routes, not simply traffic volumes, that would support current and future traffic needs of the road network.
- ◆ The detailed model should be used to establish an update on the overall network and support the future update of the Transportation Systems bylaw.





Key Recommendations: Safety Measures

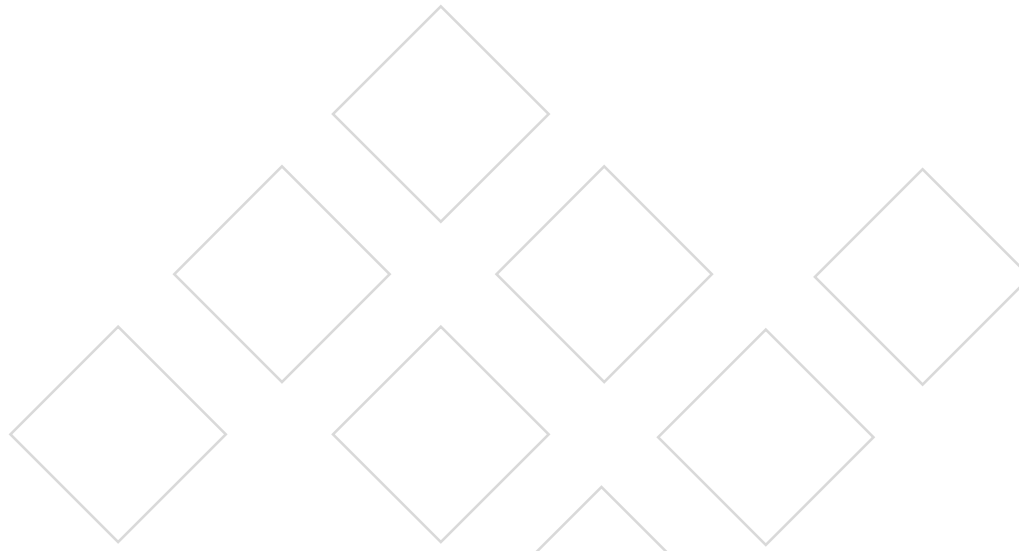
- ◆ Implement a brushing program to improve sightlines at intersections and increase sightlines in areas of high animal collisions.
- ◆ Implement guidelines for additional safety measures at stop-controlled intersections.
- ◆ Consider the use of mini-rural roundabouts at intersections to reduce the severity of collisions, discourage shortcutting, and increase traffic calming.
- ◆ Provide pavement on gravel road intersection approaches to paved roads to allow for sanding and salting during winter maintenance.





Key Recommendations: Rural Road Classification and Design Standards

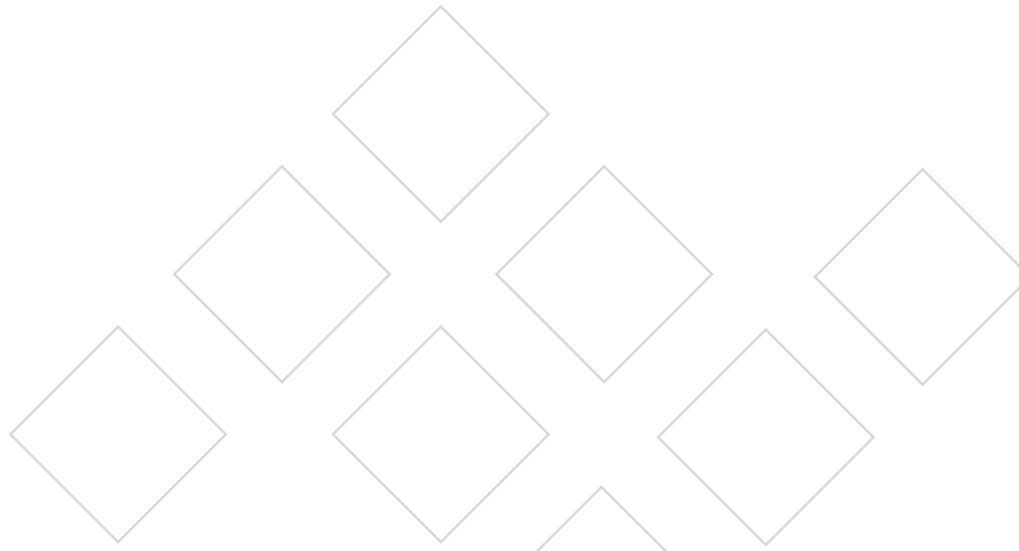
- ◆ Update rural road classifications to split Class II roads into a new Class II Major and Class II Minor standard.
- ◆ Update of design standards for widths and expected traffic volumes.
- ◆ A separate functional classification for rural industrial roads should be created.





Key Recommendations: Develop New Rehabilitation Design Guidelines

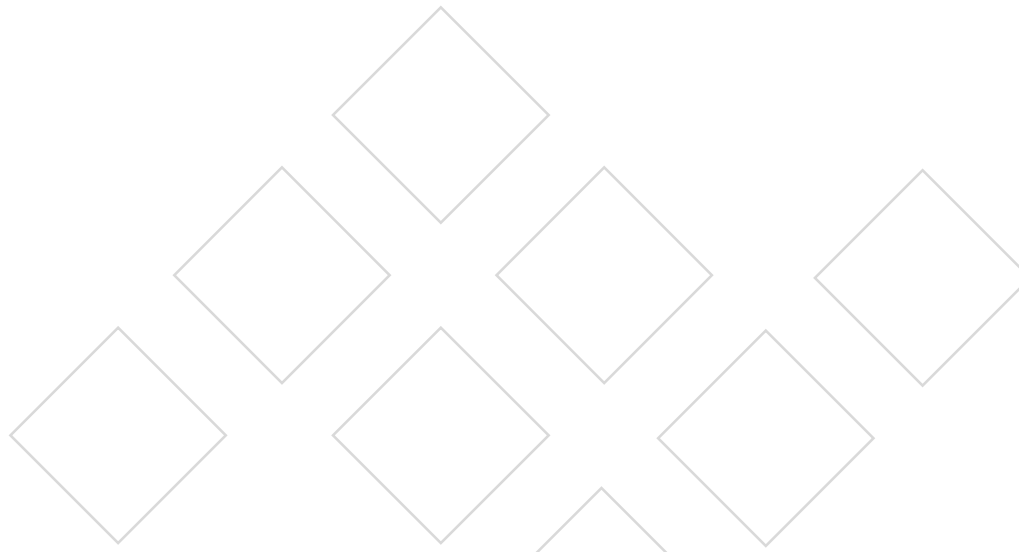
- ◆ The goal of rehabilitation design guidelines is to provide lower cost and lower impact options for roads that may primarily need an improved surface but are otherwise operating within acceptable parameters.
- ◆ Rehabilitation Design criteria would satisfy best practices but may not meet the higher standards required for new construction.
- ◆ Rehabilitation guidelines would formalize Strathcona County's current practices on rehabilitating and maintaining roads.





Key Recommendations: Funding Requirements

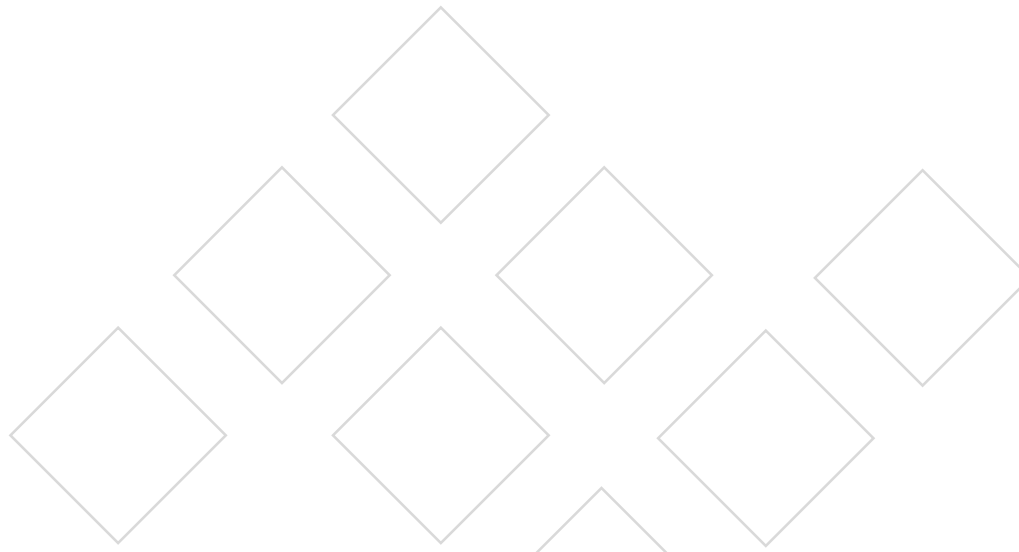
- ◆ Accounting for only roads deficient in width there are 1100km that are below new construction design standards.
- ◆ There are 610km of County Roads that have a width greater than 1.0m below new construction design guidelines. In budget terms, at a cost of \$1.5M/km that results in an infrastructure deficit of \$915M.
- ◆ Current annual programs are focused on rehabilitation to maintain existing surface condition. Capital budget will require detail review to look at increasing upgrades for width deficient roads.





Public Engagement: Phase 2

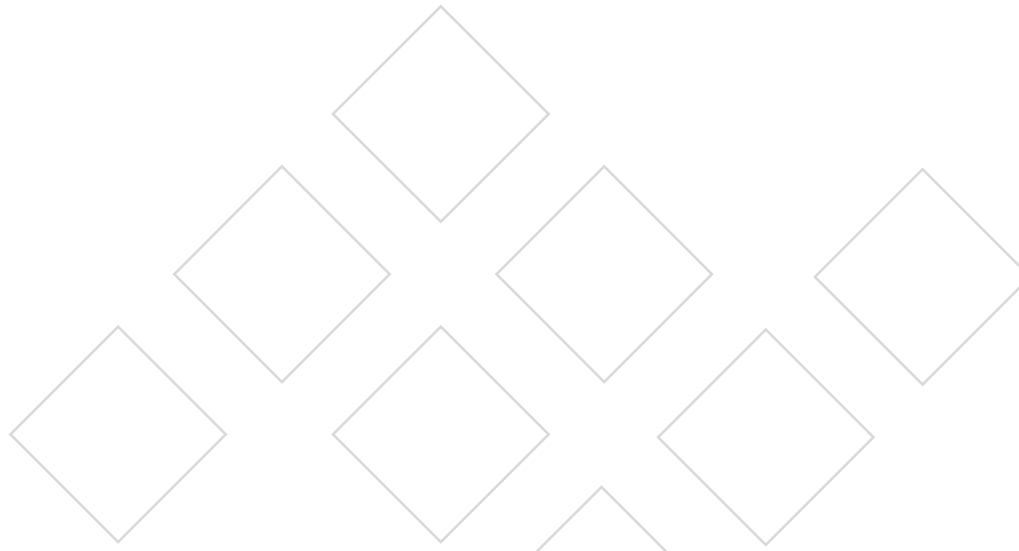
- ◆ Public acceptance and satisfaction are important factors in road planning and engineering decisions.
- ◆ The goals of this phase of engagement was to;
 - ◆ Report back to public on the 2019 SRRMP engagement
 - ◆ Understand the level of stakeholder support for the draft recommendations
 - ◆ Identify any gaps in understanding of the draft recommendations
- ◆ April to May 2021 consisted of an online presentation with the ability for respondents to provide feedback.





Defining Themes

- ◆ The responses in the “Report back” followed similar themes as during the “Listen and Learn”.
- ◆ Majority of comments received relate to items that are being addressed in the SRRMP 2021 or will be reviewed in the ITMP update.
- ◆ There were no comments indicating opposition to any proposed recommendations or indicating topics that were missed.
- ◆ Accommodating pedestrians and cyclists was more prominent in this phase of the engagement.





What We Heard

Only 19 comments were provided. Due to the limited response its difficult to draw definite conclusions, other than there was lack of significant opposition to what was presented. A summary of the primary themes were:

- ◆ The need to accommodate cyclists and pedestrians on the road or within the right-of-way (7 comments)
- ◆ Recommendations to improve specific roads (5 comments)
- ◆ Need of wider roads (3 comments)
- ◆ Need for long term planning to direct traffic away from local roads (2 comments)



Next Steps - Schedule

- ◆ Internal technical review – June 2021
- ◆ Final report – July 2021
- ◆ Presentation to Council - September 2021



THANK YOU

ANY QUESTIONS OR COMMENTS?

