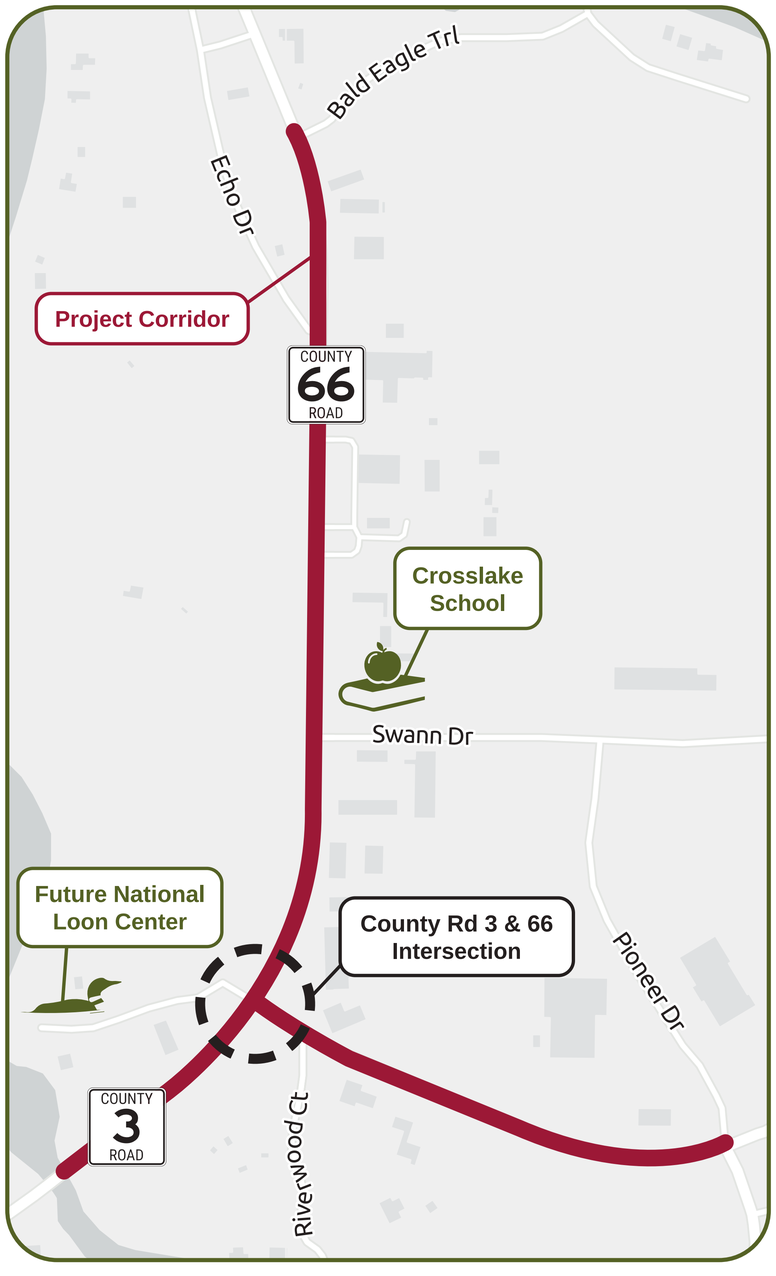
Crosslake Pedestrian and Intersection Improvements



Project Overview

Crow Wing County, in partnership with the City of Crosslake, is planning to make improvements to County Road (CR) 3 and County Road (CR) 66. This corridor has been a topic of conversation for some time, and with the National Loon Center (NLC) set to open in 2024, improvements are needed now more than ever.

This project will align all past, present, and future efforts to establish a cohesive, community-supported vision for the corridor that will be constructed prior to the NLC opening. The proposed improvements include:

- Safety improvements to the CR 3 & 66 intersection
- Pedestrian improvements along CR 3 to Pioneer Drive and along CR 66 to Bald Eagle Trail
- Stormwater treatment improvements to protect water quality

Project Schedule

We are here!

Study:
Sept. - Dec. 2022
Data is collected to develop design alternatives.

Preliminary Design:
Dec. 2022 - April 2023
A design is selected and refined.

Final Design:
April 2023 - April 2024
The design is finalized and plans for construction are made.

Construction Begins!
April 2024

Project Contacts

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Phil Martin, Project Manager (Bolton & Menk, Inc.)
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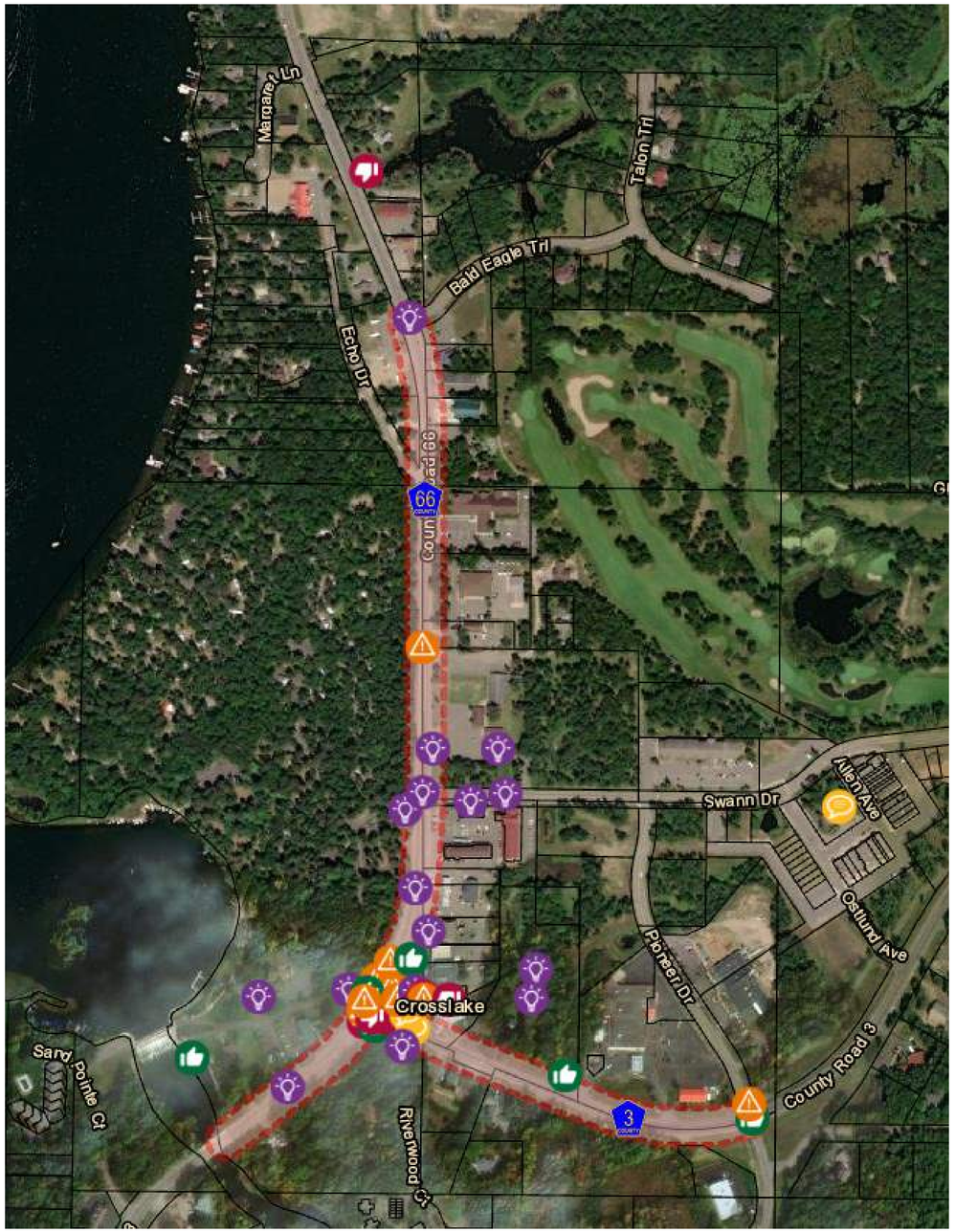
Visit the project website: CrosslakeImprovements.com

Existing Conditions - What We Heard



Popular feedback

- Traffic issues only occur during summer months
- Interest in shifting the entrance for the NLC and Campground
- Request for a park/ plaza/parking lot behind the businesses off CR 66
- Concerns about construction impacts
- Concern with parking and pedestrian access for the NLC
- Request for painted curbs to indicate entrances/ exits to businesses
- Mixed opinions on implementing a roundabout at the intersection
  - Concerns with how large vehicles and pedestrians navigate a roundabout
  - Concerns with the amount of space a roundabout would require
- Improved pedestrian infrastructure is needed, specifically at the school and on the east side of CR 66

Frequent Asked Questions

» Can the entrance/exit to the campground and/or loon center be shifted either north or south of the intersection?

» How would larger vehicles such as RVs and vehicles with trailers navigate a roundabout?

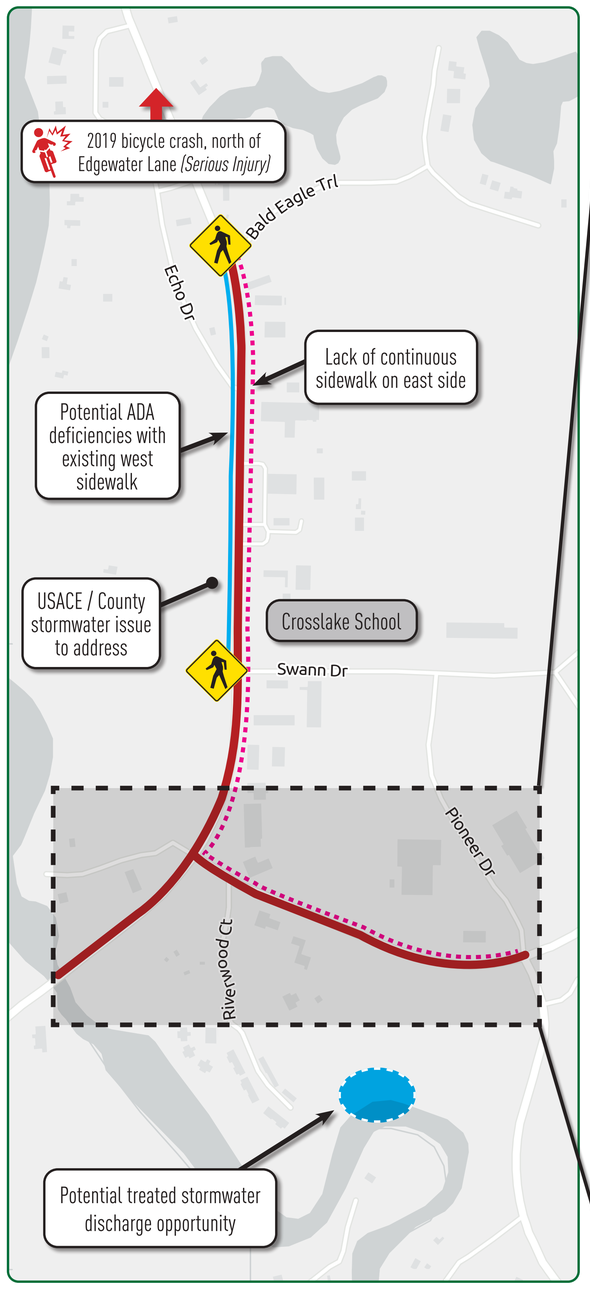
» How do emergency vehicles navigate through a roundabout?

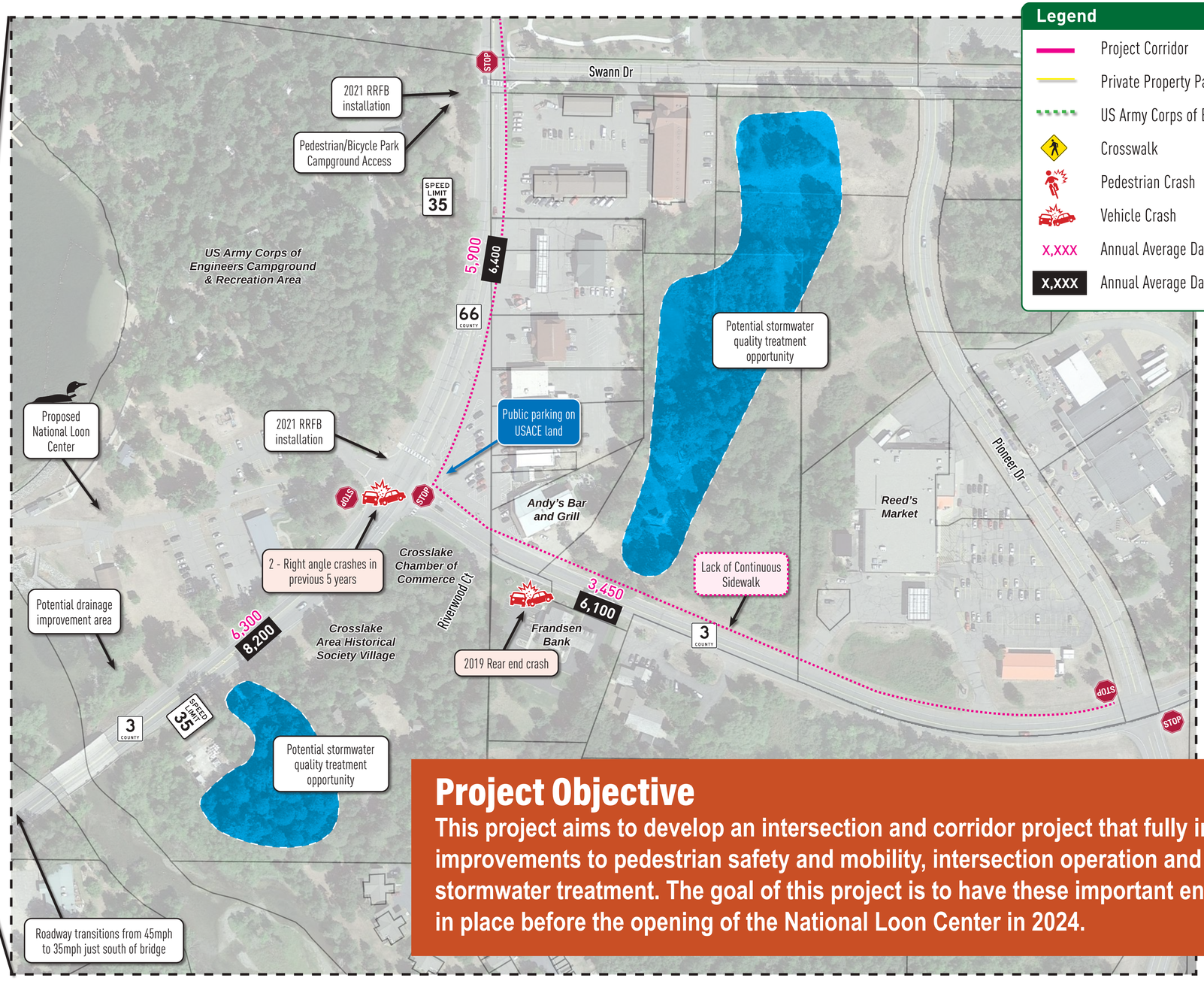
» How can pedestrians safely cross at a roundabout?

» The traffic issues are seasonal; is a permanent change necessary?

Review the Project FAQ handout in-person or on the website for answers to these questions and more!

Existing Conditions and Project Considerations





Legend

- Project Corridor
- Private Property Parcel
- US Army Corps of Engineers Parcel
- Crosswalk
- Pedestrian Crash
- Vehicle Crash
- X,XXX — Annual Average Daily Traffic (Existing)
- X,XXX — Annual Average Daily Traffic (Future)

Project Objective

This project aims to develop an intersection and corridor project that fully integrates improvements to pedestrian safety and mobility, intersection operation and safety, and stormwater treatment. The goal of this project is to have these important enhancements in place before the opening of the National Loon Center in 2024.

Evaluation of Preliminary Design Options

CRITERIA

FAIR *BETTER* *BEST*

	Mobility Traffic Capacity and Operations Provide efficient and reliable traffic operations				**Safety** Provide safe travel conditions for all types of users.				**Community Impacts** Impacts to adjacent properties and greater community			
					Motorist		**Pedestrian**					
	Peak Hours (A.M. & P.M.)	**Off-Peak Hours**	**Capacity to Accommodate Seasonal/Event Traffic**	**Supports Larger Vehicles**	Crash Rate	Crash Severity	Hwy 3/66 Intersection	Hwy 66 Corridor	**Business & Property** Minimize community impacts (e.g. right of way (ROW), access)	**Noise Pollution** Minimize ambient noise adjacent to the campground	**Light Pollution** Minimize ambient light adjacent to the campground	**Cost** Develop a solution that is fiscally responsible *(all costs are estimations)*
Side-Street Stop (Do Nothing)												N/A (routine maintenance costs - does not meet needs)
All-Way Stop												
Traffic Signal												
Roundabout												

Visit the project website: CrosslakeImprovements.com

Traffic Control Alternatives

Do Nothing (Side-Street Stop)

CRITERIA: FAIR · BETTER · BEST

Mobility			
Peak Hours (A.M. & P.M.)	Off-Peak Hours	Capacity to Accommodate Seasonal/Event Traffic	Supports Larger Vehicles
FAIR	BETTER	FAIR	BEST

Safety			
Motorist		Pedestrian	
Crash Rate	Crash Severity	Hwy 3/66 Intersection	Hwy 66 Corridor
BEST	BETTER	FAIR	FAIR

Community Impacts			
Business & Property	Noise Pollution	Light Pollution	Cost *(all costs are estimations)*
BEST	FAIR	FAIR	N/A (routine maintenance costs - does not meet needs)

This option does not meet the project goals because:

- there is significant support for long-lasting improvements that emphasize pedestrian safety while meeting the needs of the community both today and well into the future
- the existing facilities function today but do not meet the needs of the community with added pedestrian and vehicle traffic

All-Way Stop

CRITERIA: FAIR · BETTER · BEST

Mobility			
Peak Hours (A.M. & P.M.)	Off-Peak Hours	Capacity to Accommodate Seasonal/Event Traffic	Supports Larger Vehicles
BETTER	FAIR	BETTER	BEST

Safety			
Motorist		Pedestrian	
Crash Rate	Crash Severity	Hwy 3/66 Intersection	Hwy 66 Corridor
FAIR	FAIR	BEST	BEST

Community Impacts			
Business & Property	Noise Pollution	Light Pollution	Cost *(all costs are estimations)*
BEST	FAIR	BETTER	BEST

This option does not meet the project goals because:

- there is significant support for long-lasting improvements that emphasize pedestrian safety while meeting the needs of the community both today and well into the future
- although expected to function, it does not have the ability to accommodate growth or safely accommodate all users to the level the traffic signal or roundabout
- it could be an unexpected condition entering into and exiting from rural, high-speed conditions to the south

CROW WING COUNTY MINNESOTA

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City of Crosslake

Traffic Control Alternatives

Traffic Signal

CRITERIA

FAIR BETTER BEST

Mobility

Peak Hours (A.M. & P.M.)	Off-Peak Hours	Capacity to Accommodate Seasonal/Event Traffic	Supports Larger Vehicles
Expected to operate efficiently	Occasional wait times	Flexible signal timing accommodates traffic	Accommodates all vehicles

Safety

Motorist		Pedestrian	
Crash Rate	Crash Severity	Hwy 3/66 Intersection	Hwy 66 Corridor
Highest crash rate	Higher risk of severe crashes than roundabout	24 vehicle-pedestrian conflict points	Increased risk with average speed of 37mph

Community Impacts

Business & Property	Noise Pollution	Light Pollution	Cost *(all costs are estimations)*
No impacts expected	Vehicle start/stop noise	2-4 streetlights	

CROW WING COUNTY MINNESOTA

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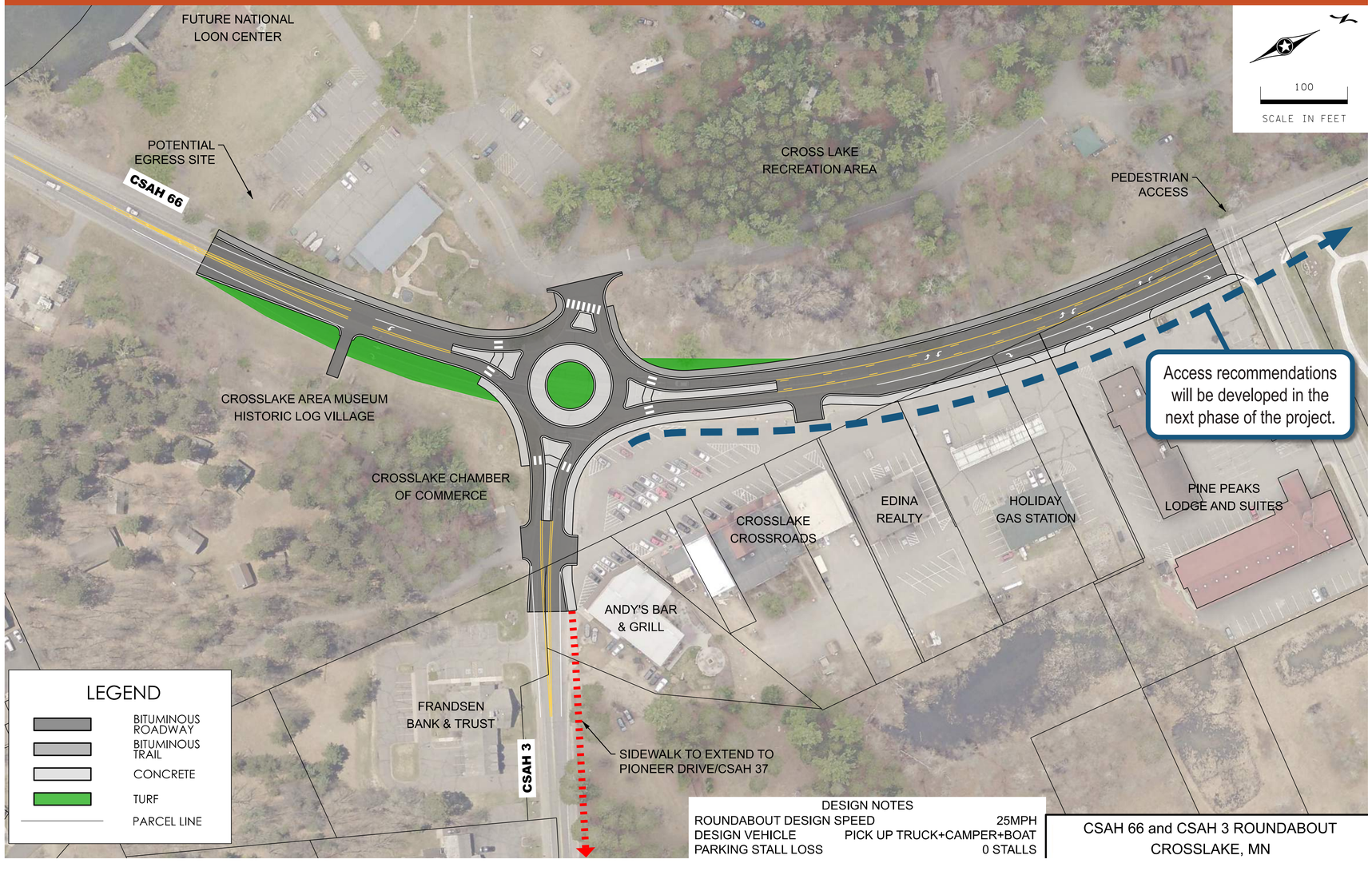
Crosslake

Traffic Control Alternatives

Roundabout

Technical recommendation based on intersection control evaluation



CRITERIA

FAIR *BETTER* *BEST*

Mobility

Peak Hours (A.M. & P.M.)	Off-Peak Hours	Capacity to Accommodate Seasonal/Event Traffic	Supports Larger Vehicles
Expected to operate efficiently	Continuous movement of traffic	Excess capacity accommodates traffic	Accommodates most large vehicles

Safety

Motorist		Pedestrian	
Crash Rate	Crash Severity	Hwy 3/66 Intersection	Hwy 66 Corridor
75% decrease in vehicle-vehicle conflicts	Lowest crash severity rate, 78% decrease compared to a signal	8 vehicle-pedestrian conflict points, safer than a signal	Reduced risk with average speeds of 20-25mph

Community Impacts

Business & Property	Noise Pollution	Light Pollution	Cost *(all costs are estimations)*
Minimal impacts to adjacent properties expected	Yield conditions lessen vehicle start/ stop noise	8 streetlights minimum (2 per intersection approach)	

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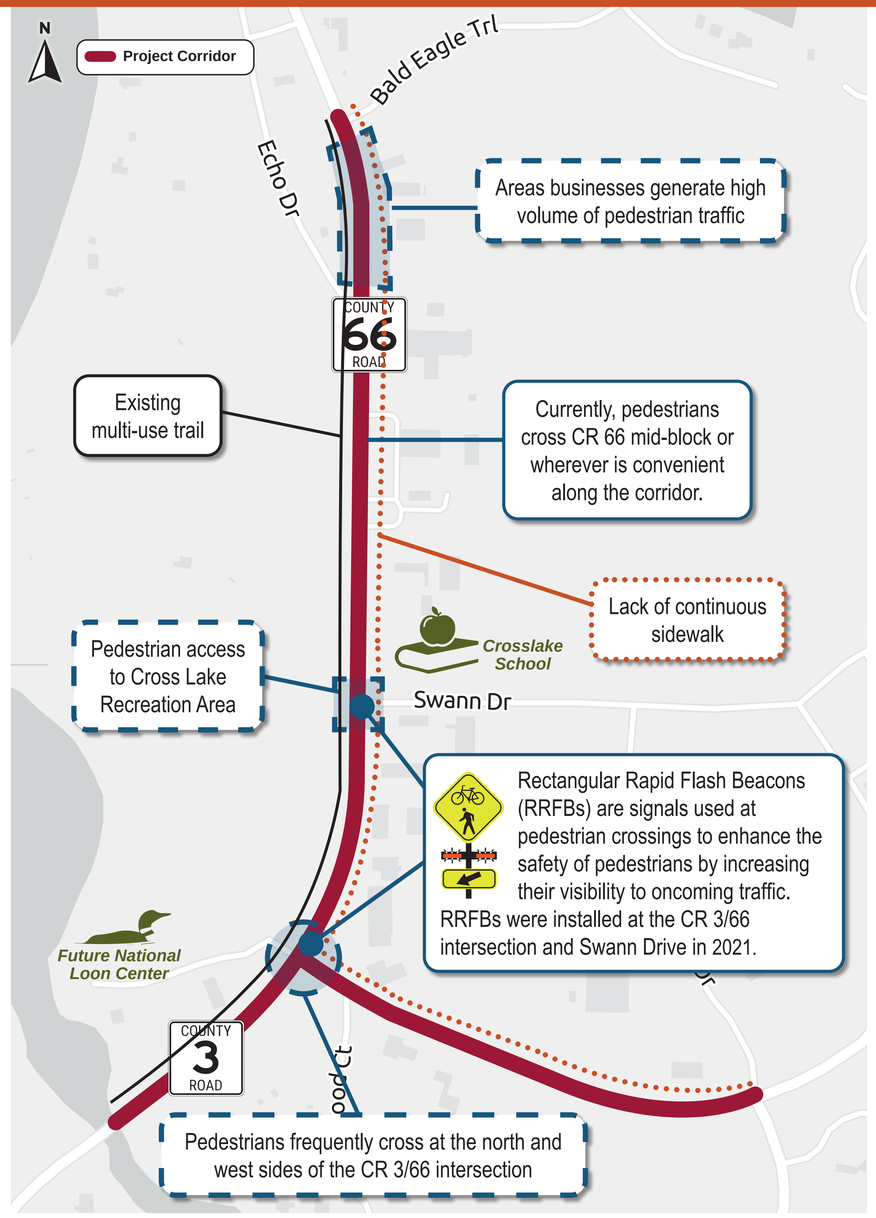
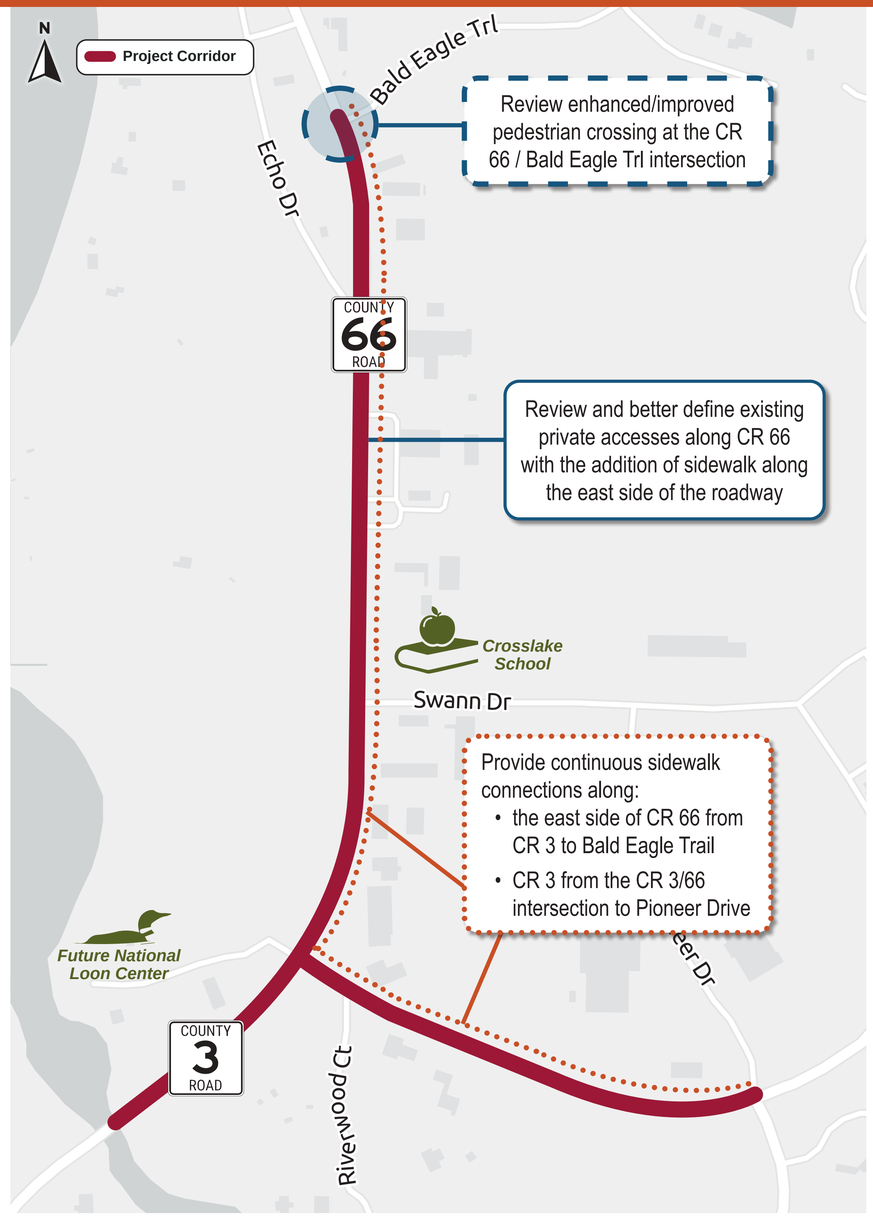
Pedestrian Safety: Corridor Overview

Existing Pedestrian Conditions



Proposed Pedestrian Improvements



Pedestrian Safety: Traffic Signals vs. Roundabouts

Traffic Signals vs. Roundabouts

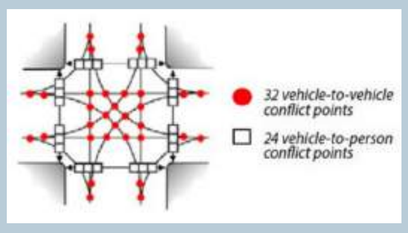
TRAFFIC SIGNAL | ROUNDABOUT

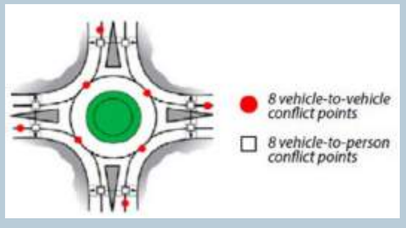
Familiarity

How well people understand how to navigate the type of intersection control.

Conflict Points

Conflict points are locations in or on the approaches to an intersection where vehicle and pedestrian paths merge, diverge, or cross.





Driver Speed

Driver speed through a signalized intersection is 35mph. Average driver speeds through a roundabout are 20-25mph.

Pedestrian Wait Times

Pedestrians traveling through signalized intersections need to push the walk button and wait to have the right-of-way. Drivers entering a roundabout are legally obligated to allow pedestrians to cross, resulting in significantly shorter wait times.

Driver Line of Sight

Traffic signals require drivers to look up, leaving pedestrians outside of the line of sight. When navigating a roundabout pedestrians remain constantly in driver's line of sight.

Driver Decision-Making

Traffic signals and roundabouts both simplify the driver decision-making process by making it clear when a driver should go and stop.

The Importance of Speed

When a vehicle is traveling at...

this is the driver's field of vision...

it takes...

and pedestrians hit at this speed have a...

ROUNDABOUT BENEFITS

A **single-lane roundabout** is designed to improve safety for all users.

Simplified Decision Making

Crosswalks are set back to increase pedestrian visibility and allowing drivers to focus on pedestrians crossing separate from vehicular traffic in the roundabout.

Pedestrian Refuge

A **center median island** allows pedestrians to focus on crossing one lane of traffic at a time.

Safety

- 15-20 mph vehicle design speed
- 2 pedestrian/vehicle interaction points compared to 6 at a signalized intersection.
- Pedestrian crossings are half the distance of a traditional intersection.
- Overall increased human interaction between drivers and pedestrians.
- 87% fewer pedestrian injury crashes at a roundabout compared to a signalized intersection.[1]

Increased Yield Rates

83% of vehicles yield to peds in single-lane roundabouts. [2]

Give 'em a brake

State law requires that traffic entering and exiting a roundabout **must yield to pedestrians** in the crosswalk.

Disclaimer: This drawing represents a generic roundabout design and is not an exact depiction of the proposed roundabouts as part of this project.

Sources 1. "A Study of the Traffic Safety at Roundabouts in Minnesota" - addendum, Minnesota Department of Transportation. 2018 2. "Report 572: Roundabouts in the United States," National Cooperative Highway Research Program. 2006.

CROW WING COUNTY MINNESOTA

Visit the project website: CrosslakeImprovements.com

City of Crosslake

Feedback & Next Steps

What's Next?

Following this open house, the project team will collect your feedback and use it to inform the preliminary design process. A summary of the feedback collected will be available on the project website in **December**. During the preliminary design phase of the project pedestrian connections and access recommendations will be developed. **Another open house will be held in Spring 2023** to gather feedback on the recommended corridor design developed in this next phase of the project.

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Open House: Spring 2023

National Loon Center (NLC)

The NLC is scheduled to open in Spring 2024. Want to know more about the NLC? Visit NationalLoonCenter.org

We Want Your Feedback!

After reviewing the informational boards share your feedback with the project team!

- Speak with project staff and fill out a comment card in-person
- Visit the project website to provide your comments on the design options using our interactive comment map

Finally, sign up for **project updates** to receive emails or texts about upcoming engagement opportunities!

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