#### Draft Concept Comparison Table

All safety improvement concepts allow for future growth, minimize impacts on adjacent properties and assure the flow of commerce on Hwy 23. Safety improvements are being presented in alphabetical order.

		Reduction of Serious and Fatal Crashes*	Time to secure funding	Estimated Project Delivery (after funding is secured)**	Estimated Cost (2026)***
Interchange		77%	Limited funding sources available, may take up to 10 years or longer	5 years +	\$20 - \$26 million
J-turn	A A A A A A A A A A A A A A A A A A A	69%	Various funding sources available, may take up to 2 years or longer	1.5 – 2.5 years	\$7 - \$10 million
Roundabout		83-86%	Various funding sources available, may take up to 2 years or longer	2.5 – 3.5 years	\$7 - \$10 million
) Traffic signal	A A A A A A A A A A A A A A A A A A A	28% increase	Limited funding sources available, may take up to 5 years or longer	2.5 – 3.5 years	\$10 - \$14 million

\*Note - Serious and fatal crash reduction factor obtained from MnDOT's Traffic Safety Evaluation at Reduced Conflict Intersections in Minnesota (August 2021) and A Study of the Traffic Safety at Roundabouts in Minnesota (September 2021)

\*\*Note - Project development doesn't typically start until a project is funded or in a fiscal constraint program like a Highway Improvement or Transportation Improvement Program (i.e. CHIP or STIP).

\*\*\*Note - A range is provided for cost because construction costs are subject to inflation, market conditions at the time of bidding, supply issues, number of bidders, and other factors that cannot be realized until the time of bidding. Cost estimates are construction costs for all improvements shown on this exhibit, including the CR 40 improvements shown.





#### Draft Concept: Interchange





\*Note - Serious and fatal crash reduction factor obtained from MnDOT's Traffic Safety Evaluation at Reduced Conflict Intersections in Minnesota (August 2021)

\*\*Note - Project development doesn't typically start until a project is funded or in a fiscal constraint program like a Highway Improvement or Transportation Improvement Program (i.e. CHIP or STIP).

\*\*\*Note - A range is provided for cast because construction casts are subject to inflation, market conditions at the time of bidding, supply issues, number of bidders, and other factors that cannot be realized until the time of bidding. Cast estimates are construction casts for all improvements shown on this exhibit, including the CR 40 improvements shown.

**Description:** The intersection of Hwy 23 and Hwy 9 would be redesigned with a bridge over Hwy 23 and ramp access to and from Hwy 23. The east leg of CR 40 will be realigned to connect to Hwy 9 and a cul-de-sac will be constructed on existing CR 40 east of Hwy 23. The west leg of CR 40 will be converted to a right in/right out at Hwy 23. The intersection will operate at highway speeds. A Hwy 9 bridge would include a trail across Hwy 23 for people who walk and bike.



# Draft Concept: J-turn



\*Note - Serious and fatal crash reduction factor obtained from MnDOT's Traffic Safety Evaluation at Reduced Conflict Intersections in Minnesota (August 2021)

\*Note - Project development doesn't typically start until a project is funded or in a fiscal constraint program like a Highway Improvement or Transportation Improvement Program (i.e. CHIP or STIP).

\*\*\*Note - A range is provided for cost because construction costs are subject to inflation, market conditions at the time of bidding, supply issues, number of bidders, and other factors that cannot be realized until the time of bidding. Cost estimates are construction costs for all improvements shown on this exhibit, including the CR 40 improvements shown.

**Description:** The intersection of Hwy 23 and Hwy 9 would be redesigned so that vehicles can no longer make a left turn onto Hwy 23 or drive straight across Hwy 23. The east leg of CR 40 will be realigned to connect to Hwy 9 and a cul-de-sac will be constructed on existing CR 40 east of Hwy 23. The west leg of CR 40 will be converted into a 3/4 intersection, with only the left from CR 40 onto Hwy 23 restricted. The intersection will operate at highway speeds. A trail and pedestrian underpass will be constructed under Hwy 23 for people who walk and bike.

### Draft Concept: Single Lane Roundabout



\*Note - Serious and fatal crash reduction factor obtained from MnDOT's A Study of the Traffic Safety at Roundabouts in Minnesota (September 2021)

\*\*Note - Project development doesn't typically start until a project is funded or in a fiscal constraint program like a Highway Improvement or Transportation Improvement Program (i.e. CHIP or STIP).

\*\*\*Note - A range is provided for cost because construction costs are subject to inflation, market conditions at the time of bidding, supply issues, number of bidders, and other factors that cannot be realized until the time of bidding. Cost estimates are construction costs for all improvements shown on this exhibit, including the CR 40 improvements shown.

**Description:** The intersection of Hwy 23 and Hwy 9 would be designed to accommodate a roundabout. The speed limit at the roundabout would be reduced to 15 or 20 MPH. The east leg of CR 40 will be realigned to connect to Hwy 9 and a cul-de-sac will be constructed on existing CR 40 east of Hwy 23. The west leg of CR 40 will be converted into a 3/4 intersection, with only the left from CR 40 onto Hwy 23 restricted. A trail and pedestrian underpass will be constructed under Hwy 23 for people who walk and bike.



# Draft Concept: Traffic Signal



Description: A traffic signal would be installed at the intersection of Hwy 23 and Hwy 9. The east leg of CR 40 will be realigned to connect to Hwy 9 and a culde-sac will be constructed on existing CR 40 east of Hwy 23. The west leg of CR 40 will be converted into a 3/4 intersection with only the left from CR 40 onto Hwy 23 restricted. The intersection will operate at highway speeds.

A trail and pedestrian underpass will be constructed under Hwy 23 for people who walk and bike. The current intersection would need to be rebuilt to level it out for vehicles to cross Hwy 23 between Hwy 9 and CR 40.

\*Note - Serious and fatal crash reduction factor obtained from MnDOT's A Study of the Traffic Safety at Roundabouts in Minnesota (September 2021)

\*\*Note - Project development doesn't typically start until a project is funded or in a fiscal constraint program like a Highway Improvement or Transportation Improve ment Program (i.e. CHIP or STIP).

\*\*\*Note - A range is provided for cost because construction costs are subject to inflation, market conditions at the time of bidding, supply issues, number of bidders, and other factors that cannot be realized until the time of bidding. Cost estimates are construction costs for all improvements shown on this exhibit, including the CR 40 improvements shown.