



Highway 7 Road Safety Audit Shorewood City Council

August 22, 2022

What is a Road Safety Audit?

- A Road Safety Audit (RSA) is an evaluation of planned and existing roads that includes a review of crash history, prior plans and recommendations, and existing conditions.
- During the RSA, the team looks for **potential safety hazards** that may affect road users and suggests measures to mitigate those safety issues.
- An RSA may be performed before, during, or after the design/construction process.

Goal of the RSA

The goal of the RSA is to **identify potential projects/strategies to improve safety**

The most effective strategies integrate the Four E's of Safety:

- **Education**
- **Enforcement**
- **Engineering**
- **Emergency Medical and Trauma Services**

Reason for Study

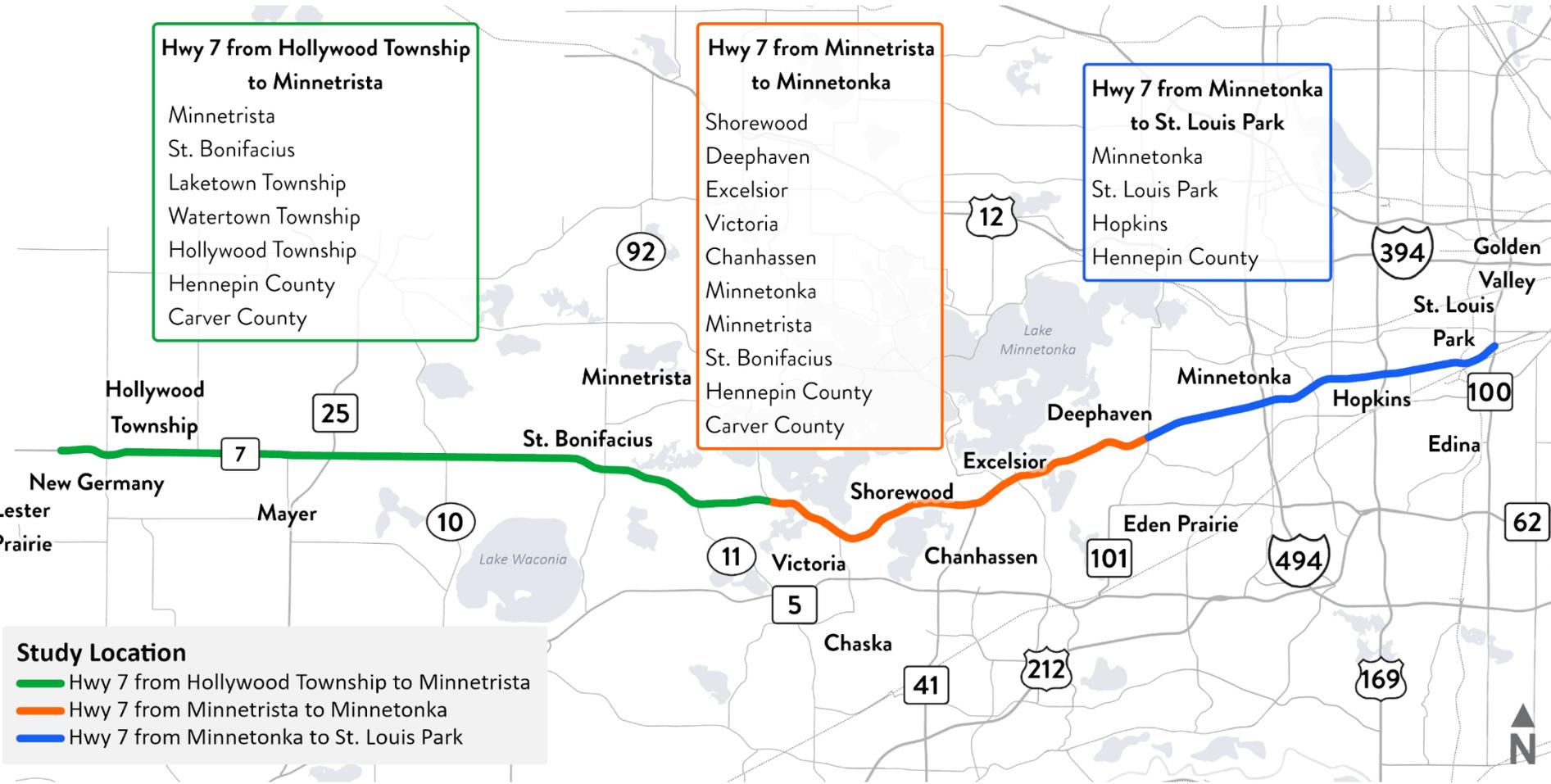


- MnDOT Commissioner committed to completing a study due to safety concerns
- Input from corridor stakeholders used to develop study scope



Background

Study Corridor Segments

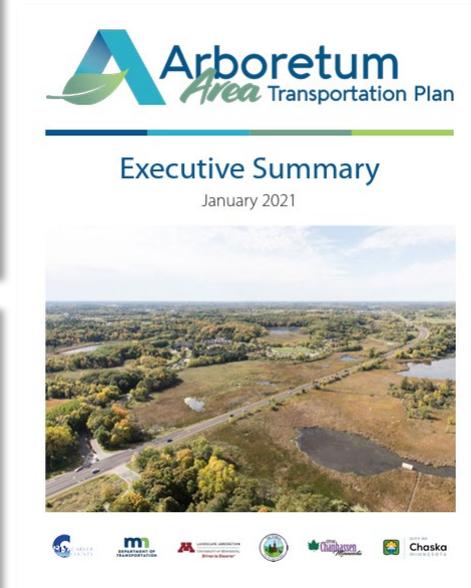
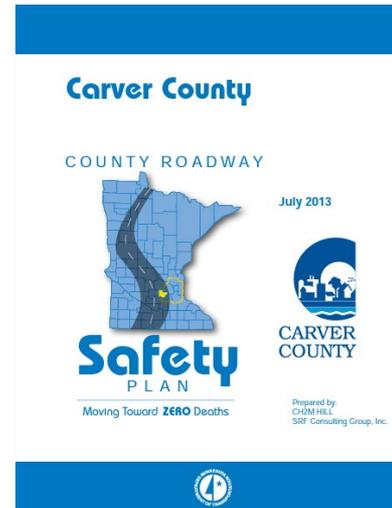


Existing Traffic Volumes & Posted Speeds



Previous Plans and Studies

- *Trunk Highway 7 Safety Assessment Report (McLeod County) (2021)*
- *Arboretum Area Transportation Plan (2021)*
- *2020 Hennepin County Road Safety Plan (2020)*
- *Carver County: County Highway Safety Plan (2013)*
- *Hennepin County 2040 Bicycle Transportation Plan (2015)*



Public Engagement

- Public engagement took place December 2021 - January 2022
- **Interactive Map & Survey**
 - More than 1,000 responses
- **Online Open House**
 - Provided overview of process, study area, crash trends, and next steps

General Themes

- Different intersection controls
- More roundabouts or traffic lights
- More safe pedestrian crossings
- Nighttime visibility issues
- Traffic light visibility and timing issues

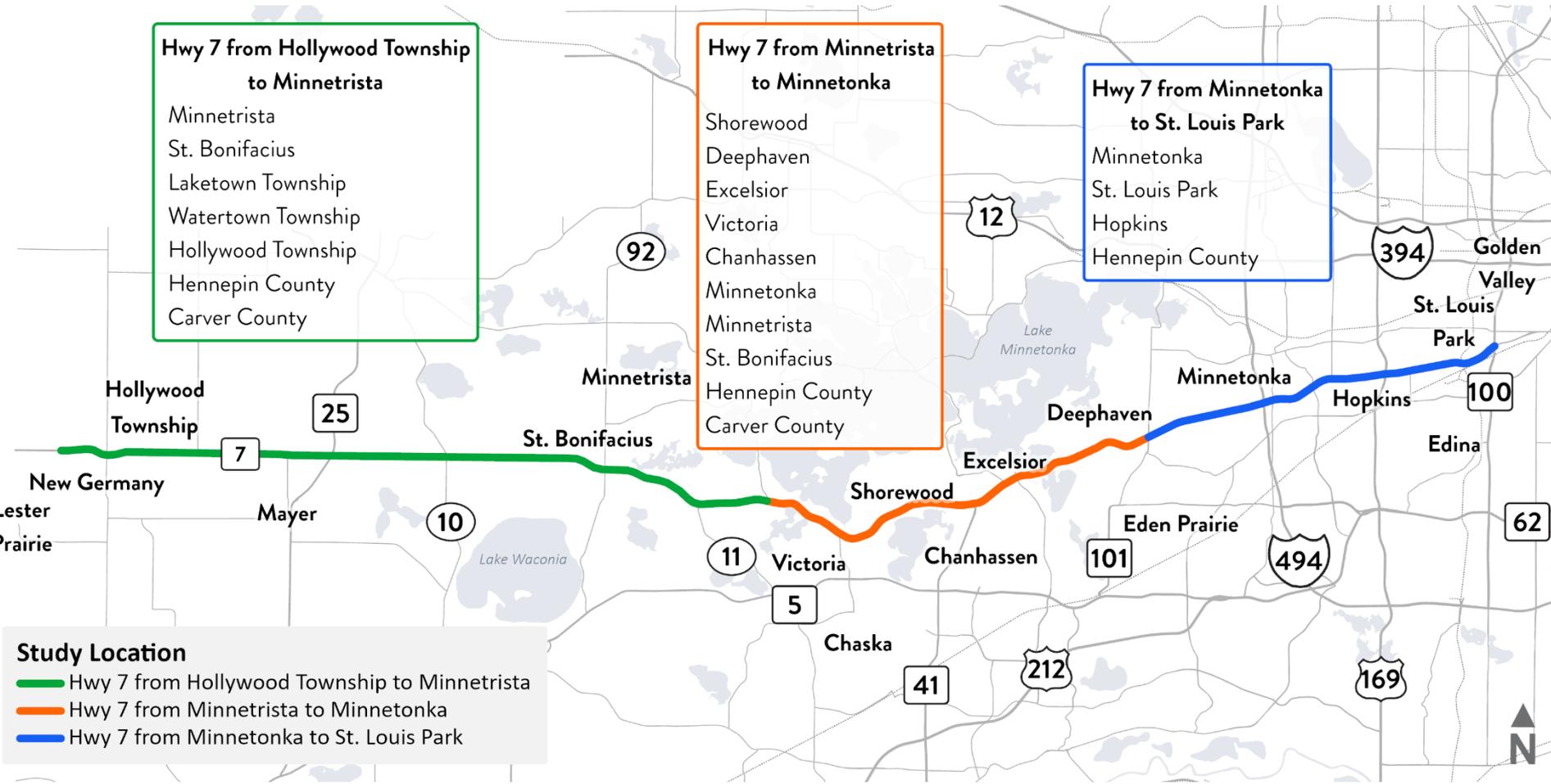
Segment	General Dangerous Conditions Identified	Pedestrian Improvement Needed	Intersection Control Issue Identified	Roadway Issue identified	Hazardous Driving Conditions/ Visibility	Other	Total
Hollywood Township to Minnetrista	18	2	41	13	18	12	104
Minnetrista to Minnetonka	134	108	111	133	37	43	566
Minnetonka to St. Louis Park	9	24	29	56	19	25	162



Hwy 7 Crash Trends

Data: MnDOT 2016-2020 Crashes

Study Corridor Segments



Addressing Safety Concerns

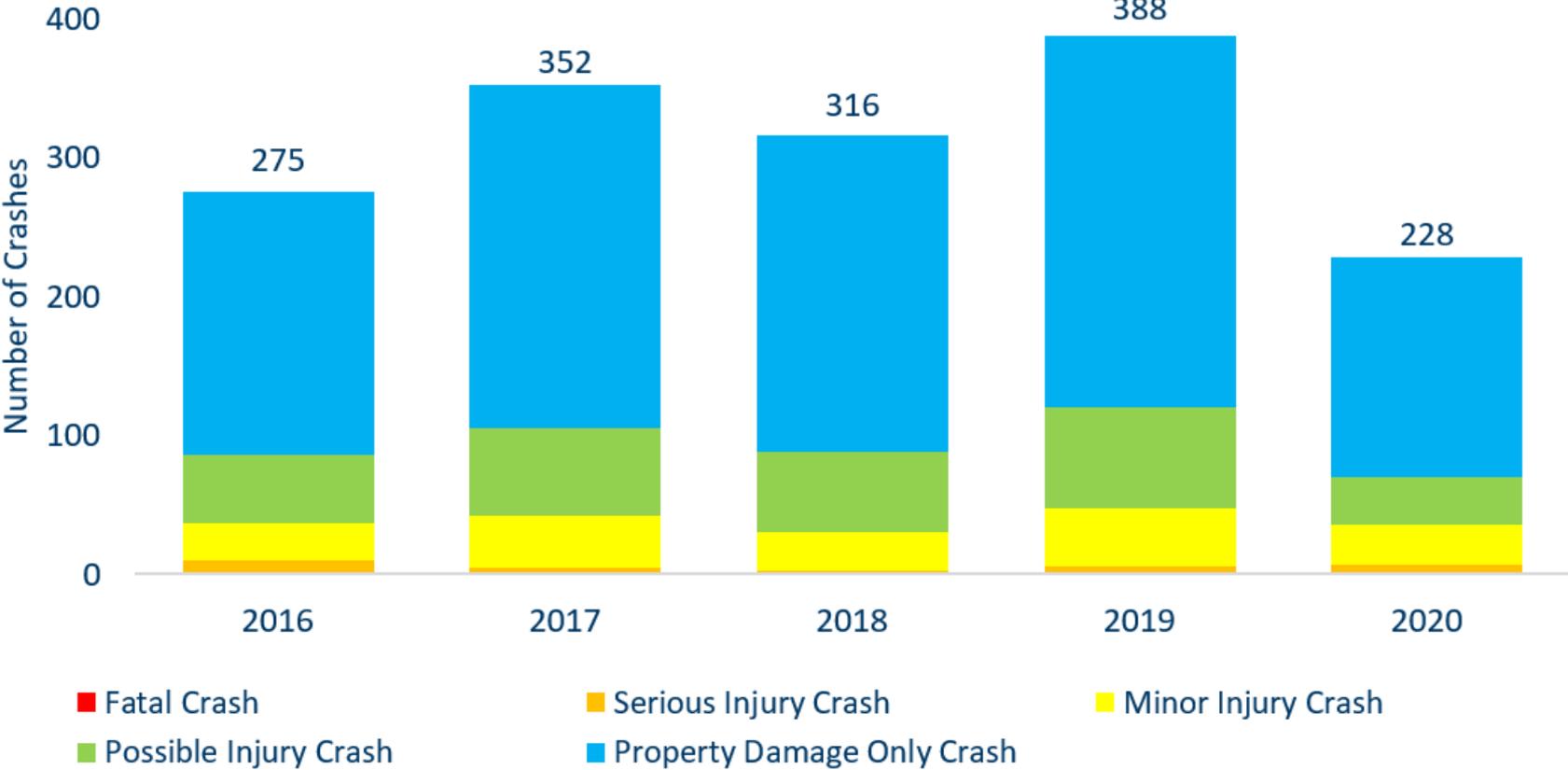


- Intersections and areas along the corridor with a **critical index** higher than 1 were identified as locations that may be experiencing safety concerns. The RSA has made recommended improvements to mitigate these safety concerns.

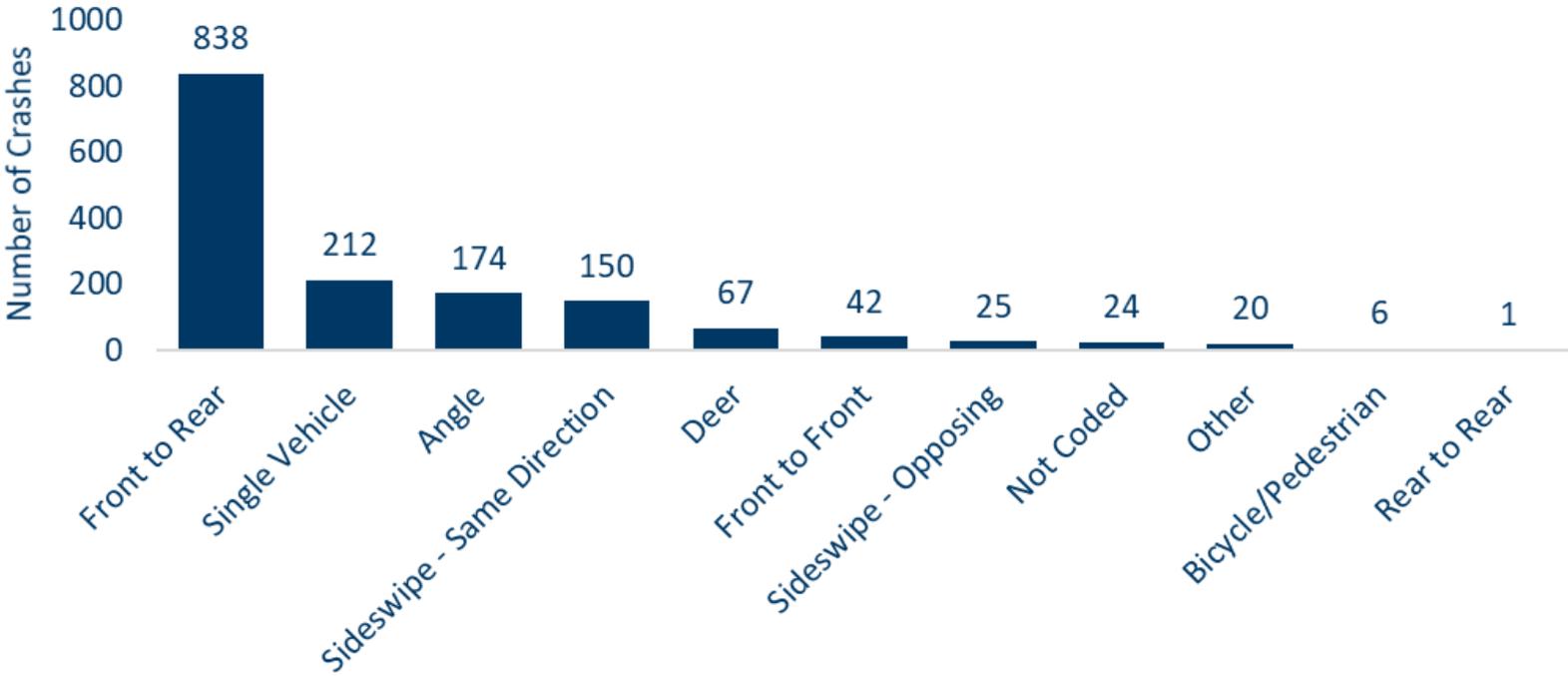
Crash Severity

Location: Corridor-Wide

Data: MnDOT 2016-2020 Crashes



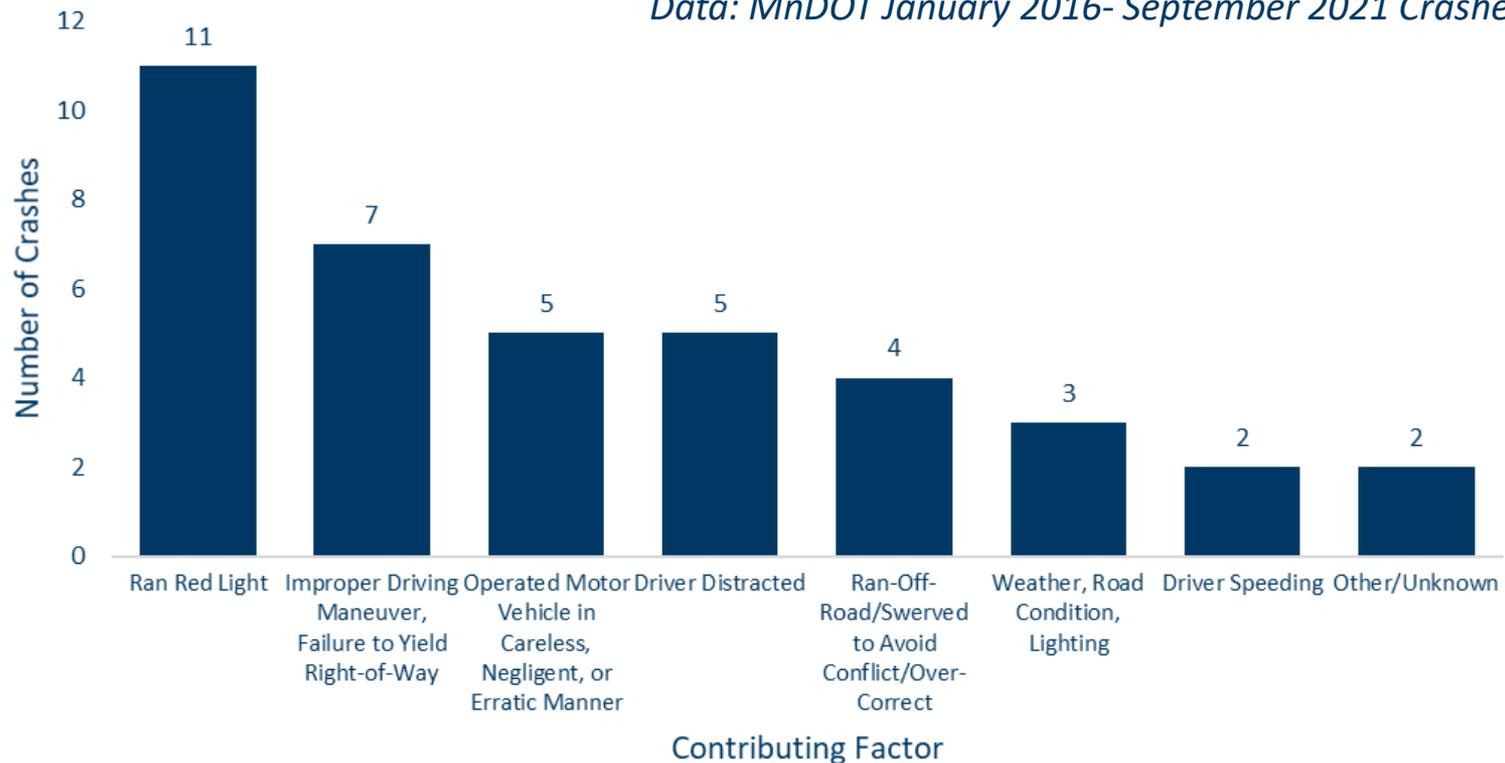
Manner of Collision



Causes of Fatal and Serious Injury Crashes

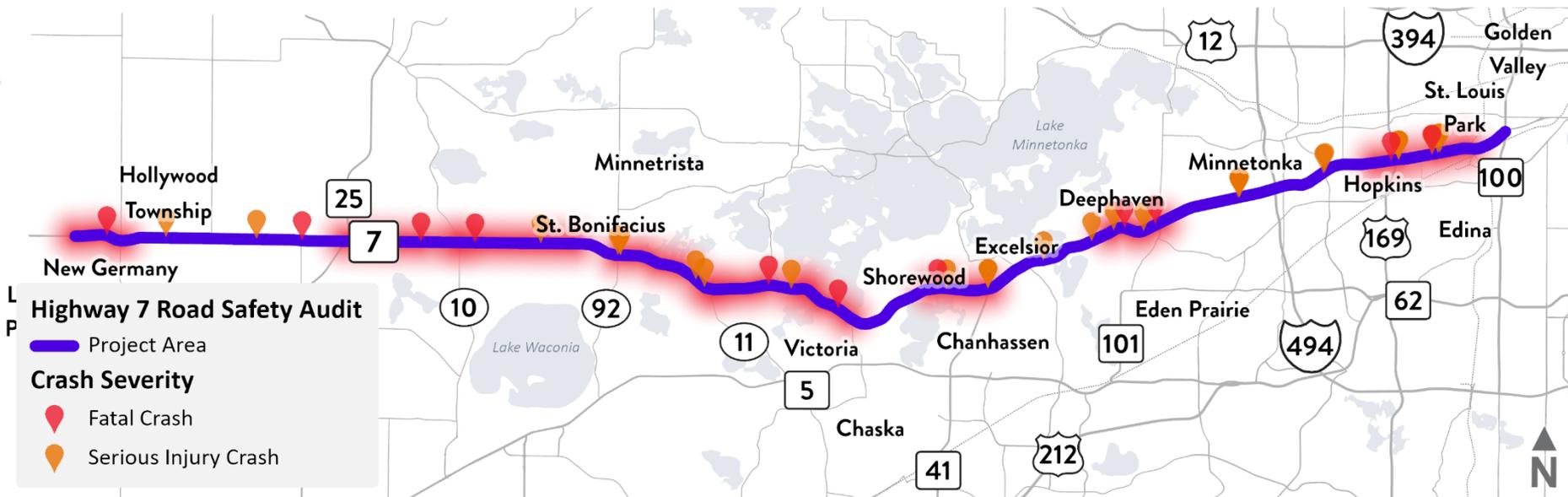
Location: Corridor-Wide

Data: MnDOT January 2016- September 2021 Crashes



Fatal and Serious Injury Crashes

Data: MnDOT January 2016- September 2021 Crashes





Recommended Improvements

Potential Corridor-Wide Initiatives



- Install enforcement confirmation lights to safely observe and pursue red light violators
- Increased enforcement
- Create a Highway 7 Corridor Coalition

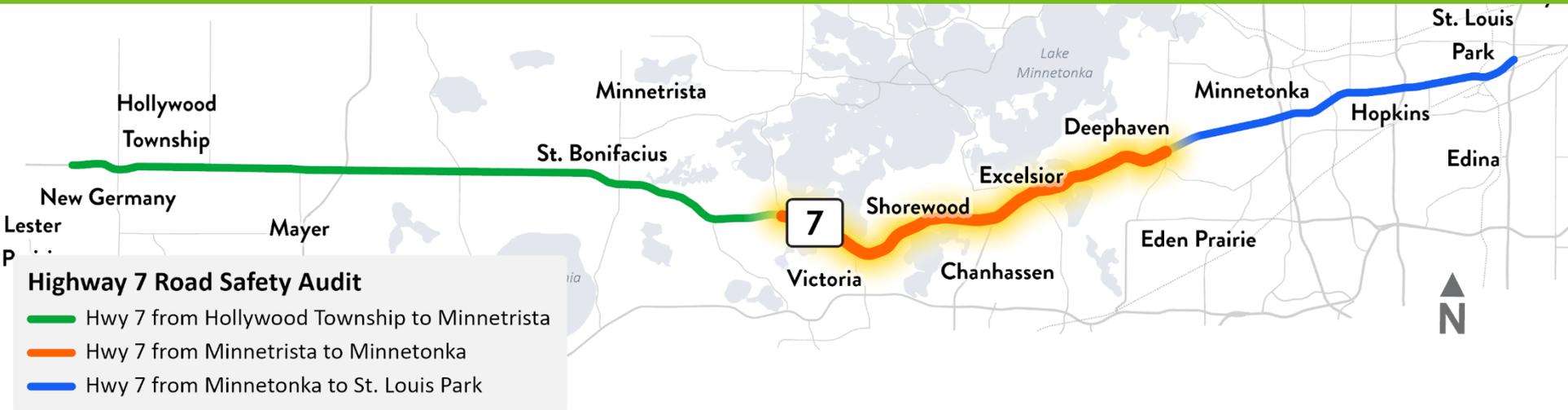


Recommended Improvements

Hwy 7 from Minnetrista to Minnetonka

Segment-wide Recommended Improvements

Hwy 7 from Minnetrista to Minnetonka



• Short-term:

- Conduct a corridor study to determine appropriate roadway design.
- Review the need for additional lighting.
- Evaluate potential pedestrian improvements/ connections (including the area surrounding Minnetonka High School).
- Install street name signs prior to all intersections and identify signals that need a battery back-up.

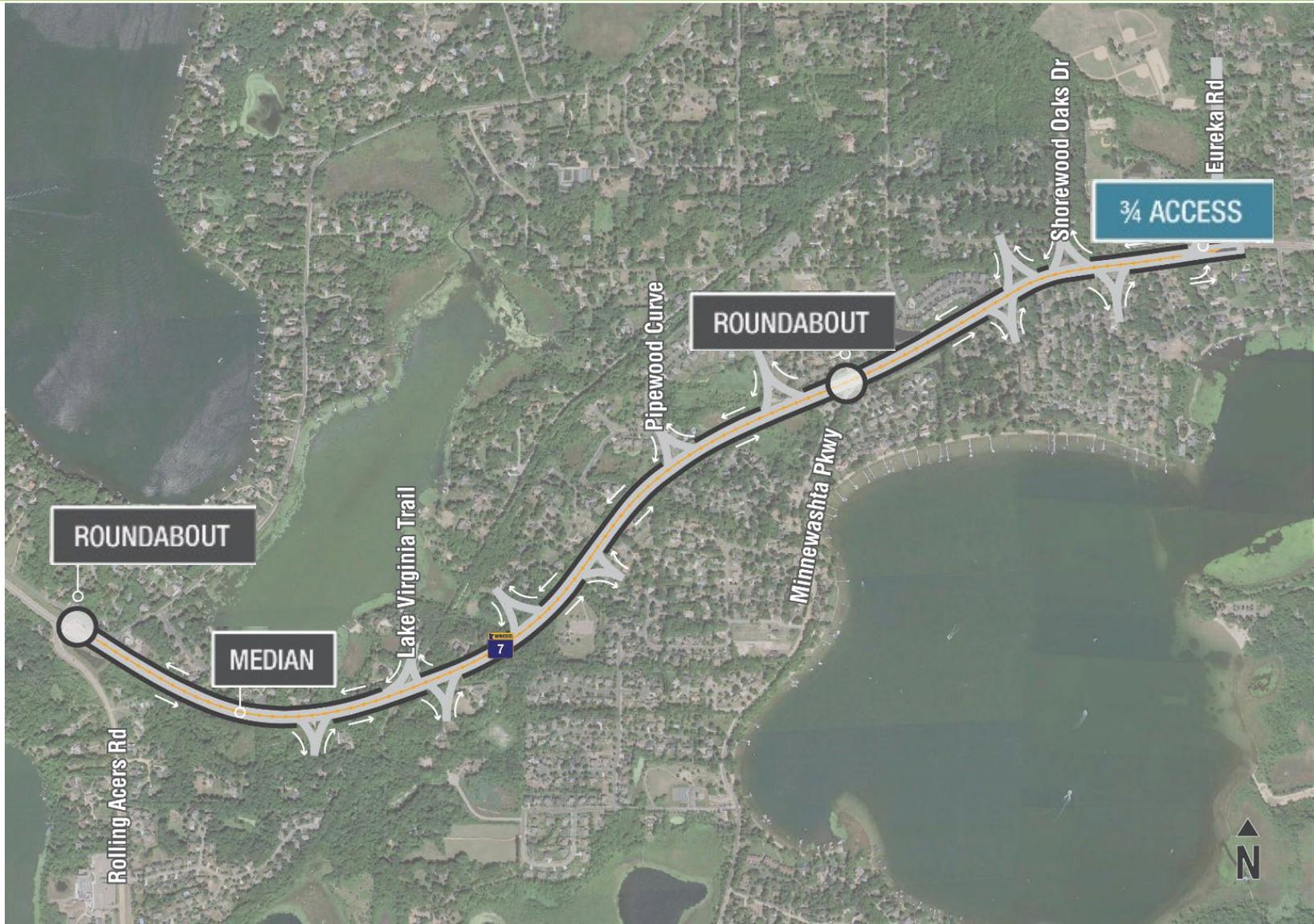
• Medium-term:

- Install a battery backup at signals where this is needed.
- Construct signal improvements and improve visibility to reduce the number of drivers who run red lights in this location.

• Long-term:

- Construct improvements recommended in the future corridor study.

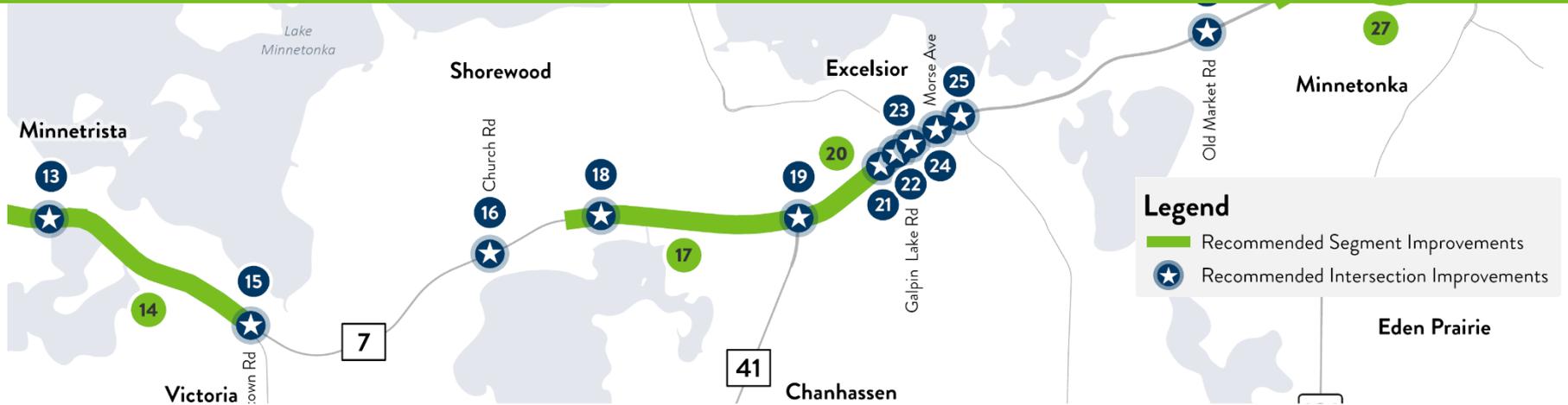
Highway 7 – Near Eureka Road





Recommended Improvements

Hwy 7 from Minnetrista to Minnetonka

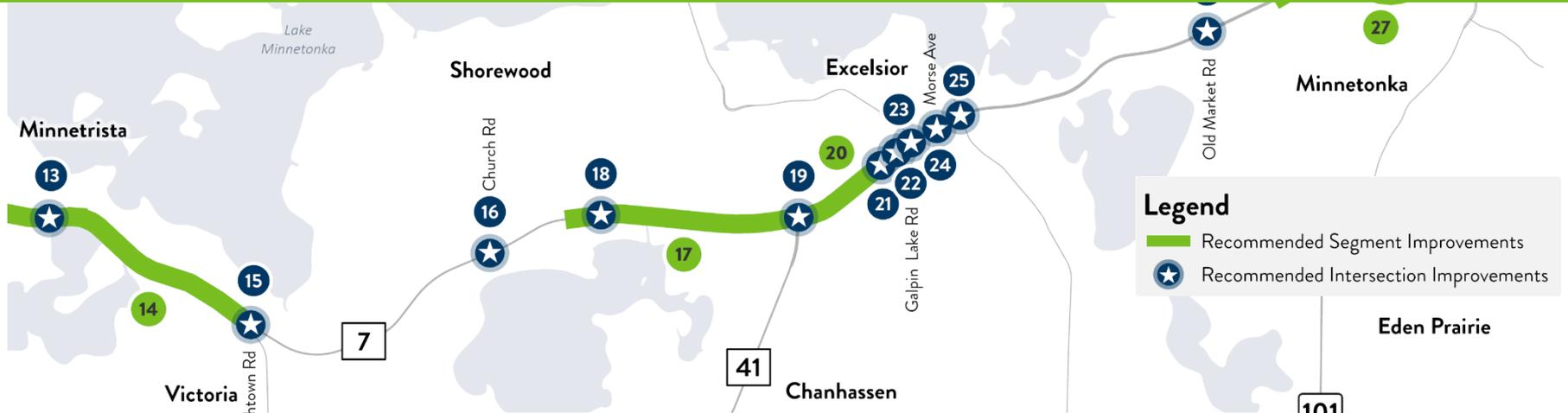


Location	Short-term	Medium-term	Long-term
13 Merrywood Lane	Remove vegetation and grade the intersection to improve visibility	--	--
14 County Border to Co. Rd. 13	Fix the pavement markings in the westbound acceleration lane area at Waterford Ln. Additional study is needed to determine the appropriate design and pedestrian improvements and connections.	Implement traffic signals improvements and improve visibility to reduce the number of drivers who run red lights. Reconstruct the road at Waterford Ln to accommodate the westbound acceleration lane.	Construct improvements recommended in the future corridor study as well as the recommended pedestrian improvements and connections.
15 Hwy 7 & Co. Rd. 13	--	--	Construct long-term intersection improvements such as the roundabout concepts within the <i>Arboretum Area Transportation Plan</i> .
16 Hwy 7 & Church Rd	Review visual sight lines for side street traffic.	Improve pedestrian crossing on the south side of the intersection and construct pedestrian crossing at Hwy 7 as part of the planned traffic signal.	Construct improvements recommended during the corridor study which includes potential roundabout or access control changes.



Recommended Improvements

Hwy 7 from Minnetrista to Minnetonka



Legend

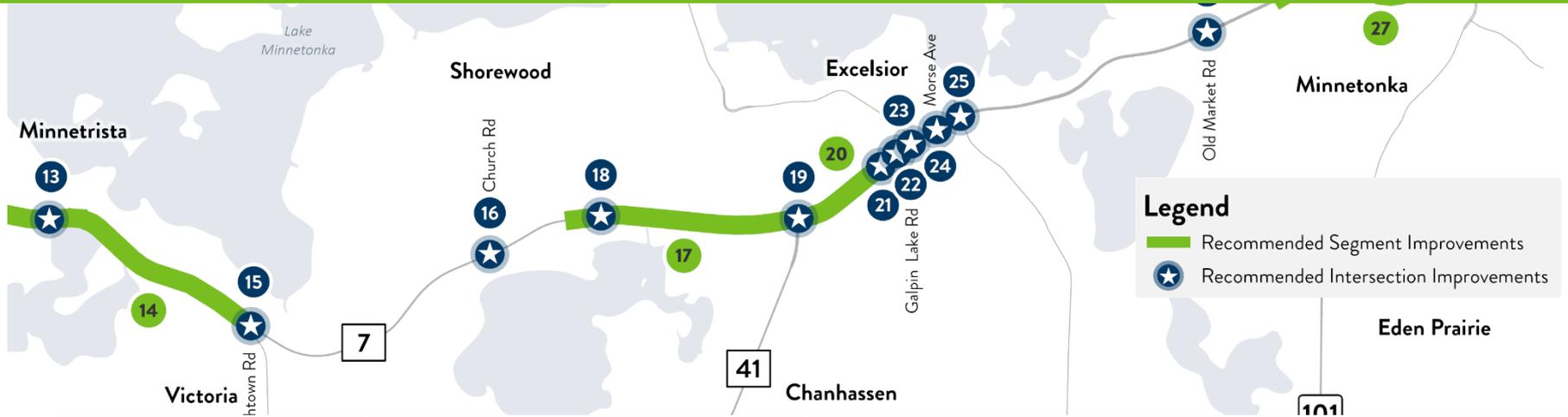
- Recommended Segment Improvements
- Recommended Intersection Improvements

Location	Short-term	Medium-term	Long-term
17 County Border to Hwy 41/Hazeltine Blvd/Lake Linden Dr	Conduct a corridor study to determine specific design improvements and review possible pedestrian improvements and connections.	Construct signal improvements and improve visibility to reduce the number of drivers who run red lights.	Construct improvements recommended in the future corridor study as well as the recommended pedestrian improvements and connections.
18 Hwy 7 & Eureka Rd	--	Construct an enhanced pedestrian crossing at Hwy 7, such as a rectangular rapid-flash beacon or pedestrian refuge island.	Construct improvements recommended during the corridor study, which could include a roundabout or other intersection control changes.
19 Hwy 7 & Hwy 41	Add pavement markings to include vehicle stop bars and study potential intersection improvements.	Construct signal improvements and improve visibility to reduce the number of drivers who run red lights.	Construct intersection improvements to improve safety and operations.
20 Hwy 41/Hazeltine Blvd to Co. Rd. 19/Oak St	--	Install cable median barrier	--



Recommended Improvements

Hwy 7 from Minnetrista to Minnetonka



Location	Short-term	Medium-term	Long-term
21 Hwy 7 & High Point Rd	Restrict left turns onto Hwy 7 at these intersections to improve safety.	--	--
22 Hwy 7 & Water St/Chaska Rd	--	Realign and construct an acceleration lane for the westbound right turn from Water St. onto Hwy 7 to prevent drivers illegally crossing Hwy 7 to get to Chaska Rd.	--
23 Hwy 7 & Galpin Lake Rd	--	Implement access control changes or closures and remove the free flow southbound right turn immediately east at Oak St./Galpin Lake Rd.	--
24 Hwy 7 & Co. Rd. 19/Oak St.	Install a "no right turn on red" sign for the westbound right-turn movement (to be active during school arrival/dismissal times).	--	--



Recommended Improvements

Hwy 7 from Minnetrista to Minnetonka



Location	Short-term	Medium-term	Long-term
25 Hwy 7 & Morse Ave	Improve traffic enforcement.	Improve the safety and visibility for right-turn movements from Morse Ave and potentially add a side street median.	--
26 Hwy 7 & Old Market Rd	Monitor this intersection because improvements were recently completed.	--	--
27 Vine Hill Rd to Co. Hwy 101	Implement pedestrian improvements and connections at intersection (including the area surrounding Minnetonka High School). Work with Minnetonka High School staff to improve parking management and traffic operations on campus.	Construct signal improvements and improve visibility to reduce the number of drivers who run red lights.	Construct the improvements recommended in corridor study as well as the recommended pedestrian improvements and connections.



Next Steps

Additional Recommendations

Recommendations to consider to ensure safety projects continue to be implemented in the study area:

- Agencies should collaborate to create plan to implement short-term improvements .
- Establish an approach to complete the items listed as “to be evaluated”.
 - (e.g., completing corridor studies)
- Reference the RSA when projects are programmed along these corridors to ensure safety improvements are included.
- Agencies should continue to work collaborative to seek and apply for funding.
- Review traffic law enforcement practices.

Next steps include:

- Meetings with stakeholders/cities
- Sharing of information with elected officials
- Sharing of findings from the study with the public
- Identifying funding and project prioritization

<https://www.dot.state.mn.us/metro/projects/hwy7slp-hollywood/index.html>

<https://www.dot.state.mn.us/metro/projects/hwy7slp-hollywood/recommendations.html>

Thank you!

April Crockett

West Metro Area
Manager, MnDOT

*april.crockett@
state.mn.us*

651-775-4347

Andrew Lutaya

West Metro Area
Engineer, MnDOT

*andrew.lutaya@
state.mn.us*

651-234-7563

Derek Leuer

State Traffic Safety
Engineer, MnDOT

*derek.leuer@
state.mn.us*

651-234-7372