

# STAY INTHE KNOW

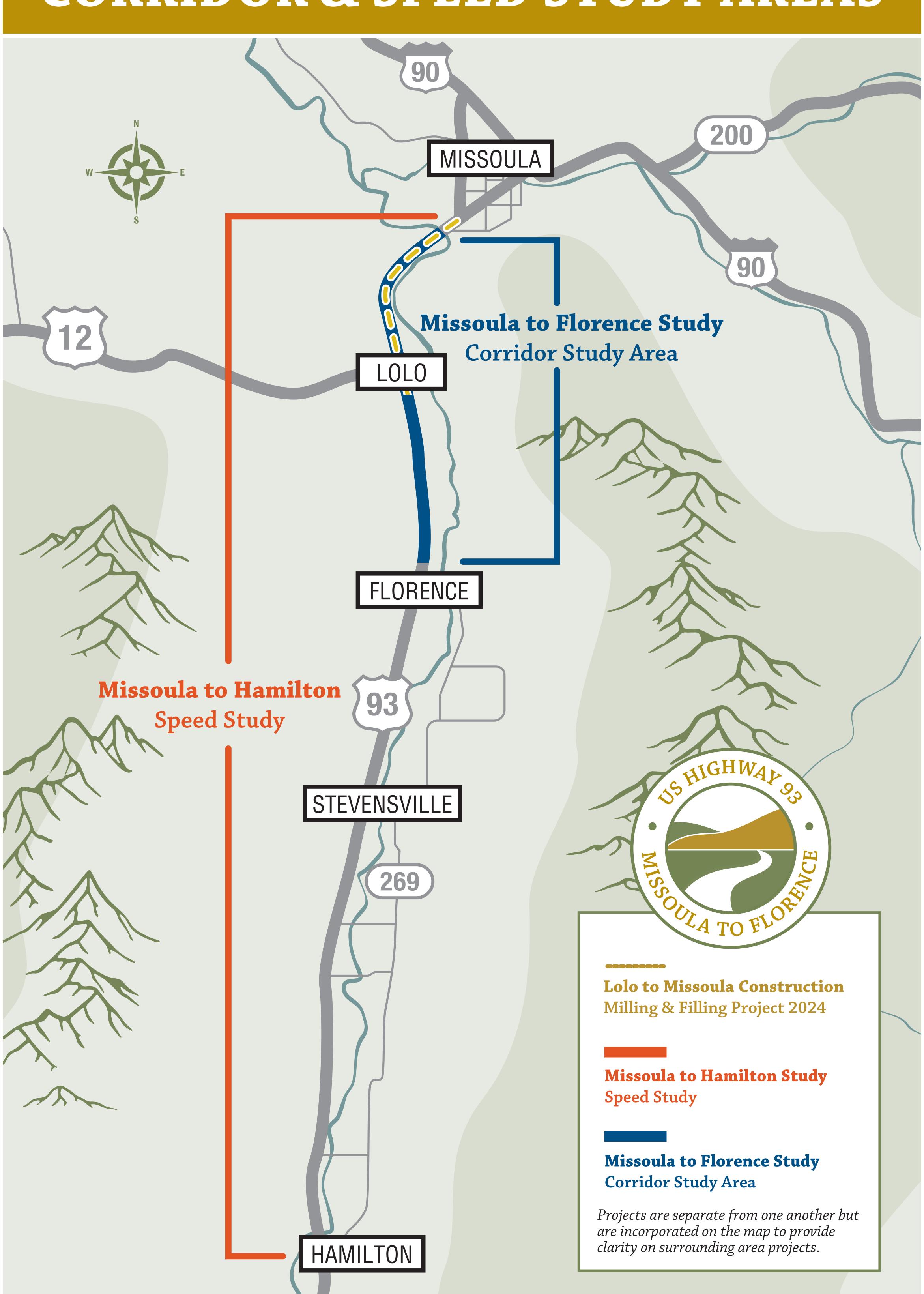








# CORRIDOR & SPEED STUDY AREAS



# SPEED STUDY

## Speed Study Background:

Missoula County request for speed limit review on US Highway 93 (US 93).

**Speed study conducted in 2022 from Missoula to Hamilton by KLJ Engineering.** 

## Five study area segments:

- 1) Lolo to Missoula.
- 2) Florence to Lolo.
- 3) Stevensville to Florence.
- 4) Victor to Stevensville.
- 5) Hamilton to Victor.

## Speed Study Methodology:



Roadway conditions/characteristics August 2022.



### **Vehicular classes**

24-hour period on dates in August and September 2022.



## **Crash history**

Reviewed from 1/1/2016 to 12/31/2020.



## **Speed characteristics**

24-hour period on dates in August & September 2022.

# Findings:



Current posted speeds are at 50th percentile, which means half of the drivers are traveling above and the other half below the speed limit. 85th percentile is typically used to set speed limits.



Many drivers traveling faster than the speed limit.



Drivers have difficulty slowing down when transitioning to residential neighborhoods or businesses.

# Recommendations:

- No change to current speed limits on US 93.
- 55 mph speed zones should be extended to a total of 0.5 mile in length.
- A new 55 mph transition speed zone should be introduced between the existing 65 mph and 45 mph area south of Missoula
- Consider traffic calming devices, such as speed feedback signs or urban transition zones.





Step 1: Traffic, Safety, Conditions Analysis Existing

Issues

Key

**WE ARE HERE** 

Strategies Potentia Step 3: Identify

Step 2:

Identify

Improvement to Address Concepts Step 4: Identify

Key Issues

Concepts

Recommendations Implementation Feasible Identify Step 6: for

Spring 2024 Stakeholder Outreach Public &

Stakeholder Fall 2022 Outreach Public &

Stakeholder Outreach Public &

Fall 2023

Improvement Evaluate Step 5:

# PUBLIC & STAKEHOLDER FEEDBACK



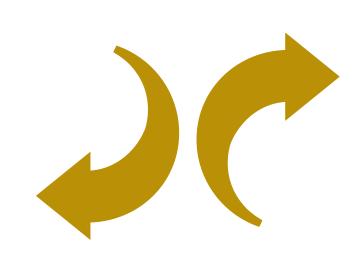
Growth and Development.



High Speeds and Speed Differential.



Near Misses.



Conflicts in the Center
Two-Way Left-Turn Lane.





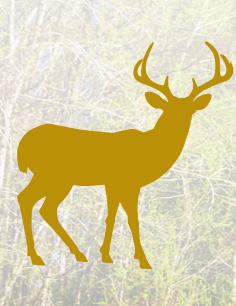
Insufficient Gaps in Traffic.



Limited Lighting and Adverse Road Conditions.



Shared-Use Path Conflicts.

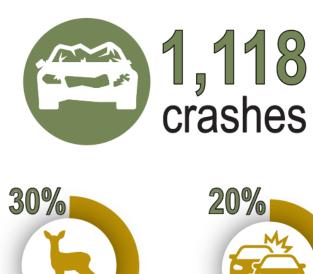


Wildlife Conflicts.

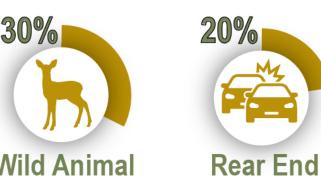
# CORRIDOR STUDY FINDINGS

# Traffic, Safety and Crash Findings

- 65% of traffic travel north in the morning and south in the evening.
- 3-4% of traffic is heavy trucks.
- Missoula is a destination for approximately 32% of trucks and 72% of vehicles.

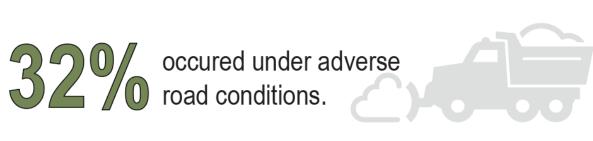


of crashes occured during commuting hours (6 to 8 am and 4 to 6 pm).



of crashes occured during winter months (November to February).



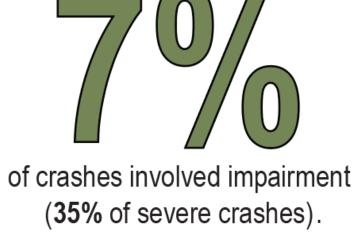


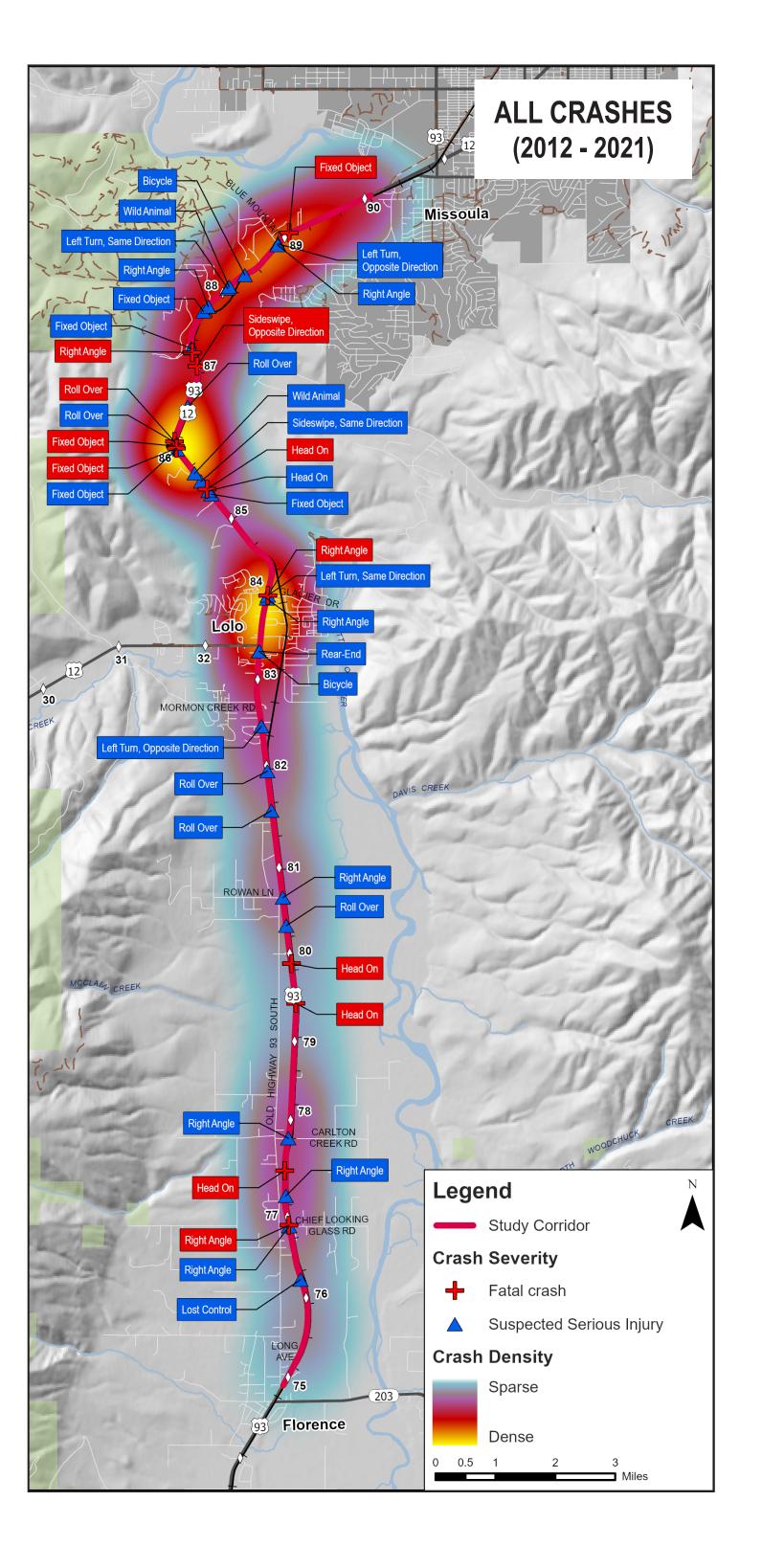


78%









# **High Priority Locations**

- Urban/Rural Transitions.
- Rural "S Curves".
- Lolo Area.
- Rural Highway.





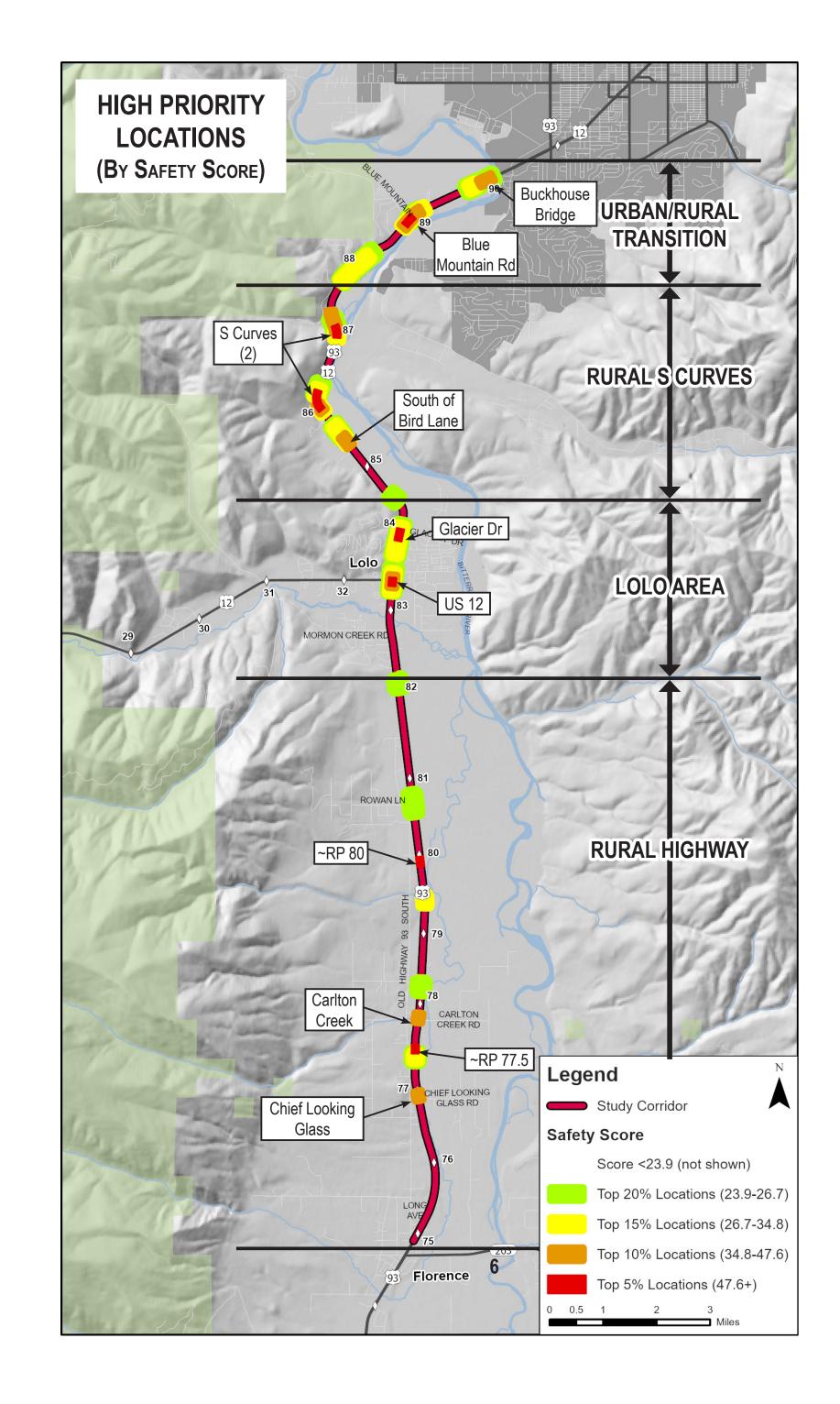




**Crash Frequency** 

**Crash Rate** 

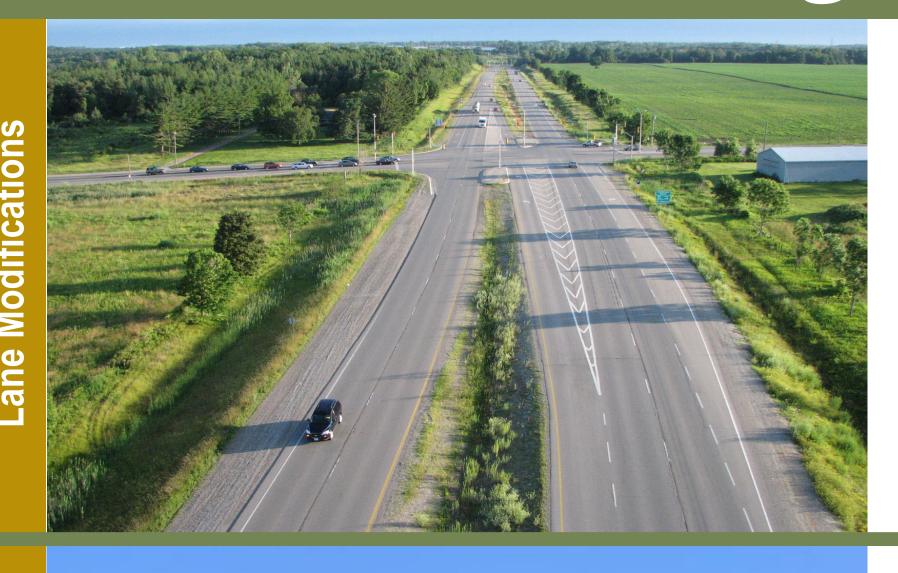
**Crash Severity** 



# POTENTIAL SOLUTIONS

The study team has developed a series of big-picture ideas to consider in the US 93 corridor. After hearing your feedback, the team will refine these ideas and develop location-specific recommendations.

# Intersection Strategies



Potential improvements include:

- Right- or left-turn lanes.
- Right- or left-turn acceleration lanes.
- Left-turn staging.
- Two Way Left Turn Lane.



Potential improvements include:

- New signals.
- Signal modifications (protected phasing, timing changes.).



Roundabouts can help reduce travel speeds while providing continuous traffic flow through intersections. On US 93, roundabouts would need to be configured to accommodate multiple lanes.

Potential improvements include seperated left-turn movement using alternate intersection configurations such as:

- Restricted Crossing U-Turn.
- Continuous Green T.



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# Roadway Segement Strategies



Potential improvements include:

- Dynamic curve warning.
- Variable speed limit.
- Weather alerts.
- Incident alerts.



Roadway

**Accommodations** 

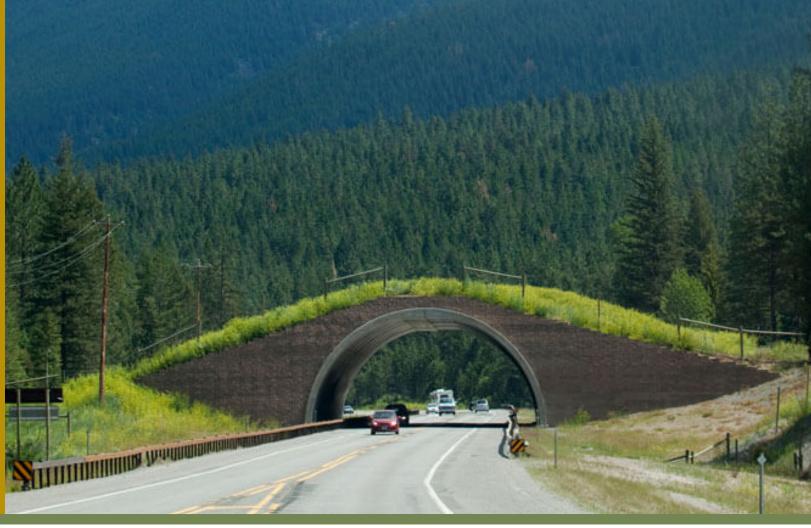
Potential improvements include:

- High friction surfacing.
- Roadside lighting.
- Enhanced pavement markings and signing.
- Widened medians.
- Centerline rumble strips.



**Potential improvements include:** 

- Urban transition zones.
- Speed feedback signs.
- Landscaping.
- Optical speed bars.



Potential improvements include:

- Fencing.
- Grade-separated crossings.
- Detection/activated signs.
- Improved visibility (vegetation management, lighting).



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# Corridor-Wide Strategies



Potential improvements include:

- Access consolidation.
- Partial movement accesses.



Divided

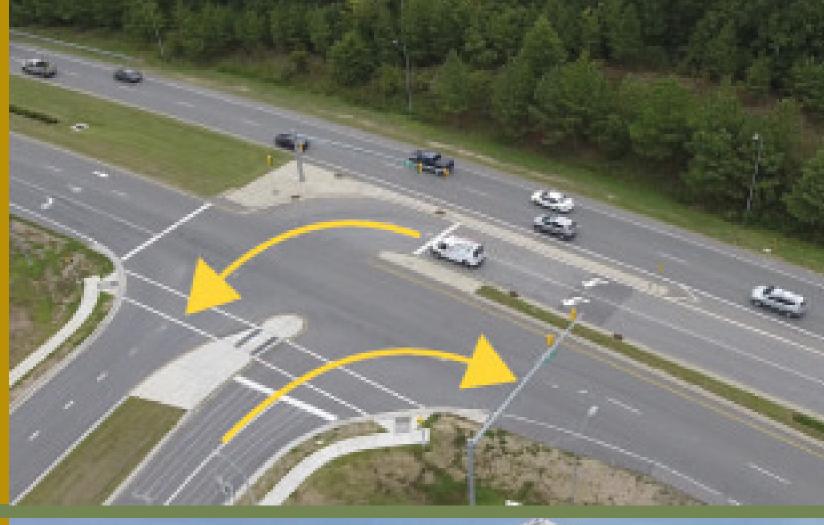
D T

Conflict

Reduced

Potential improvements include:

- Concrete barrier.
- High-tension cable rail.
- Vegetated median.



Potential improvements include:

- Reduced conflict intersections.
- Controlled access.



To match and support suburban context, the following improvements may be used:

- Curb and concrete median.
- Slower speeds.
- Lighting.

