

Corridor Traffic Safety Study San Francisquito Canyon Road



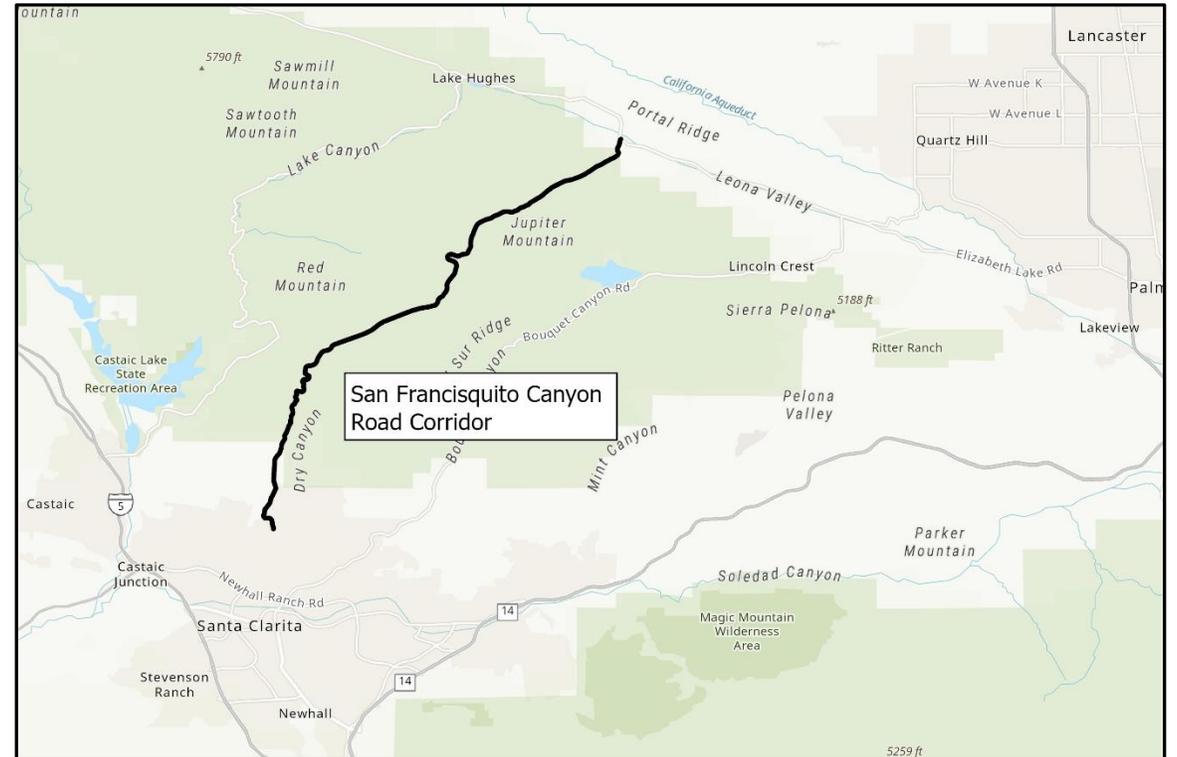
Community Outreach Meeting

Wednesday, June 12, 2024

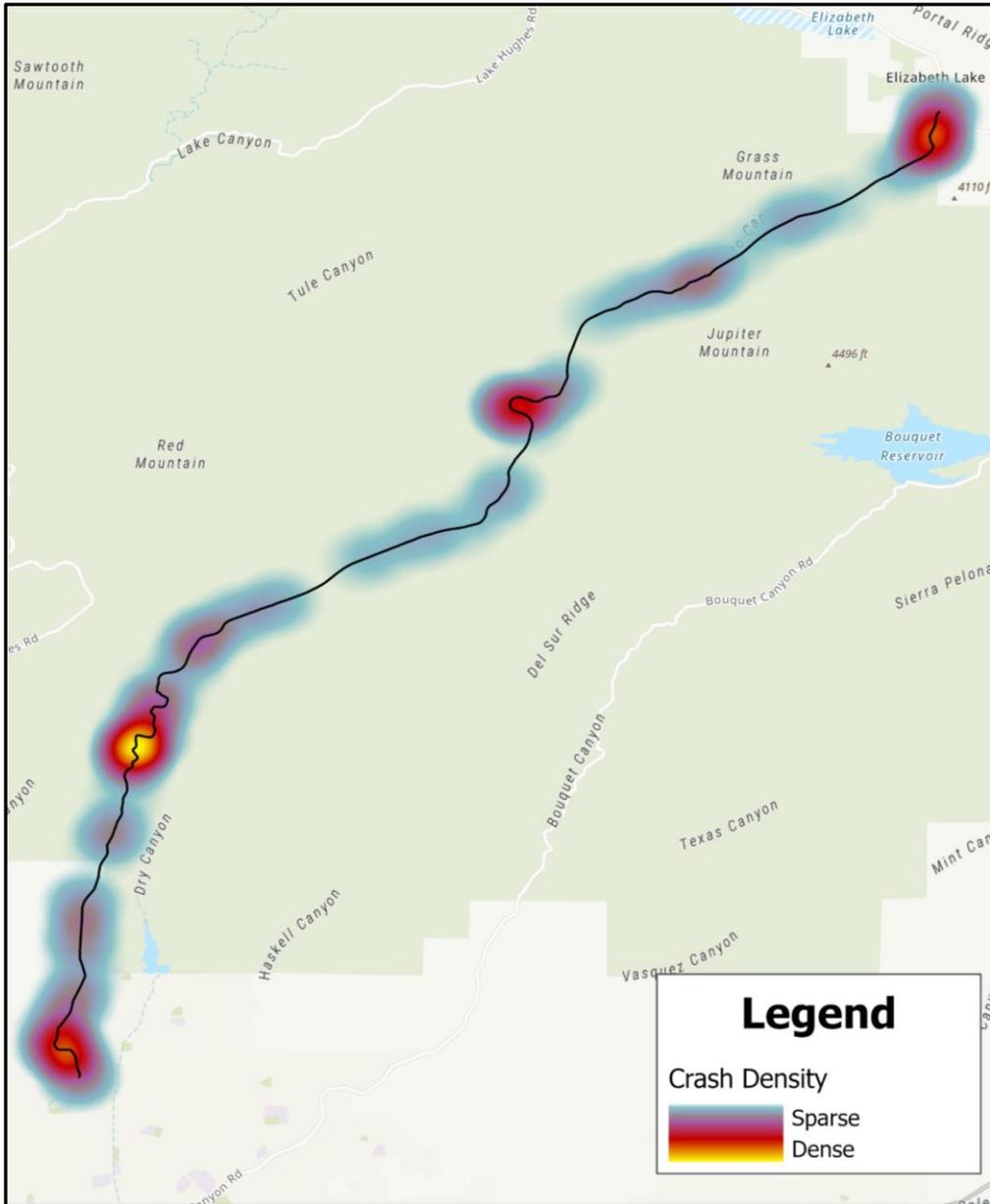
7:00 PM

Project Overview

- Understand the factors that contribute to collisions
- Develop strategies and safety improvements to reduce traffic injuries and crashes
- Develop a Corridor Traffic Safety Study summarizing proposed improvements and their optimal prioritization of installation



Corridor Safety Background and Trends



- *Crash data: January 1, 2018 – December 31, 2022
- 128 injury crashes throughout the 5-year analysis period
- Heat Map details areas with the most crashes and details where fatal/severe injury crashes occurred

*Collision Data was pulled from the Transportation Injury Mapping System (TIMS)

Corridor Safety Background and Trends

Collision Severity

| Collision Severity | 2018 | 2019 | 2020 | 2021 | 2022 | Grand Total | Percent |
|-------------------------|-----------|-----------|-----------|-----------|-----------|-------------|-------------|
| Fatal | 2 | 0 | 0 | 1 | 2 | 5 | 3.9% |
| Severe Injury | 4 | 4 | 7 | 3 | 6 | 24 | 18.8% |
| Minor or Visible Injury | 13 | 9 | 4 | 11 | 11 | 48 | 37.5% |
| Complaint of Pain | 11 | 10 | 13 | 11 | 6 | 51 | 39.8% |
| Grand Total | 30 | 23 | 24 | 26 | 25 | 128 | 100% |

*Collision Data was pulled from TIMS, which does not include “property damage only” collisions

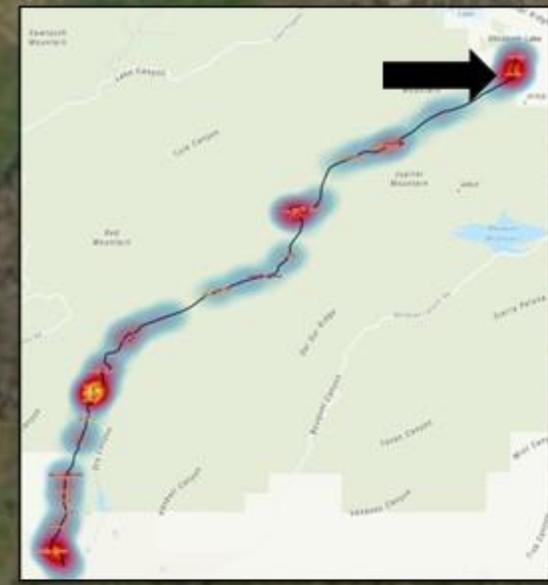
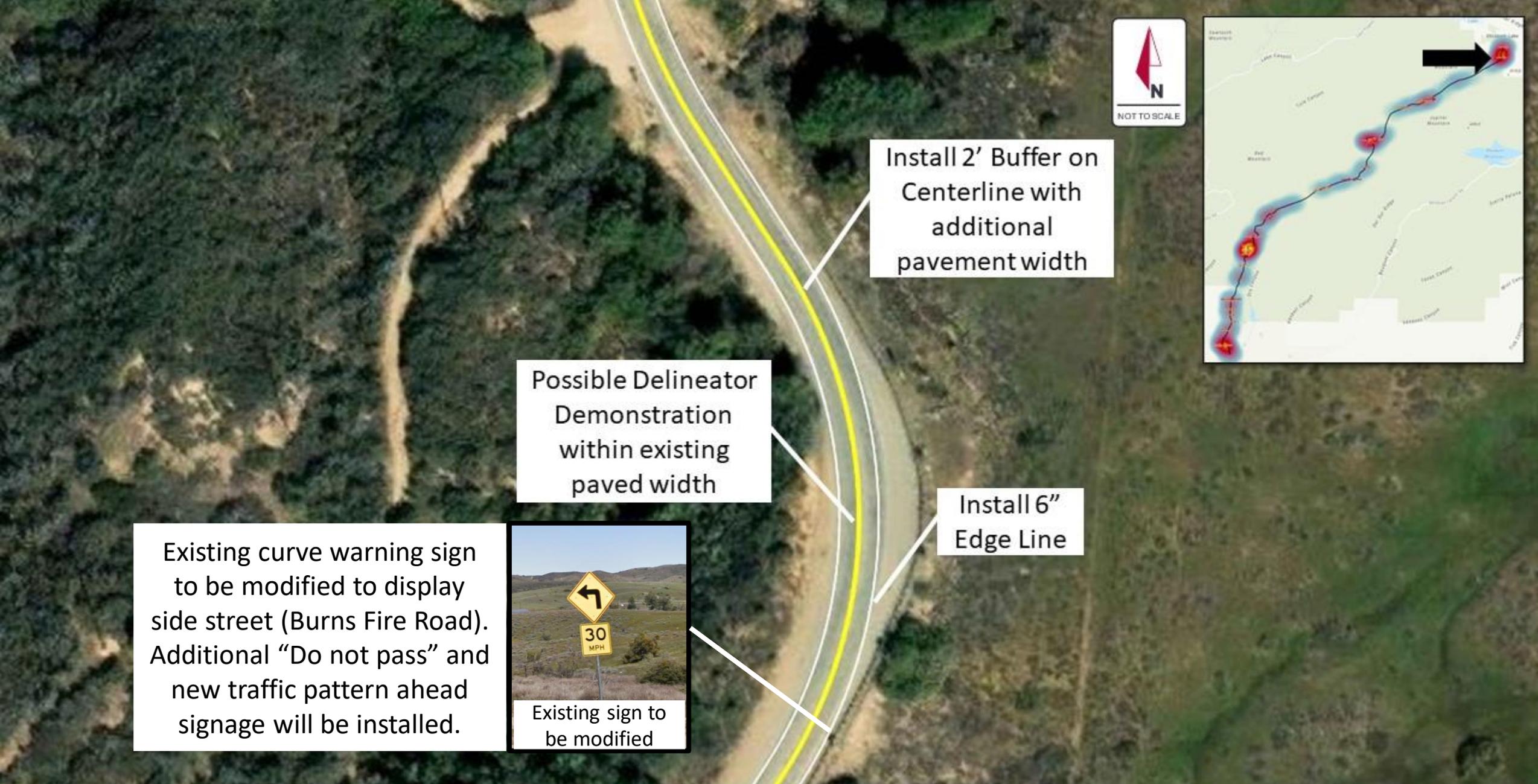
Corridor Safety Background and Trends

Primary Collision Factor

| Collision Type | 2018 | 2019 | 2020 | 2021 | 2022 | Grand Total | Percent |
|--------------------|-----------|-----------|-----------|-----------|-----------|-------------|-------------|
| Hit Object | 17 | 14 | 11 | 14 | 16 | 72 | 56.3% |
| Head-On | 2 | 4 | 4 | 3 | 6 | 19 | 14.8% |
| Overtaken | 3 | 3 | 1 | 7 | 1 | 15 | 11.7% |
| Sideswipe | 2 | 2 | 3 | 0 | 2 | 9 | 7.0% |
| Broadside | 5 | 0 | 2 | 1 | 0 | 8 | 6.3% |
| Other | 1 | 0 | 2 | 1 | 0 | 4 | 3.1% |
| Rear End | 0 | 0 | 1 | 0 | 0 | 1 | 0.8% |
| Grand Total | 30 | 23 | 24 | 26 | 25 | 128 | 100% |

Proposed Safety Countermeasures





Install 2' Buffer on Centerline with additional pavement width

Possible Delineator Demonstration within existing paved width

Install 6" Edge Line

Existing curve warning sign to be modified to display side street (Burns Fire Road). Additional "Do not pass" and new traffic pattern ahead signage will be installed.



Existing sign to be modified

Delineators

What is it?

- Retroreflective devices mounted in a series along centerline of roadway

Purpose?

- Prevents drivers from illegally passing along curves
- Provides additional visibility

Advantages

- Greatly increases visibility
- Greater flexibility and lower cost compared to other barriers

Disadvantages

- Drivers may be “stuck” after accidentally passing centerline
- Increased maintenance cost



Centerline Buffer

What is it?

- Provides extra space between two solid center line markings

Purpose?

- Further separates opposing directions of traffic

Advantages

- Can be easily combined with delineators and/or rumble strips
- Narrow buffers can be used in constrained areas

Disadvantages

- Performance improves with wider buffer and may require additional pavement width



Enhanced Roadway Striping

What is it?

- Delineates wider edge lines by going from 4" to 6" in thickness

Purpose?

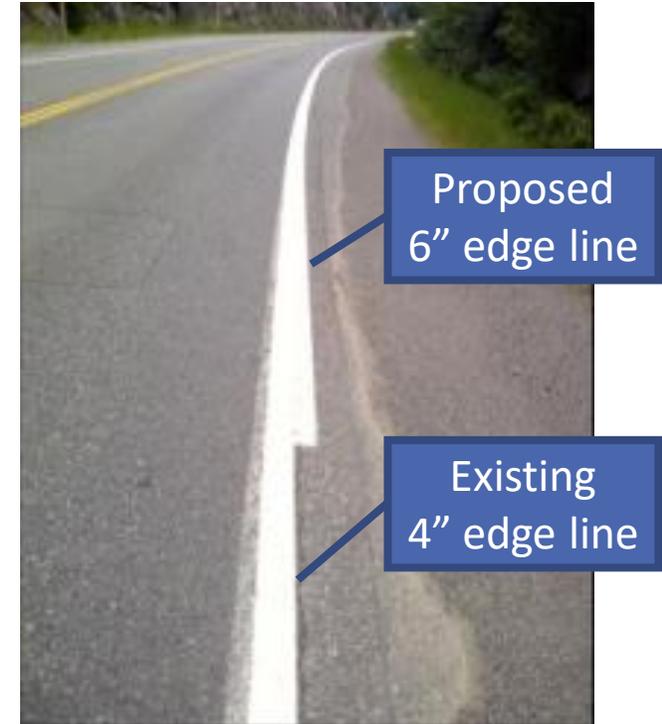
- Provides additional visibility to drivers of existing edge of roadway

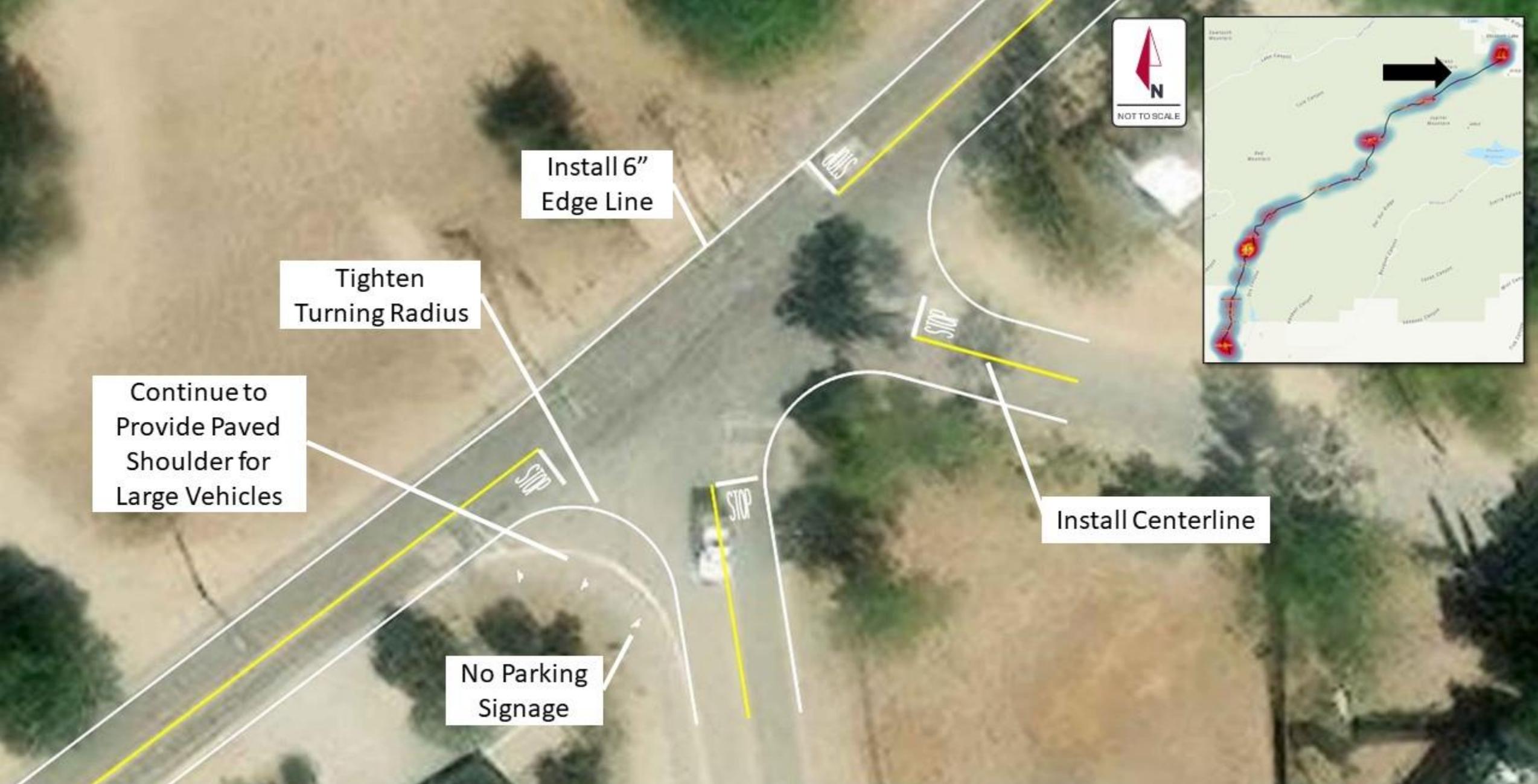
Advantages

- Low-cost
- Easy to implement when performing maintenance

Disadvantages

- More costly due to additional use of material





Install 6" Edge Line

Tighten Turning Radius

Continue to Provide Paved Shoulder for Large Vehicles

No Parking Signage

Install Centerline



Tighten Turning Radius

What is it?

- Minimizes the size of corner radius

Purpose?

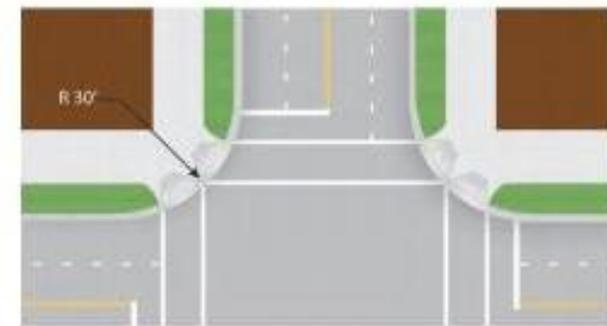
- Reduces vehicle turning speed

Advantages

- Low-cost and easy to implement (when limited to striping)

Disadvantages

- Larger vehicles (trucks, buses, etc.) require larger turning radius
- Need for No Parking restriction in paved shoulder





Install Driver Feedback Sign

Install 6" Edge Line

Install 2' Buffer on Centerline with Rumble Strips

Install Safety Edge

Driver Feedback Signage

What is it?

- A radar speed sign displaying a driver's current speed in relation to the posted speed limit

Purpose?

- Alerts drivers of speeding, particularly ahead of changes to the roadway

Advantages

- Less expensive than roadway modifications
- Easy to implement

Disadvantages

- Effectiveness wears off over time



Safety Edge

What is it?

- Shapes the edge of the pavement to 30 degrees to eliminate vertical drop-off

Purpose?

- Provides a transition for all vehicles to return to the roadway after drifting off the paved road

Advantages

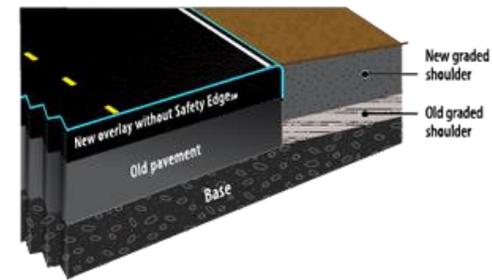
- Low-cost
- High effectiveness

Disadvantages

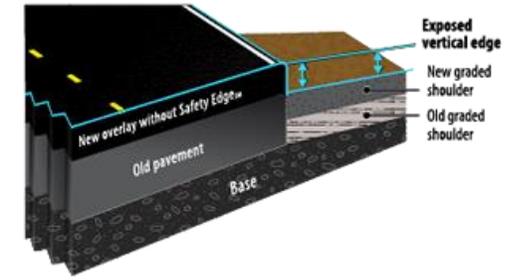
- Most optimal when installed during repaving of roadway

Traditional Pavement Edge

Newly constructed traditional pavement edge

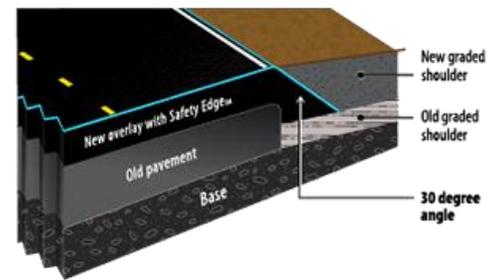


Traditional pavement edge over time

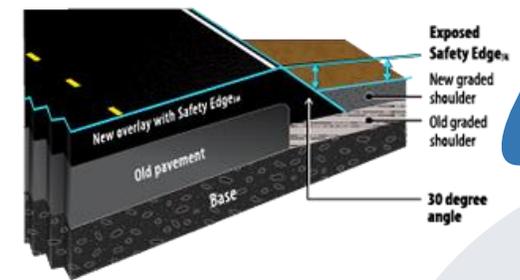


Safety Edge_{SM}

Newly constructed Safety Edge_{SM}



Safety Edge_{SM} over time



Centerline Rumble Strips

What is it?

- Grooves along the centerline of roadway designed to produce noise and vibration

Purpose?

- Alerts drivers of roadway departure when crossing centerline

Advantages

- Low-cost
- Demonstrated effectiveness

Disadvantages

- Exterior noise



Transverse Rumble Strips

What is it?

- Grooves across the roadway designed to produce noise and vibration

Purpose?

- Alerts drivers of a need to slow down or stop

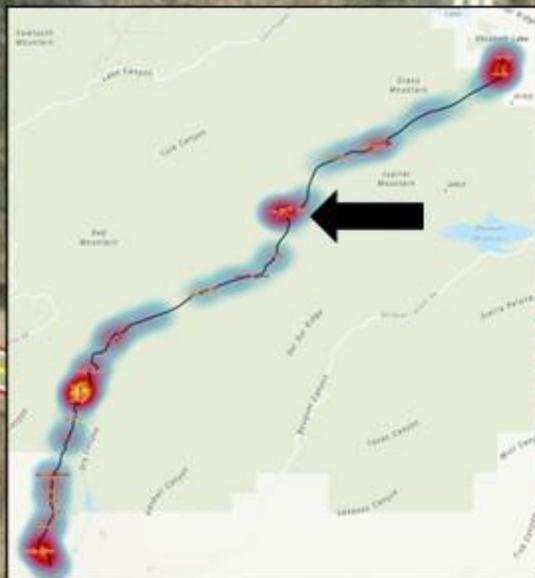
Advantages

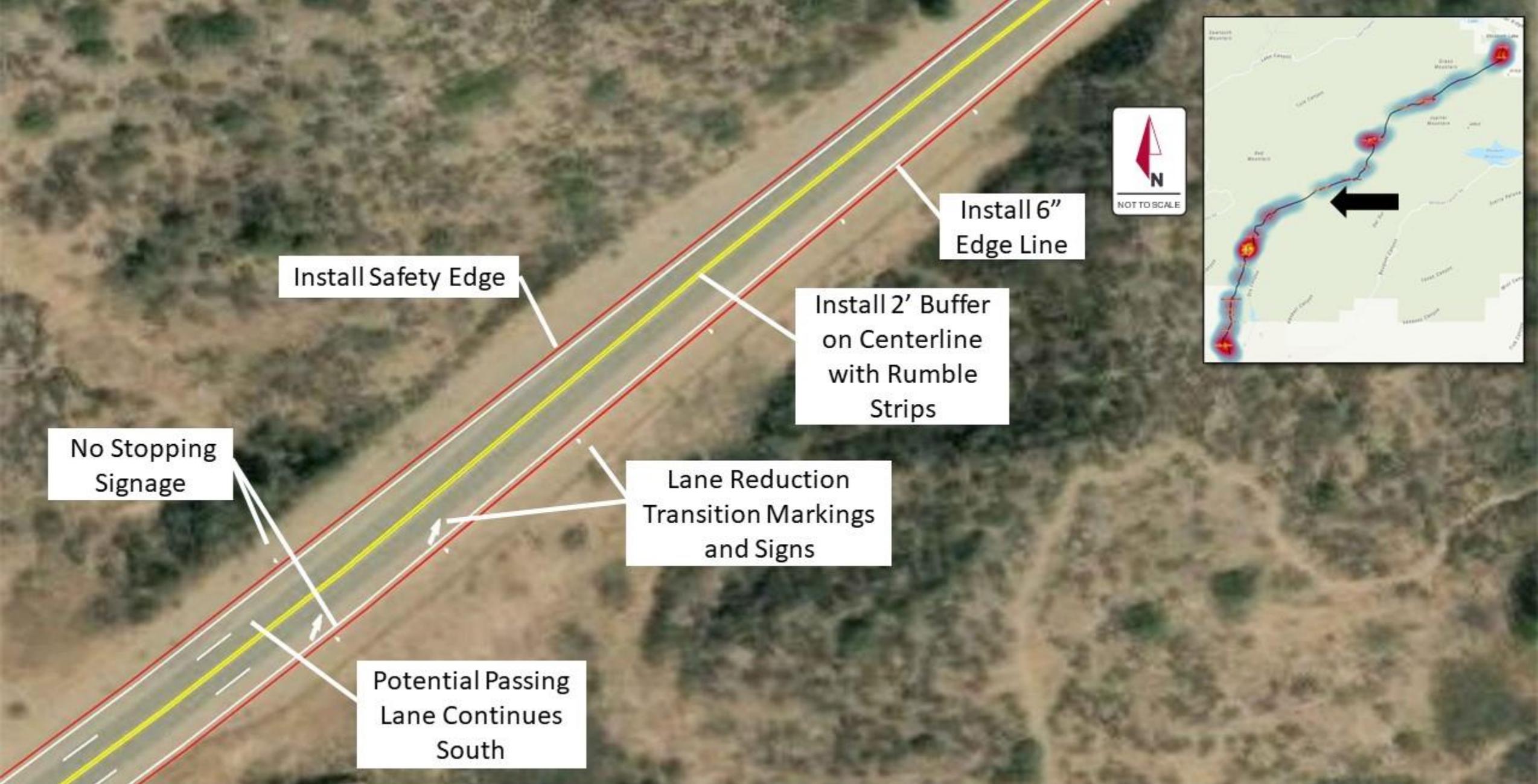
- Low-cost
- Demonstrated effectiveness

Disadvantages

- Exterior noise
- Uncomfortable for motorcyclists and bicyclists







Passing Lane/Expanded Turnouts

What is it?

- Lane or shoulder where faster vehicles can pass slower drivers

Purpose?

- Provides legal and safe passage for drivers to pass, avoiding risky and unsafe passing

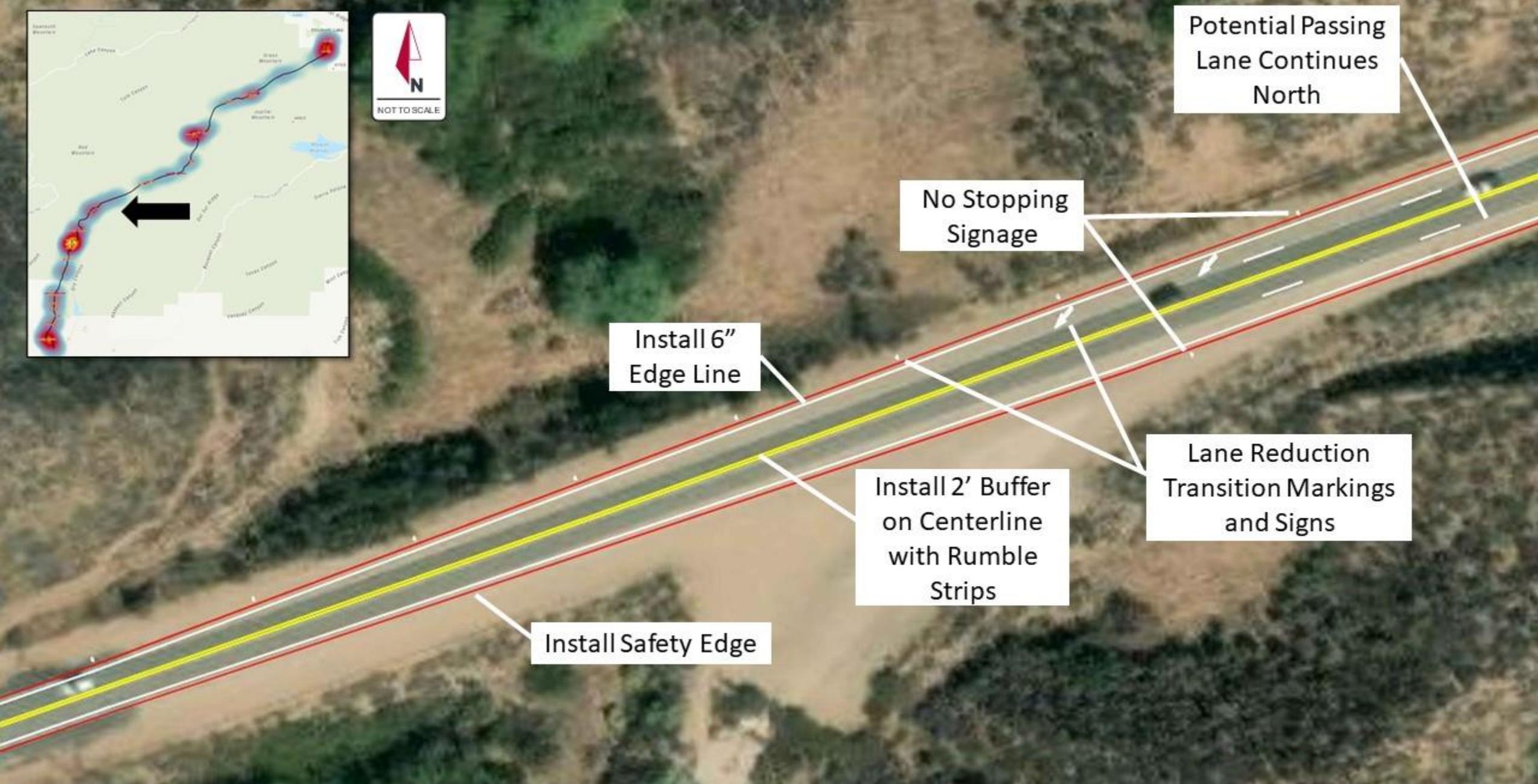
Advantages

- Optimal in areas with large speed differentials
- Improves traffic operations and reduces delays

Disadvantages

- Additional pavement width and right-of-way may be required
- Requires long stretch of roadway with minimal sharp curves





Potential Passing Lane Continues North

No Stopping Signage

Install 6" Edge Line

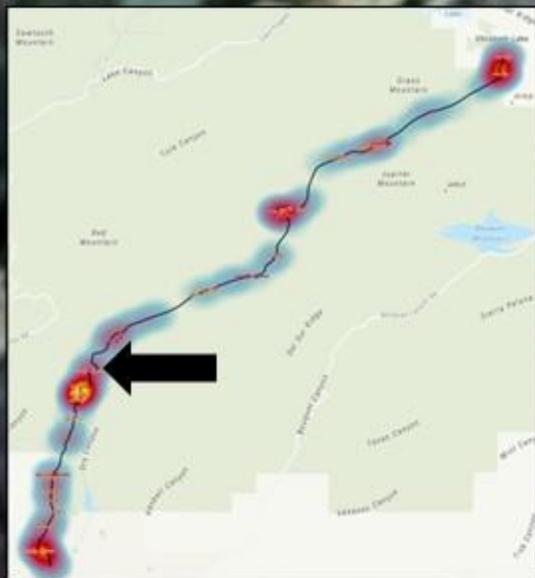
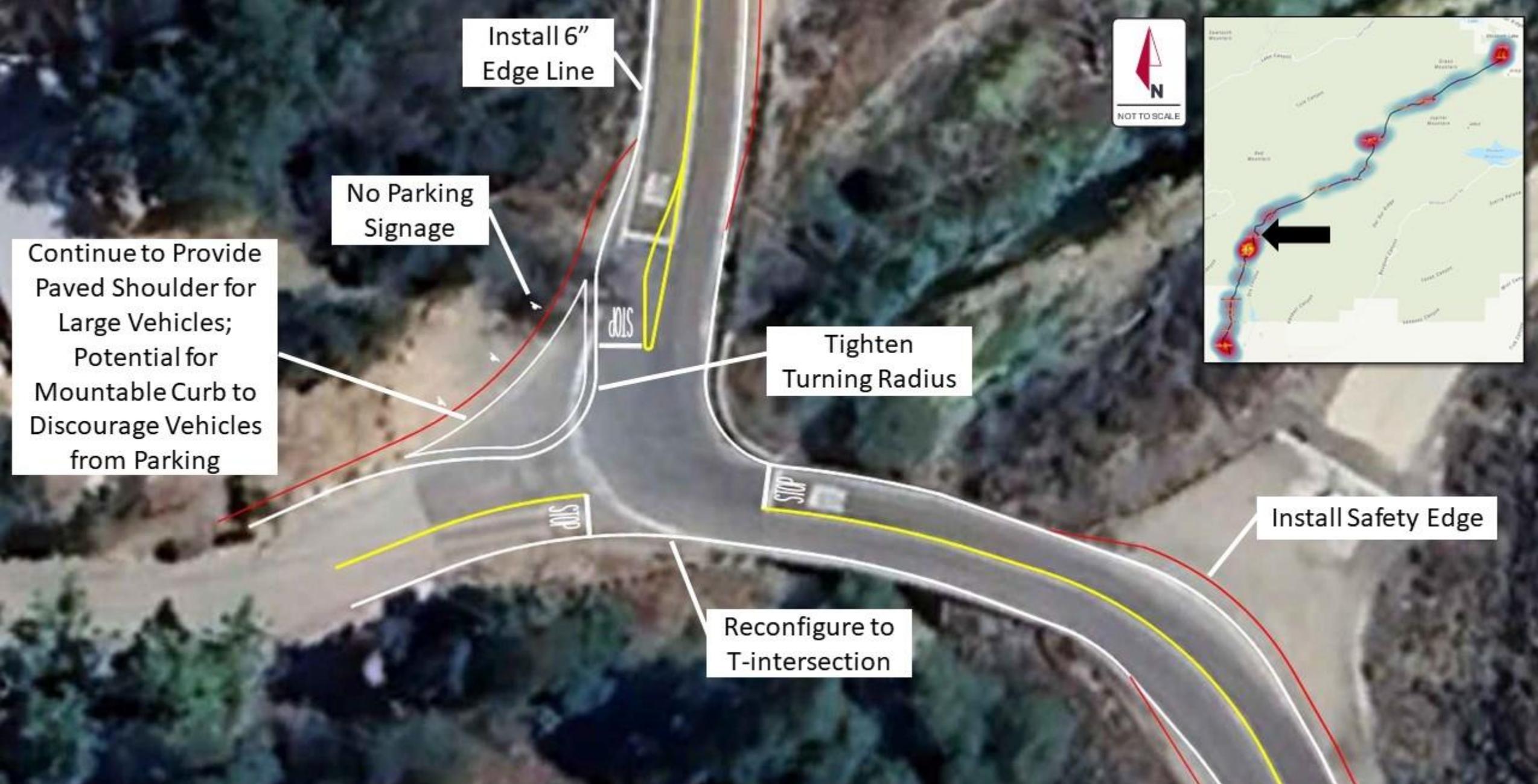
Lane Reduction Transition Markings and Signs

Install 2' Buffer on Centerline with Rumble Strips

Install Safety Edge

LOCATION 5 – End MP 11.8

SAN FRANCISQUITO CANYON ROAD



Continue to Provide Paved Shoulder for Large Vehicles; Potential for Mountable Curb to Discourage Vehicles from Parking

No Parking Signage

Install 6" Edge Line

Tighten Turning Radius

Reconfigure to T-intersection

Install Safety Edge

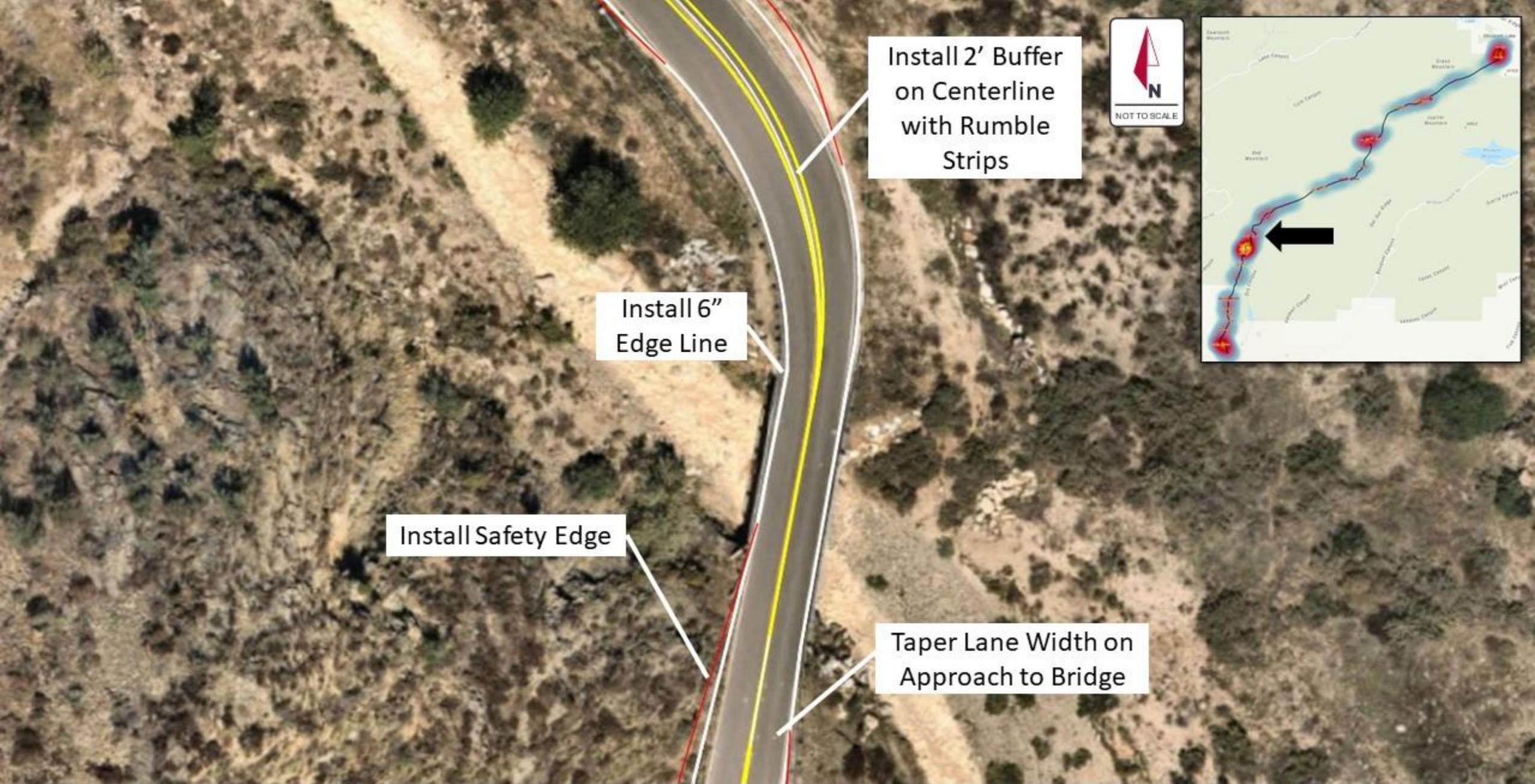


Install Safety Edge

Install 6"
Edge Line

Potential for
Delineators

Install 2' Buffer on
Centerline with
Rumble Strips



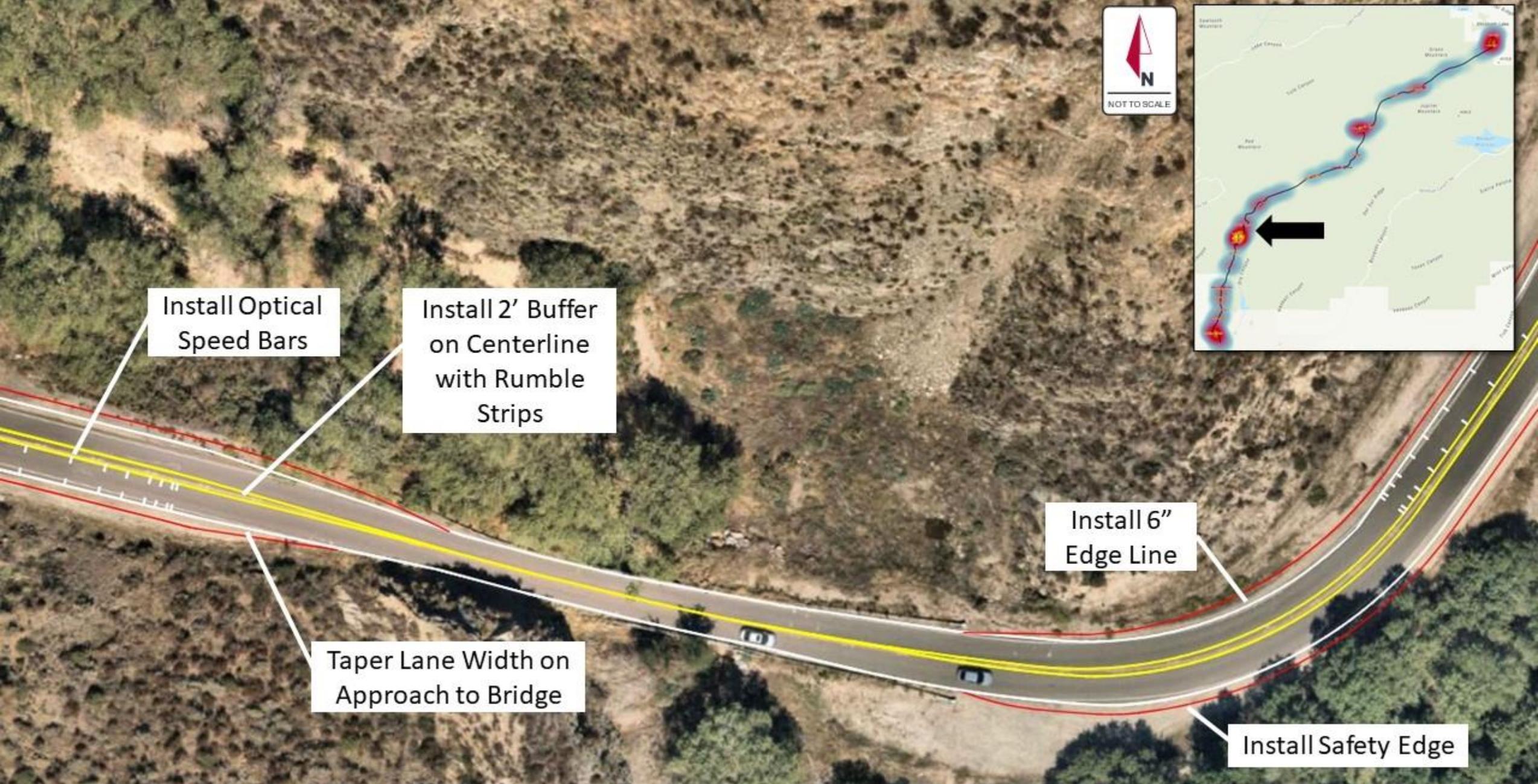
Install 2' Buffer on Centerline with Rumble Strips

Install 6" Edge Line

Install Safety Edge

Taper Lane Width on Approach to Bridge





Install Optical Speed Bars

Install 2' Buffer on Centerline with Rumble Strips

Taper Lane Width on Approach to Bridge

Install 6" Edge Line

Install Safety Edge

Optical Speed Bars

What is it?

- Transverse pavement markings placed at decreasing spacing

Purpose?

- Provide the appearance to drivers that they are travelling faster than their true speed

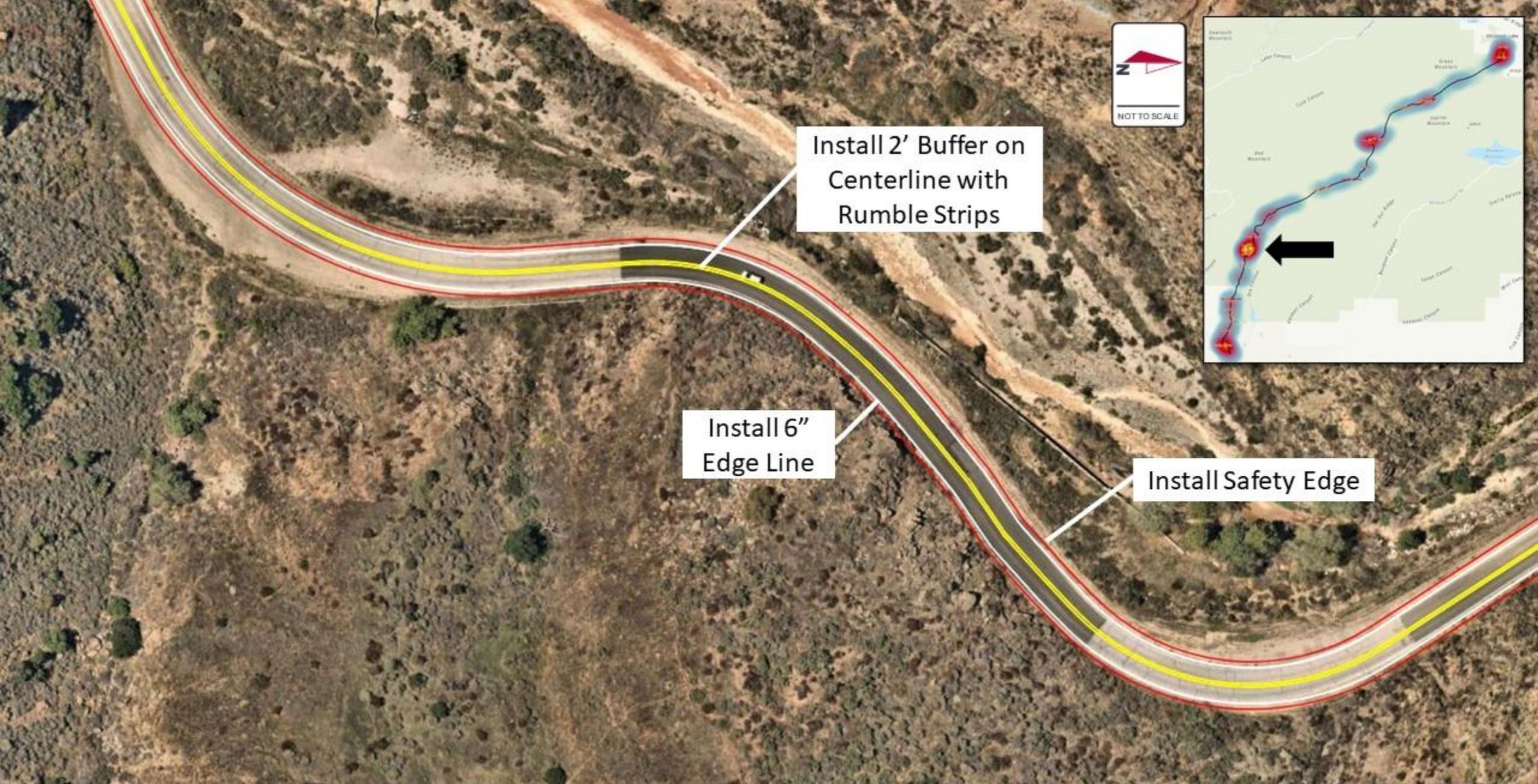
Advantages

- Low-cost
- Easy to implement

Disadvantages

- Increased maintenance cost
- Needs to be used sparingly to prevent drivers from being desensitized

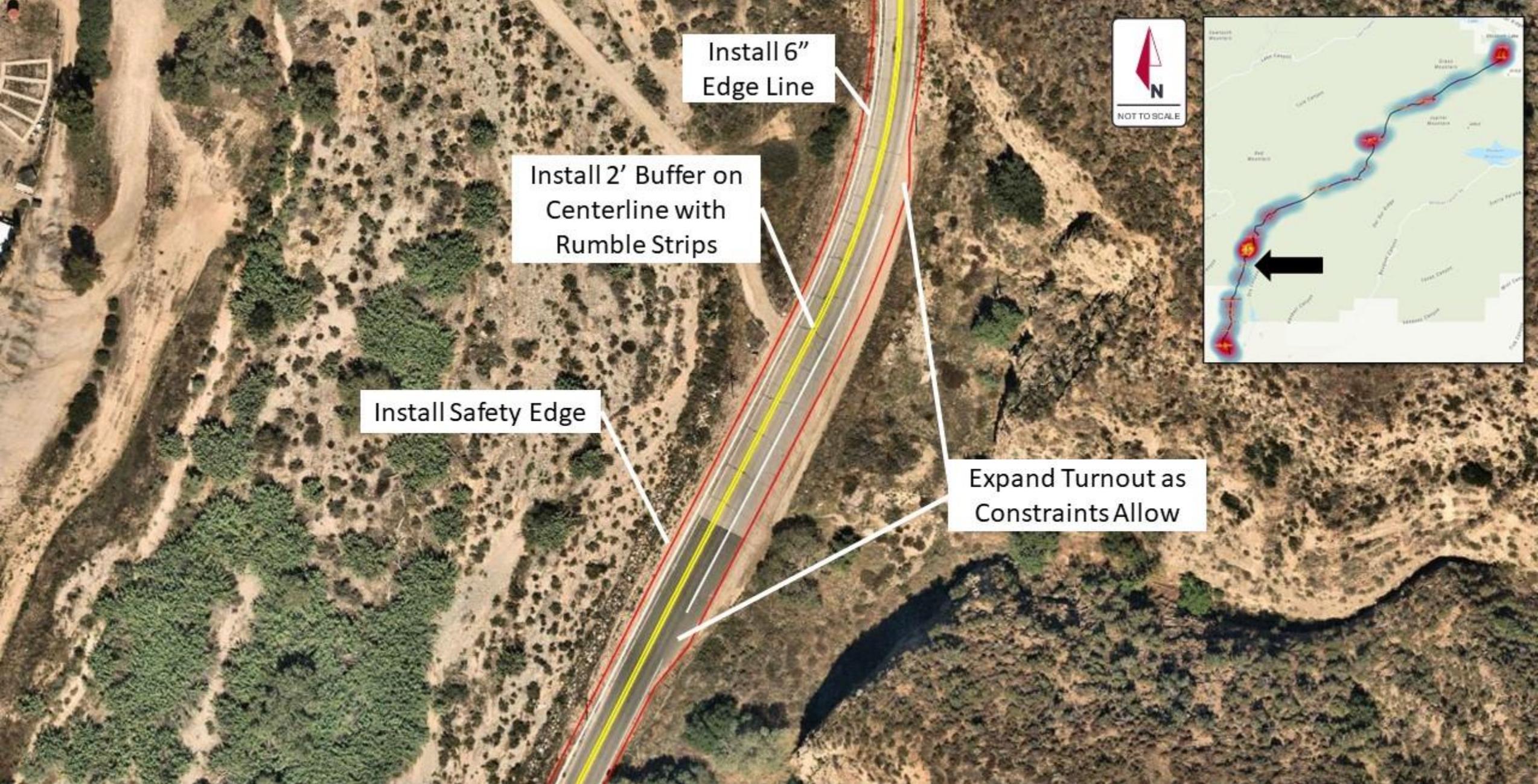




Install 2' Buffer on Centerline with Rumble Strips

Install 6" Edge Line

Install Safety Edge



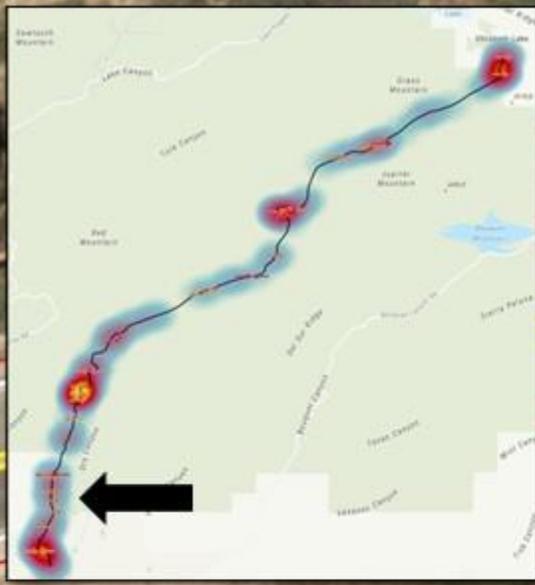
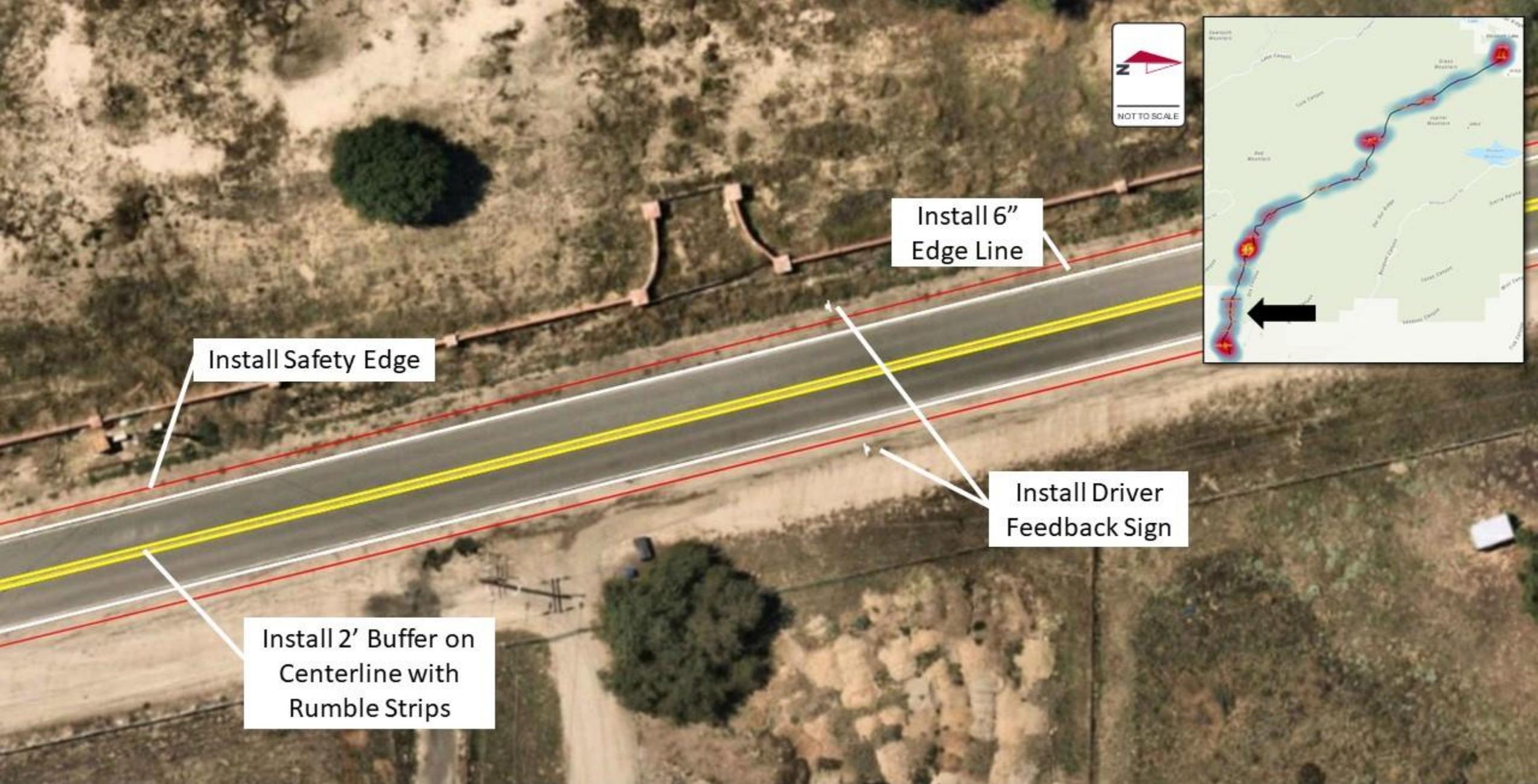
Install 6" Edge Line

Install 2' Buffer on Centerline with Rumble Strips

Install Safety Edge

Expand Turnout as Constraints Allow



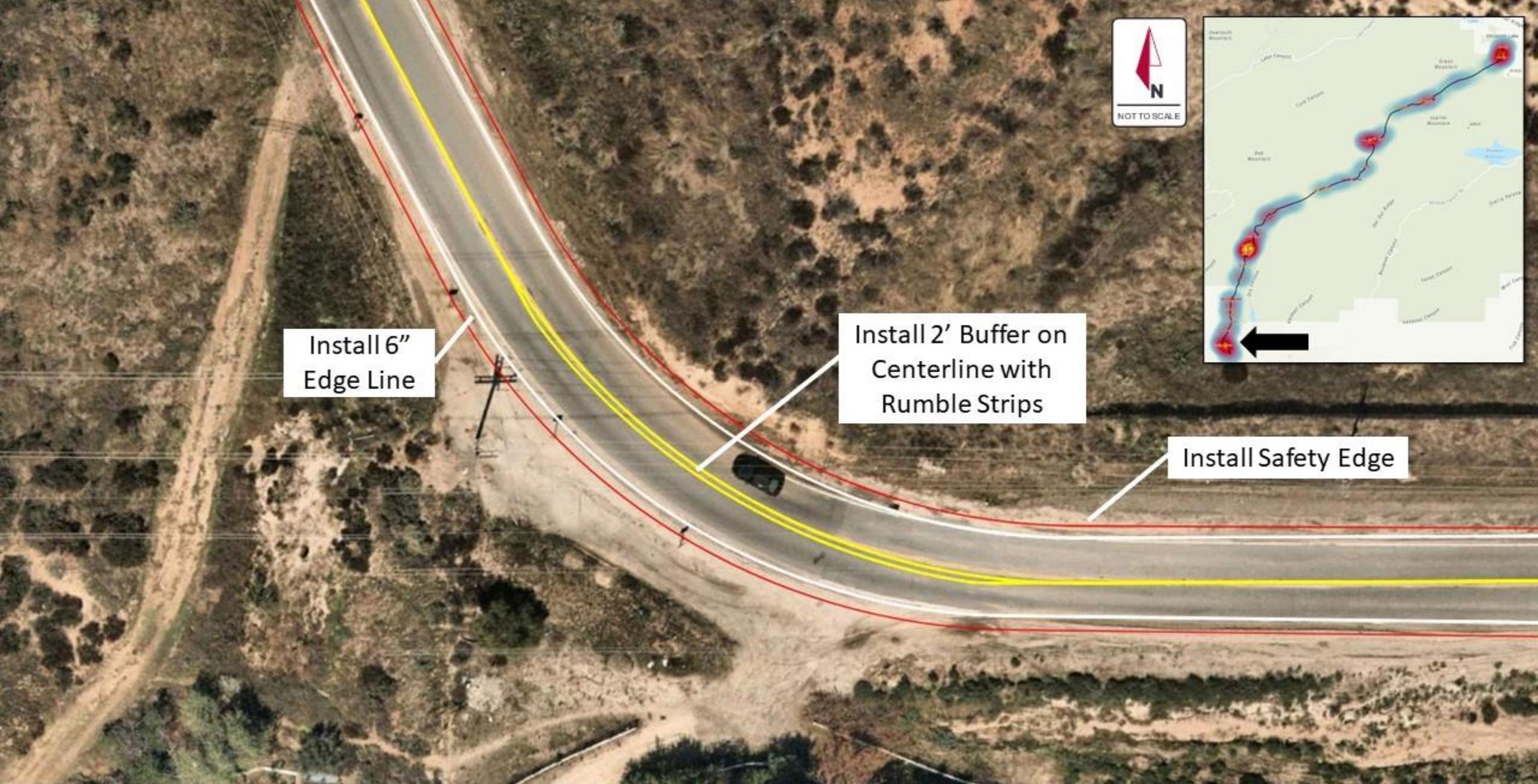


Install Safety Edge

Install 6" Edge Line

Install Driver Feedback Sign

Install 2' Buffer on Centerline with Rumble Strips



Install 6"
Edge Line

Install 2' Buffer on
Centerline with
Rumble Strips

Install Safety Edge

Next Steps

- Incorporate community outreach feedback
- Finalize Corridor Traffic Safety Study
- Pilot Delineator Project
 - Curve located approximately 0.5 miles south of Elizabeth Lake Road
 - Plans are nearly complete
 - Delineators and supplemental signage to be installed by August
- Work to implement the proposed improvements



Curve where Pilot Delineator Project will be installed

Questions and Open Forum

Contact Information

Email: trafficsafetyplan@pw.lacounty.gov

Phone: (626) 300 - 4888

