



Napa Valley Vision Zero Plan

Citizens Advisory Committee

Contact: Diana Meehan

Email: dmeehan@nvta.ca.gov

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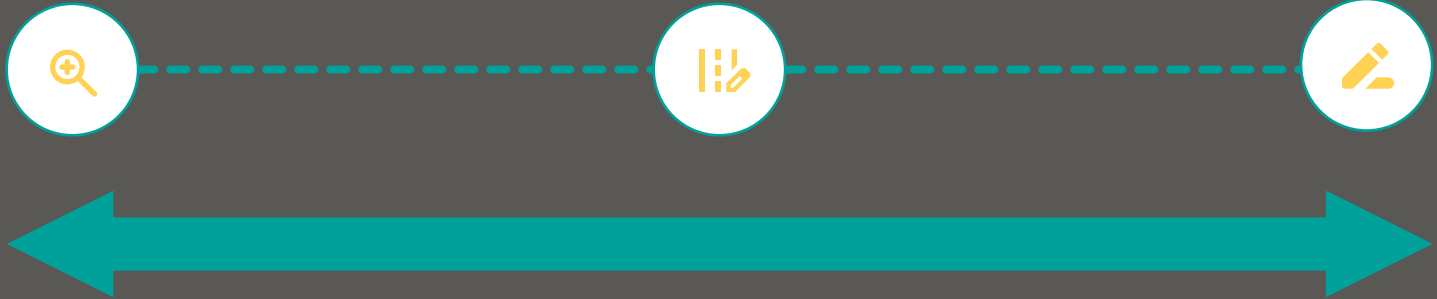
INTRODUCTION

we are here

GATHER & ANALYZE
SAFETY DATA

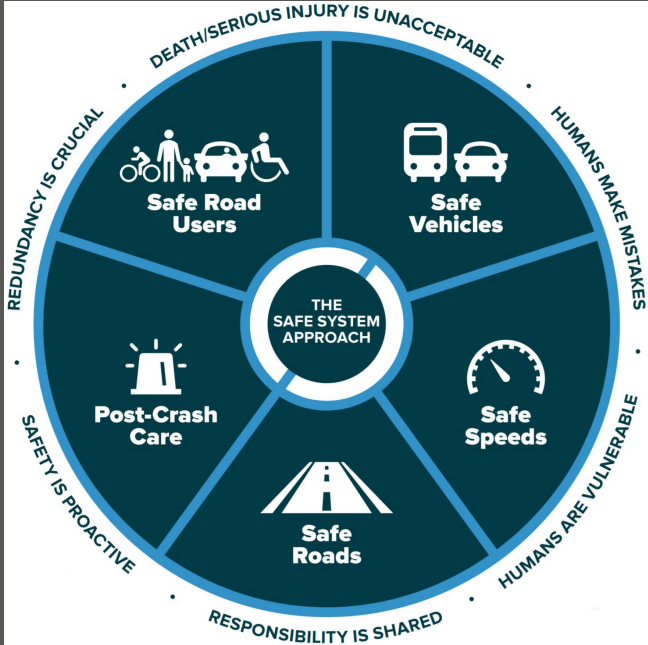
PROFILES &
COUNTERMEASURES

DRAFT THE VISION
ZERO PLAN



VISION STATEMENT

“Napa Valley is committed to an equity-focused, data-driven effort to eliminate traffic deaths and severe injuries on our streets by 2030”



Collision Profiles

- We used collision data to find the most common and pressing characteristics of collisions in Napa Valley
- The collisions that fall into these profiles account for 77% of all collisions and 79% of KSI collisions
- The data covers collisions resulting in injuries between the years of 2015-2021

Unsafe Speeds on Major Rural Thoroughfares

Speeding remains the top concern in Napa Valley, especially in more rural contexts where roadways can feel like the “open road,” but serve substantial traffic volumes and substantial cross traffic from intersecting roadways and driveways



828 total collisions, **72** KSI collisions

18% of all collisions

13% of KSIs

Roundabouts

Intersection Reconstruction & Tightening

Raised Median

Signal Progression

Rumble strips

Improved Pavement Friction

Safety Edge

Guardrail

Delineators, Reflectors, and Object Markers

Driving Under the Influence

The number of DUIs is substantial, accounting for almost a quarter of all KSI collisions, and reflects the nature of the region as a Wine Country destination.



637 total collisions, **134** KSI
14% of all collisions
23% of KSIs

Curve Advance Warning Sign

Chevron Signs on Horizontal Curves

LED Enhanced Signs

Speed Feedback Signs

Speed Limit Reduction

TDM Strategies (Shuttles, Enhanced Local Transit, etc.)

Targeted Enforcement & Education

Broadsides

Broadsides are one of the collision types most likely to cause death or severe injury due to the high amount of kinetic energy transfer. Locations and typologies of particular concern are intersections of minor roadways with major roadways or highways, intersections with side-street stop control, and unprotected left turns.



1091 total collisions, **90** KSI

23% of all collisions

16% of KSIs

Roundabout

All-Way Stop Control

Intersection Reconstruction
and Tightening

Raised Median

Refuge Island

Red-Light Running Cameras

Signal

Improve Signal Visibility

Hit Object

Hit object collisions can be related to behaviors such as DUI and traveling too fast – both increase the risk of motorists losing control and hitting roadside objects.



974 total collisions, **175** KSI
21% of all collisions
31% of KSIs

Upgrade Striping
Widen/Pave Shoulder

Lane Narrowing

Delineators, Reflectors, and/or Object
Markers

Rumble Strips

Centerline Hardening

Improved Pavement Friction

Safety Edge

Guardrail

Nighttime Collisions Along Major Roadways

Collisions during the nighttime are a serious concern, as much of the rural roadways in the region are not well-lit, and even facilities with streetlights can see great variability in the efficacy of those streetlights.



854 total collisions, **138** KSI

18% of all collisions

24% of KSIs

Safety Edge

Guardrail

Provide Appropriate Sightlines

Curve advance warning sign

Chevron Signs on Horizontal
Curves

Speed Limit Reduction

High Visibility Crosswalks

Solid Green Bicycle Conflict
Striping

People Hit in Crosswalks at Intersections

A majority of pedestrian collisions in the region occurred with the pedestrian having the right-of-way in the crosswalk. This profile highlights the need for enhanced pedestrian safety at intersections.



130 total collisions, **23** KSI
3% of all collisions
4% of KSIs

Leading Ped Interval

Extend Yellow and All Red Time

Rectangular Rapid Flashing
Beacon (RRFB)

Raised Intersection

Raised Crosswalk

Refuge Island

Intersection & Segment Lighting

Add Sidewalk

Curb Extensions

People Hit Crossing Outside of Crosswalks

The region has many roadways and intersections that lack sidewalks and crosswalks, respectively. Many pedestrian collisions, including a majority of the pedestrian KSI, occurred with people crossing outside of crosswalks or walking along the road, suggesting unmet desire lines.



80 total collisions, **30** KSI

2% of all collisions

4% of KSIs

Extended Time Pushbutton

High-Visibility Crosswalk

Countdown Timer

Hybrid Beacon

Leading Ped Interval

Restripe Crosswalk

Extend Yellow and All Red Time

Yield to Pedestrians Sign

Bicycle Collisions at Intersections

The region has a large number of roadways without adequate bicycle facilities. People biking are vulnerable on roadways, especially when interacting with motorists at intersections.



236 total collisions, **35** KSI
5% of all collisions
6% of KSIs

Bike Box

Bike Detection

Bike Signal Heads

Extend Bike Lane to Intersection

Green Conflict Striping Through intersection

Separate Bike Signal Phasing

Prohibit Right Turn on Red

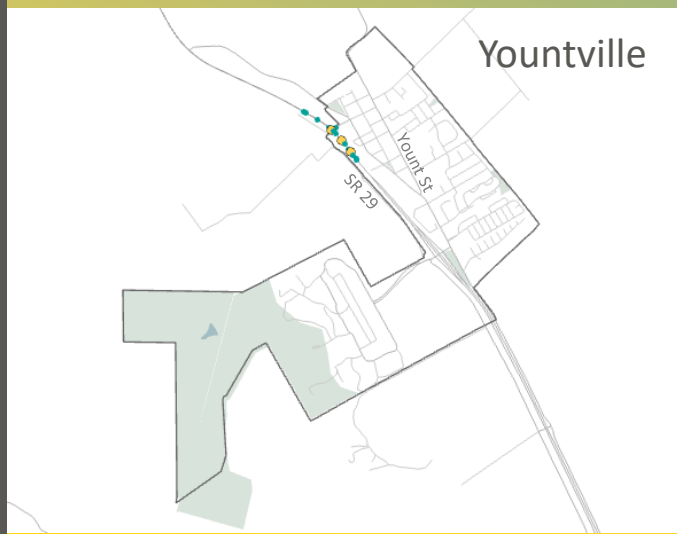
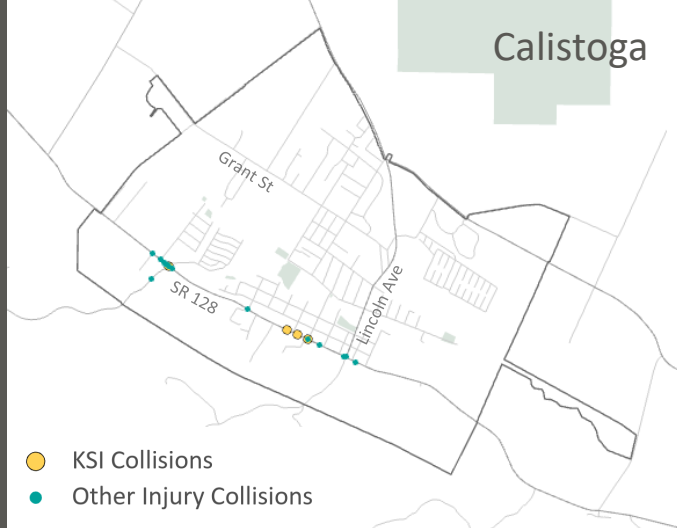
Protected Left-Turn Phasing

Highway Gateways Through Jurisdiction

Yountville and Calistoga both feature at-grade intersections that serve as the primary connector between the highway and the center of the city. Risk at these intersections arise from higher speed through-traffic crossing and mixing with local traffic without transitions to slow speeds.



47 total collisions, **8** KSI
1% of all collisions
1% of KSIs



Highway Gateways Through Jurisdiction

These countermeasures are aimed to reduce speeds as vehicles travel past towns and reduce conflicts between major and minor streets, in addition to general speed management measures.

- | | |
|--|------------------------|
| Roundabout | Raised Median |
| Intersection reconstruction and tightening | Refuge Island |
| Supplemental Signal Heads | Curb Extensions |
| Shorten Cycle | Lane Narrowing |
| Improve Signal Visibility | Rumble Strips |
| Protected Left-Turns | Centerline Hardening |
| Prohibit Right-turn-on-Red | Access Management |
| Prohibit Left Turns | Upgrade Striping |
| | Advance Stop Bar |
| | Advance Yield Markings |

Highways as Main Streets Through Downtown

St. Helena and Calistoga both feature main streets with high activity that also serve as highly-trafficked thoroughfares, and this double role can create safety risks in the interaction between high volumes of higher-speed through traffic and local activity.



99 total collisions, **9** KSI
2% of all collisions
2% of KSIs



Highways as Main Streets Through Downtown

These countermeasures are aimed to reduce speeds as vehicles travel on main streets through downtowns to improve the safety of other road users in dynamic, mixed-use areas. These measures should be implemented with the measures for improved pedestrian safety and general speed reduction measures.

All-Way Stop
Control

Centerline
Hardening

Roundabout

Lane Narrowing

Raised
Crosswalks

Raised
Intersection

Refuge Island

Speed Humps

Straighten
Crosswalk

Access Management

Curbside Management

Install/Upgrade Ped
Crossings at Uncontrolled
Locations

Curb Extensions

Education

For vulnerable groups

For youth and seniors

For bicyclists

On roadway changes such as newly-
implemented countermeasures



Enforcement

Targeted enforcement (at specific locations or times)

High-visibility enforcement

Automated enforcement?



NON-ENGINEERING COUNTERMEASURES & SAFETY
PARTNERSHIPS

Policy Changes

Expand Safe Routes to School

Neighborhood slow zones

Speed limit modification



Partner with Local Businesses & Stakeholders

Safe ride home programs (at bars,
for example)

Partner with local experts and
businesses at hotspots



“Routine Maintenance”

Keep roadways clear of debris

Improve crash data collection,
sharing, and tracking

Pilot demonstration safety projects



Your Thoughts?

What existing programs are working? Not working?

Any new ideas for partnership come to mind, especially in relation to these identified needs?



NEXT STEPS

SURVEY

VISION ZERO

NVTA is creating a regional Vision Zero Plan that builds consensus among agency stakeholders and the community to make meaningful progress towards **ZERO** deaths and fatalities on Napa Valley roadways.



We're working to make Napa Valley's roads safer for everyone.

We would like to hear your perspectives and your experience related to road safety.

Please provide your input by filling out our short survey!



SCAN ME!



SCAN ME!

This Street Story Map allows YOU to provide information on where you have been in a collision or experienced a near-miss collision. You're also able to share information on safety issues in places you travel through.

Your input will help us understand how to address your transportation safety concerns!

Draft Vision Zero Plan

Evaluation & Implementation

Identify strategies and tools for monitoring performance, funding sources, and roles and responsibilities

Vision Zero Plan

One consolidated report that can act as a roadmap for NVTa, City, and Town staff

QUESTIONS?

