



Nevada City SR 49 Multimodal Corridor Plan

Nevada County Transportation Commission

Nevada County Board of Supervisors November 5, 2019 Meeting



Presentation



Project Team



Nevada County Transportation Commission



County of Nevada and Nevada City



Caltrans



Federal Highway Administration



Consultant Support



Schedule for State Route 49 Multimodal Corridor Plan

Task Description	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19
Task 1 Project Meetings and Coordination							
1.1 Project "Kick-off" Meeting		K					
1.2 PAC Meetings (3 Mtngs)		P		P		P	
Task 2 Data Review, Collection, and Analysis							
2.1 Intersection Observation and Corridor Analysis			D				
Task 3 Develop and Review Improvement Alternatives				D			
3.1 Utilizing Data from Task 2.1, Potential							
Task 4 Draft Report					D		
4.1 Develop Corridor Improvement Plan				D			
4.2 Public Participation				W		W	
4.3 Administrative Draft Report					D		
Task 5 Final Report/Project Implementation							D
5.1 Integrate PAC and Public Comments into Draft							
5.2 Prepare and Present Final Report							D

- Work in Process
- Kickoff Meeting
- Deliverable
- PAC Meeting
- Workshop
- Coordination

Project approach



Approach for SR 49 Multimodal Corridor Plan



Project Goals

- Plan a safer environment for walking, biking and driving
- Create solutions together
- Identify a prioritized list of multimodal improvements
- Develop implementable multimodal infrastructure plan

Project Scope

- Seek community and stakeholder input on mobility issues in the corridor
- Work together to develop solutions that connect the community
- Identify transportation deficiencies – and improvements that address them
- Develop technical information to support competitive grant applications (Get Projects Funded)



Approach for SR 49 Multimodal Corridor Plan



• Focus Issues

- Auto-centric environment
- High Travel Speeds
- Lack of Pedestrian/Bike Connectivity
 - Natural Environment
 - Mobility

• Preferred Improvements and Lower-Cost Solutions

- Pedestrian Crossing Treatments
- Intersection Channelization Treatments
- Intersection Control (Roundabout Control)
- Multipurpose Paths – East-West Connectivity



Study Corridor

Three Study Segments

1. SR 20/SR 49/Uren Street
2. Coyote Street/ SR 49 (adjacent to Forest Service driveway)
3. North Bloomfield Road/East Broad Street/SR 49

Study Intersections

1. SR 20/SR 49/Uren Street
2. Coyote Street/ SR 49 (adjacent to Forest Service driveway)
3. North Bloomfield Road/East Broad Street/SR 49
4. Maidu Avenue/Orchard Street/SR 49
5. Cement Hill Road/West Broad Street/SR 49
6. Elks Lodge driveway/SR 49
7. Nevada County Juvenile Hall driveway/SR 49



Nevada City SR 49 Multimodal Corridor Plan - Segment 1





- Nevada City Limits
- Multimodal Facility
- Bike Trail
- Pedestrian Trail
- Multi-Use Path
- Amenities**
- Bench
- Government
- Library
- Transit
- Point of Interest
- School
- Water Body



Nevada City SR 49 Multimodal Corridor Plan - Segment 2





Nevada City SR 99 Multimodal Corridor Plan - Segment 3



Community Involvement



Community Involvement

- **Project Development Team**

- NCTC
- City and County
- Caltrans
- FHWA
- Public Representative

- **Community Workshops**

- Workshop #1 May 28th 2019
 - Introduce the Study
 - How to stay engaged during the study
 - Input on issues/concerns/needs
- Workshop #2 July 23rd 2019
 - Sought feedback on recommended improvements



Join us by attending the initial community open house for the Highway 49 Multimodal Corridor Plan. The Plan is needed to provide recommendations for the improvement of roadway and traffic conditions in order to make it safer and easier for pedestrians, cyclists and drivers to cross and travel along Highway 49. This will likely require a focus on intersections and innovative ways to reduce motor vehicle speeds prior to and throughout the corridor.

The Open House will have maps of the roadways and trails within the study limits, and photos or illustrations of some (not all) of possible improvement concepts and strategies for the corridor.

**Tuesday,
May 28th**

5:00 - 7:00 p.m.

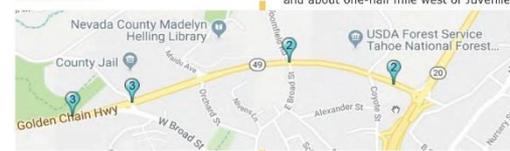
Empire Room
Eric Rood Administrative Center
950 Maidu Ave., Nevada City, CA

Workshop Agenda

5:15: Brief presentation about study, purpose and workshop format; why are you here?

Study Limits: Highway 49 between Highway 20 and about one-half mile west of Juvenile Hall

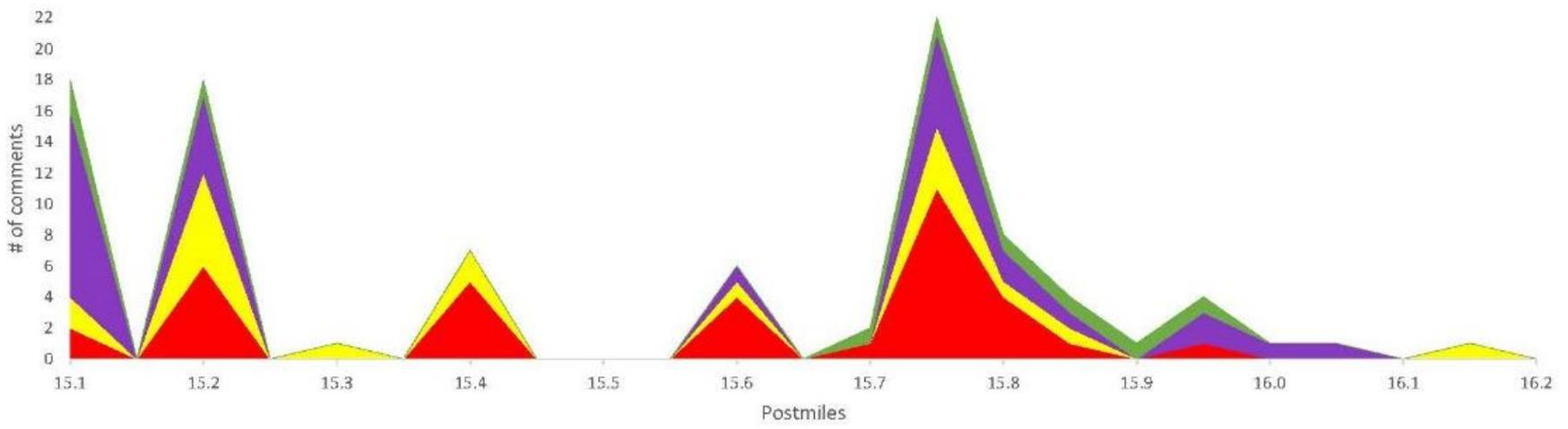
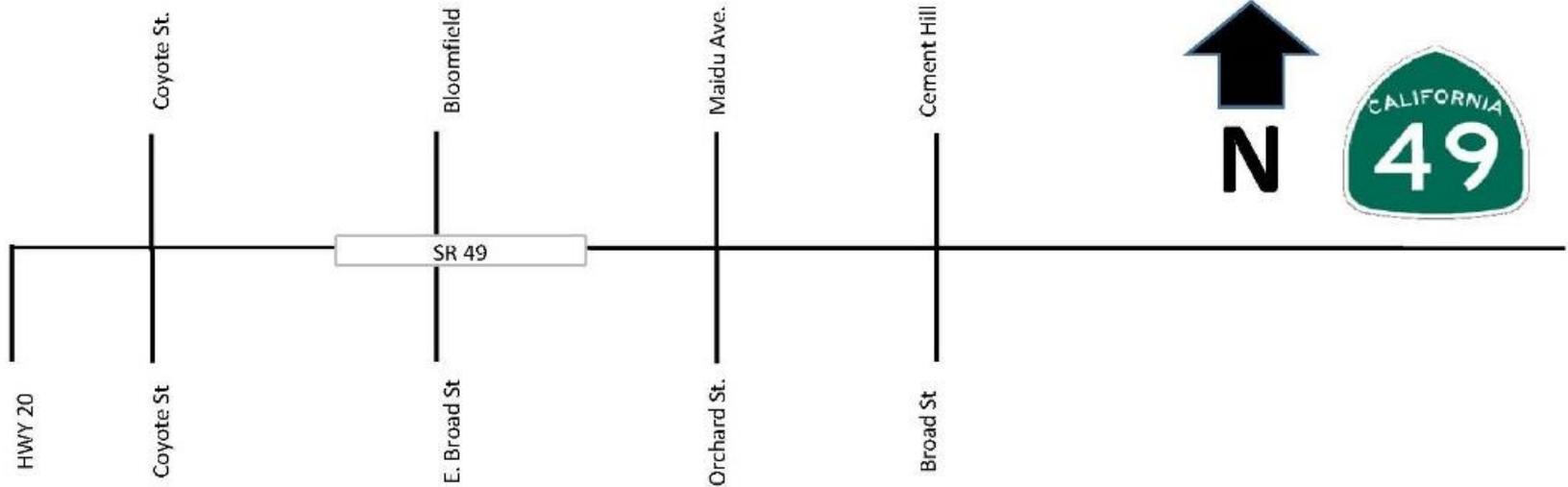
Plan Area:



www.nctc.ca.gov

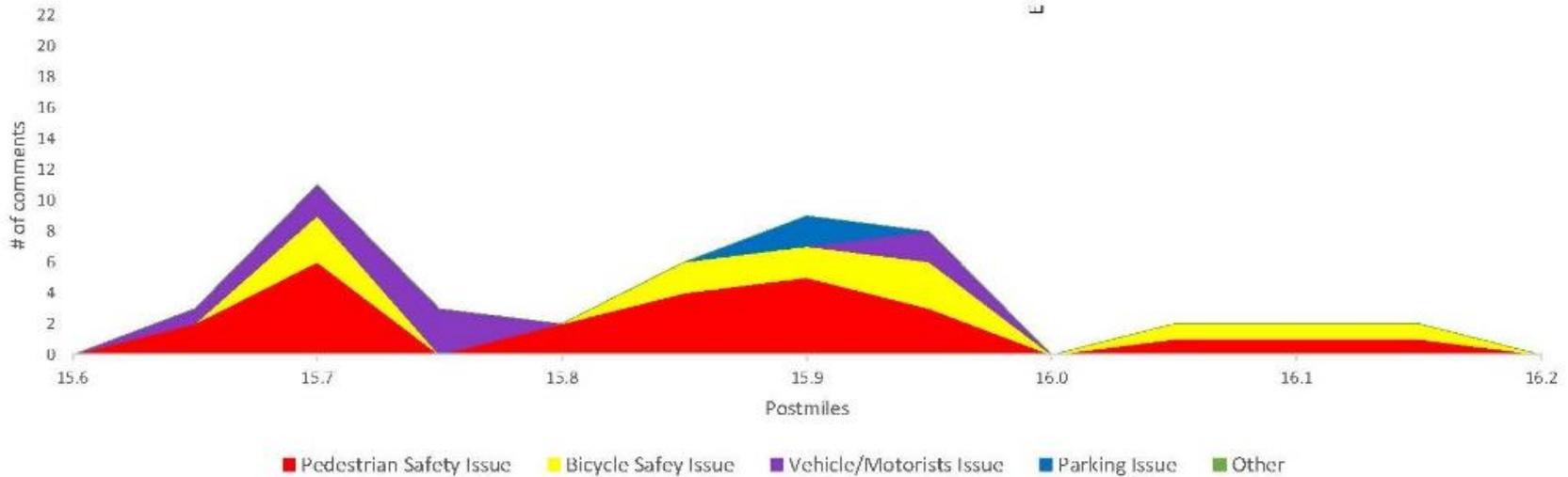
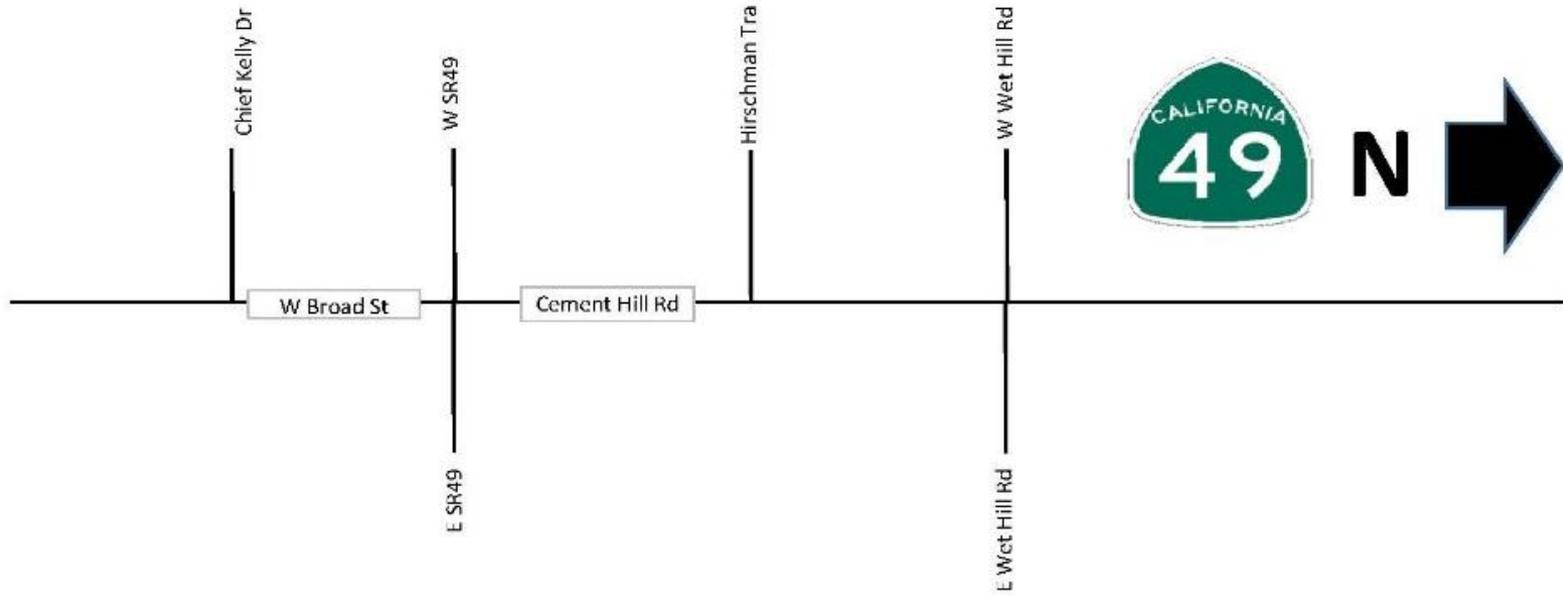


Public Input from May 28th Workshop



■ Pedestrian Safety Issue
 ■ Bicycle Safety Issue
 ■ Vehicle/Motorists Issue
 ■ Parking Issue
 ■ Other

Public Input from May 28th Workshop



Technical Analysis



FHWA Road Safety Assessment Program

Focused on Pedestrians & Cyclists

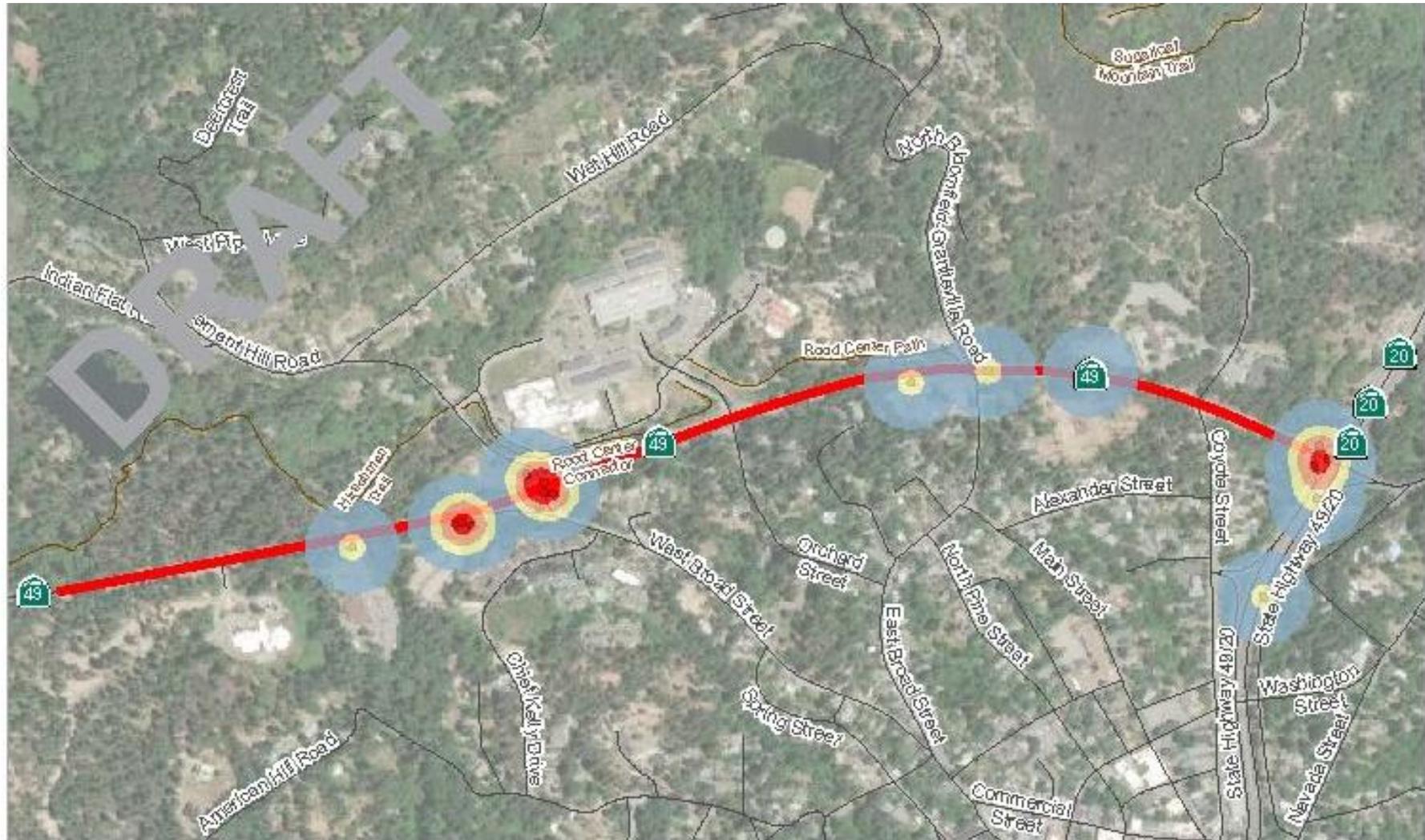
Traveler Safety Audits

- Formal safety performance examination by an independent, multi-disciplinary team.
 - What road elements present a safety concern?
 - What are the opportunities to eliminate/mitigate the safety concern?
- Very low cost countermeasure.
- Can achieve up to 60 percent crash reduction.
- Implemented through an RSA Policy.



Collision Analysis (Key Hot Spots)

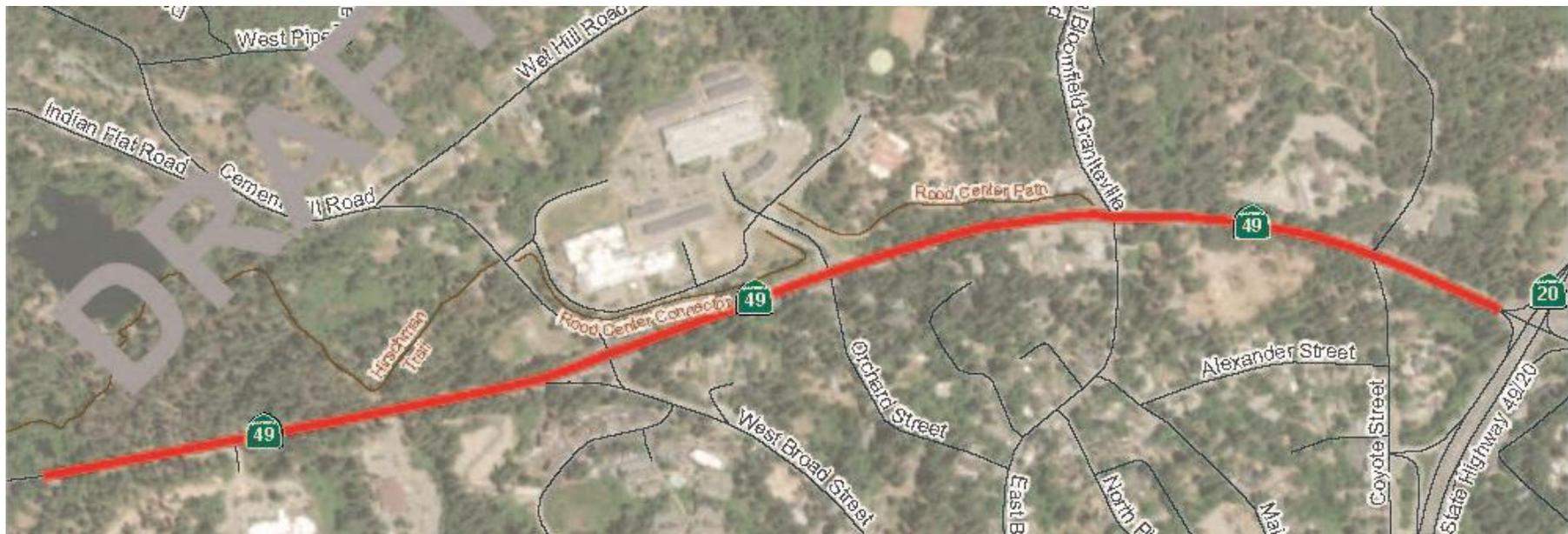
1. SR 20/SR 49/Uren Street
2. Cement Hill-West Broad Street



Intersection Operations (Key Deficiencies)

1. SR 20/SR 49/Uren Street
2. Coyote Street/ SR 49 (adjacent to Forest Service driveway)
3. Orchard Street Road/Maidu Avenue

Bicycle: Level of Traffic Stress

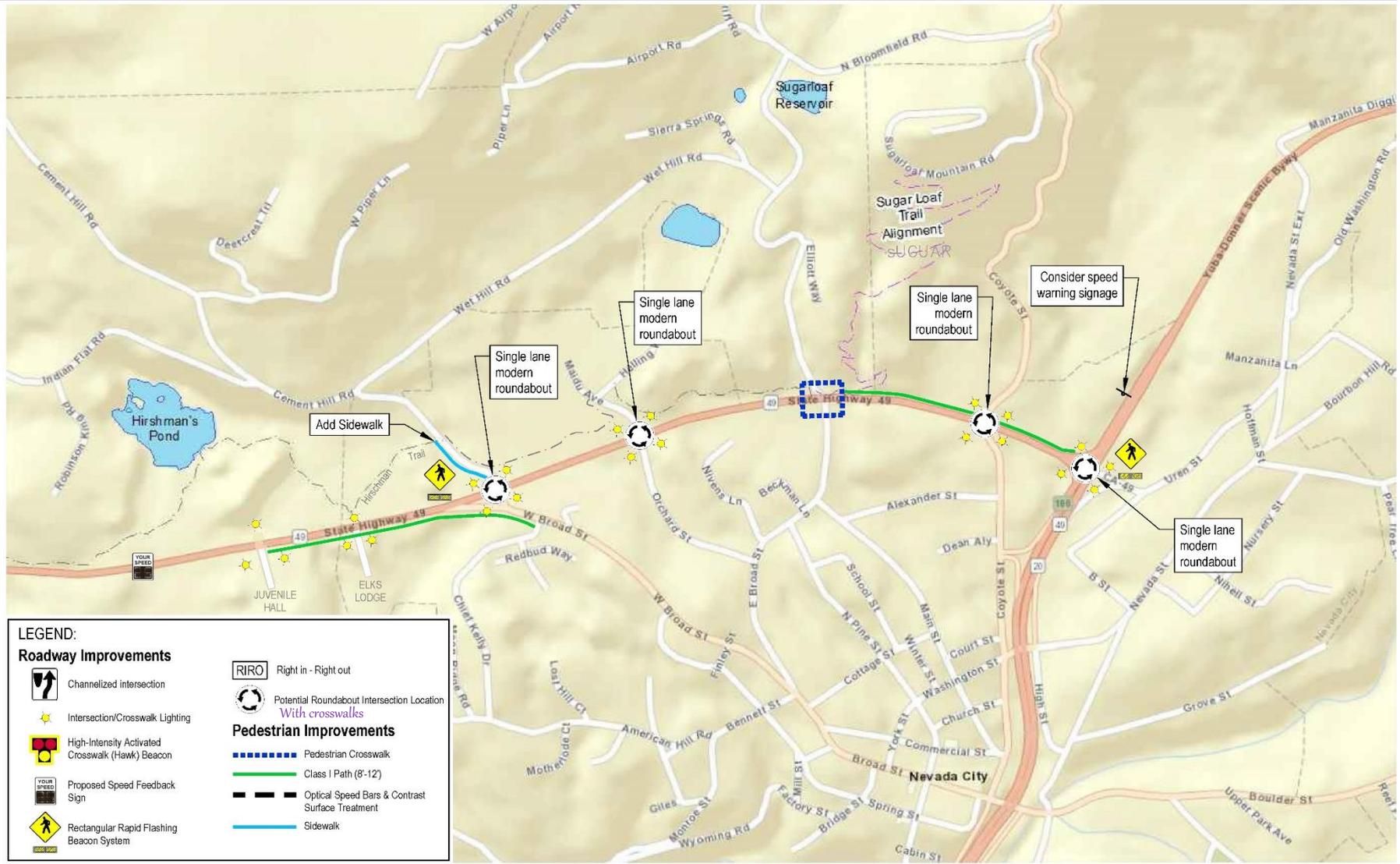


Improvement Concepts

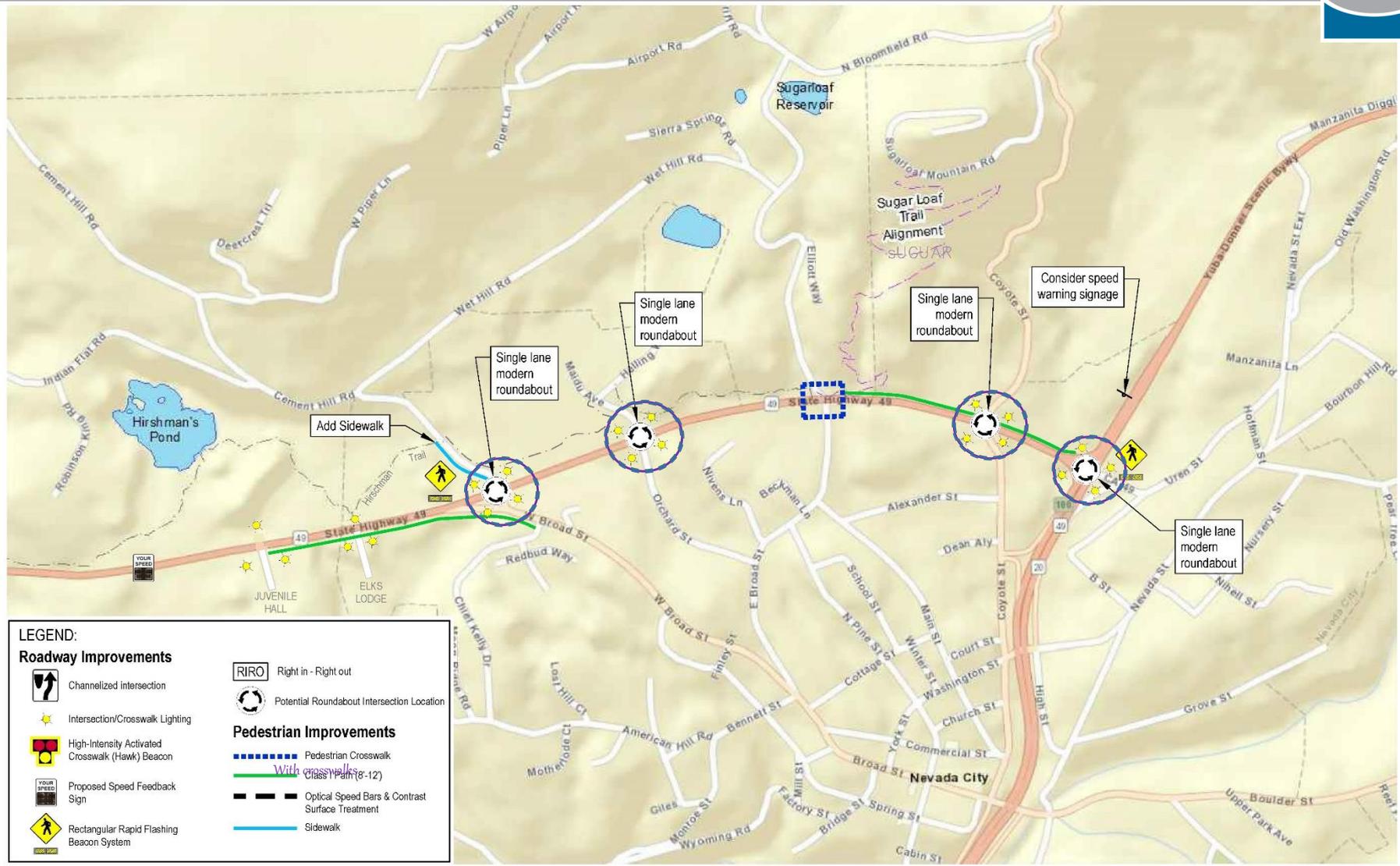
Preferred Improvements

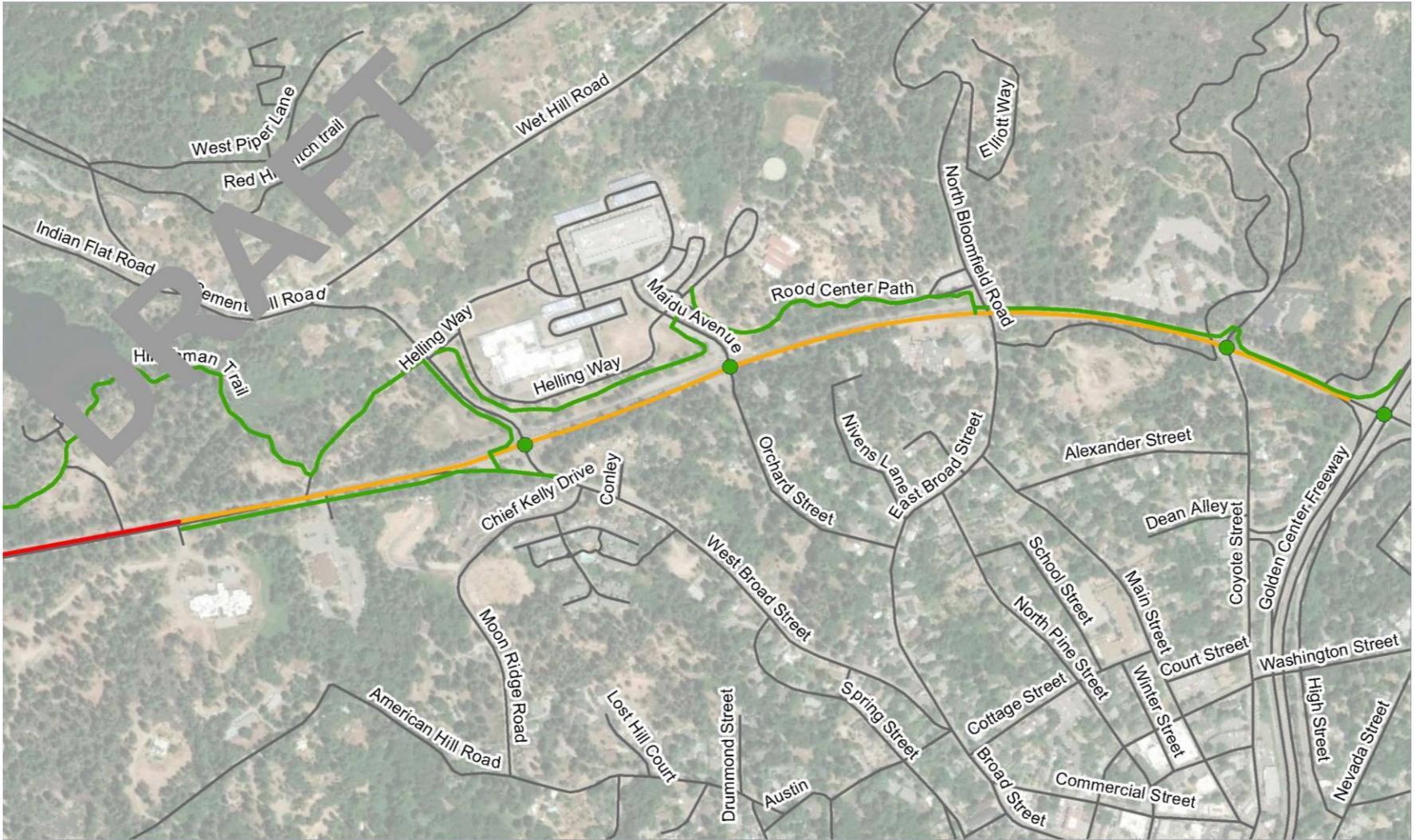


Recommended (Preferred) Ultimate Improvement Concepts



Recommended Low Cost (Interim) Improvement Concepts





Legend

- LTS 1
- LTS 3
- LTS 4
- LTS 1
- County Road Network

Paper Size ANSI A

0 0.03 0.06 0.09 0.12

Miles

Map Projection: Lambert Conformal Conic
Horizontal Datum: NAD 1983 2011
Grid: NAD 1983 2011 StatePlane California II FIPS 0402 Ft US



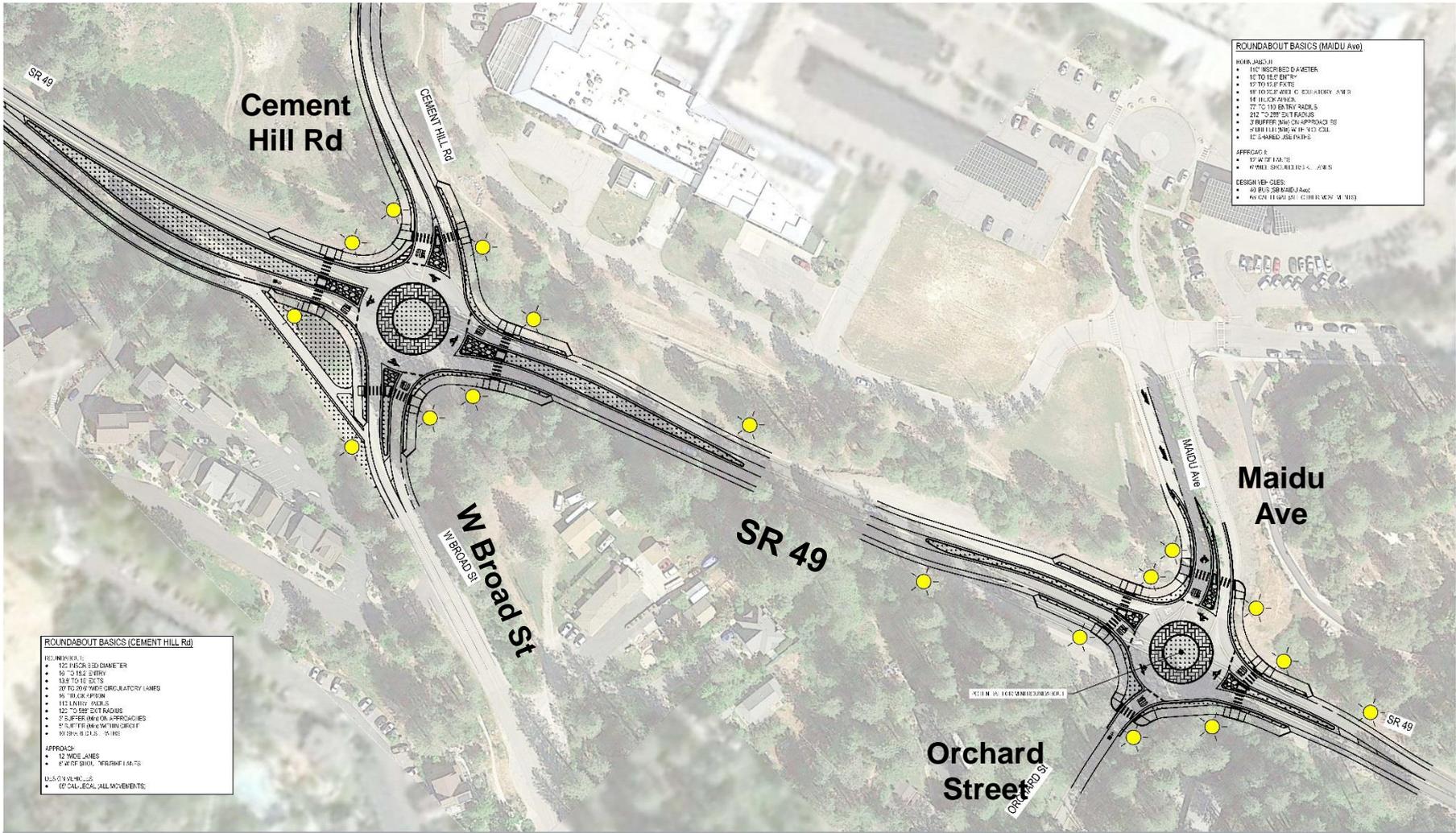
Nevada County Transportatio Comm
SR 49 Multimodal Corridor Study

**Improved
Level of Traffic
Stress**

Project No. 11194668
Revision No. -
Date 09/04/2019

FIGURE XX

Roundabout Alternatives (Concepts) for SR 49 / Maidu & Cement Hill Rd



<p>LEGEND</p> <ul style="list-style-type: none"> 6' BUFFER AREA TO EXISTING AVENUE ROUNDABOUT UTILITY 10' BUFFER AREA TO EXISTING AVENUE 10' BUFFER AREA TO EXISTING AVENUE 10' BUFFER AREA TO EXISTING AVENUE 	<p> 10' BUFFER AREA TO EXISTING AVENUE</p> <p> 10' BUFFER AREA TO EXISTING AVENUE</p> <p> 10' BUFFER AREA TO EXISTING AVENUE</p>	<p> 10' BUFFER AREA TO EXISTING AVENUE</p> <p> 10' BUFFER AREA TO EXISTING AVENUE</p> <p> 10' BUFFER AREA TO EXISTING AVENUE</p>	<p> 10' BUFFER AREA TO EXISTING AVENUE</p> <p> 10' BUFFER AREA TO EXISTING AVENUE</p> <p> 10' BUFFER AREA TO EXISTING AVENUE</p>	<p> 10' BUFFER AREA TO EXISTING AVENUE</p> <p> 10' BUFFER AREA TO EXISTING AVENUE</p> <p> 10' BUFFER AREA TO EXISTING AVENUE</p>	<p> 10' BUFFER AREA TO EXISTING AVENUE</p> <p> 10' BUFFER AREA TO EXISTING AVENUE</p> <p> 10' BUFFER AREA TO EXISTING AVENUE</p>
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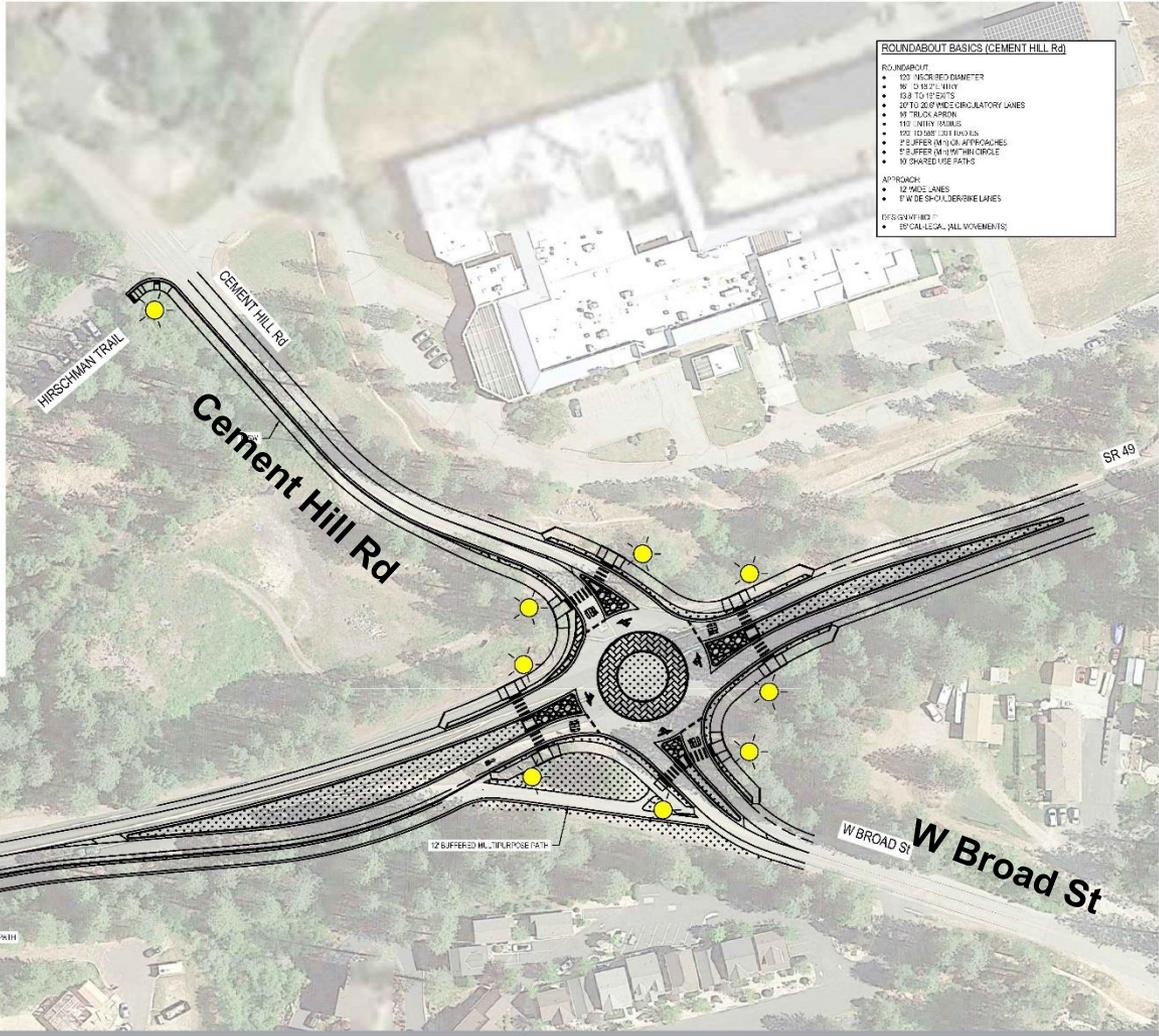
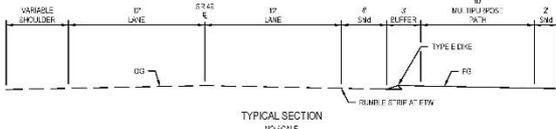
NEVADA COUNTY TRANSPORTATION COMMISSION
STATE ROUTE 49 MULTIMODAL CORRIDOR STUDY
ULTIMATE IMPROVEMENT CONCEPT

**SR 49 / MAIDU Ave / ORCHARD St
AND
SR 49 / CEMENT HILL Rd / W BROAD St**

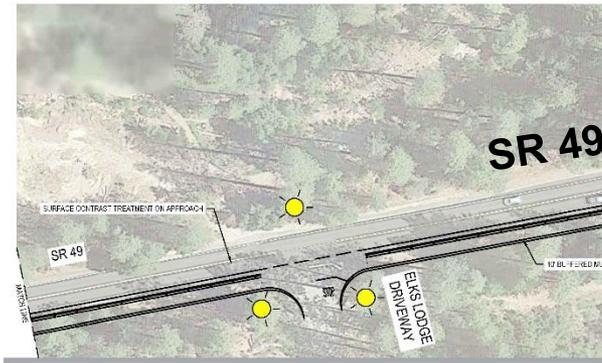
Project No. 11194668
Comp. No. 2646
Date AUGUST 2019

Source: gisdata\GIS\Roads\Proposed\SR119\SR49\Map\Proposed\SR49\Map\SR49_2019_08_19.dwg

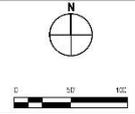
Roundabout Alternative (Concept) for SR 49 / Cement Hill / W Broad Street



- ROUNDABOUT BASICS (CEMENT HILL Rd)**
- ROUNDABOUT
 - 100' INSIDE RADIUS
 - 12' TO 15' SLOPE
 - 13.8 TO 15' EXITS
 - 20 TO 25' WIDE CIRCULATORY LANES
 - 10' TRUCK APRON
 - 10' DRIVE SHOULDER
 - 10' TO 15' SLOPE
 - 15' BUFFER ON APPROACHES
 - 15' BUFFER ON MULTIPURPOSE
 - 10' SHARED USE PATHS
- APPROACH:**
- 12' WIDE LANES
 - 15' WIDE SHOULDER/LANES
- DESIGN NOTES:**
- 15' CAL-LEGAL, ALL MOVEMENTS



LEGEND



NEVADA COUNTY TRANSPORTATION COMMISSION
 STATE ROUTE 49 MULTIMODAL CORRIDOR STUDY
 ULTIMATE IMPROVEMENT CONCEPT
 SR 49 / CEMENT HILL Rd / W BROAD St
 AND ELKS LODGE / JUVENILE HALL
 DRIVEWAYS

Project No. 11194668
 Comp. No. 2646
 Date AUGUST 2019

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 Plot Date: 08-Aug-2019 07:51:50 PM

**Contact: Dan Landon,
Nevada County Transportation Commission
(530) 265-3202 / Fax: (530) 265-3260
<http://www.nctc.ca.gov>**



Keys to Our Approach for SR 49

Multimodal Corridor Plan

Improvement Type Tool Box

- Lane Width Reduction (Reduce from 12 ft to 11 ft)
- Rumble Strips (inside median only)
- Class I Multipurpose Path (paved)
- Sharrows
- DG Multipurpose Path
- Sidewalk (paved)
- Rectangular Rapid Flashing Beacon (pedestrian activated only)
- Pedestrian Hybrid Beacon (pedestrian activated only)
- Pedestrian Bridge Crossing
- Electronic Speed Warning Signs & Speed Advisory Signs
- Formalized Parking Spaces, Diagonal, Parallel, Other
- Intersection Channelization Treatments
- Intersection Control Type (Roundabouts)

Recommended Low Cost Improvement Concepts for SR 49 Corridor

