



# **“ROAD DIETS”**

**“Fat Roads” Go on a Diet**

**Marchon Miller  
Project Manager**

# Symptoms of a “sick” Road Patient

- 4-lane undivided roadway
- ADT between 12,000-18,000 (upper limits of 20-25,000 can be used, but trickier)
- No median
- No center turn lane
- No bike facilities
- Numerous driveways
- “main street” vitality non-existent



# **“Fat Road” PATIENT**

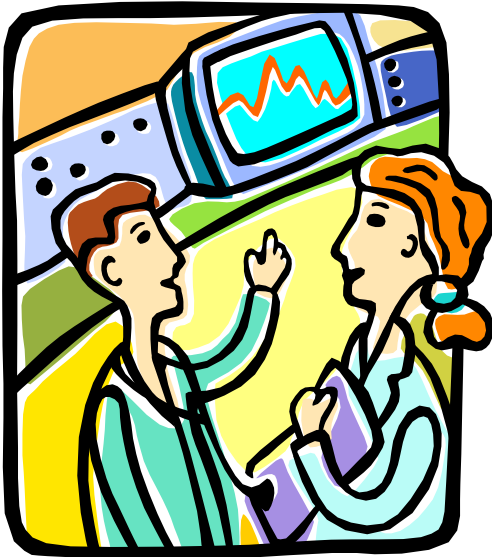
**(Victorian Ave, Sparks, NV)**



# Patient Vitals

- 4-lanes, no left turn lanes except at signalized intersections
- Moderate volumes (5,000-15,000 ADT)
- Posted Speed 25-35 mph
- Bus Service
- Commercial Area (numerous driveways)
- No bike facilities
- Sidewalks in most areas
- Parking in many areas
- Cries out to be a “main complete street”

# Doctor's Advice:



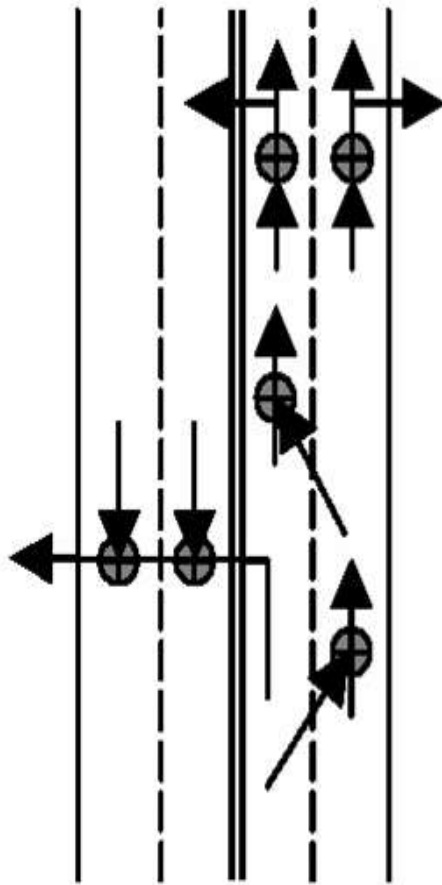
- Skinny your lanes (from 4 to 3 (TWLTL))
  - Safety Benefit:
    - Reduced vehicle speeds
    - Reduced conflict points
    - Reduced collisions
    - Reduced pedestrians conflicts
- Add bike lanes
  - Create space for bicycles
- Add Landscaping and Esthetics  
(if doctor bill not too high!)

# Patient thinks over his options.....

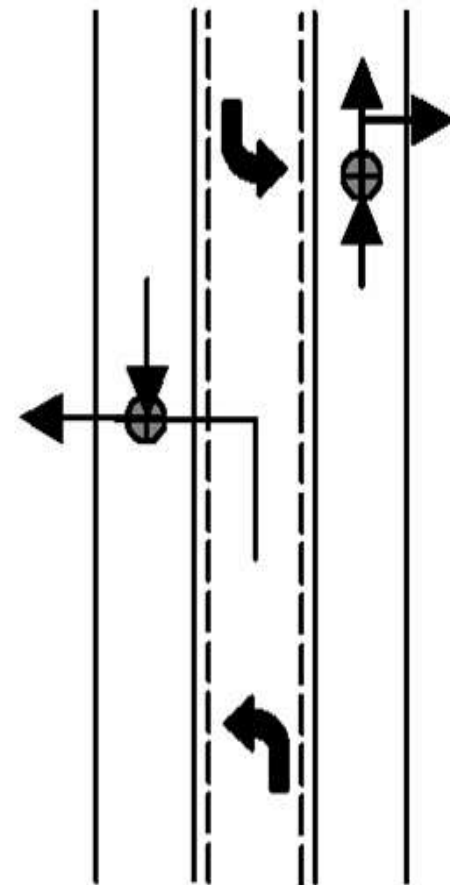
6 conflict points

Vs.

2 conflict points



⊕  
Conflict  
Point



Four-Lane Undivided

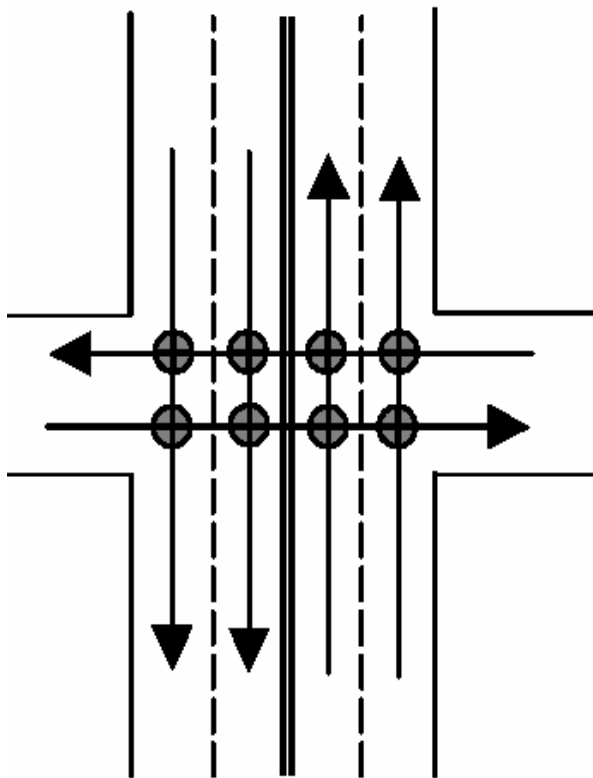
Three-Lane

# What about at the Intersections?

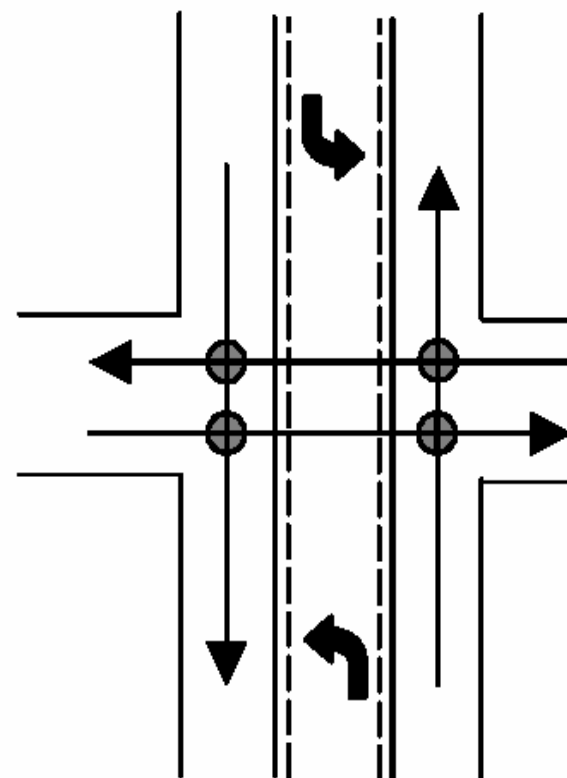
8 conflict points

Vs.

4 conflict points



⊕  
Conflict  
Point



Four-Lane Undivided

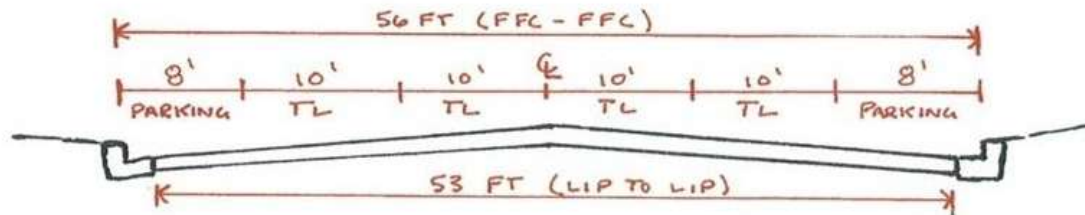
Three-Lane

# What about Peds and Bikes???

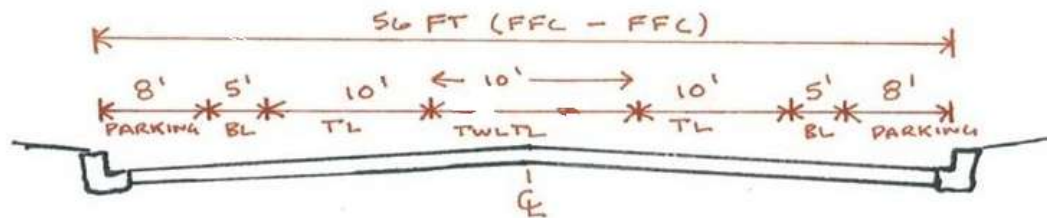
- Existing 4-lane undivided roadway has no refuge for peds
- New 3-lane roadway will:
  - add bike lanes and a TWLTL creating ped refuge and better sight distance
- Existing 4-lane undivided roadway has no bicycle facility
- New 3-lane roadway can:
  - add bike lanes

# Doctor Writes His Prescription.....

VICTORIAN AVE. (EL RANCHO TO ROCK BLVD.)



EXISTING ROADWAY SECTION



PROPOSED ROAD DIET SECTION

TL = TRAVEL LANE  
BL = BIKE LANE

# The Operation is performed!



# Leaner, more productive patient!



# Did a Healthy Diet work?



- 3-Lane section:
  - **Slowest car sets the speed**
  - Conflict points are minimized
- New Bike Lanes:
  - Creates bike facility
- TWLTL:
  - Left turns taken out of mainstream of traffic
- Pedestrians:
  - Bigger buffer between moving traffic and peds
  - Creates refuge areas

# Is the Doctor's Advice Always Taken?



# A year and a half later.....possibly

January 27, 2010

## Kings Beach highway project back before Tahoe regulators

BY JEFF DELONG  
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The future of Lake Tahoe's Kings Beach will be considered again by land-use regulators and again, the community is divided over major changes being proposed.

More than a year and half after the Tahoe Regional Planning Agency rejected plans to narrow California 28 where it runs through the center of the north Tahoe town, channeling traffic through roundabout intersections, agency governors will reconsider their decision today.

The \$48 million-plus plan, already approved by the Placer County Board of Supervisors, would narrow a mile-long stretch of highway from its existing four lanes to one lane in each direction

### Kings Beach's future

**WHAT:** Tahoe Regional Planning Agency

**WHEN:** 12:30 p.m. today

**WHERE:** The Chateau, 955 Fairway Blvd., Incline Village

and a center turn lane, with two single-lane roundabout intersections.

The idea, supporters say, is to make Kings Beach's commercial core more pedestrian and bicycle friendly and to help energize a tourism-dependent economy.

"The No. 1 reason is it's consistent with the community's vision," TRPA spokesman Dennis Oliver said. "We are looking to create a more walkable and pedestrian-oriented downtown setting."

The project also is in line with TRPA's long-term vision for redevelopment all around the lake, Oliver said.

"It's pretty important. We are obviously headed for trying to adopt a pedestrian-oriented approach to redevelopment, and this would be a good test of that," Oliver said.

Critics counter that while the town is in need of an upgrade, this particular proposal would create highway gridlock for "the sake of a very abstract vision" pursued by TRPA and other agencies.

If approved, "this is going to be a mess," said Dave McClure of the Kings Beach Business and Citizens Alliance. "This is going to cause much more congestion than what Placer County has led everyone to believe."



# A Big "yes" vote!

LOCAL & F

SATURDAY, JANUARY 30, 2010

RENO GAZETTE-JOUR

## Controversial Kings Beach traffic plan gets board OK

### Construction to change highway could begin in '11

BY JEFF DELONG  
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Rebirth of the downtown strip of Lake Tahoe's Kings Beach could begin as early as next year following the plan's approval by land-use regulators.

Governors of the Tahoe Regional Planning Agency unanimously endorsed a project designed to change a mile-long highway thoroughfare into a pedestrian and bicycle-friendly village.

Critics of Wednesday's decision insist it will result in highway gridlock and the dangerous diversion of traffic into residential areas. Supporters heralded it as a needed change to make busy California 28 safer, improve the town's appearance and serve as a potential example of other redevelopment efforts around the Tahoe Basin.

"For Kings Beach, which hasn't had a lot of investment for a long time, this is going to be very significant," said Ken Grehm, Placer County's director of public works. "It's going to improve and revitalize that community."

The \$48 million project would narrow four lanes of highway to a single lane in each direction with a center turn lane, with two single-

lane roundabout intersections serving as the project's centerpiece.

The county still has to raise about \$16 million to fully fund the project, Grehm said.

Construction of the project, expected to take three years, should begin in 2011 with the building of off-highway parking and "traffic calming" devices on nearby residential streets, Grehm said.

Dave McClure of the Kings Beach Business and Citizens Alliance, a central project critic, said the project will result in "immediate traffic congestion" and divert cars into residential areas.

"The day of reckoning is still out there in the future," McClure said. "It's going to be much worse than what the county is telling everybody."

Controversy about the plan might not be over. McClure pointed to a Jan. 11 letter from the Federal Highway Administration in which officials said they will investigate claims that the civil rights of Hispanic residents in the area might be violated by traffic being diverted into their neighborhoods.

The investigation was requested by the California League of United Latin

On RGJ.com

Log on to read more related issues and share your opinion about the construction.

American Citizens.

McClure criticized a decision by TRPA he contended was locked in place long before last week's lengthy hearing.

"It was decided well ahead of time," McClure said, adding that more critics didn't speak out because they considered doing so "pointless."

But Allen Biaggi, chairman of TRPA's governing board, described the approval as a "bellwether day for Kings Beach" that could have important implications elsewhere.

"I think it's a statement of the board," Biaggi said. "This sets the stage for more pedestrian, bicycle-oriented communities less focused on the automobile."

Dana Ash, a longtime Kings Beach resident who supported the project on behalf of local mothers, called the project "crucial for our town."

She said it will improve a dangerous situation for pedestrians along the busy highway.

"It's a life-threatening experience. I can't walk there with my children," Ash said. "Now, we will be able to do that without fearing for our lives."



# More patients.....



## Mayberry Drive, Reno, NV

- Moderate Access Arterial
  - Volumes don't warrant 4-lanes
    - 2008: 2,300 ADT
    - 2018: 9,000 ADT
- Good Access Management
  - Left turn access needed
- No Bike Facilities
  - Grade school on street

## East end of Mayberry



# Mayberry Drive today



# Mayberry Drive today



# Mayberry Drive today



# El Rancho Blvd, Reno, NV Before diet.....



## El Rancho Drive....after diet



# Wells Ave, Reno, NV Before Diet....



## Wells Ave...after diet.



## Wells Ave...after diet.



# Wells Ave...after diet.



# Wells Ave...after diet.



# Wells Ave...after diet.



# Project Vital Comparisons (Wells Ave)

- Crashes:
  - Pre-project 2001-2002 = 123
  - Post-project 2004-2005 = 85  
**(31% reduction)**
- Speeds (posted 30 mph):
  - Pre-project 2002 85<sup>th</sup> percentile = 39.0 mph
  - Post-project 2007 85<sup>th</sup> percentile = 30.8 mph  
**(24% reduction)**

# **Project Additions (Wells Ave.)**

- Additions to project:
  - bike lanes
  - ped median refuge areas
  - bulbouts for peds for site distance
  - landscaping
  - roundabout
  - new lighting

# Complete Streets

“Road Diets” are a tool to create a “Complete Street”

Complete Streets are designed and operated for:

- bicycles
- public transportation vehicles and riders
- pedestrians of all ages and abilities
- as well as motorists

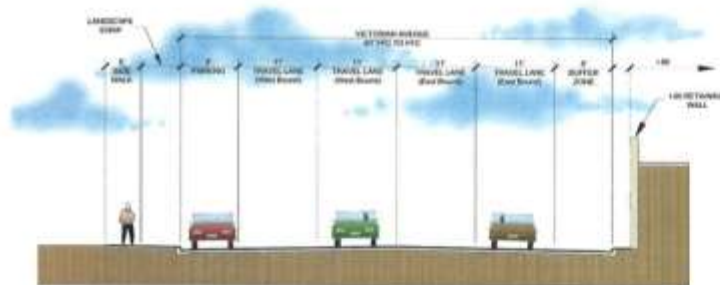
Complete Streets are:

- safer
- more livable
- welcoming to everyone

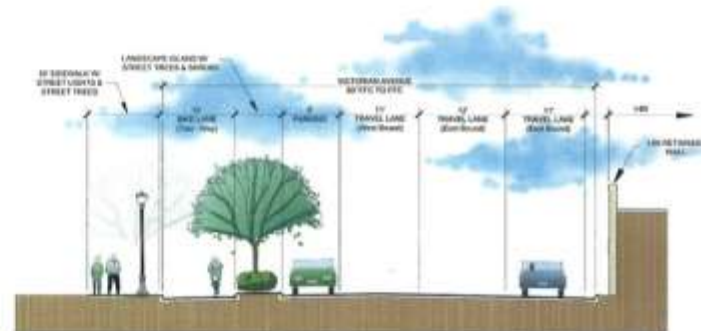
# Complete Streets

## Checklist:

- ✓ sidewalks
- ✓ bike lanes
- ✓ special bus lanes
- ✓ comfortable and accessible transit stops
- ✓ frequent crossing opportunities
- ✓ median islands
- ✓ accessible pedestrian signals
- ✓ curb extensions
- ✓ narrower lanes
- ✓ tight curb radii
- ✓ and more

Scale:  $1'' = 20'$ 

Scale:  $1'' = 5'$ .



Scaler 1<sup>st</sup> = 5<sup>th</sup>

# “Greenway Link”



# Operation in Progress





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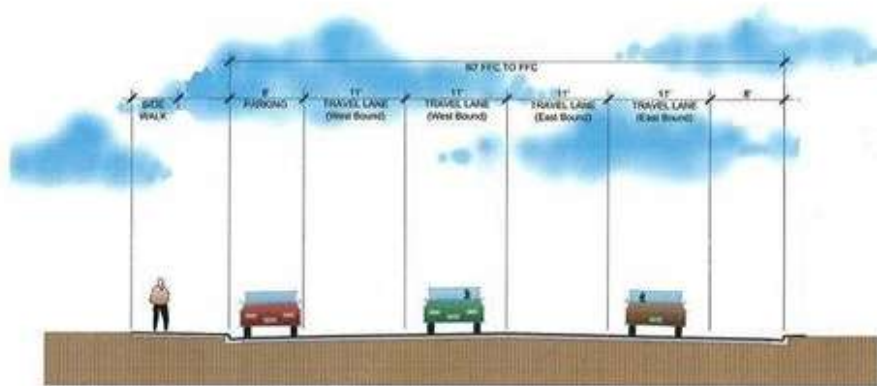


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# Future “diets”?

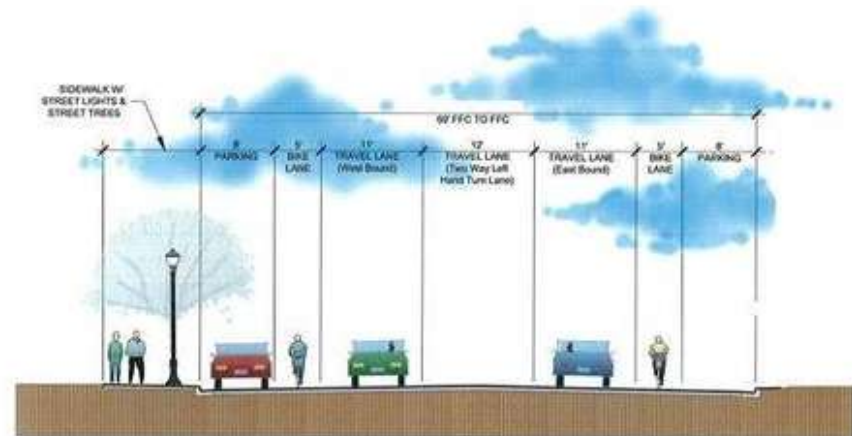


# California Ave, Reno, NV (Mayberry Drive to Virginia St.)



*CROSS SECTION A (Existing)*

Scale: 1" = 5'



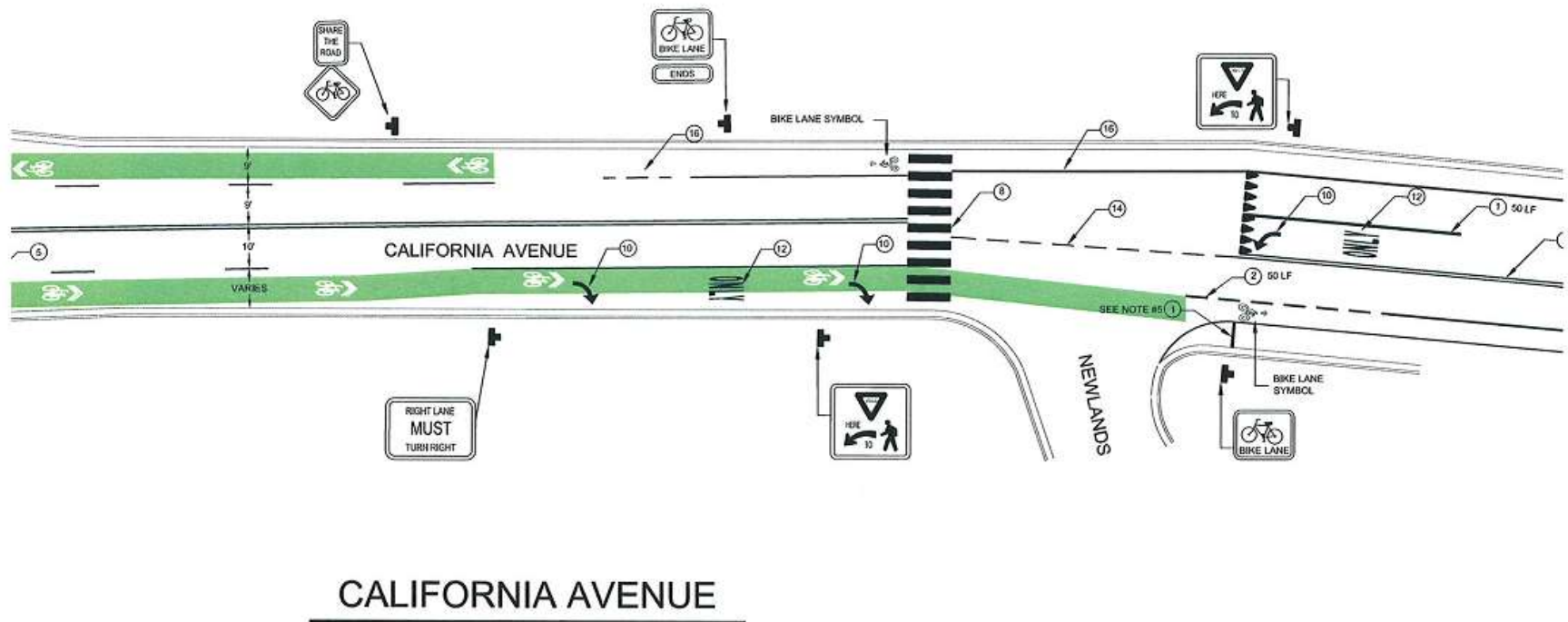
*CROSS SECTION A CONCEPT (Proposed)*

Scale: 1" = 5'

*California Ave*

CONCEPTUAL PLAN

# California Ave, Reno, NV (Mayberry Drive to Virginia St.)



Could be areas first shared use lane with colored bike lane.

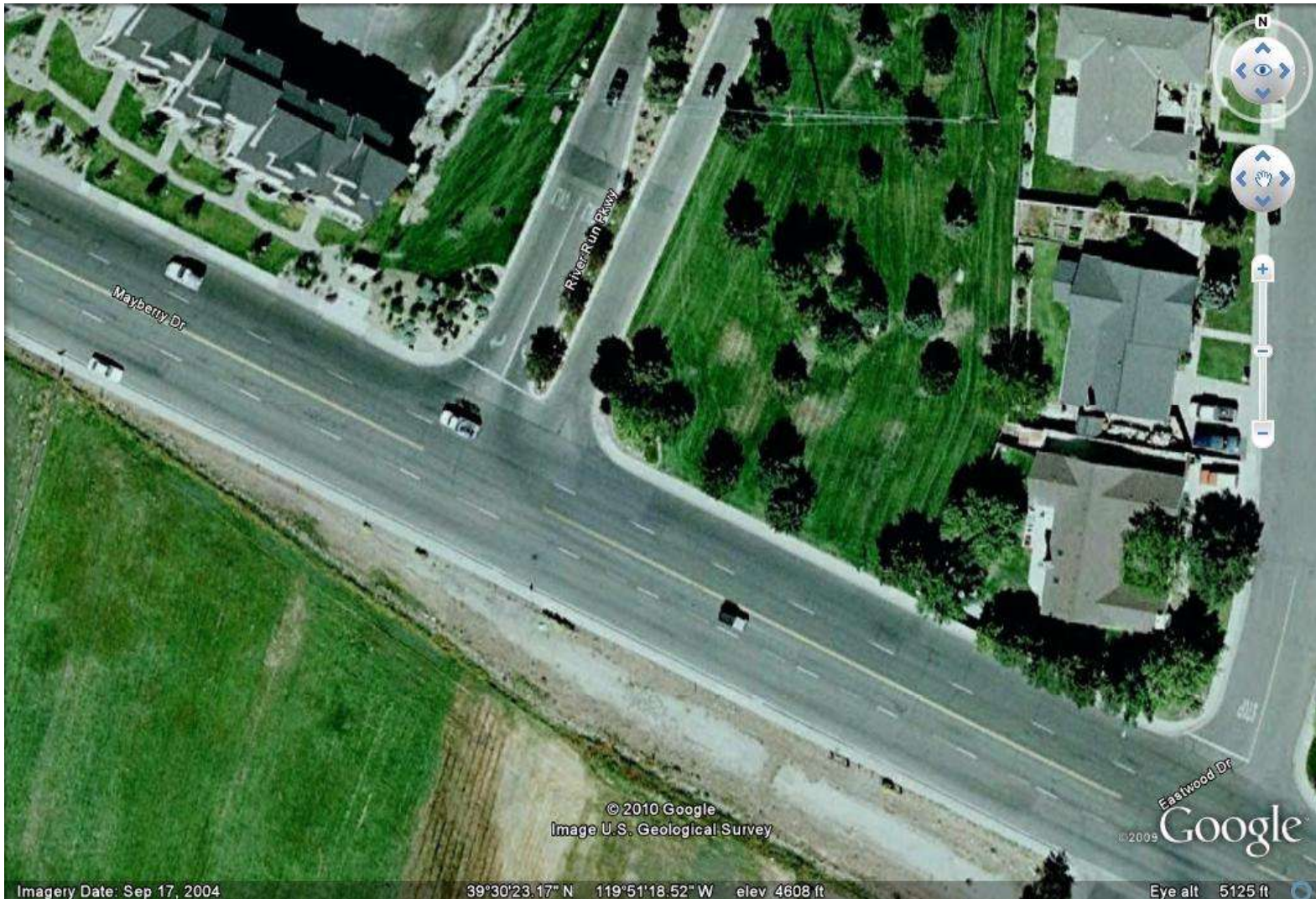
# Arlington Ave., Reno, NV (Skyline Blvd to First St.)



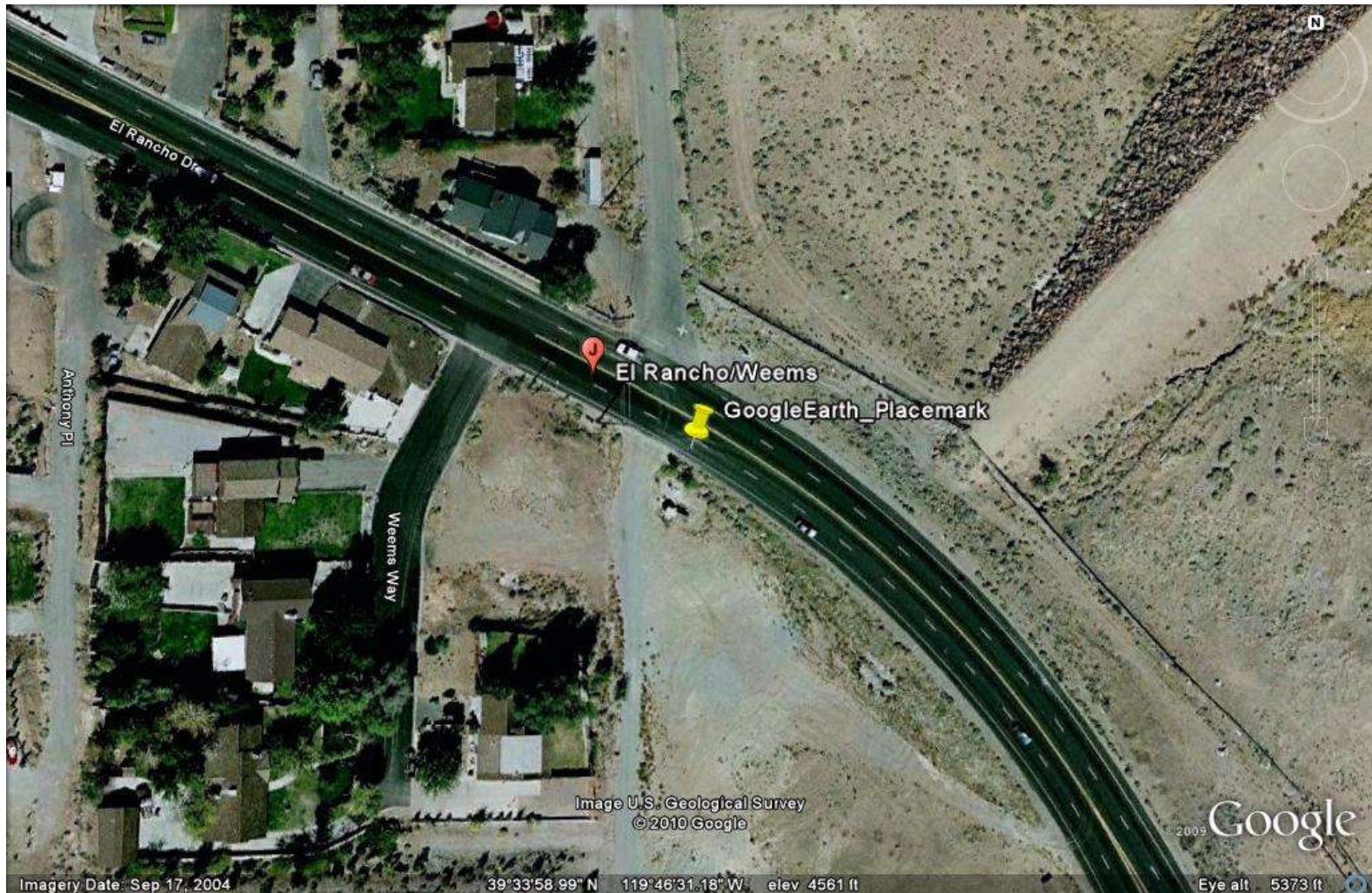
© 2010 Google W Arroyo St  
Image U.S. Geological Survey

39°30'43.72" N 119°48'02.26" W elev 4546 ft

# Mayberry Drive (McCarran Blvd. to California St.)



# El Rancho Dr., Sparks, NV (Wedekind Road to Sun Valley Dr.)



**Thank you....**

