

# MISSOURI FLAT MASTER CIRCULATION & FINANCING PLAN (MC&FP) PHASE II: BOARD OF SUPERVISORS STUDY SESSION

PRESENTED BY EL DORADO COUNTY LONG RANGE PLANNING

2/6/18

## Study Session Overview

Review Agenda

Presentation: Overview of MC&FP and Alternatives

Outreach Summary

Next Steps

## Project Background

The MC&FP was divided into two phases after the November 1998 passage of Measure Y. The County approved the initial phase (Phase I) in December 1998.

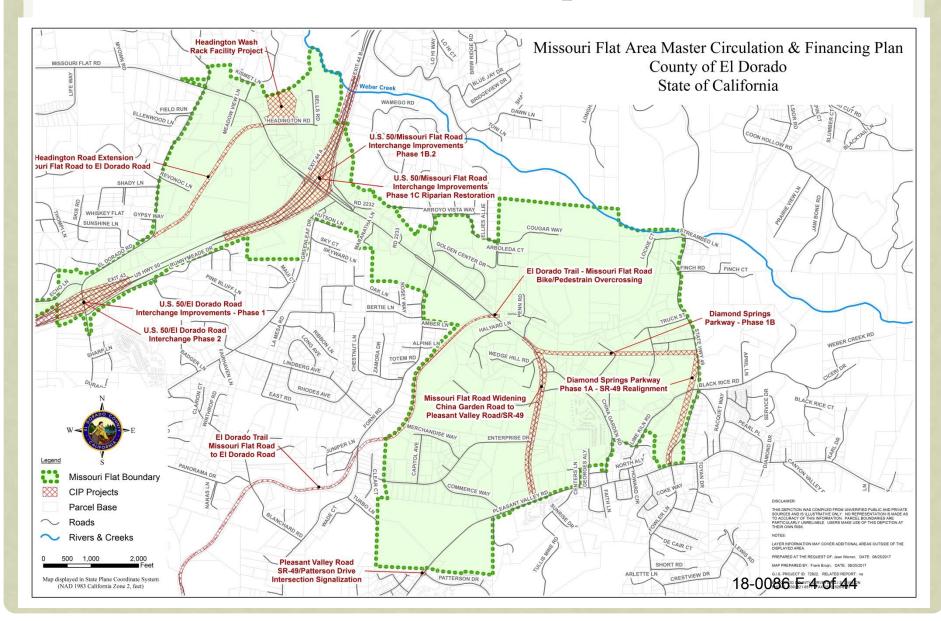
#### Phase I

- Limits commercial development to 730,000
   sq. ft. in Project Area.
- Excludes specific transportation improvements included in MC&FP.

## Phase II

- Would allow for an additional 770,000 sq. ft. of commercial development (1.5 million sq. ft. in total).
- Requires updated evaluation of transportation improvements, including need for ultimate highway interchange solution at Missouri Flat.

## MC&FP Map



# MC&FP Phase II Study Would Provide the Following:

A mechanism to finance roadway infrastructure improvements as a result of further commercial growth.

A determination of when a fix is needed at the interchange, and an analysis of other alternatives to help reduce the cost.

Information related to total infrastructure required in the MC&FP area.

#### **Board Policy J-2:**

"all departments provide priority treatment for commercial and industrial projects being processed in El Dorado County to assure that the future tax base of the County is provided in a timely manner."

### Why Phase II?

Facilitate additional commercial development to:

Expand retail shopping opportunities for residents and visitors

Keep more sales
tax revenue in
the County
reduce sales tax
leakage to
neighboring
jurisdictions

Increase job and business opportunities in the County

#### PUBLIC OUTREACH

- Recruited two focus groups to review key issues and options
- Focus group meetings and public workshop held in November 2017
- Created project website
- Notified stakeholders and property owners via eNews
- Coordination with County Public Information Officer
- Outreach to local news media and social media channels

#### EL DORADO COUNTY MISSOURI FLAT MASTER CIRCULATION AND FINANCING PLAN PHASE II

PROJECT OVERVIEW MEETINGS AND WORKSHOPS BACKGROUND INFORMATION



#### Welcome to the Missouri Flat Area Master Circulation and Financing Plan

evels of traffic congestion due to its central location and 6:30 PM - 8:30 PM existing commercial development. Phase I of the Missouri Flat Master Circulation and Financing Pla (MC&FP) was established in 1998 to provide a funding mechanism (through a sales and property tax increm to address existing road deficiencies within the Missour to encourage economic development in the Missouri program which enabled the development of 500,000 ·/- square feet of retail businesses and generates

MC&EP Phase II will provide a framework to fund any Highway Fo/Missouri Flat Road Interchange and adjacent arterial and collector roads. These improvements will alleviate existing and projected traffic elopment in the Missouri Flat Road corridor

#### Why does the County need to update

The County General Plan has long designated the Missouri Flat area as a central hub of commercial activity in the County. The commercial land use designations

Upcoming Meetings, Presentations and Workshops Public Workshop Government Building C

#### Where is the study area?



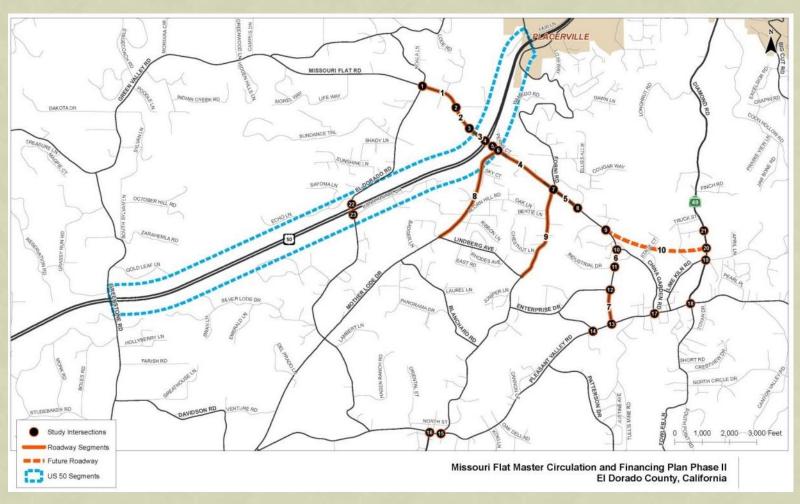
#### What is the Plan's focus?

The MC&FP Phase II will study traffic, analyze travel demand, and produce cost estimates fo analysis will include key intersection roadways, interchanges, as well as US 50 mainline and ramp junctures in both the County's rural and community regions. The travel demand analysis will identify operational

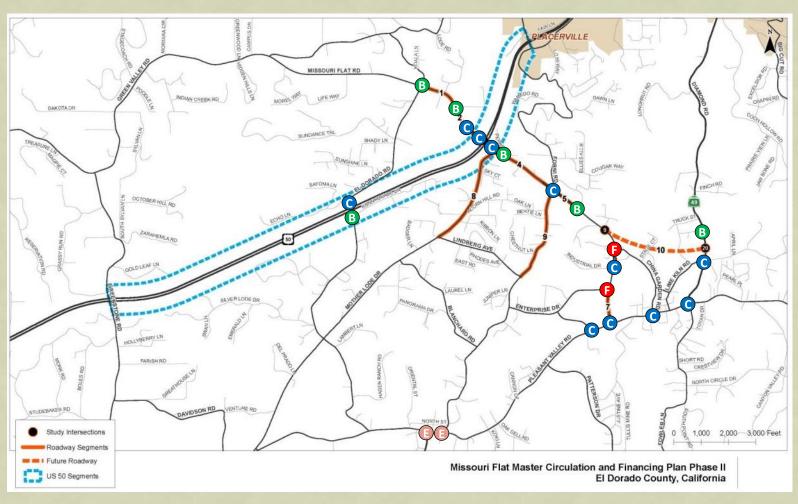
# Traffic Analysis Steps

- Understand existing conditions
  - Inventory future development
- Forecast traffic to 2035 and beyond
- Identify future traffic operations
  - Screen most effective improvements

# Traffic Study Area



# **Existing Traffic Operations**



## Forecast Growth Assumptions

Prior to 2013, planning was based on 3% annual growth

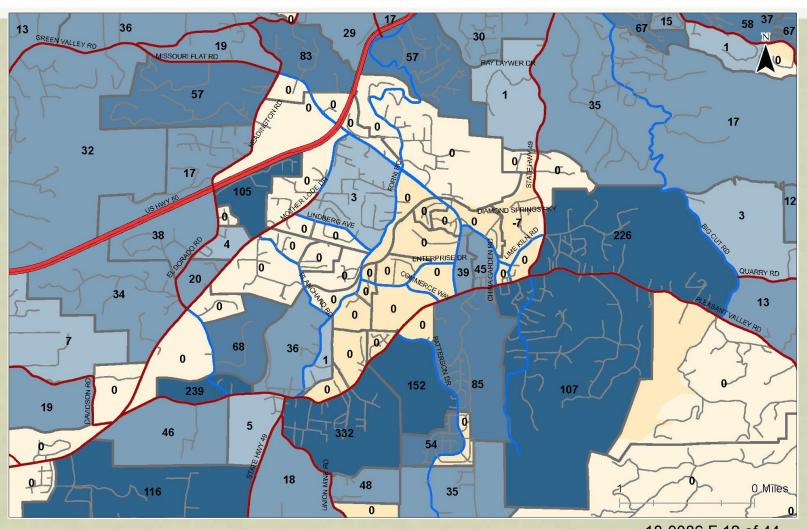
In 2013, the Board of Supervisors adopted an updated forecast of 1.03% annual growth

Missouri Flat area growth assumptions based on 2015 EPS market study of retail demand

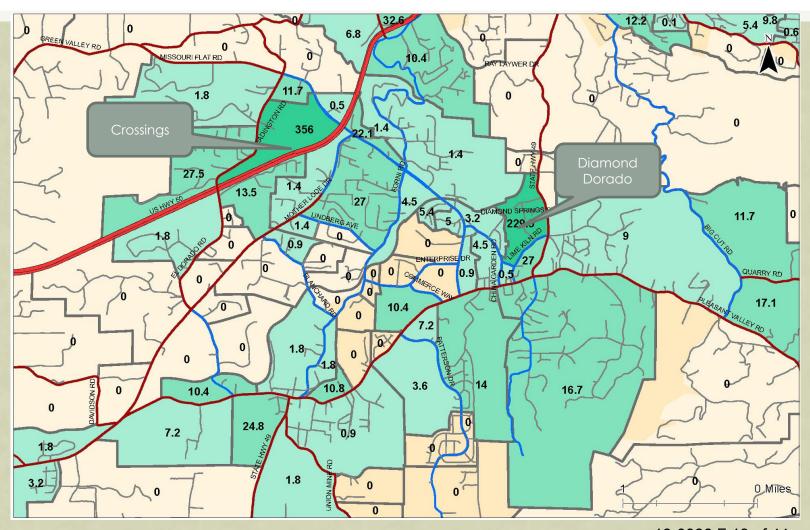
Total retail demand of about 1.1 million square feet by 2035

Could support Diamond Dorado (240 KSF) and initial phases of The Crossings (375 KSF)

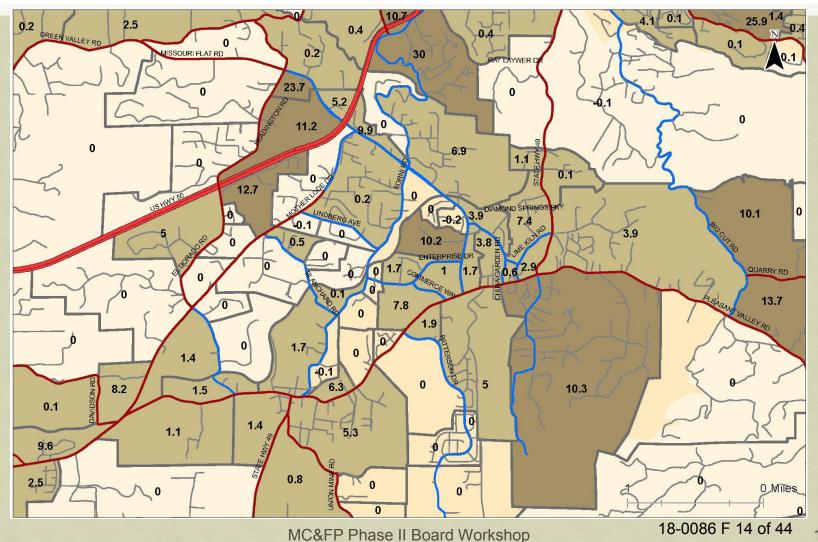
## Housing Growth 2010-2035



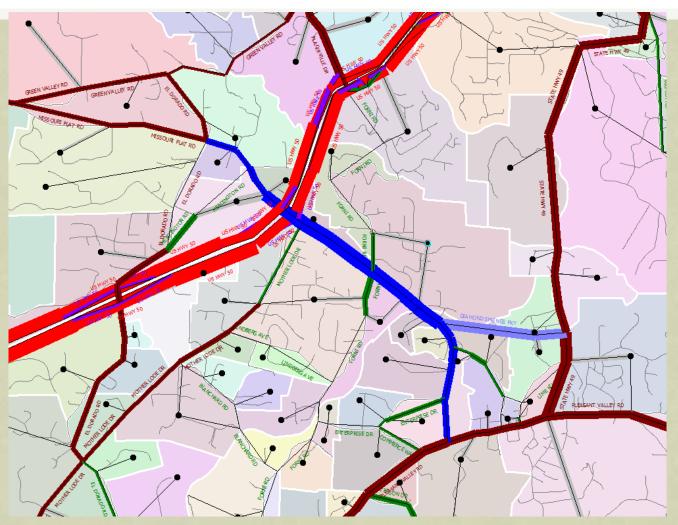
## Retail Growth 2010-2035 1,000 square feet



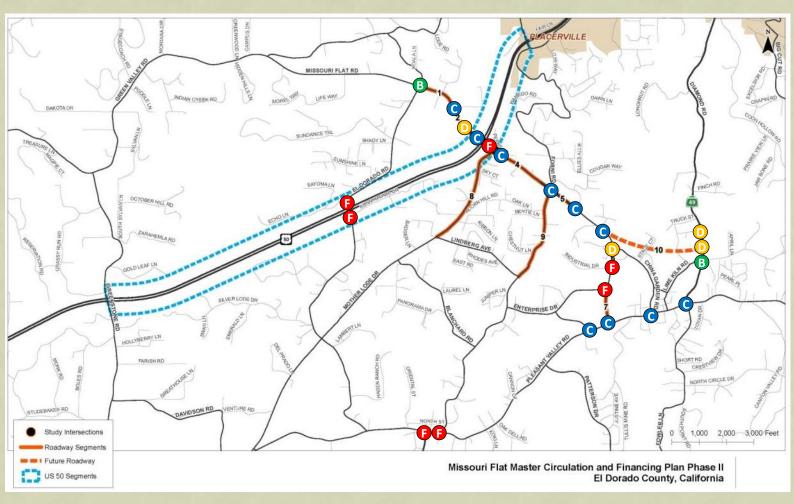
## Non-Retail Employment Growth 2010-2035 1,000 square feet



# Travel Model Used to Forecast 2035 Traffic Corresponding to New Development



## 2035 Traffic Operations



# Focus on Interchange

Most critical congestion area

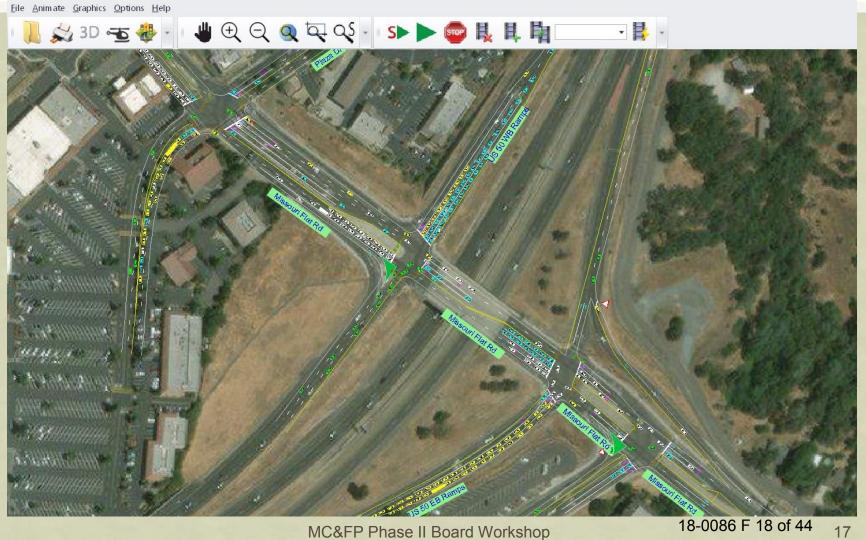
Most expensive improvements

Simulation analysis
used to represent
interactions between
closely-spaced
intersections



18-0086 F 17 of 44

## Simulation of Traffic Operations

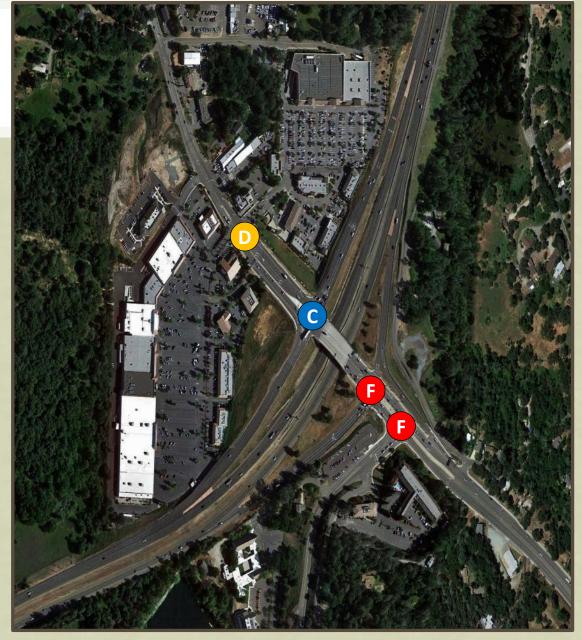


#### 2040 Conditions

Extrapolated growth beyond 2035

By 2040, cannot ensure acceptable operations at all 4 intersections

Improvements
needed to
separate
conflicting
movements



18-0086 F 19 of 44

### Alternatives Development Methodology

## Project Goals

Improve interchange to reduce congestion & accommodate future traffic needs

Provide/maintain facilities for bikes/peds via sidewalks & Class II Bicycle Lane

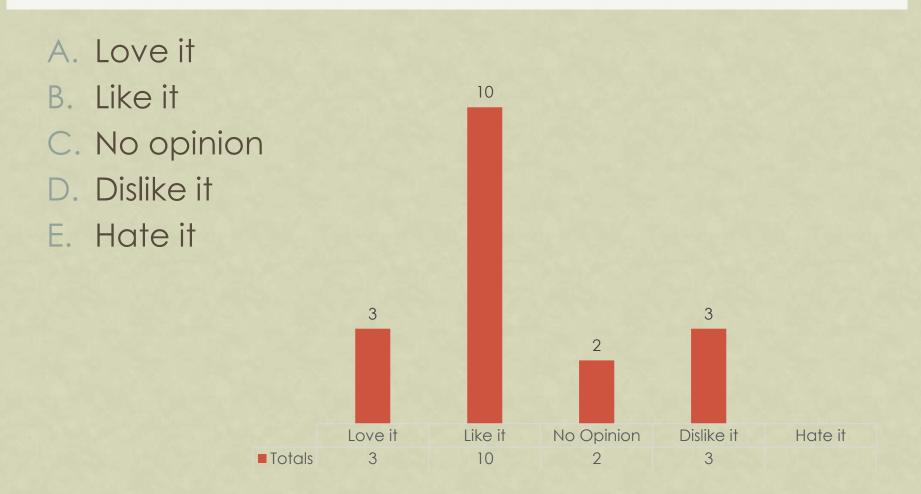
Minimize/Avoid Right of Way Impacts

#### Short Term Alternatives

- Low cost alternatives
- Design life of less than 5 years
- Does not preclude construction of long term alternatives
  - Lane Reconfiguration #1
  - Lane Reconfiguration #2

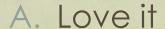


Restripe Missouri Flat with an additional northbound lane

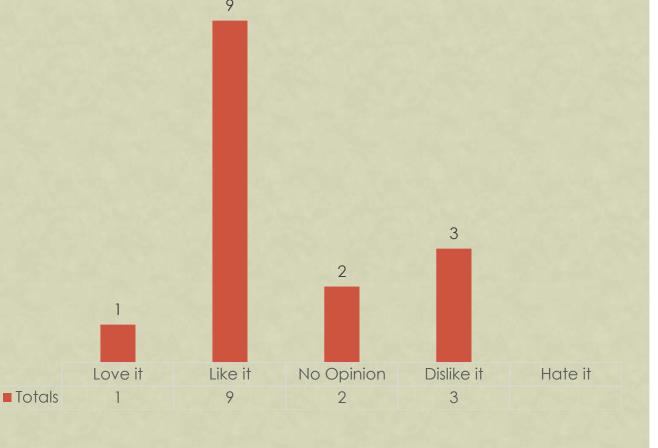




Restripe Missouri Flat with an additional southbound lane



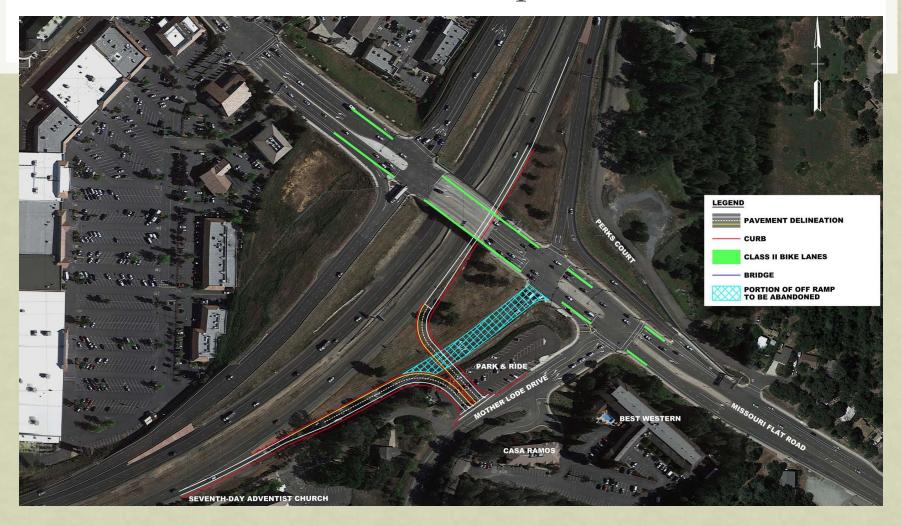
- B. Like it
- C. No opinion
- D. Dislike it
- E. Hate it



### Long Term Alternatives

- Design life of at least 20 years:
  - Hook Ramps
  - Partial Cloverleaf
  - Diverging Diamond #1
  - Diverging Diamond #2
  - Roundabouts
  - 6-Lane Tight Diamond
  - Single Point Diamond

## Hook Ramps



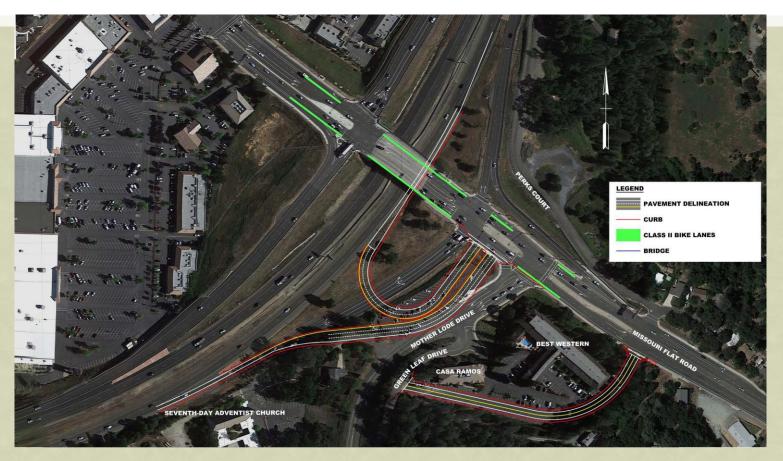
Provides new eastbound on/off-ramps connecting to Mother Lode Drive

### Hook Ramps

- A. Love it
- B. Like it
- C. No opinion
- D. Dislike it
- E. Hate it



#### Partial Cloverleaf



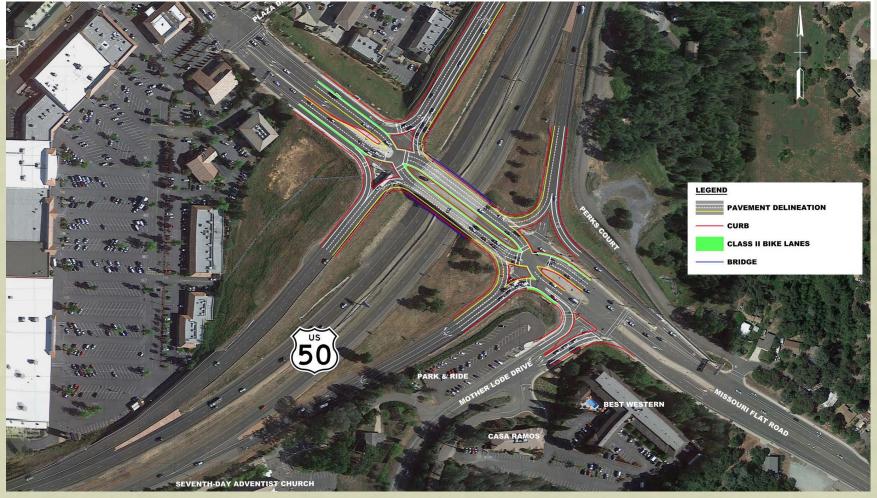
Provides new eastbound on/off-ramps connecting to Missouri Flat Road in standard configuration. (Requires Mother Lode Drive Relocation)

#### Partial Cloverleaf

- A. Love it
- B. Like it
- C. No opinion
- D. Dislike it
- E. Hate itl



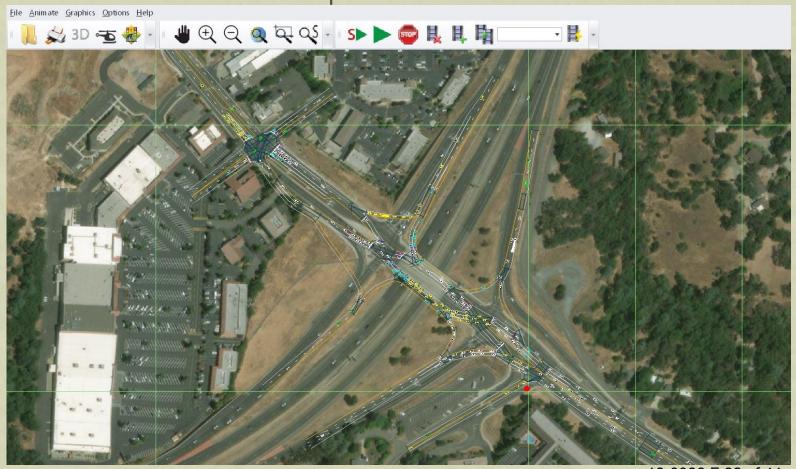
## Diverging Diamond #1 (ML right-in, right-out)



Switches traffic on bridge to left side to allow more efficient traffic operations

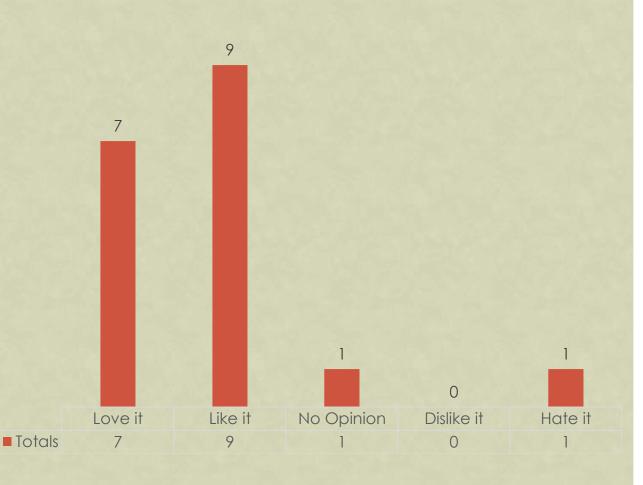
## Diverging Diamond #1 (ML right-in, right-out)

Simulation of traffic operations

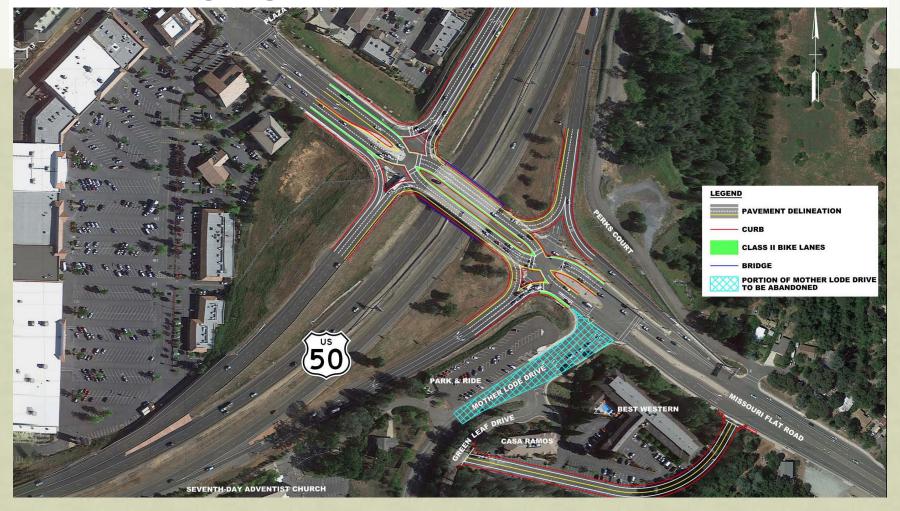


## Diverging Diamond

- A. Love it
- B. Like it
- C. No opinion
- D. Dislike it
- E. Hate it

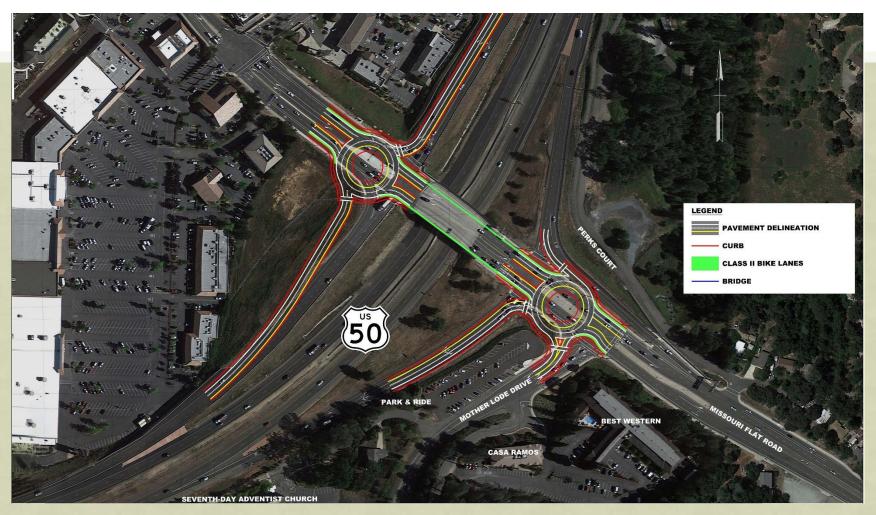


## Diverging Diamond #2 (Relocate ML)



Switches traffic on bridge to left side to allow more efficient traffic operations

#### Roundabouts



Provides roundabouts at ramp intersections

#### Roundabouts

- A. Love it
- B. Like it
- C. No opinion
- D. Dislike it
- E. Hate it

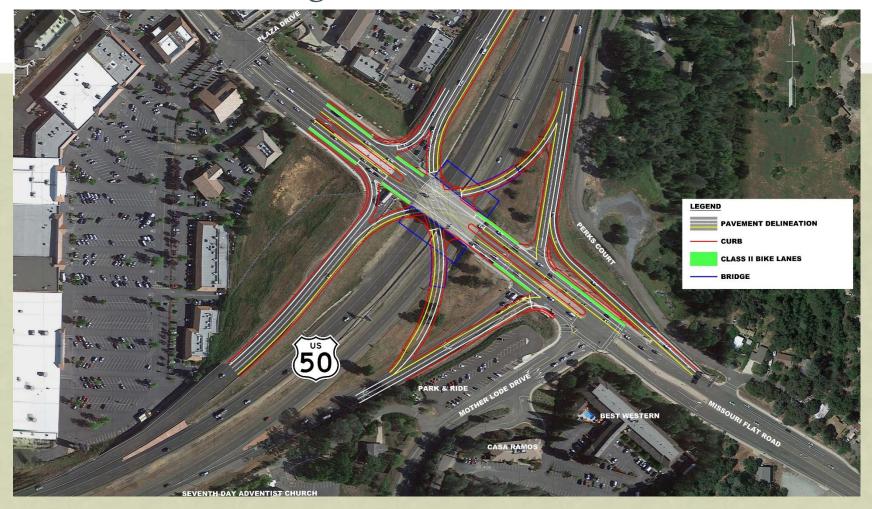


## 6-Lane Tight Diamond



Widens current configuration

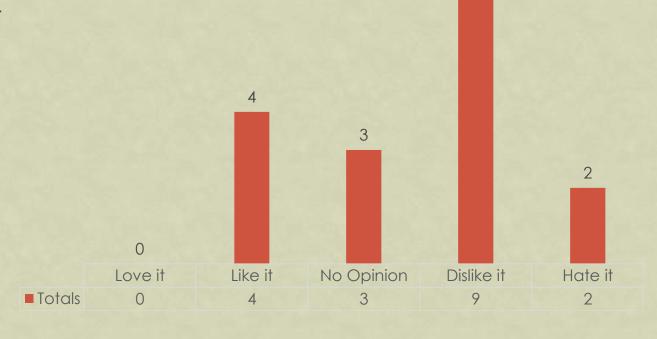
### Single Point Diamond



Combines 2 ramp intersections into a single intersection on bridge. Future configuration identified in MC&FP Phase 1.

## Single Point Diamond

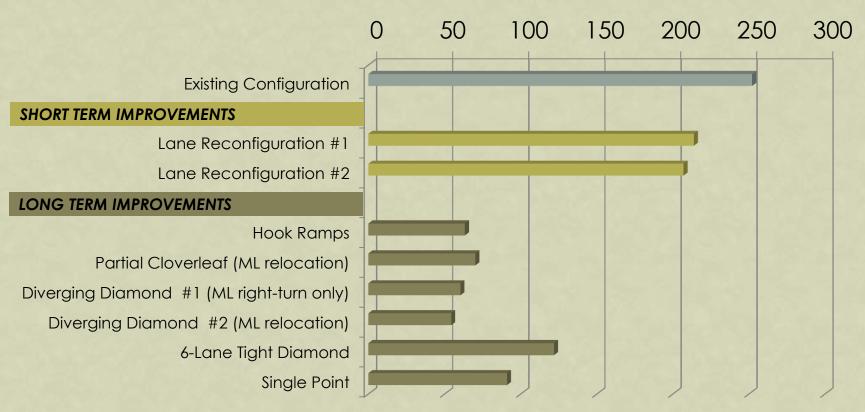
- A. Love it
- B. Like it
- C. No opinion
- D. Dislike it
- E. Hate it



9

## Average Travel Time through Interchange Area

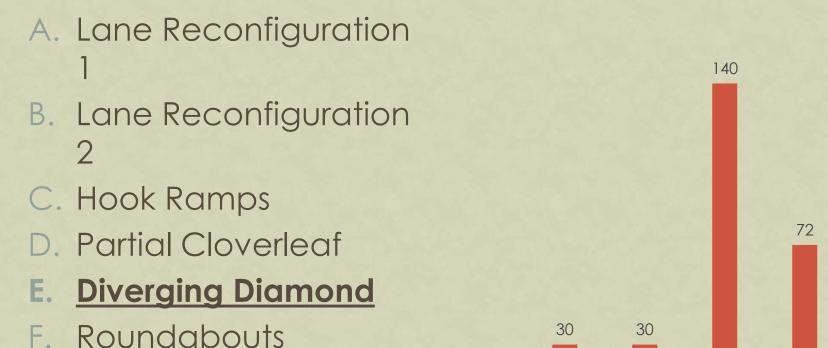
#### 2040 PM Peak Hour Time per Vehicle (Seconds)



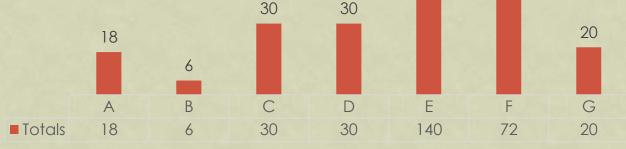
#### Value Score

	Traffic Performance (Preliminary)	Caltrans Approvability	Right of Way Impacts	Environmental Impacts	Performance Score (1000 Max)	Cost	Value Index = (Score/Cost)
Weighting	50%	30%	10%	10%	Maxy		*1,000,000
No-Build	1	10	10	10	550	\$0	N/A
Hook Ramps	6	1	6	6	450	\$3,000,000	150
Partial Cloverleaf	6	4	2	5	490	\$11,750,000	42
Diverging Diamond #1 (ML right-in, right-out)	7	8	9	8	760	\$4,600,000	165
Diverging Diamond #2 (Relocate Mother Lode)	9	9	2	8	820	\$11,300,000	73
Roundabout	3	9	7	7	560	\$3,800,000	147
6-Lane Tight Diamond	5	9	9	8	690	\$4,500,000	153
Single Point Diamond	5	10	10	9	740	\$25,750,000	29

## Rank Your Top Picks

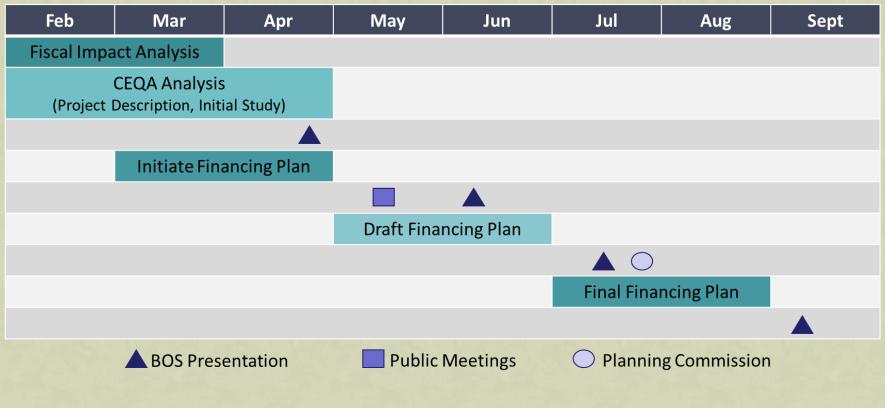


G. Single Point



#### Next Steps

After identifying the preferred interchange configuration and finalizing engineering analyses, next steps include:



#### Recommendation

- Staff recommends the Board select the Diverging Diamond #1:
  - Top pick in public meetings
  - Highest Value Index
  - Most efficient traffic operations
  - High chance of Caltrans approvability
  - Fewer environmental impacts
- Today's preferred alternative will be used to develop the financing plan
- Preferred alternative can be revisited during future studies