

# EL CAMINO REAL CORRIDOR STUDY

Workshop # 3  
February 19, 2015  
City of Menlo Park



# EL CAMINO REAL CORRIDOR STUDY

## **Presentation Outline**

- Study Objectives and Overview
- Existing Conditions and Survey Results
- Proposed Alternatives
- Alternatives Analysis
- Public Input on Alternatives

# STUDY OBJECTIVES AND OVERVIEW



# EL CAMINO REAL CORRIDOR STUDY

## Study Objectives

- Review potential transportation and safety **improvements**.
- **Consider possible alternatives** to allow for the addition of a bicycle lane or an additional through lane.
- Identify potential **reconfiguration** alternatives.
- Evaluate the **feasibility** and potential impacts of up to **three (3)** alternatives to improve **multi-modal** transportation.
- **Impacts** to traffic, active transportation, safety, parking and aesthetics will be addressed.
- Within the limited right-of-way available, assess safety, efficiency and convenience **trade-offs** between motorists and bicyclists.

# EL CAMINO REAL CORRIDOR STUDY

## Guidelines from City Council

- El Camino Real between Encinal Avenue and Sand Hill Road will be evaluated.
- Modifications to side-streets will be considered between the western side of the Caltrain tracks and the eastern side of Curtis Street-Hoover Street-Alto Lane.
- All proposed modifications should be consistent with the El Camino Real/Downtown Specific Plan.
- Only surface improvements will be considered (i.e., no grade separation or tunneling).
- No impacts to existing medians and sidewalks
- Impacts (both beneficial and adverse) to all modes of travel will be considered in this study.
- Ultimate design and implementation of modifications to El Camino Real will need to meet Caltrans requirements and standards.

# EL CAMINO REAL CORRIDOR STUDY

## Study Elements

- Identify performance metrics
- Community Workshop #1 (April 2014)
- Evaluate existing conditions
- Community Workshop #2 (October 2014)
- Develop travel demand forecasts
- Develop and analyze alternatives
- **Community Workshop #3**
- Prepare estimated costs for alternatives
- Prepare draft report
- City Council identifies preferred plan
- Full design plans will be prepared for ECR/Ravenswood intersection
- Environmental analysis will be completed for the preferred plan

# EL CAMINO REAL CORRIDOR STUDY

## Community Participation Opportunities

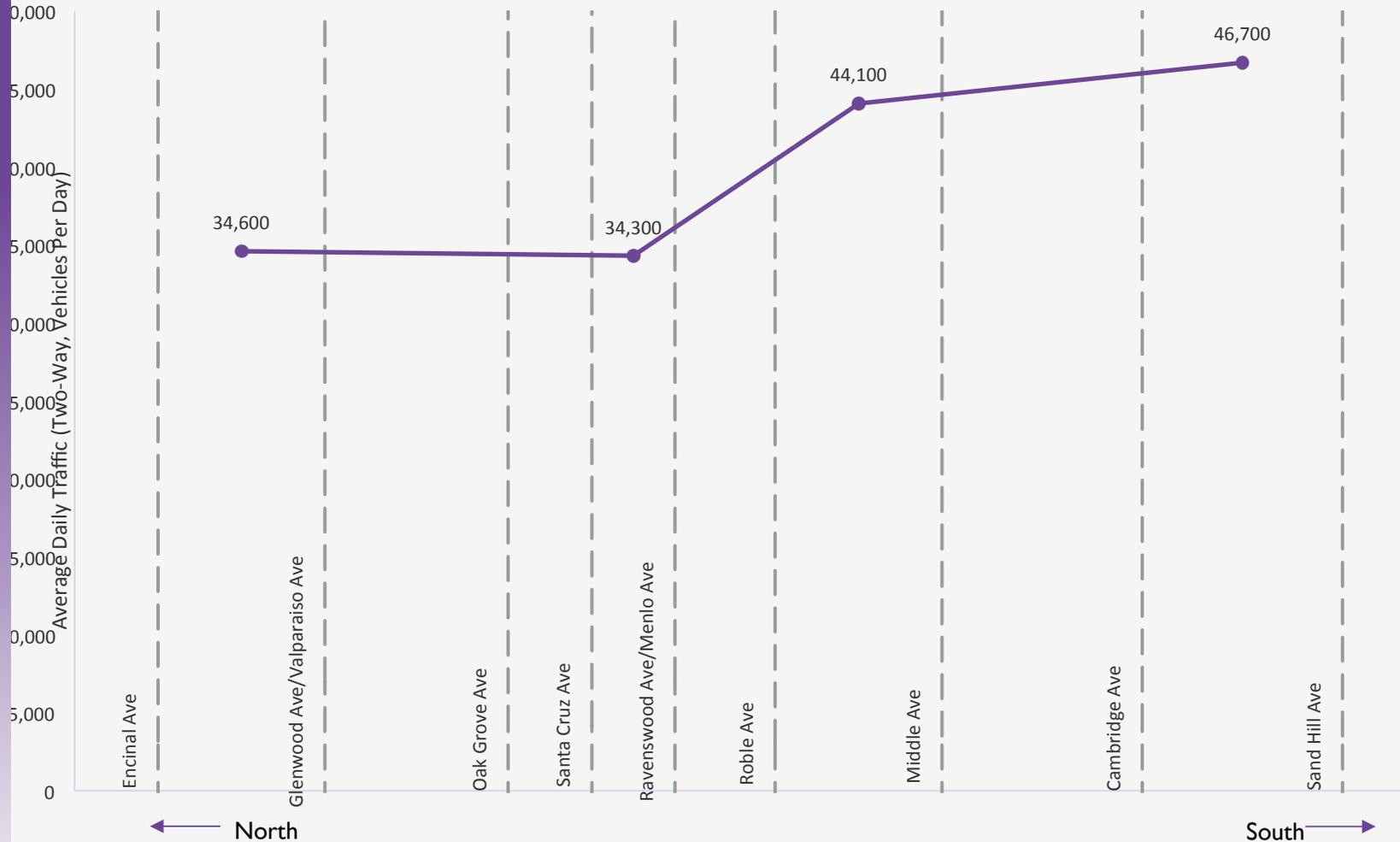
- Completed 2 Community workshops
- City Commission Presentations
- Project website
  - [www.menlopark-elcamino.com](http://www.menlopark-elcamino.com)
- Online Survey
- Rankings tonight on Alternatives
- Followup voting/ranking on Alternatives via online survey.

# EXISTING CONDITIONS AND SURVEY RESULTS



# EL CAMINO REAL CORRIDOR STUDY

El Camino Real - Average Daily Traffic Volume

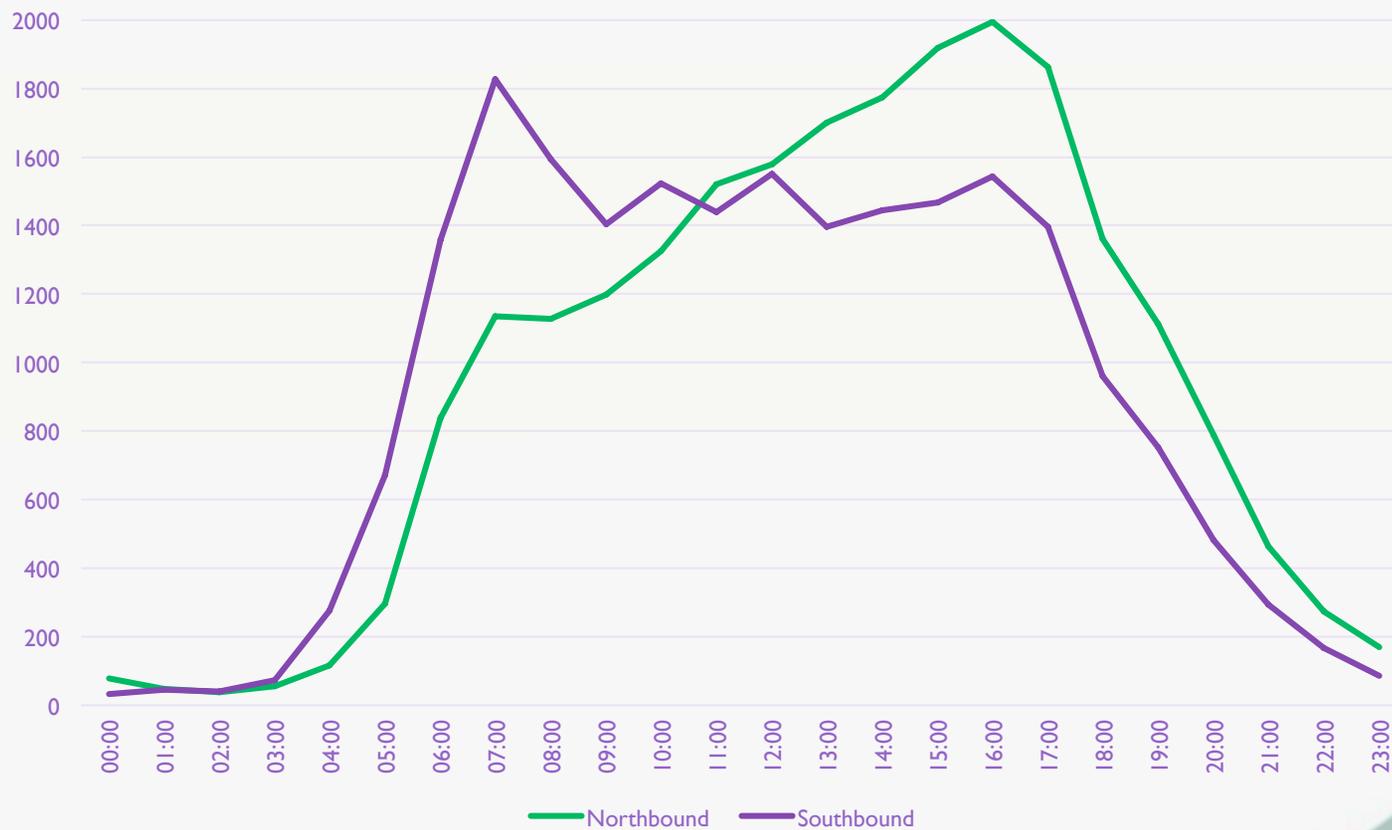


➤ Truck traffic: 1.5 - 2% of traffic during the afternoon

# EL CAMINO REAL CORRIDOR STUDY

## Current Conditions

### Hourly Traffic Trends – ECR north of Middle Avenue



# EL CAMINO REAL CORRIDOR STUDY

## Current Conditions

	Northbound	Southbound
AM Peak Average Travel Time	3:48	5:06
AM Peak Average Speed	21.5 mph	15.7 mph
Midday Peak Average Travel Time	4:35	3:48
Midday Peak Average Speed	17.5 mph	21.3 mph
PM Peak Average Travel Time	5:24	5:00
PM Peak Average Speed	14.9 mph	16.1 mph

# EL CAMINO REAL CORRIDOR STUDY

## Current Conditions – Pedestrians & Bicyclists

### Hourly volumes (morning – afternoon)

Intersection	Pedestrian	Bicycle
ECR/Oak Grove Rd	53-88	20-7
ECR/Santa Cruz Ave	96-144	19-13
ECR/Ravenswood-Menlo Ave	35-46	26-25
ECR/Middle Ave	13-28	9-17
ECR/Sand Hill Rd	113-41	201-55

# COMMUNITY SURVEY

## About the Survey

- Active between June 16 and September 12, 2014
- Outreach included website and e-mail announcements; flyers distributed at local businesses, public spaces, and events; and school newsletters
- Additional responses collected at Open House on October 2
- Total of 316 responses



**El Camino Real Transportation Survey**

The survey includes 19 questions and is estimated

**1. Indicate the condition which applies to the location of your home.**

- I live in Menlo Park within a half mile (4-5 blocks) of the El Camino Real.
- I live in Menlo Park, but farther than a half mile of the El Camino Real.
- I don't live in Menlo Park, but I do live within a half mile of the El Camino Real.
- None of the above.

**\*2. Indicate the condition which applies to the location of your work.**

- I work in Menlo Park within a half mile (4-5 blocks) of the El Camino Real.
- I work in Menlo Park, but farther than a half mile of the El Camino Real.
- I don't work in Menlo Park, but I do work within a half mile of the El Camino Real.
- None of the above.

**\*3. Do you drive a vehicle on El Camino Real?**

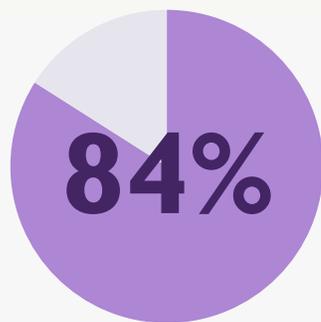
- Multiple times per day
- Approximately once per day
- A few times a week
- Almost never

**\*4. Do you ride a bike on or across El Camino Real?**

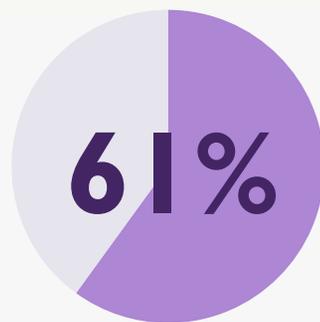
- On a daily basis
- Several times per week
- Mostly on weekends

# COMMUNITY SURVEY

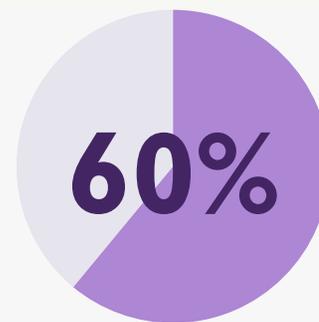
## Survey Participants



drive



walk



bike



use transit

# COMMUNITY SURVEY

## Potential Changes

### ➤ TOP 5 DESIRABLE CHANGES

1. Enhanced pedestrian safety and crossings
2. Inclusion of bike lanes on El Camino Real
3. More bike parking close to downtown
4. More landscaping along El Camino Real (providing buffers between pedestrians or bicyclists and vehicles)
5. Timing traffic signals to favor continuous north-south flow on El Camino Real

### ➤ MOST UNDESIRABLE CHANGES

1. More convenient on-street parking on El Camino Real
2. Higher travel speeds on El Camino Real
3. Lower travel speeds on El Camino Real
4. Additional through lanes on El Camino Real

# PROPOSED ALTERNATIVES



## Proposed Alternatives

- No Project (Do Nothing)
- Alt #1 - Continuous Six Lanes
- Alt #2 - Buffered Bike Lanes
- Alt #3 – Separated Bike Facility

# No Project (Do Nothing)



EXISTING

# Alternative #1 – Continuous 6 Lanes



ALTERNATIVE 1

# No Project (Do Nothing)



EXISTING

## Alternative #2 – Buffered Bike Lanes



ALTERNATIVE 2

# No Project (Do Nothing)



EXISTING

# Alternative #3 – Separated Bike Facility



ALTERNATIVE 3

# No Project (Do Nothing)



EXISTING

# Alternative #1 – Continuous 6 Lanes



ALTERNATIVE 1

# No Project (Do Nothing)



EXISTING

## Alternative #2 – Buffered Bike Lanes



ALTERNATIVE 2

# No Project (Do Nothing)



EXISTING

# Alternative #3 – Separated Bike Facility



ALTERNATIVE 3

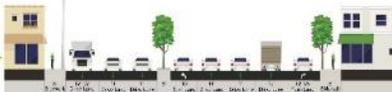
EL CAMINO REAL CORRIDOR STUDY



ALTERNATIVE 1  
CONTINUOUS G LINES



EL CAMINO REAL CORRIDOR STUDY

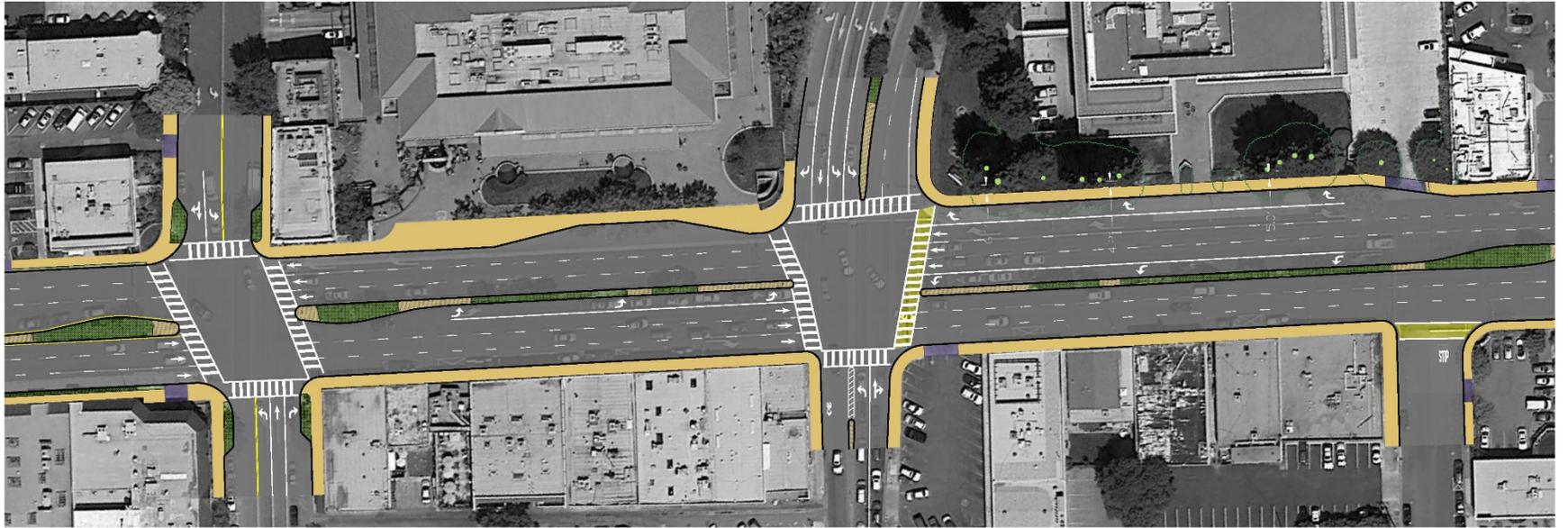


ALTERNATIVE 1  
CONTINUOUS 6 LANES

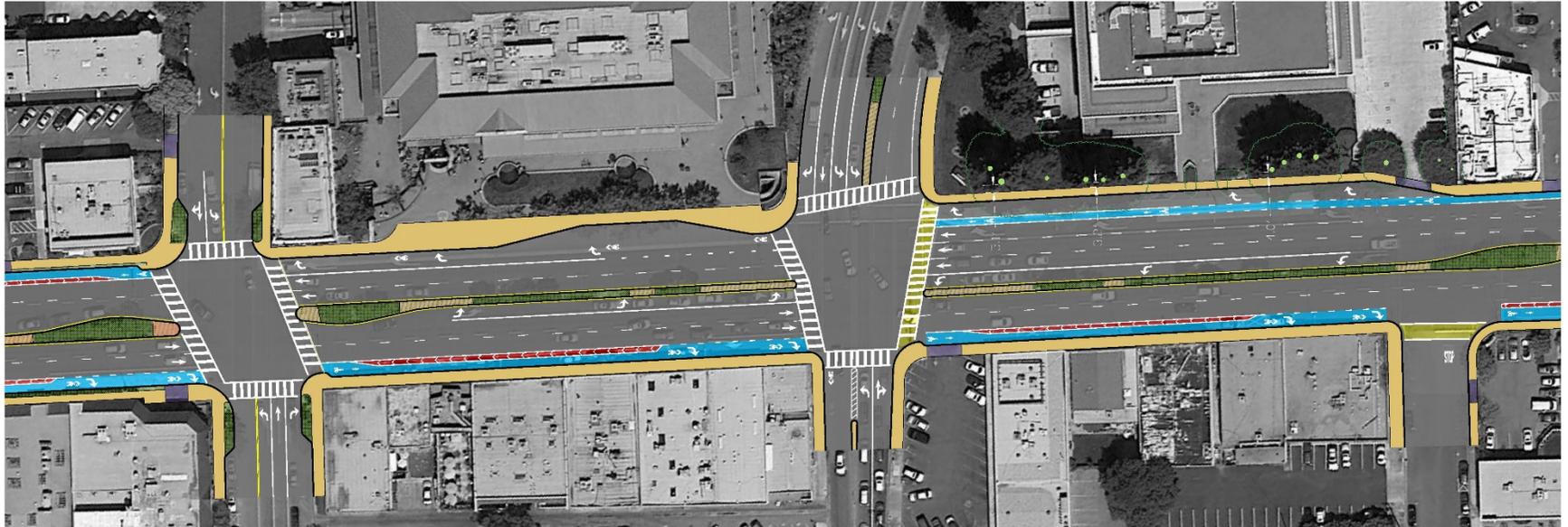
# No PROJECT (Do NOTHING)



# ALTERNATIVE #1 – CONTINUOUS 6 LANES



# ALTERNATIVE #2 – BUFFERED BIKE LANES



# ALTERNATIVE #3 – SEPARATED BIKE FACILITY



# ALTERNATIVES ANALYSIS



## Model Forecasting

- C/CAG-VTA Bi-County Travel Demand Model
- 2010 Base and 2035 Future Traffic Projections
- Primarily ABAG Land Use Outside the Study Area
- Includes MP Downtown Specific Plan Land Use
- 6 Lane Alternative included change from 2 to 3 lanes
- Alts 2 and 3 Included Adjustments based on the Extent of Bike Facility Improvements to the Non-Motorized Mode Forecasting

# EL CAMINO REAL CORRIDOR STUDY

## **Analysis**

- Traffic Volume Projections
- Induced Demand
- Change in Travel Patterns
- Corridor Travel Time and Speed
- Intersection Delay
- Intersection Queuing

# EL CAMINO REAL CORRIDOR STUDY

## Vehicles per hour (pm peak)

El Camino Real	2014	Future 2035 - PM Peak			
		No project	Alt 1	Alt2	Alt 3
North of Ravenswood	2802	3136	4552	3134	3074
South of Ravenswood	3622	4233	4621	4231	4171
<b>Middlefield Road</b>					
North of Ravenswood	1290	1650	1538	1679	1729
South of Ravenswood	2100	2391	2860	2458	2427

# EL CAMINO REAL CORRIDOR STUDY

Travel Time (minutes)		Existing		2035 - No Project		2035 - Alt 1		2035 - Alt 2		2035 - Alt 3	
	Length (ft)	Travel Time	Avg Speed (mph)	Travel Time	Avg Speed (mph)	Travel Time	Avg Speed (mph)	Travel Time	Avg Speed (mph)	Travel Time	Avg Speed (mph)
AM											
NB Sand Hill to Encinal	6950	4.1	19.2	4.8	16.6	6.0	13.2	4.6	17.3	4.3	18.3
SB Encinal to Sand Hill	6950	5.9	13.8	5.2	15.3	6.0	13.2	5.1	15.6	5.8	13.6
PM											
NB Sand Hill to Encinal	6950	5.3	14.8	5.8	13.6	7.2	11.0	5.9	13.3	6.0	13.2
SB Encinal to Sand Hill	6950	4.8	16.3	5.0	15.7	5.6	14.1	4.9	16.2	5.3	14.8

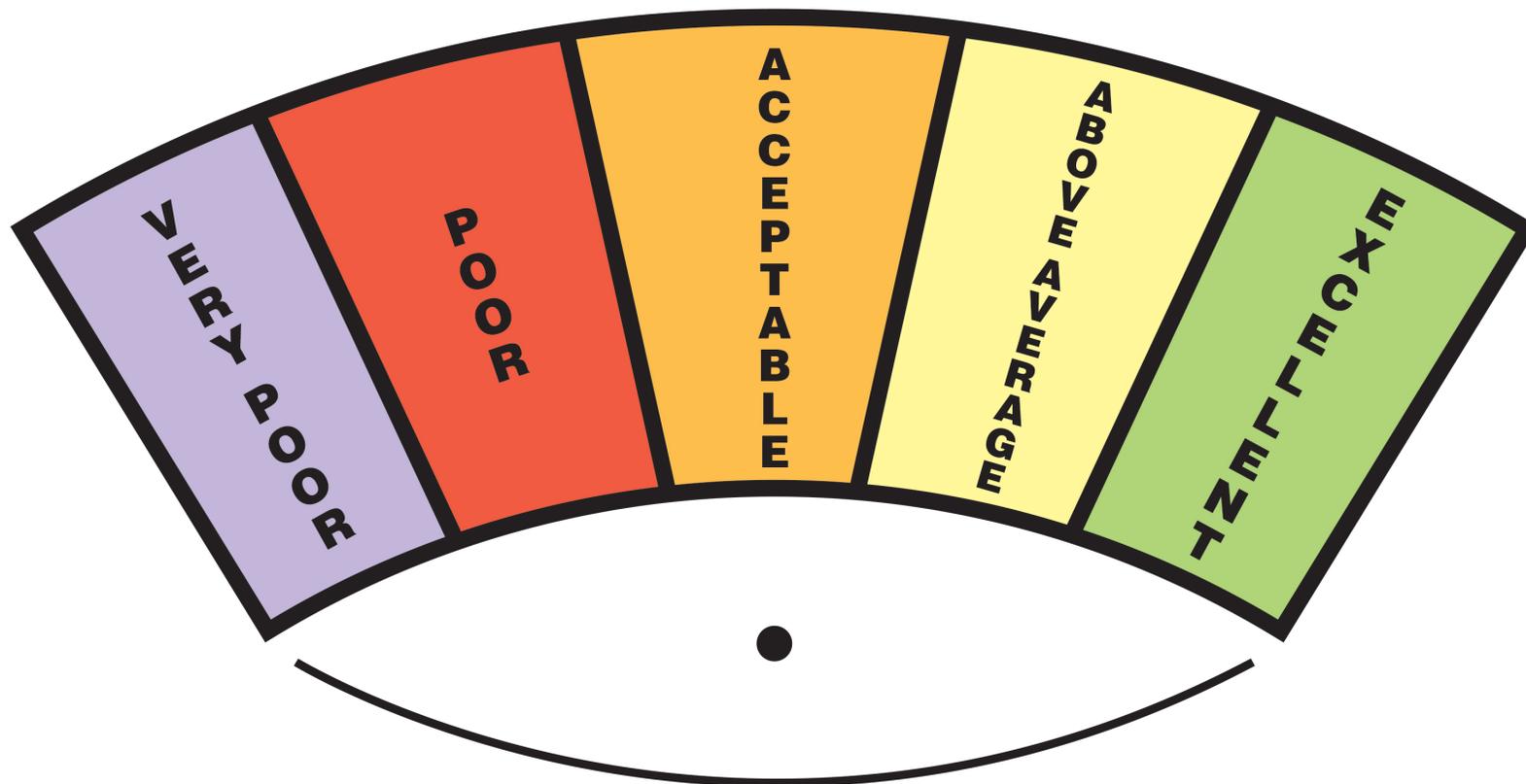
# EL CAMINO REAL CORRIDOR STUDY

## Bike Volumes (bikes per day)

	2014	2035			
El Camino Real		No project	Alt 1	Alt2	Alt 3
North of Ravenswood	120	132	132	475	856
South of Ravenswood	175	203	203	322	368
Middlefield Road					
North of Ravenswood	871	1026	1026	715	594
South of Ravenswood	856	1114	1114	855	744

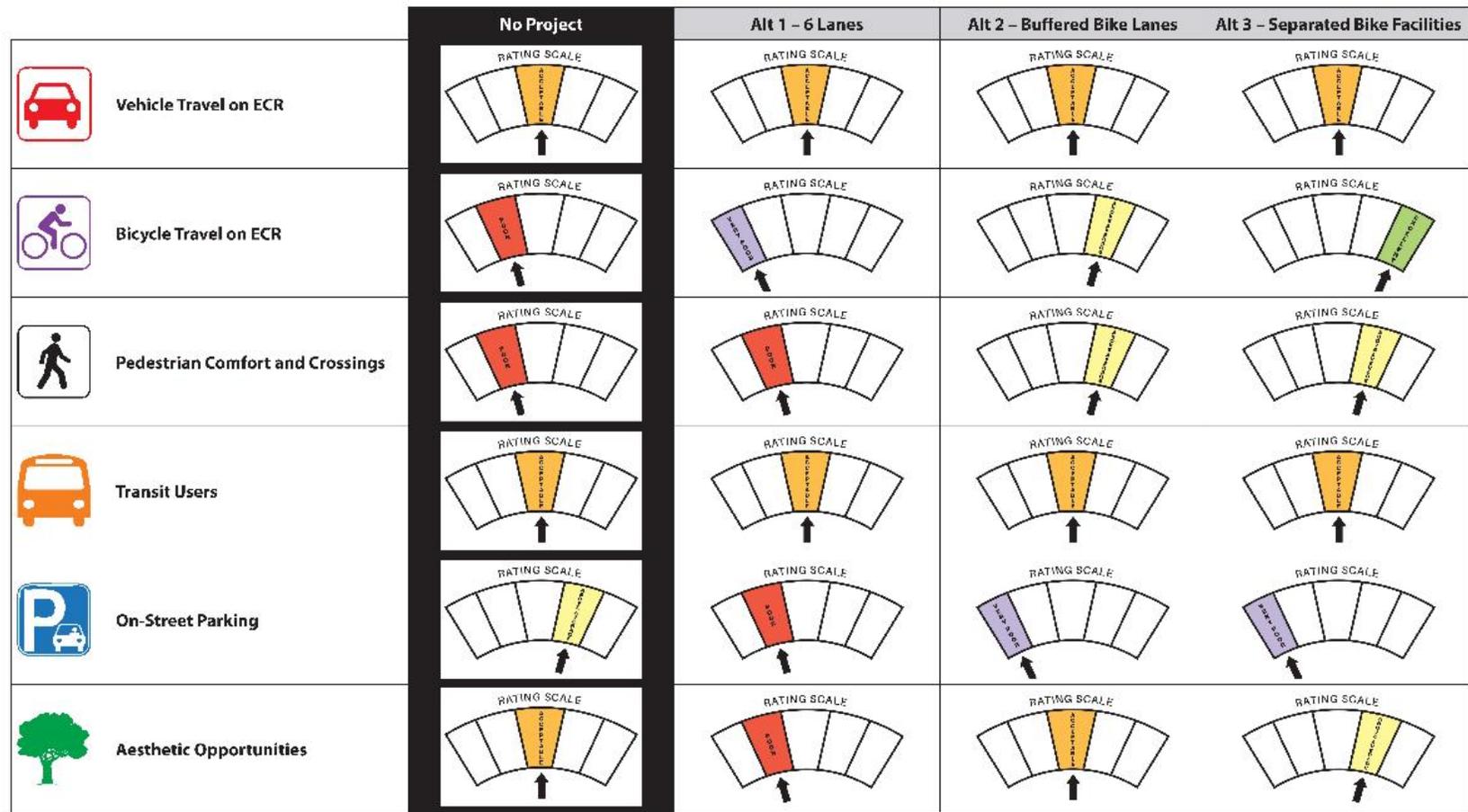
# EL CAMINO REAL CORRIDOR STUDY

## Alternatives Ratings



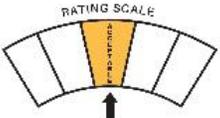
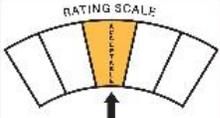
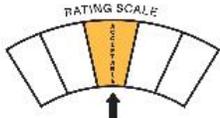
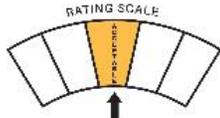
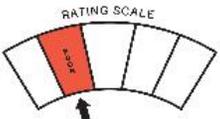
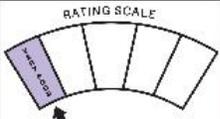
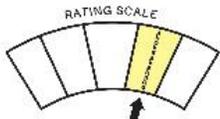
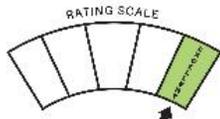
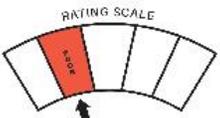
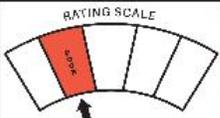
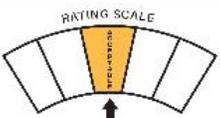
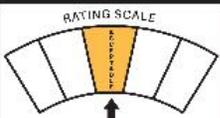
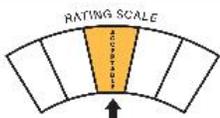
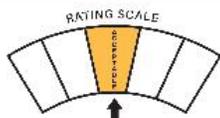
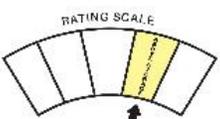
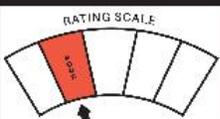
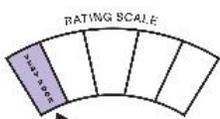
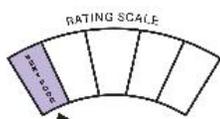
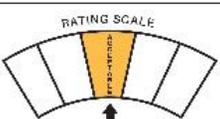
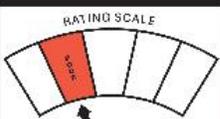
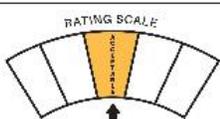
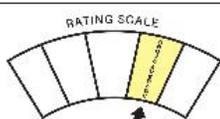
# EL CAMINO REAL CORRIDOR STUDY

## El Camino Real Corridor Study Transportation Rating



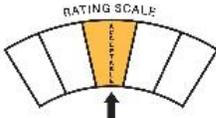
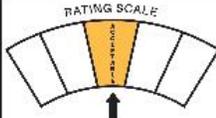
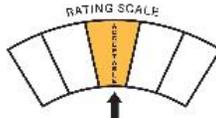
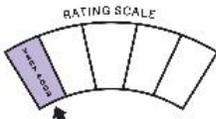
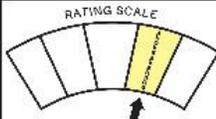
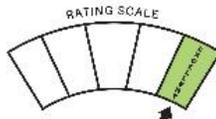
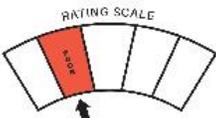
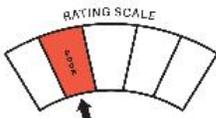
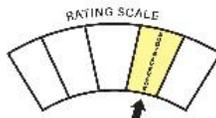
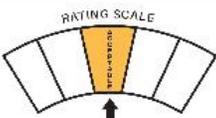
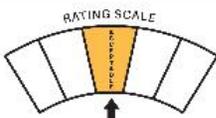
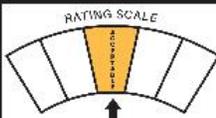
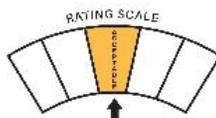
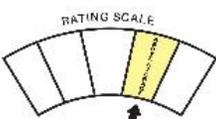
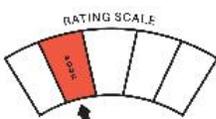
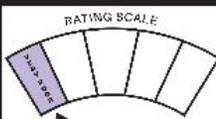
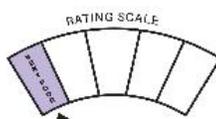
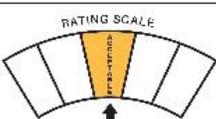
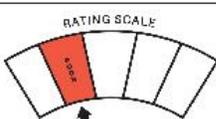
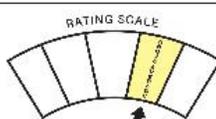
# EL CAMINO REAL CORRIDOR STUDY

## El Camino Real Corridor Study Transportation Rating

	No Project	Alt 1 – 6 Lanes	Alt 2 – Buffered Bike Lanes	Alt 3 – Separated Bike Facilities
 Vehicle Travel on ECR				
 Bicycle Travel on ECR				
 Pedestrian Comfort and Crossings				
 Transit Users				
 On-Street Parking				
 Aesthetic Opportunities				

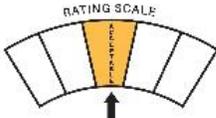
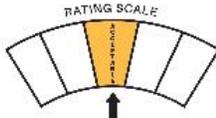
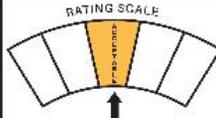
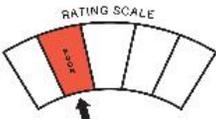
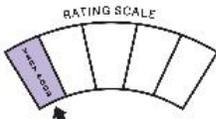
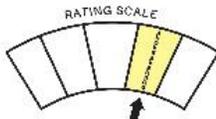
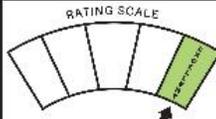
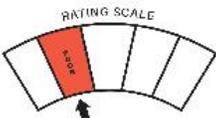
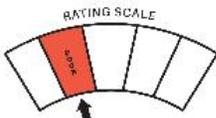
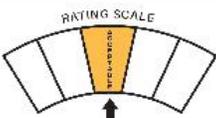
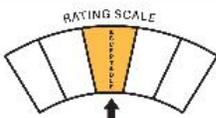
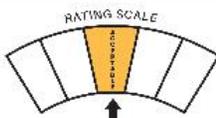
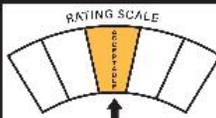
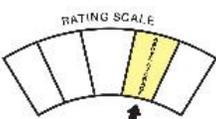
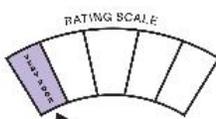
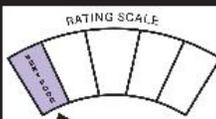
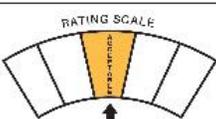
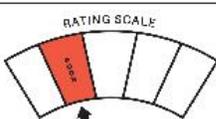
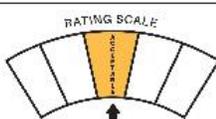
# EL CAMINO REAL CORRIDOR STUDY

## El Camino Real Corridor Study Transportation Rating

	No Project	Alt 1 – 6 Lanes	Alt 2 – Buffered Bike Lanes	Alt 3 – Separated Bike Facilities
 <b>Vehicle Travel on ECR</b>				
 <b>Bicycle Travel on ECR</b>				
 <b>Pedestrian Comfort and Crossings</b>				
 <b>Transit Users</b>				
 <b>On-Street Parking</b>				
 <b>Aesthetic Opportunities</b>				

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# FEEDBACK



# EL CAMINO REAL CORRIDOR STUDY

## El Camino Real Corridor Study Do Nothing

	AGREE	DISAGREE
 <p><b>1. Vehicle Travel Experience</b> – The existing vehicle lane alignment and vehicle delay are acceptable.</p>		
 <p><b>2. Bicycle Facilities</b> – The absence of bicycle lanes on El Camino Real is acceptable.</p>		
 <p><b>3. Pedestrian Experience</b> – The existing crossing opportunities and delay for pedestrians are acceptable.</p>		
 <p><b>4. Transit Access</b> – Existing transit access is acceptable.</p>		
 <p><b>5. Parking</b> – The amount of on-street parking along El Camino Real is acceptable.</p>		
 <p><b>6. Aesthetics</b> – The opportunity for aesthetic improvements is acceptable.</p>		

# EL CAMINO REAL CORRIDOR STUDY

## Public Feedback

- **Comment Cards**...rank your alternatives & general written comments.
- Online voting capability open now through March 13<sup>th</sup>.
- [www.menlopark.org/elcaminorealcorridor](http://www.menlopark.org/elcaminorealcorridor)
- [www.menlopark.org/elcaminorealsurvey](http://www.menlopark.org/elcaminorealsurvey)



# EL CAMINO REAL CORRIDOR STUDY

## Next Steps

- 1. Continuing gathering feedback through online voting.
- 2. Summarize feedback from workshop and online rankings.
- 3. Prepare draft report.
- 4. Present to Bicycle, Transportation, Planning Commissions
- 5. Present to City Council for identification of preferred concept
- 6. Prepare full design plans for ECR/Ravenswood
- 7. Prepare environmental analysis for the preferred concept

# EL CAMINO REAL CORRIDOR STUDY

END

