



Alpine Road Corridor Study Project

*Community Meeting
November 1st, 2016*

*Joe Lo Coco – County of San Mateo
Adam Dankberg – Kimley-Horn
Eileen Goodwin – Apex Strategies*





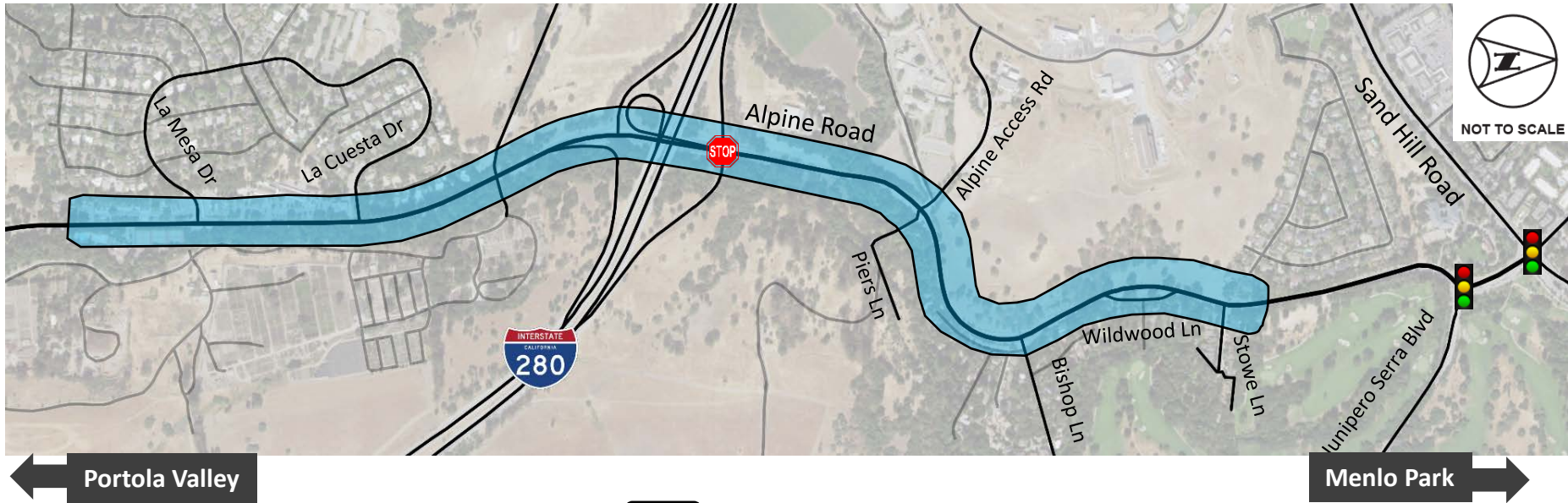
Agenda

- Presentation (45 min)
 - Project Overview
 - Feedback received during and after previous meeting
 - Proposed Improvements
 - Other Improvements Considered
- Breakout Session (30 min)
- Q&A (15 min+)





Project Corridor



← Portola Valley

Menlo Park →

Study Area

Study Intersection (Signalized)

Study Intersection (All-Way Stop)





Background

- Approximately 25,000 vehicles/day on north side of I-280
- Lengthy backups approaching I-280 in southbound direction in afternoon/evening
- Difficult to access corridor due to heavy volumes and limited sight distance
- Heavily utilized bicycle corridor (greater than 800 per day on weekends)
- Corridor is greatly constrained by steep slopes, limited right-of-way and Los Trancos/San Francisquito Creek

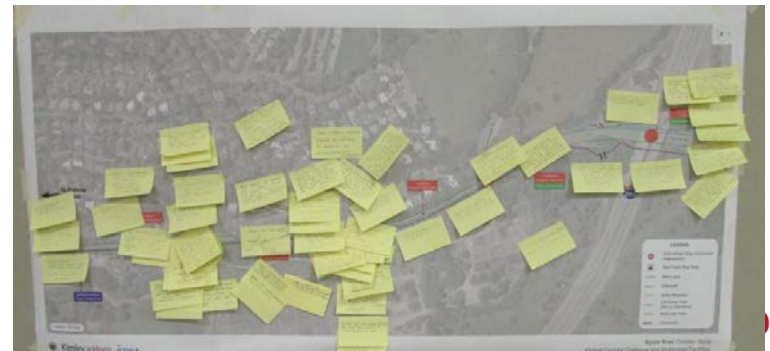




Alpine Road Corridor Study Project

Community Meeting #1

- Meeting held January 21, 2016 with approximately 100 attendees
- 146 responses to online feedback form

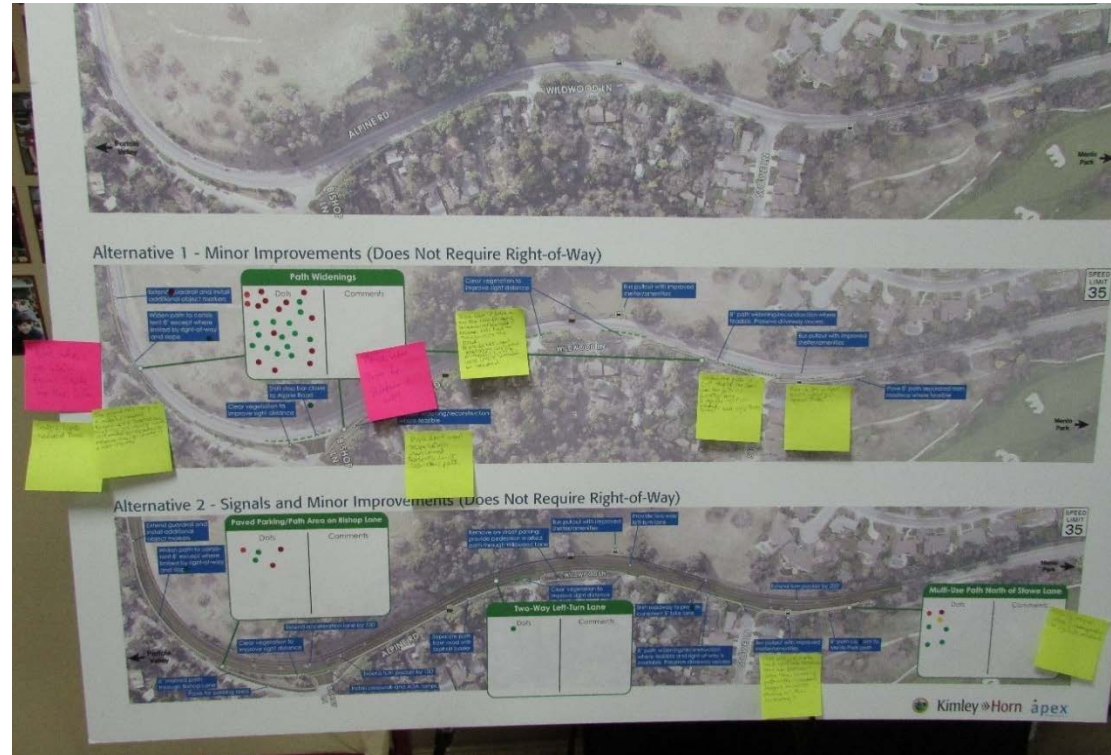




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Community Meeting #2

- Meeting held May 9, 2016 with approximately 75 attendees
- 58 additional responses to online feedback form/via e-mail





Community Feedback

(Community Meeting #2)

- Strongest support for:
 - Minor signage & striping improvements to lower speeds, increase bicycle & pedestrian safety
 - Roundabouts at La Mesa and La Cuesta Drive
 - Path widening in Ladera area
 - Roundabouts at I-280 ramps
 - Consolidating access to Wildwood Lane to one driveway
 - Extension of multi-use path north of Stowe Lane





Community Feedback

(Community Meeting #2)

- Opposition to:
 - Signals at La Mesa & La Cuesta Drive
 - Paved parking/path area on Bishop Lane
- Mixed opinions:
 - Signals at I-280 ramps
 - Striped parking area at Stanford Dish trail entrance
- Other concerns:
 - Cyclists navigating roundabouts





Development of Improvements

- Improve traffic operations and safety
- Support safe and efficient bicycle, pedestrian, and transit facilities
- Street aesthetic
- Implementable
 - Reasonably expected project budget
 - Consistent with requirements of MUTCD, AASHTO, County standards
 - Minimize or avoid potential environmental impacts
- Methodology
 - Site Visits
 - Traffic Analysis
 - Conceptual design
 - Community Feedback





Improvement Phases

- Improvements refined and selected for further evaluation based on analysis & community feedback
- Phase 1
 - Near-term improvements
 - Signage, striping, and other minor improvements
- Phase 2
 - Longer-term improvements
 - Intersection modifications (e.g. signals, roundabouts)
 - Additional pavement (e.g. turn lanes, bike buffers)
- Alternate Improvements for Phase 2
 - Longer-term improvements that are alternatives to some Phase 2 improvements





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Phase 1 Improvements





Corridor-Wide

- Reduce speed limit to a consistent 35 MPH throughout corridor





Ladera Area Improvements

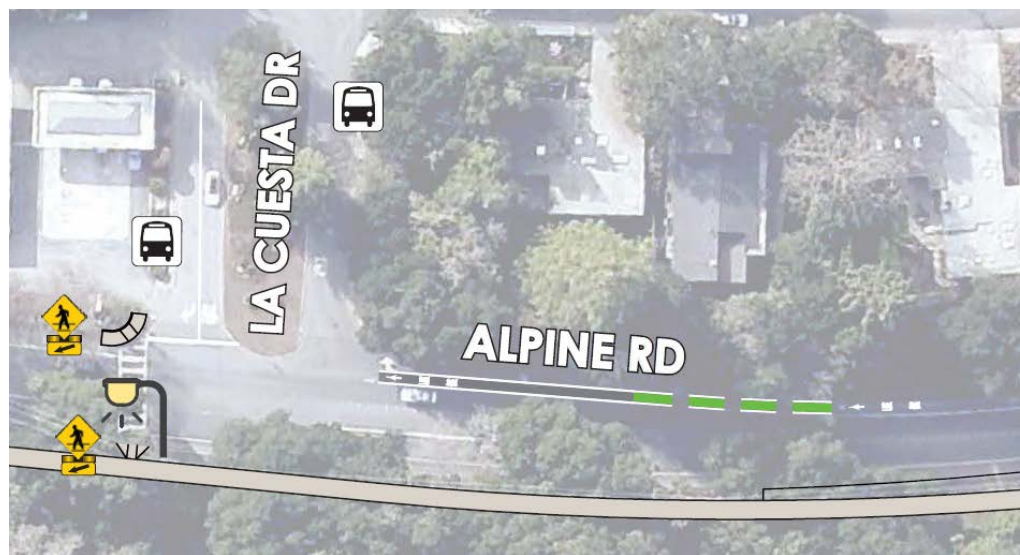
- Shift crosswalk south of La Mesa Drive
- Install lighting & pedestrian-activated flashing beacons at crosswalks at Ladera Oaks, La Mesa, and La Cuesta
- Install speed feedback signs





Ladera Area Improvements

- Widen off-street path on east side of Alpine Road south of I-280 to 8 feet where feasible
- Bike slots at intersections and green paint in conflict areas





I-280 Interchange Improvements

- All I-280 interchange improvements are in phase 2.





Piers Lane Improvements

- Extend buffered bike lane north of I-280 interchange
- “Keep Clear” zones at Piers Lane





Stanford Weekend Acres Area Improvements

- Extend guardrail towards Piers Lane by 100+ feet





Stanford Weekend Acres Area Improvements

- Install speed feedback signs
- “Keep Clear” zones at Stowe, Wildwood, and Bishop Lanes
- Green paint for bike lanes in conflict zones





Stanford Weekend Acres Area Improvements

- Shift roadway striping to widen bike lane to 5' near Stowe Lane





Phase 2 Improvements





Ladera Area Improvements

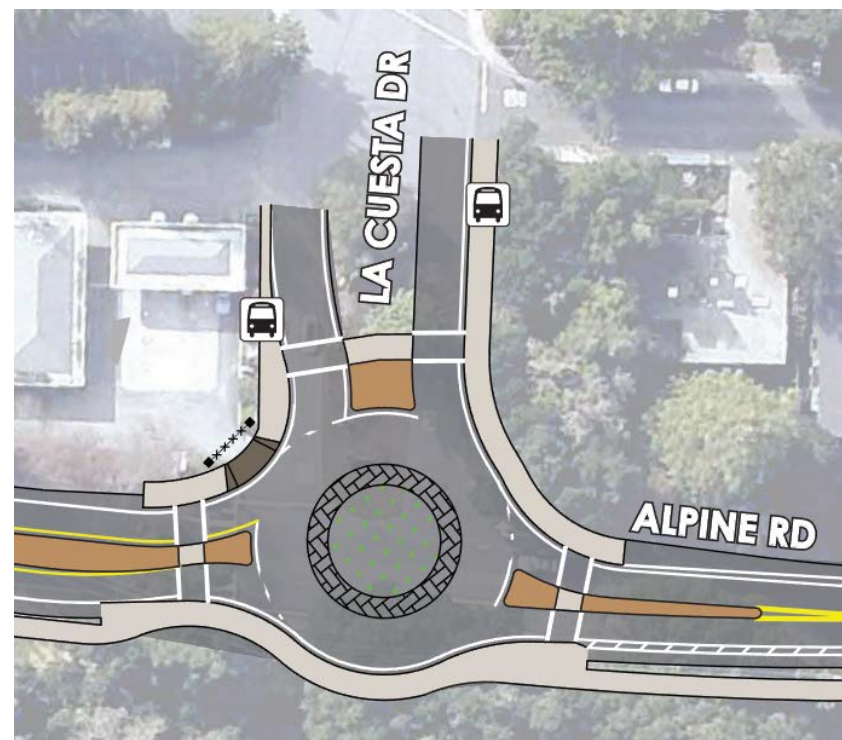
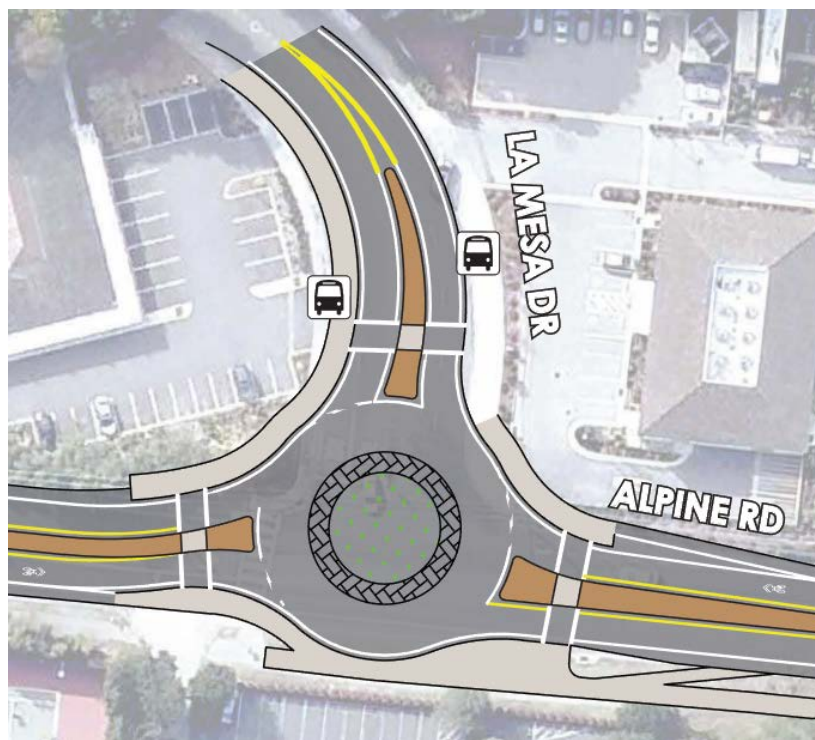
- Buffered bike lanes between La Cuesta Drive and I-280 interchange
- Right-out only shopping center driveway closed
- Restrict exit-only driveway at Shell station to fuel delivery trucks only





Ladera Area Improvements

- Roundabouts at La Mesa & La Cuesta





Ladera Area Alternate Improvement

- Add Turn Lanes on La Cuesta Drive
 - Requires narrowing of existing median on La Cuesta, but will not affect any trees or monument sign

Existing



Proposed





I-280 Interchange Improvements

- Signals at northbound & southbound ramp intersections
- Remove free right turns from off-ramps to Alpine Road
- Remove free southbound on-ramp from northbound Alpine Road to southbound 280
- Extend northbound ramp merging area





Interchange Area Alternate Improvement

- Roundabouts at I-280 ramps





Comparison of I-280 Solutions

	Signalization	Roundabouts
Auto Traffic	<ul style="list-style-type: none"> • Highest capacity and largest reduction in delay • Projected to handle future demands 	<ul style="list-style-type: none"> • Large reduction in delay • Approaches capacity in future
Bicycles	<ul style="list-style-type: none"> • Delineated bike lanes • May have higher vehicle speeds 	<ul style="list-style-type: none"> • Options provided for both recreational and commute cyclists but with less control at conflict points
Benefits for Side-Street Access	<ul style="list-style-type: none"> • Significantly reduces delay for side-streets • Creates vehicle platoons with each signal cycle 	<ul style="list-style-type: none"> • Reduces delay for side-streets • Does not create platoons (constant flow of traffic)
Cost	<ul style="list-style-type: none"> • \$1 Million - \$2 Million 	<ul style="list-style-type: none"> • \$8 Million - \$12 Million

Further study on signalization vs. roundabout required. Decision to be made in coordination with Caltrans.





Piers Lane Improvements

- Modify Dish trail/Piers Lane parking lot on County right-of-way
- Coordinate with Stanford on Dish Trail parking adjacent to their right-of-way
- Provide 150' westbound left-turn pocket at Piers Lane
- Lengthen existing turn pockets at Alpine Access





Stanford Weekend Acres Area Improvements

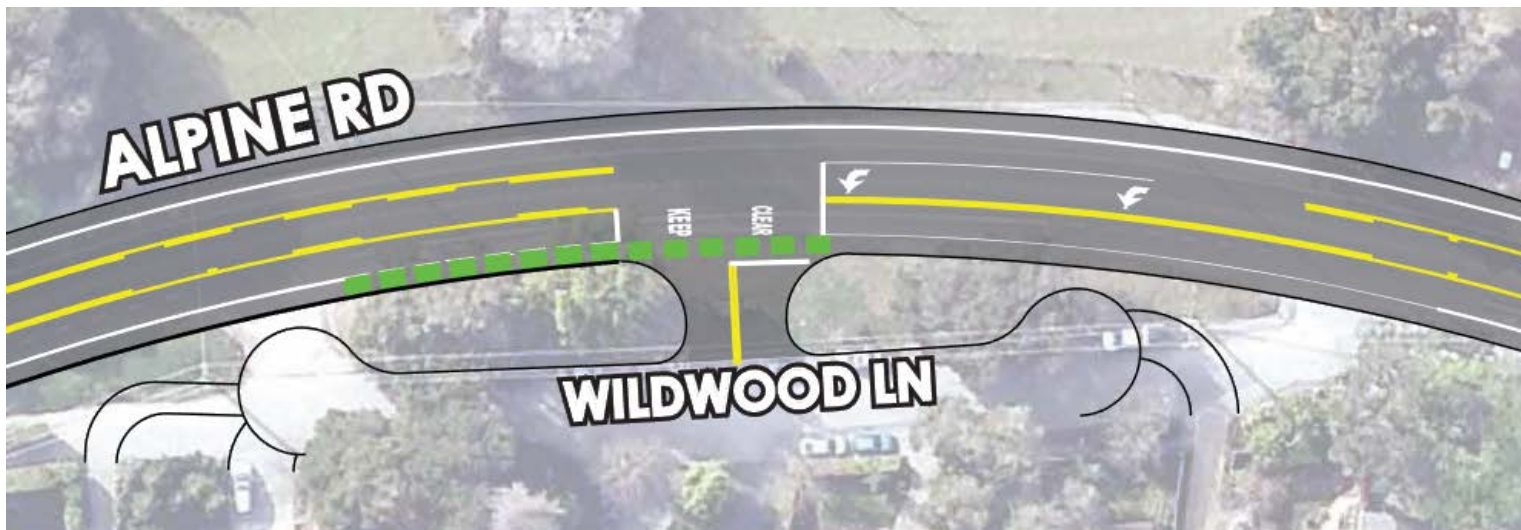
- Lengthen turn pockets and acceleration lanes at Bishop Lane





Stanford Weekend Acres Area Improvements

- Consolidate access to one Wildwood Lane driveway and provide a center turn lane





Stanford Weekend Acres Area Alternate Improvement

- Center-turn lane at Wildwood Lane
 - No consolidated driveway access





Stanford Weekend Acres Area Improvements

- Improve northbound bus stop at Stowe Lane
 - Will improve bus access, passenger comfort, and thus may benefit ridership
- Lengthen left-turn pocket to Stowe Lane
- Off-street path extension adjacent to Alpine Road to Stowe Lane





Community-Requested Improvements

- Highly requested improvement: “Keep Clear” zones at SWA intersections
 - “Keep Clear” zones now included in Phase 1 improvements





Community-Requested Improvements

- Install signals at Stanford Weekend Acres intersections (Stowe, Wildwood, or Bishop)
 - Does not meet signal warrants
- Update on signal improvements at Junipero Serra Boulevard/Santa Cruz Avenue/Sand Hill Road





Community-Requested Improvements

- Install a signal at Piers Lane
 - Meets signal warrants but not recommended until I-280 interchange is fixed
 - Performed traffic analysis to determine effects of signal
 - Reduces delay at Piers Lane/Alpine Access
 - Increases delay at Bishop, Wildwood, Stowe, and I-280
 - Increases queue length on Alpine by about 10%
 - With I-280 interchange improvements, provides nominal benefit in morning peak





Community-Requested Improvements

- Make the roundabouts at I-280 ramps single-lane instead of two lanes
 - Not sufficient to solve congestion issue
- Incorporate bicycle lanes or sharrows in the roundabouts
 - Not allowed by standards for safety reasons





Community-Requested Improvements

- Make parking illegal on the County's portion of Alpine Road
 - Already is illegal, dependent on enforcement
- Speed humps on Alpine Road
 - Used on local, neighborhood, or residential streets only
 - Only appropriate on County streets with a speed limit of 25 mph
 - Not recommended for emergency vehicle routes or bus routes





Next Steps

- PowerPoint, Q&A, and traffic models available at: <http://publicworks.smcgov.org/alpine-road-traffic-corridor-study>
- Corridor Study Report to be prepared in Winter 2016/17 and posted to website
- Phase 1 improvements implemented as money is allocated
- Grant funding and further development required for Phase 2 improvements





Breakout Session

- Please work with the group at your table to prioritize the list of improvements proposed for Phase 1 and 2
- Project representatives will be available to answer clarifying questions on the proposed improvements
- One “scribe” for each group will write the priority number collectively determined by the group on the provided table
- Please provide any questions/comments on the provided comment cards
- A Q&A session will follow to respond to written questions





Q&A

