

City of Menlo Park / City of Palo Alto
Quiet Zone Study

Kimley»Horn



Overview

1. Quiet Zone Basics
2. Menlo Park / Palo Alto Quiet Zone Study Overview
3. Quiet Zone Process
4. Walkthrough of Work To-Date

Why do trains sound their horns?

- Railroads are regulated by the Federal Railroad Administration (FRA)
- Train horns are required by the FRA
- Decibel level requirements for horns
- Advance notice (20 seconds)



What is a Quiet Zone?

- A Quiet Zone exists where a train horn does not need to sound
- The crossings need to be upgraded to be safer without horns than they are in current state with horns.
- Achieved via:
 - Supplemental Safety Measures (SSM) at every crossing; or
 - Proposed design's Quiet Zone Risk Index (QZRI) qualifying for Quiet Zone



Most crossings, as they exist today, would not meet the safety thresholds to implement a Quiet Zone.

Quiet Zone Study

The Process

PHASE I Study (CURRENT)

- Agency Coordination
- Conceptual Design / Safety Analysis
- Public Outreach
- Final Report

PHASE II Implementation (FUTURE)

- Permitting (CPUC, Caltrain)
- Final Design
- Funding
- Construction
- FRA Certification

Agency Coordination

Stakeholder organizations met at each crossing and discussed proposed improvements

Agencies involved:

- City of Menlo Park
- City of Palo Alto
- Kimley-Horn
- Caltrain
- CPUC
- FRA
- UPRR
- Caltrans



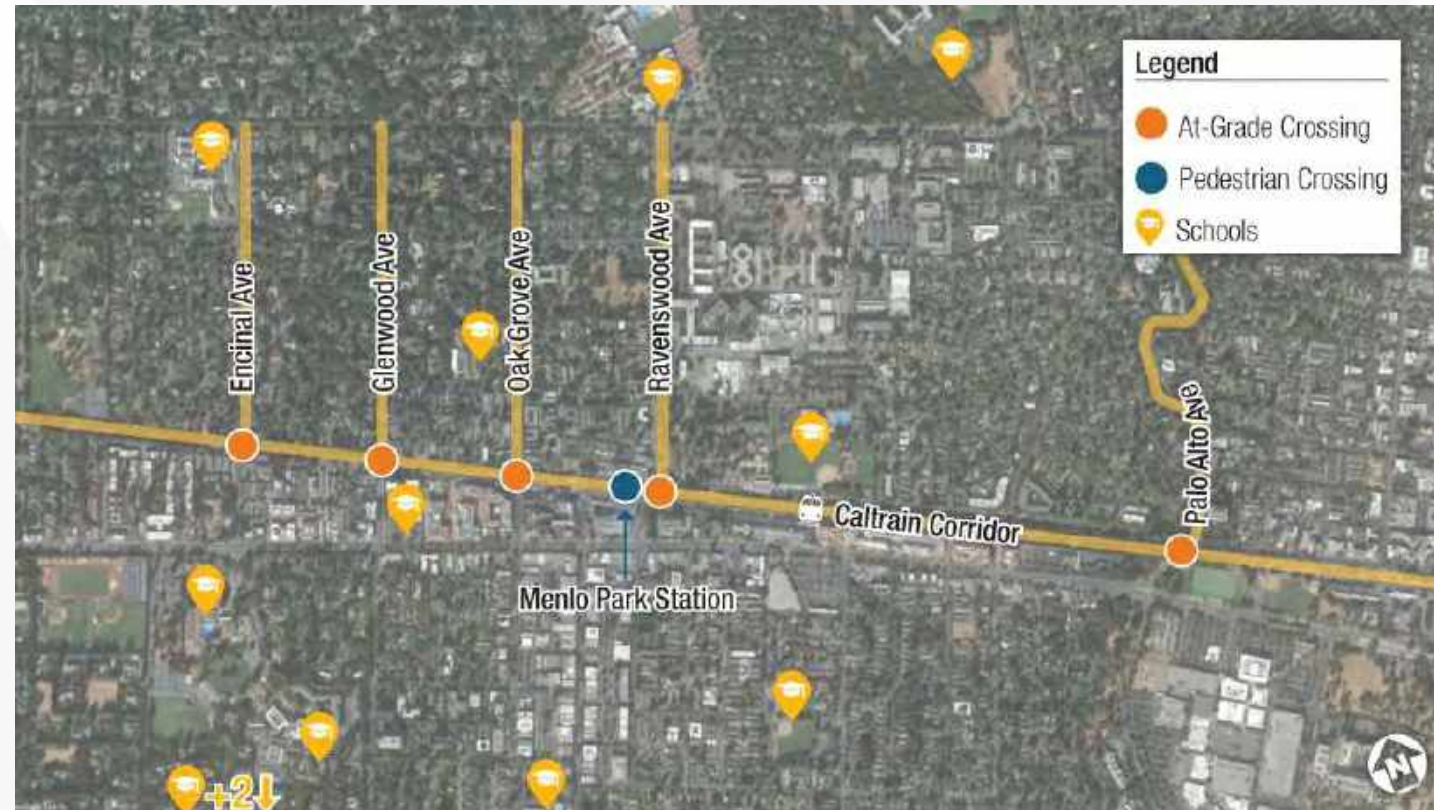
The Menlo Park / Palo Alto Quiet Zone Study Area

Menlo Park Study Area

- Encinal Ave
- Glenwood Ave
- Oak Grove Ave
- Menlo Park Station (pedestrian crossing)
- Ravenswood Ave

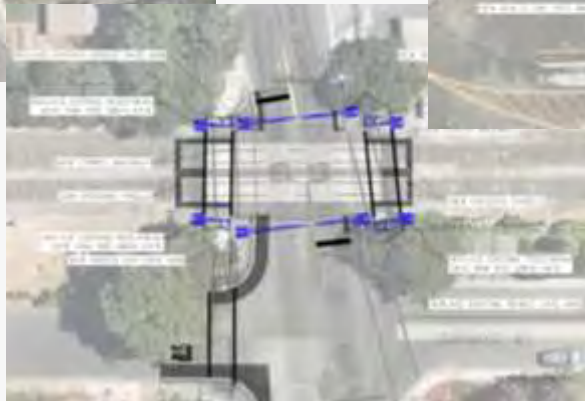
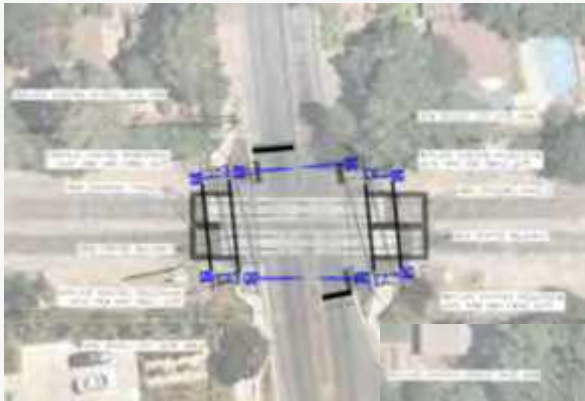
Palo Alto Study Area

- Palo Alto Ave



Conceptual Design

- Each crossing was redesigned to meet specific safety criteria



DESIGN FOCUS AREAS

Safety
Improvements

- Four-quadrant gates
- Raised medians
- Sidewalk realignment
- Refreshed roadway striping and updated signage

DESIGN FOCUS AREAS

Safety
Improvements

- Four-quadrant gates

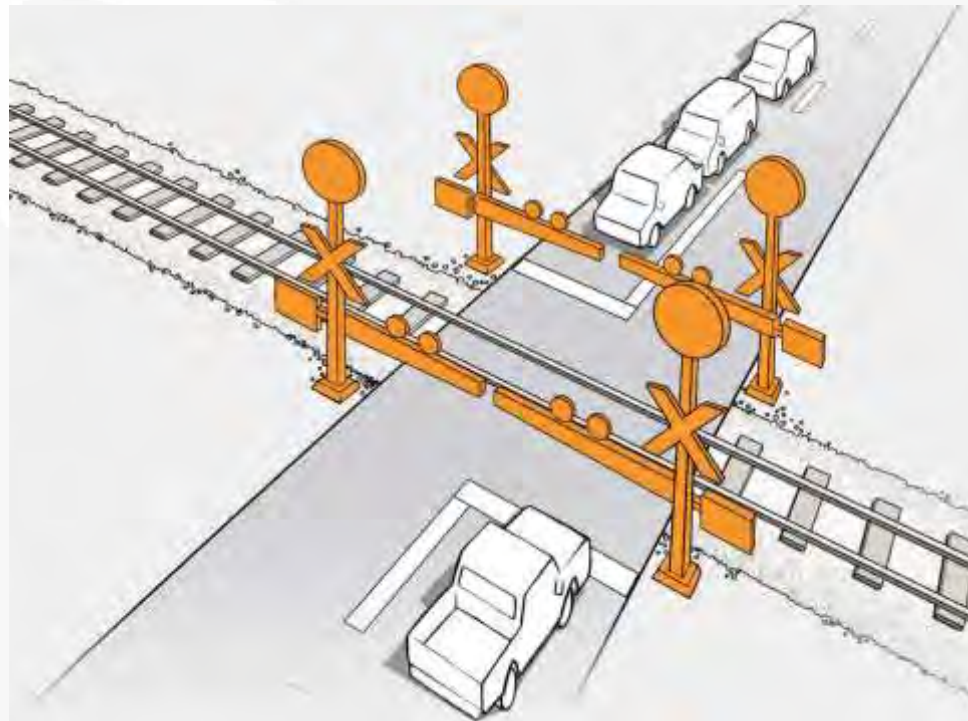


Image: <https://hsr.ca.gov/about/safety/quad-gates/>

DESIGN FOCUS AREAS

Safety
Improvements

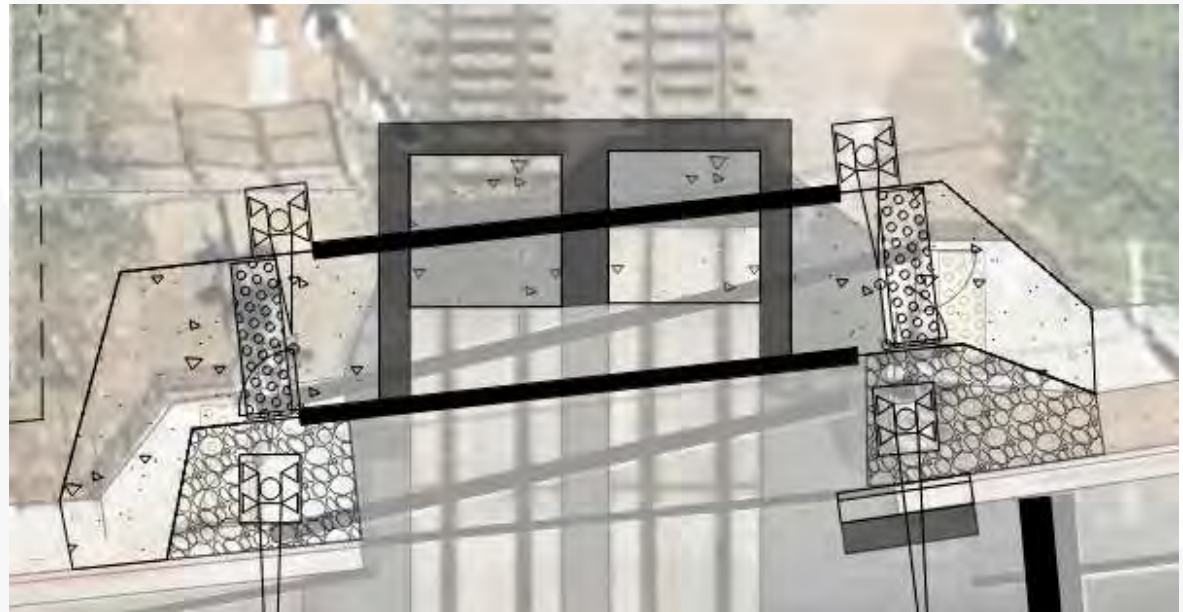
- Raised medians



DESIGN FOCUS AREAS

Safety
Improvements

- Sidewalk realignment



DESIGN FOCUS AREAS

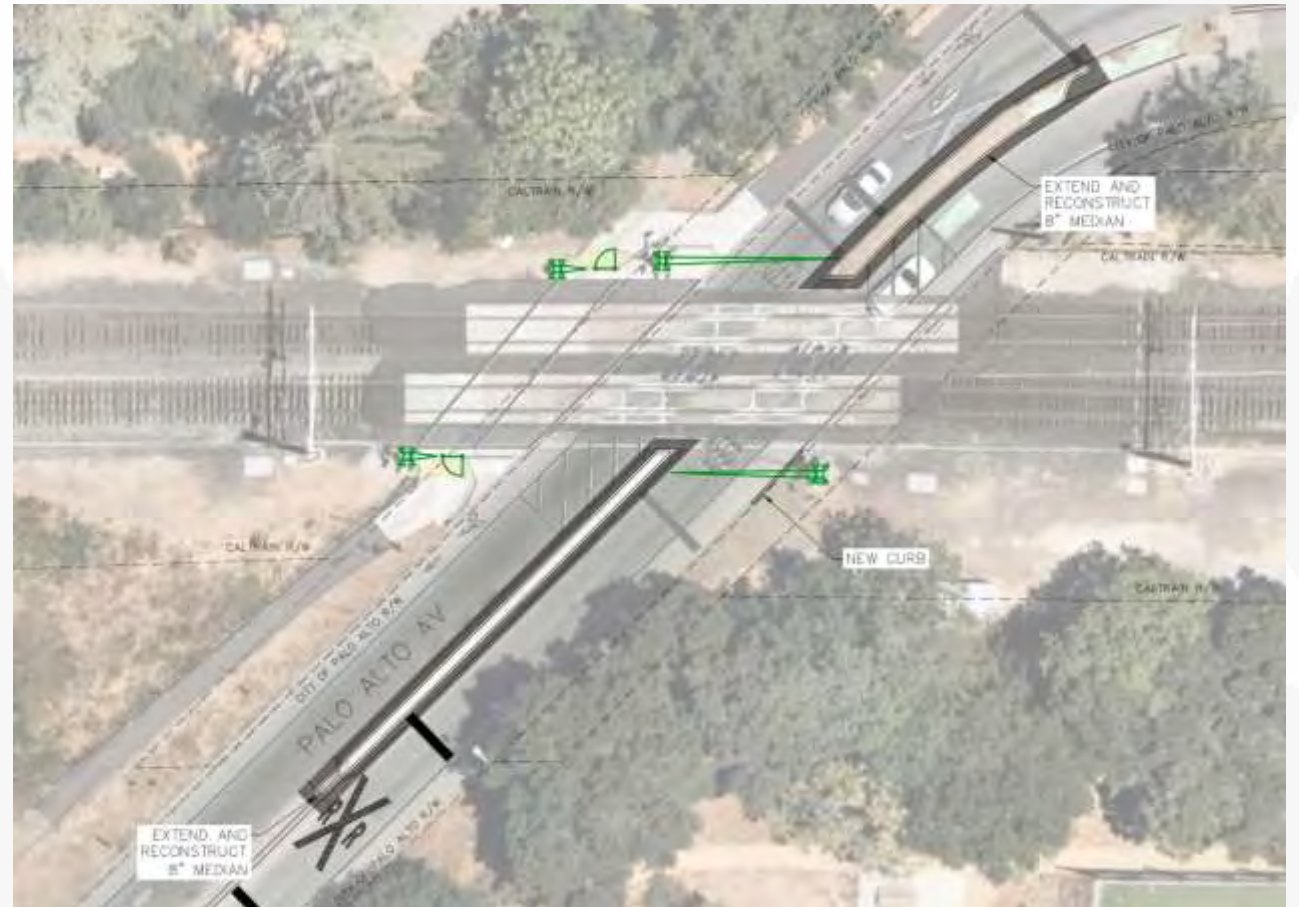
Safety
Improvements

- Refreshed roadway striping and updated signage



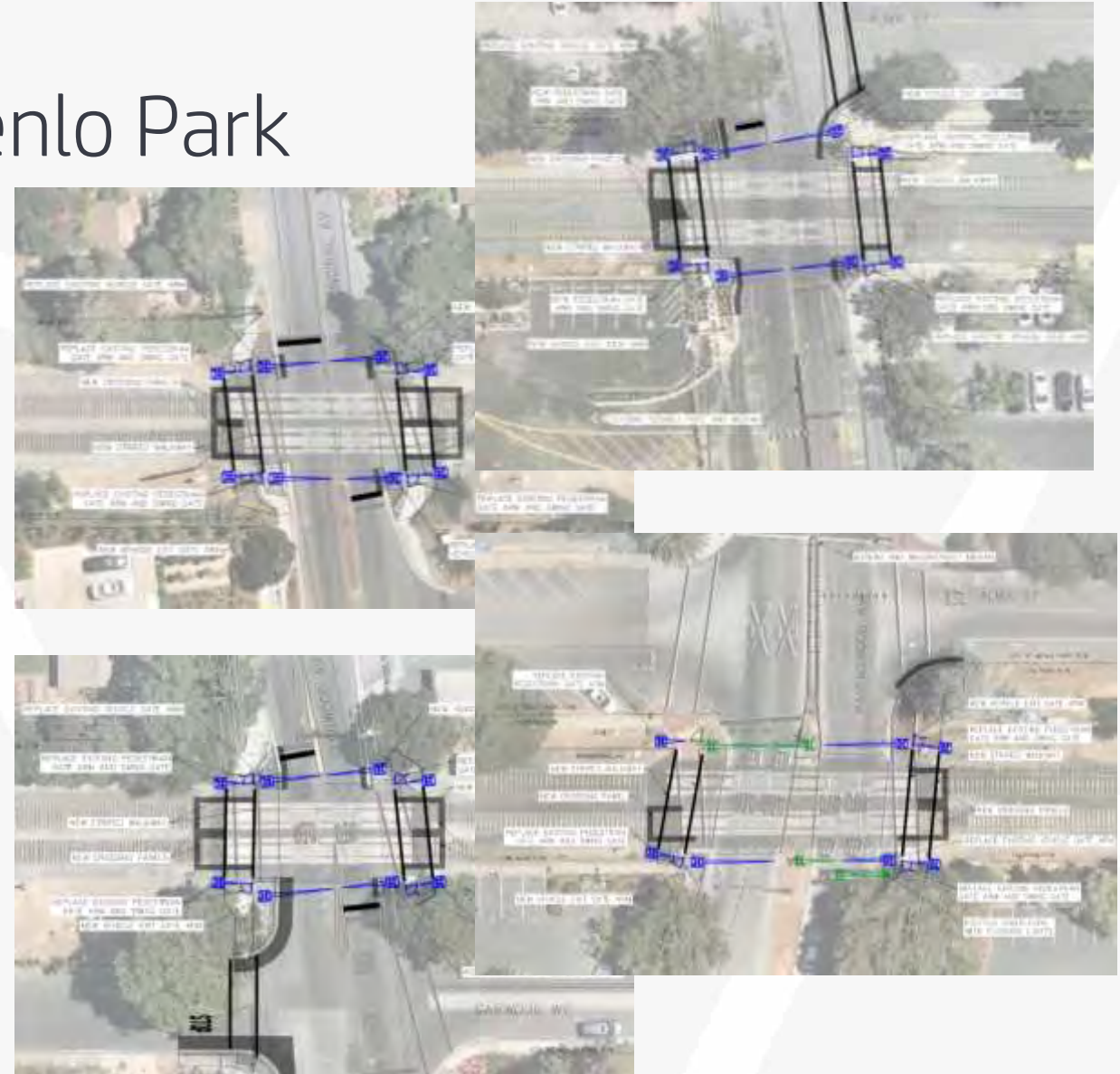
Conceptual Design – Palo Alto Ave / Alma St

- Elongated medians near the railroad tracks to meet FRA standards
- Refreshed striping and signage to meet federal standards



Conceptual Design – City of Menlo Park

- Gate upgrades to four-quadrant systems
- Sidewalk realignment to straighten path of travel when possible
- Refreshed striping and signage to meet federal standards
- Not every individual crossing requires immediate upgrades for quiet zone approval



Public Outreach

- Feedback from this meeting will help inform future decisions



Final Report

- Brings together all steps taken in this process
- Provides recommendations for the cities



FUTURE Implementation

- Permitting (CPUC, Caltrain)
- Final Design
- Funding
- Construction

The logo for Kimley»»Horn is displayed in white text on a dark red background. The word 'Kimley' is followed by three right-pointing chevrons (»») and the word 'Horn'. Below the logo, the tagline 'Expect More. Experience Better.' is written in a smaller, sans-serif font. The background of the slide features abstract, overlapping shapes in orange, red, green, and blue.

Expect More. Experience Better.

Questions?

KEY PERSONNEL

CITY OF MENLO PARK

HUGH LOUCH
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CITY OF PALO ALTO

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KIMLEY-HORN

PETER MEYERHOFER, P.E. (PROJECT MANAGER)
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MEAGAN CHAN, EIT