



CONNECT
THE COASTSIDE



Connect the Coastside Presentation

Workshop #4 Recommended Transportation and Land
Use Improvements

April 7, 2016

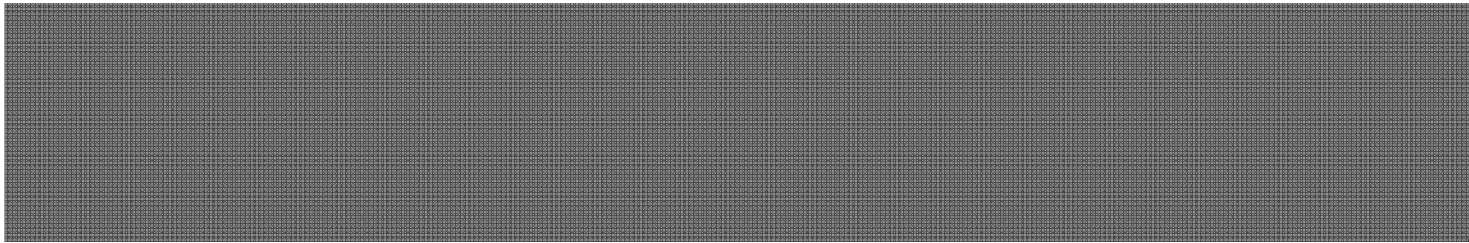


Meeting Agenda

- Review of Project Objectives and Schedule
- Task 3 – Identification and Evaluation of Recommended Transportation and Land Use Alternative to Address Deficiencies
- Next Steps

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Project Objectives and Schedule





What is Connect the Coastsides?

➔ The Plan will identify measures to ensure future residential and non-residential development can be supported by the future transportation system and infrastructure.





Project Objectives

- Estimate the buildout development potential of the Midcoast and Half Moon Bay as permitted by the LCP, General Plan, zoning and pertinent regulations
- Identify the potential impacts of growth on traffic, mobility and safety
- Identify and evaluate measures to minimize and mitigate the impacts of growth
- Develop a plan for funding and implementing transportation improvements

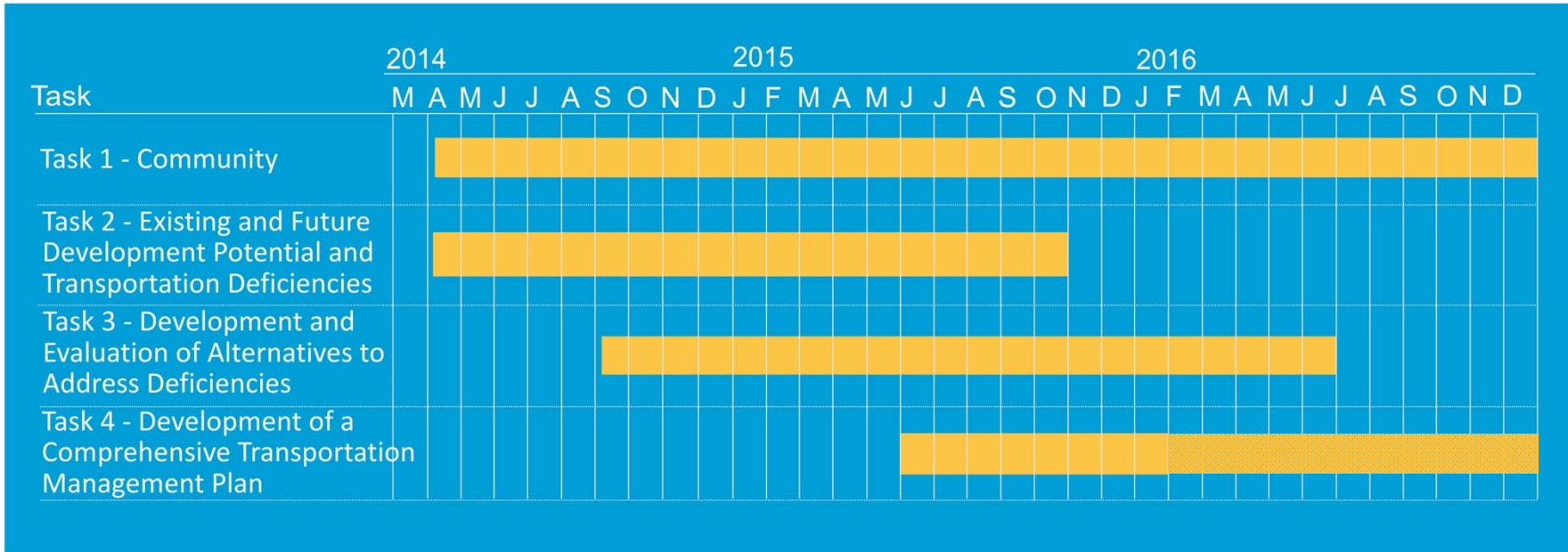


Project Objectives

- San Mateo County is the project sponsor for Connect the Coastsides.
- This plan is to meet the requirements of the County's Local Coastal Program and is separate from the City of Half Moon Bay's Local Coastal Program and General Plan updates. Recommendations for areas in Half Moon Bay are advisory only.



Project Schedule



Workshop #1: Opportunities and Constraints - November 2014

Workshop #2: Alternatives - March 2015

Workshop #3: Land Use Forecast & Alternative Performance Standards - October 2015

Workshop #4: Recommended Transportation and Land Use Improvements – April 2016

Workshop #5: Draft Plan - October 2016





Recommended Alternative



Task 3 - Recommended Alternative to Address Transportation Deficiencies





Recommended Alternative

➤ Background

- Buildout and Constrained Development Forecast used to understand potential impacts on transportation system
- Recommended measures to minimize and mitigate the impacts of growth
 - Transportation improvements
 - Land use policies



Recommended Alternative

➤ Background

- Not intended to be an all-inclusive list of improvements that can or will occur in the Half Moon Bay and the Midcoast region
- List of recommended improvements that directly align with the goals and objectives of this study



Intersection Deficiencies

➤ Midcoast Intersection Deficiencies

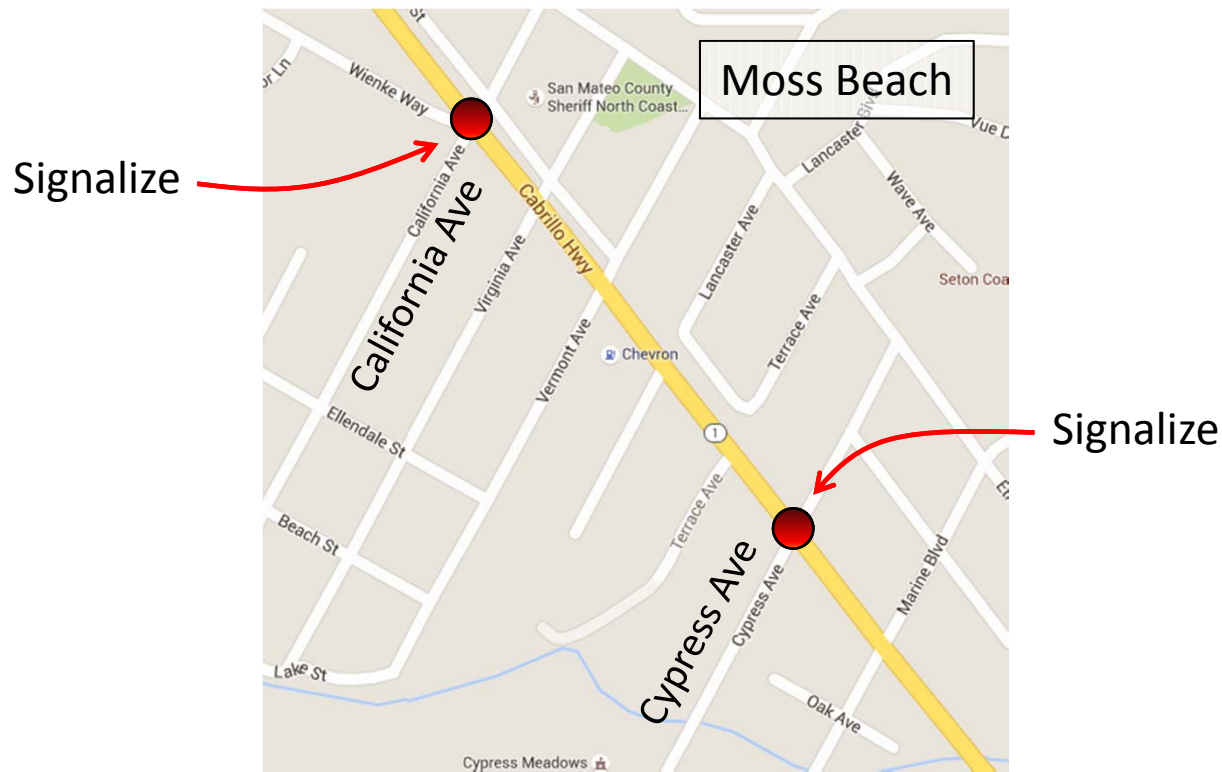
Unsignalized intersections that have a deficient LOS and meet a signal warrant (sufficient side street volume)

Signalized LOS worse than LOS D



Intersection Deficiencies

➤ Midcoast Intersection Deficiencies

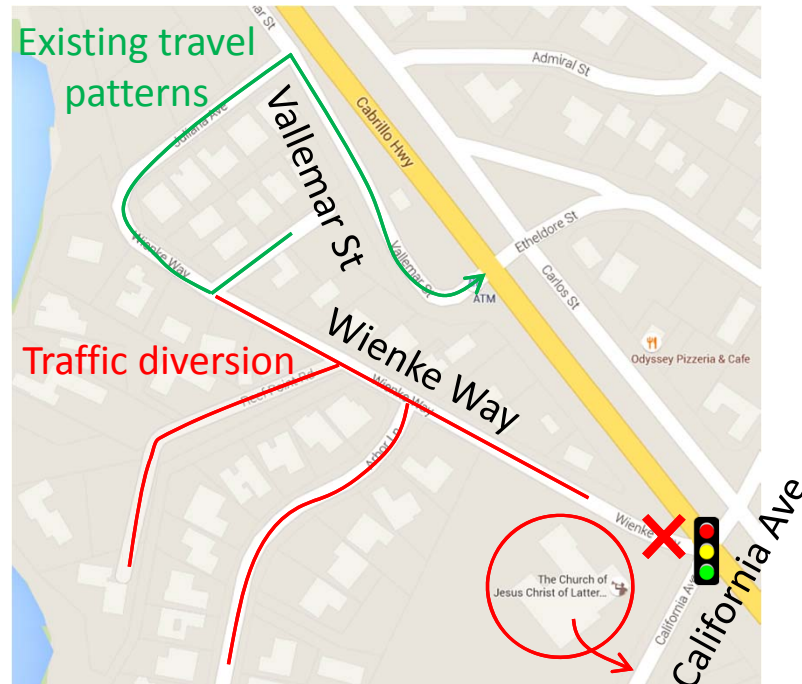
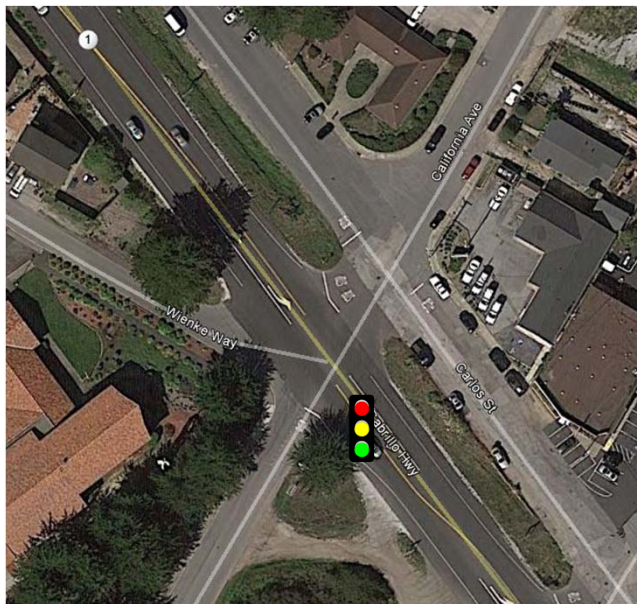




Intersection Deficiencies

➤ Unsignalized Intersections

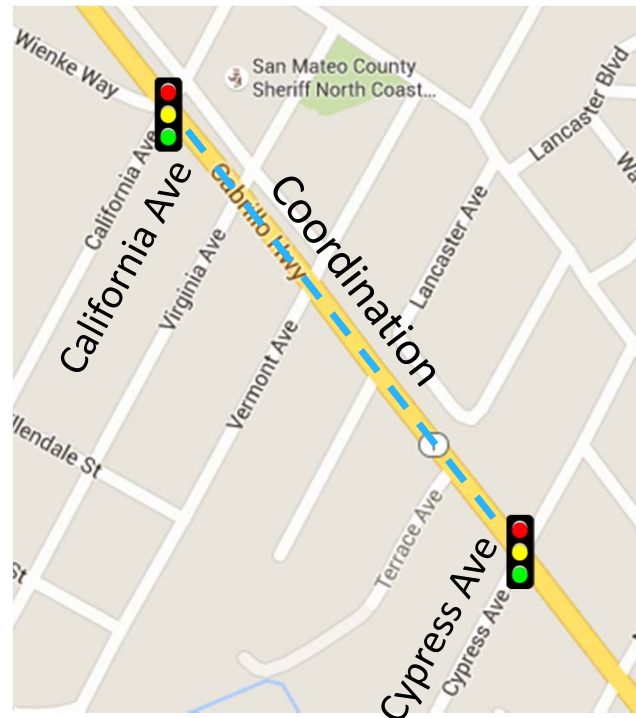
➤ Highway 1 & California Avenue





Intersection Deficiencies

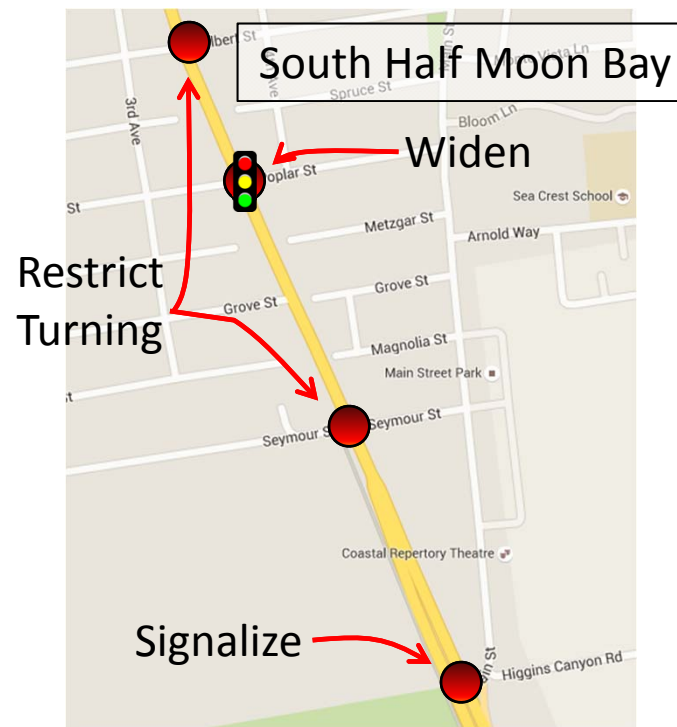
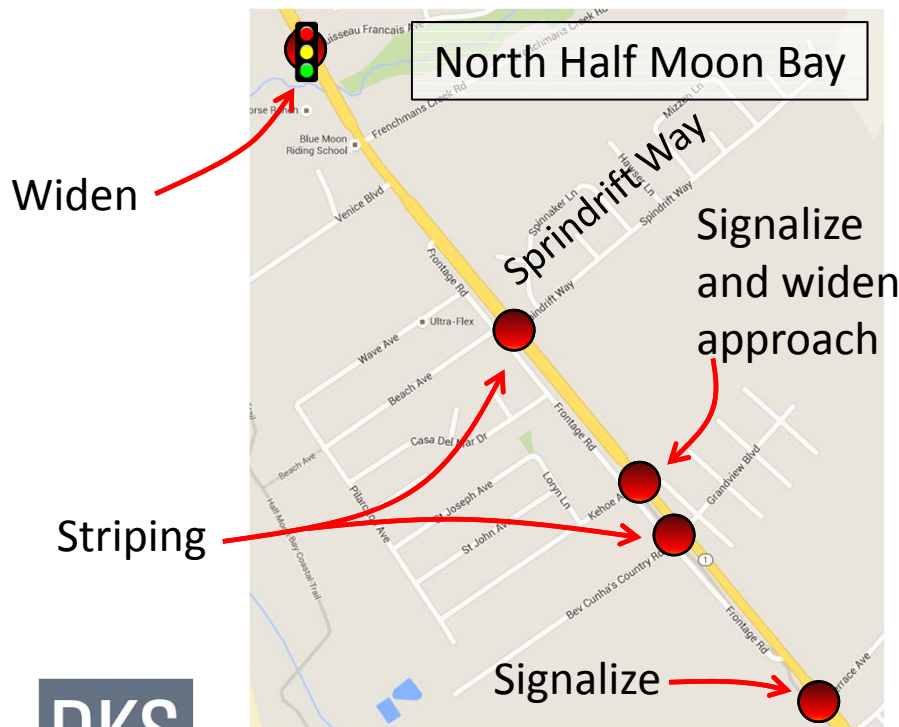
- Unsignalized Intersections
- Highway 1 & Cypress Avenue





Intersection Deficiencies

➤ Half Moon Bay Intersection Deficiencies



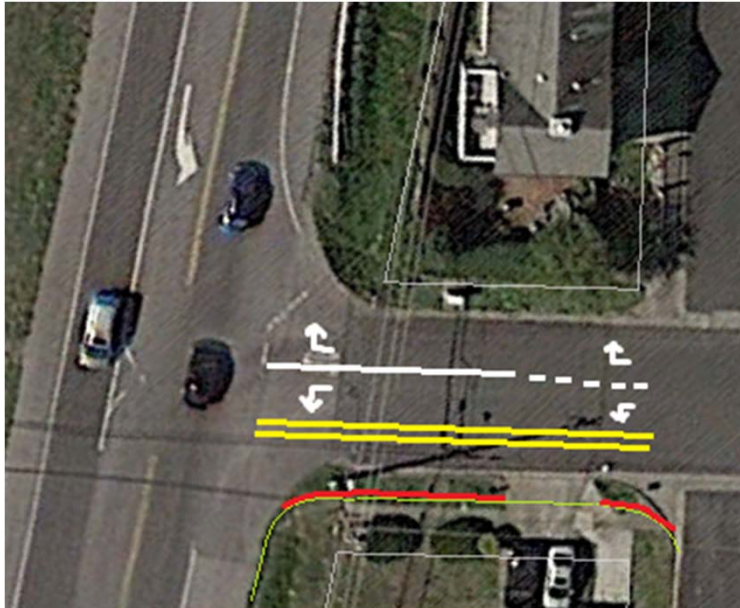


Intersection Deficiencies

➤ Unsignalized Intersections

➤ Highway 1 & Spindrift Way

➤ Highway 1 & Grandview Boulevard



By separating the right- and left-turns, the signal warrant is no longer met.

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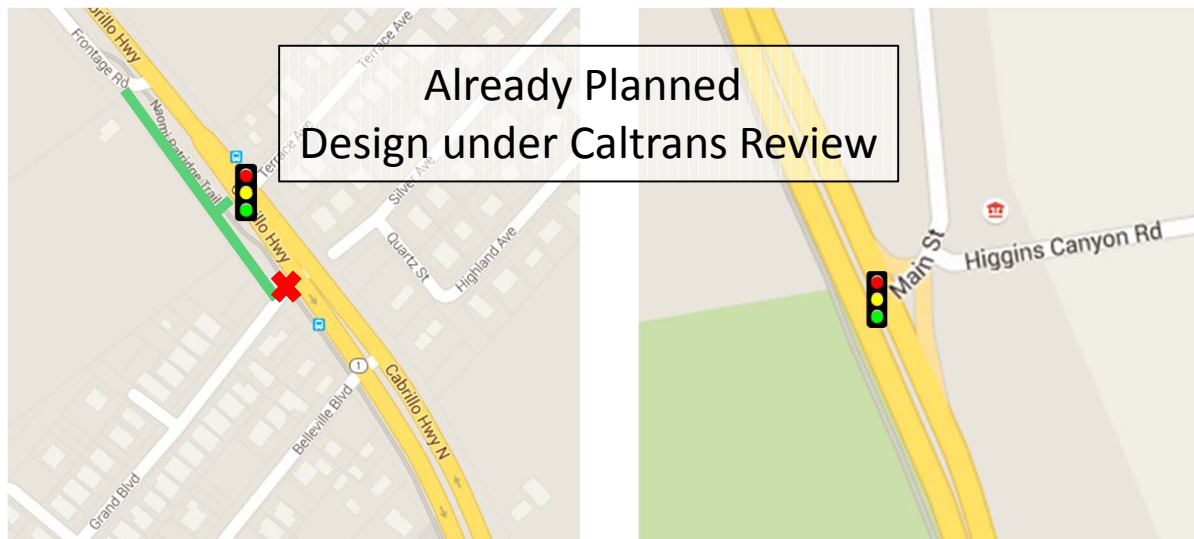


Intersection Deficiencies

➤ Unsignalized Intersections

➤ Highway 1 & Terrace Avenue

➤ Highway 1 & Main Street South

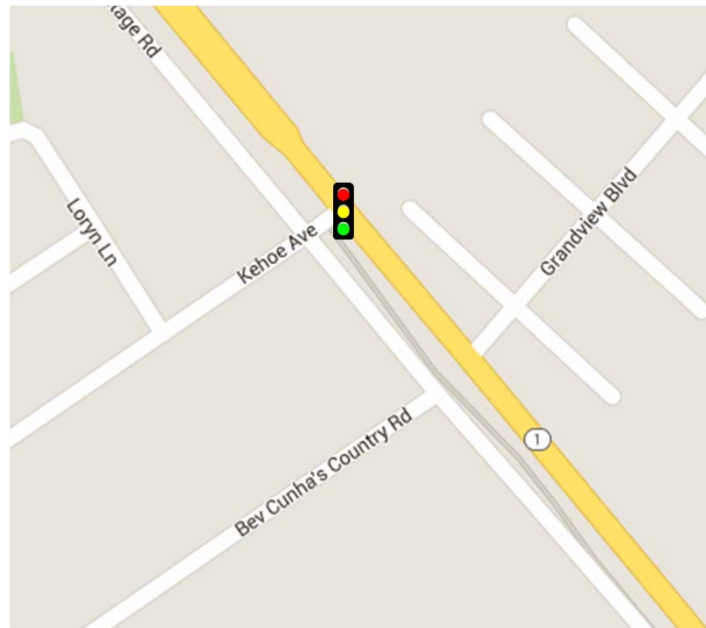




Intersection Deficiencies

➤ Unsignalized Intersections

➤ Highway 1 & Kehoe Avenue

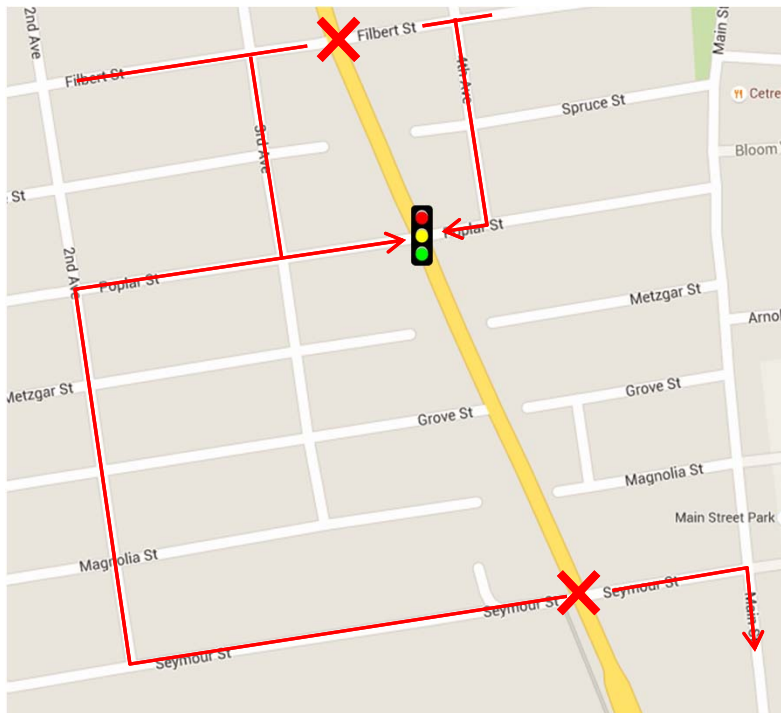




Intersection Deficiencies

➤ Unsignalized Intersections

➤ Highway 1 & Filbert Street



➤ Highway 1 & Seymour Street





Intersection Deficiencies

➤ Signalized Intersections

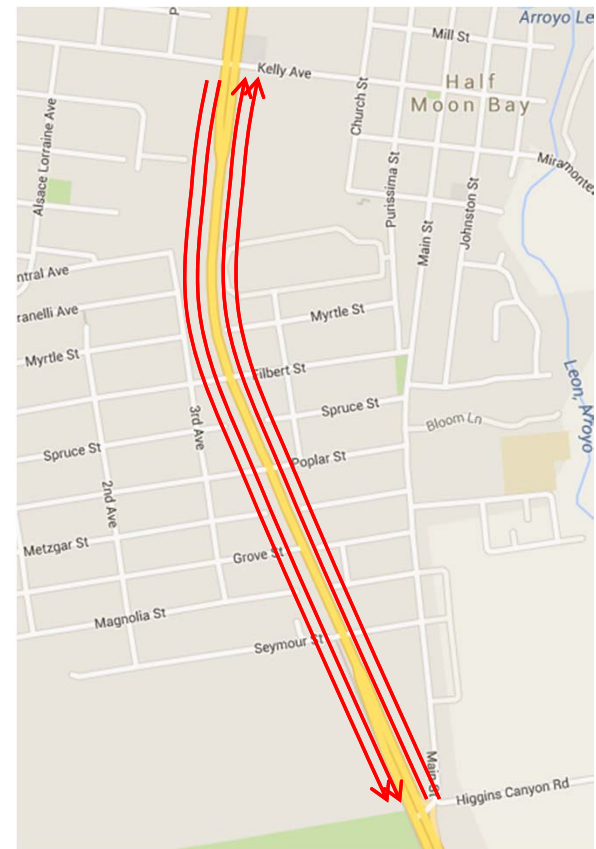
- Highway 1 & Ruisseau Francois Avenue
- 600' four-lane section plus taper





Intersection Deficiencies

- Signalized Intersections
 - Highway 1 & Poplar Avenue
 - Connect four lane section at Kelly Ave and South Main





Roadway Deficiencies

➤ Roadway Deficiencies

Travel time along a cars-only segment with longer than 2x freeflow travel time.

Travel time along a multi-modal segment with longer than 3x freeflow travel time



Roadway Deficiencies

Deficiencies at Full Buildout

Segment	Weekday AM Peak Delay Index	Weekday PM Peak Delay Index	Weekend Midday Peak Delay Index
1 st Street to Mirada Road	2.18	2.32	1.95
Mirada Road to SR 92	9.77	8.19	3.19
SR 92 to Miramontes Point Road	1.02	1.03	1.95
Combined Highway 1 Segment	3.35	3.13	2.19

BOLD – Does not meet Standard (2.0)



Roadway Deficiencies

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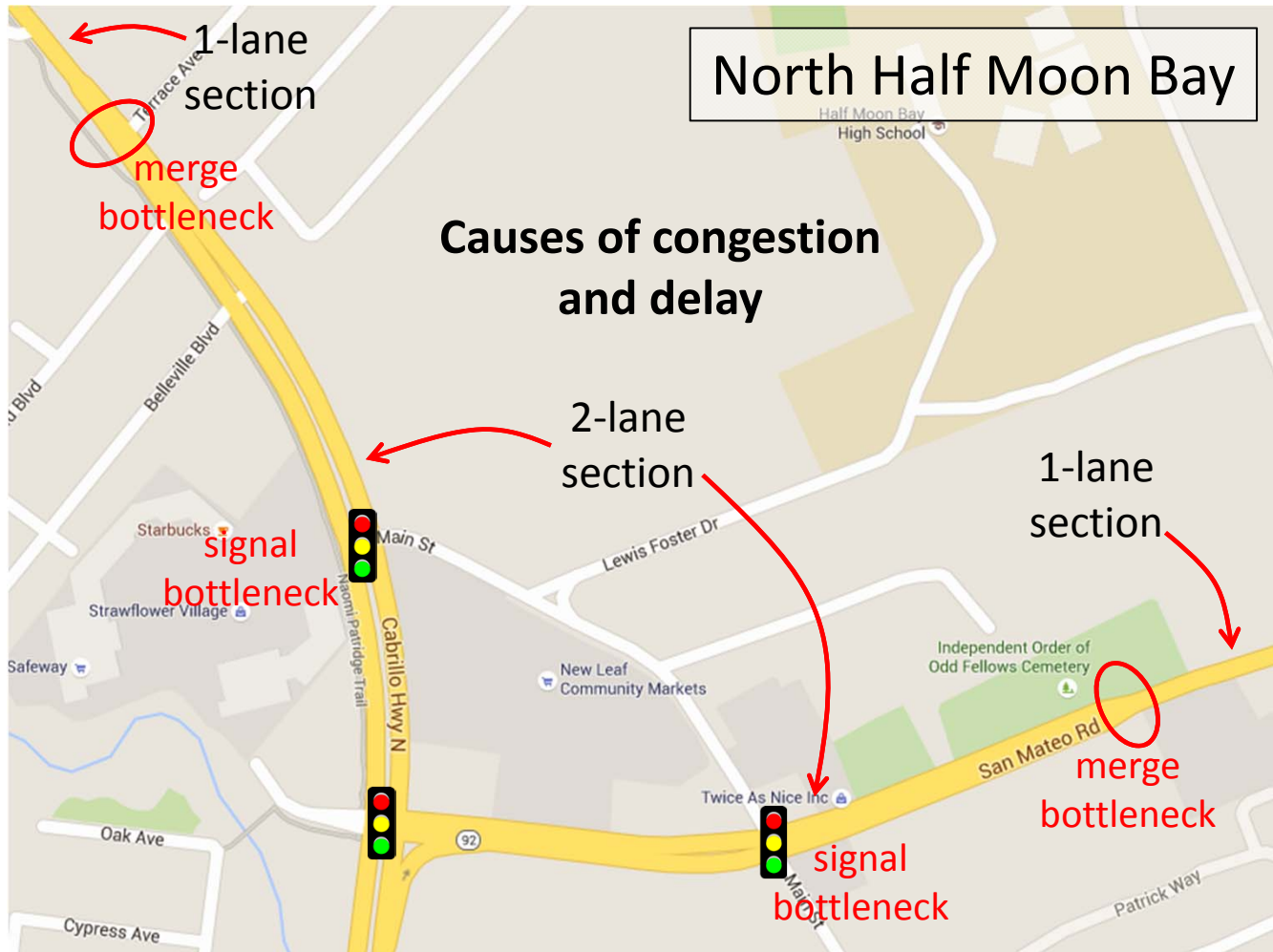
BOLD – Does not meet Standard (2.0)

Conversion of the roadway to a Multi-Modal Facility (Addition of a Class II Bicycle lane) will raise the standard to 3.0



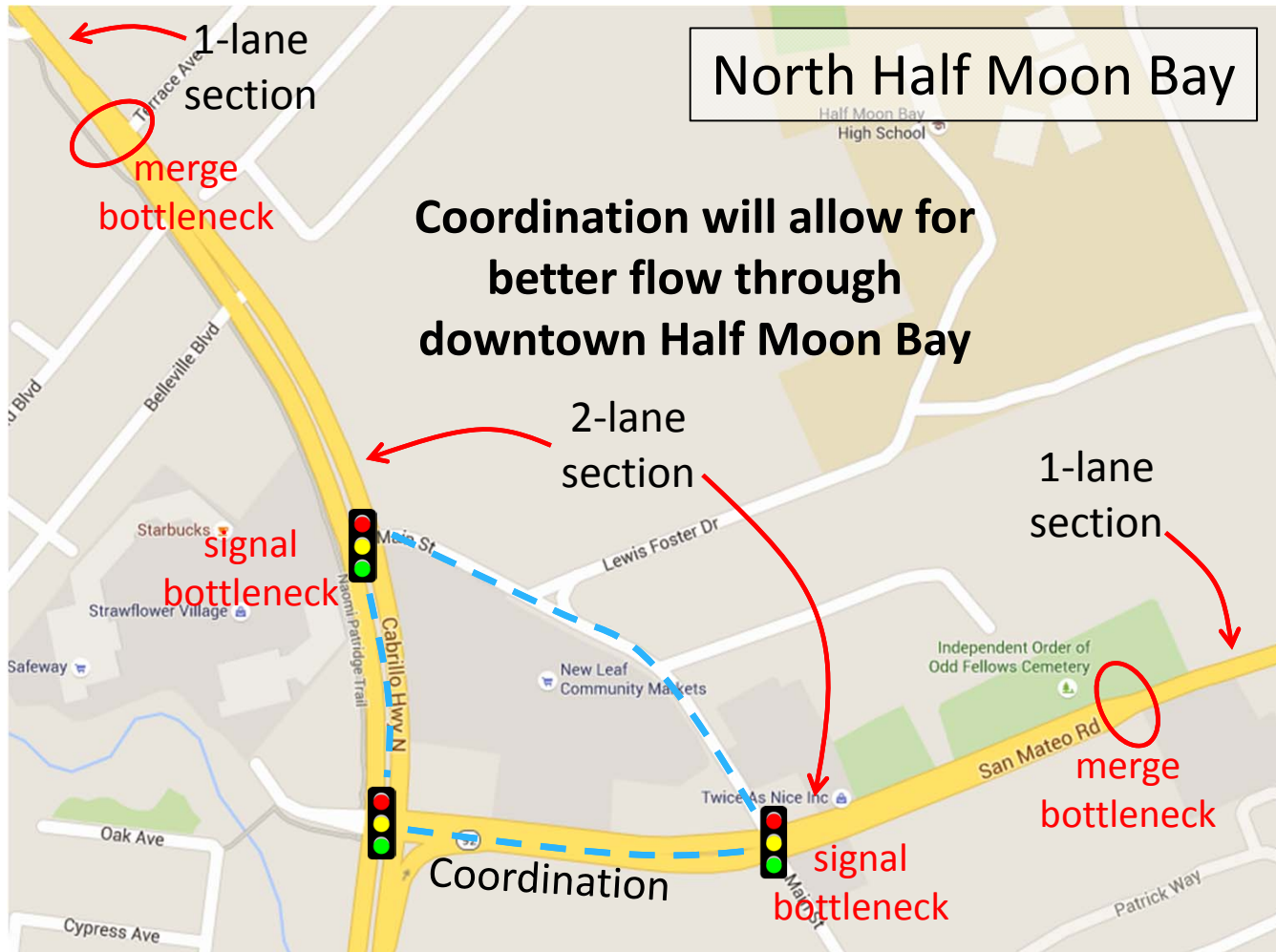


Roadway Deficiencies





Roadway Deficiencies





Roadway and Intersection Deficiencies

- ➔ Proposed Improvements will address all roadway and intersection deficiencies in the Midcoast and Half Moon Bay except for delay through downtown Half Moon Bay which will be partially mitigated by signal coordination.



Roadway and Intersection Circulation and Safety

➤ Intersection Improvements

- Turn bay and acceleration lane at Gray Whale Cove
- Median and northbound turn bay and acceleration lane at 16th (Lighthouse)
- Stop signs added at unsigned locations

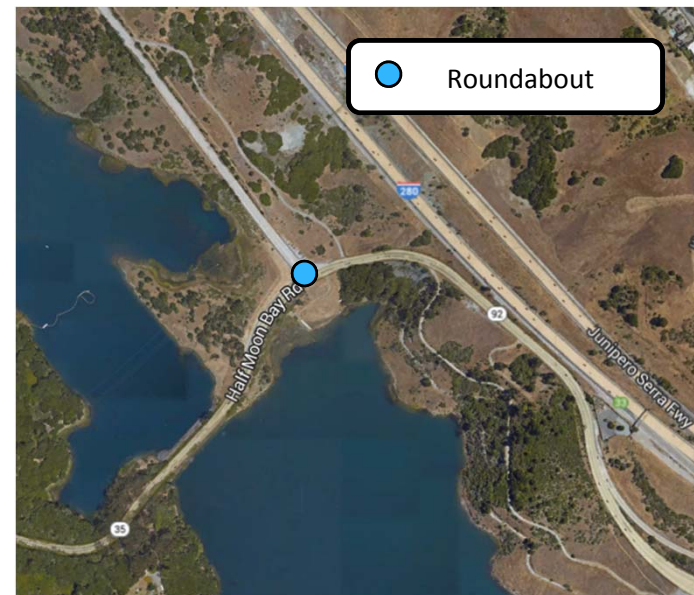




Roadway and Intersection Circulation and Safety

➤ Intersection Improvements

- Roundabout at SR-92 and SR-35
(will still be deficient, however it will improve operations at an LOS F intersection)





Roadway and Intersection Circulation and Safety

➤ Roadway Improvements

- Defined curb and shoulder for consistent cross section
- Consolidation of access along Rocket Farms driveways between Mirada Road and Young Avenue



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Roadway and Intersection Circulation and Safety

➤ Roadway Improvements

- Implementation of calming improvements along:
 - Main Street (Montara)
 - Carlos Street (Moss Beach)





Roadway and Intersection Circulation and Safety

➤ Roadway Improvements

- Left-turn lanes at major businesses along SR 92 in Half Moon Bay
- SR-92 climbing lane between the quarry and existing lanes
- “Trucks use right lane” signs along climbing lane



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Roadway and Intersection Improvement Cost

➤ Cost for Deficiency Projects

\$13.6 M

➤ Additional Cost for Circulation and Safety Projects

\$12.3 M



Pedestrian Deficiencies

➤ Pedestrian Deficiencies

Segments along Highway 1 with potential for pedestrian demand that do not provide sufficient pedestrian facilities (PEQI score)

Segments along Highway 1 with potential for pedestrian demand without crossing opportunities every ½ mile



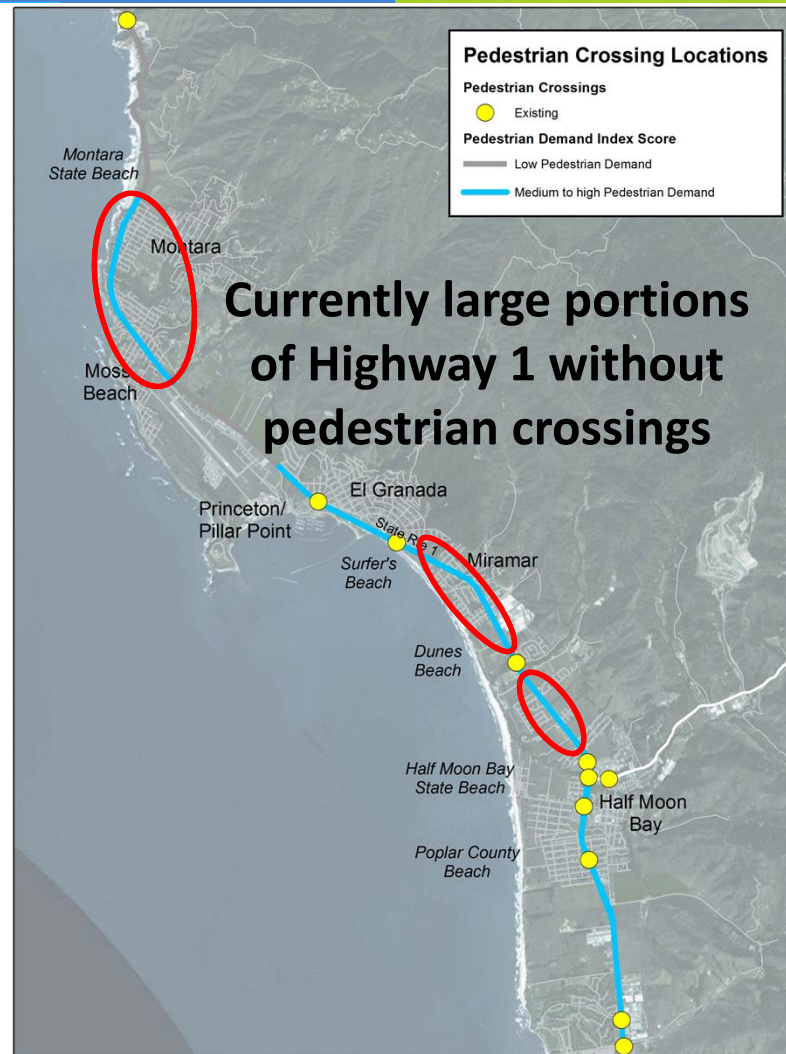
Pedestrian Deficiencies

➤ Pedestrian Improvements

- Pedestrian count-down timers on signalized crosswalks
- Signal timing adjusted to meet 3.5 feet per second crossing speed MUTCD requirement
- Pedestrian refuges on wide crossings
- ADA compliant walking paths along Highway 1 in Montara, Moss Beach, Miramar, and downtown areas of Half Moon Bay with:
 - 6' wide obstruction-free path
 - Pedestrian scale lighting



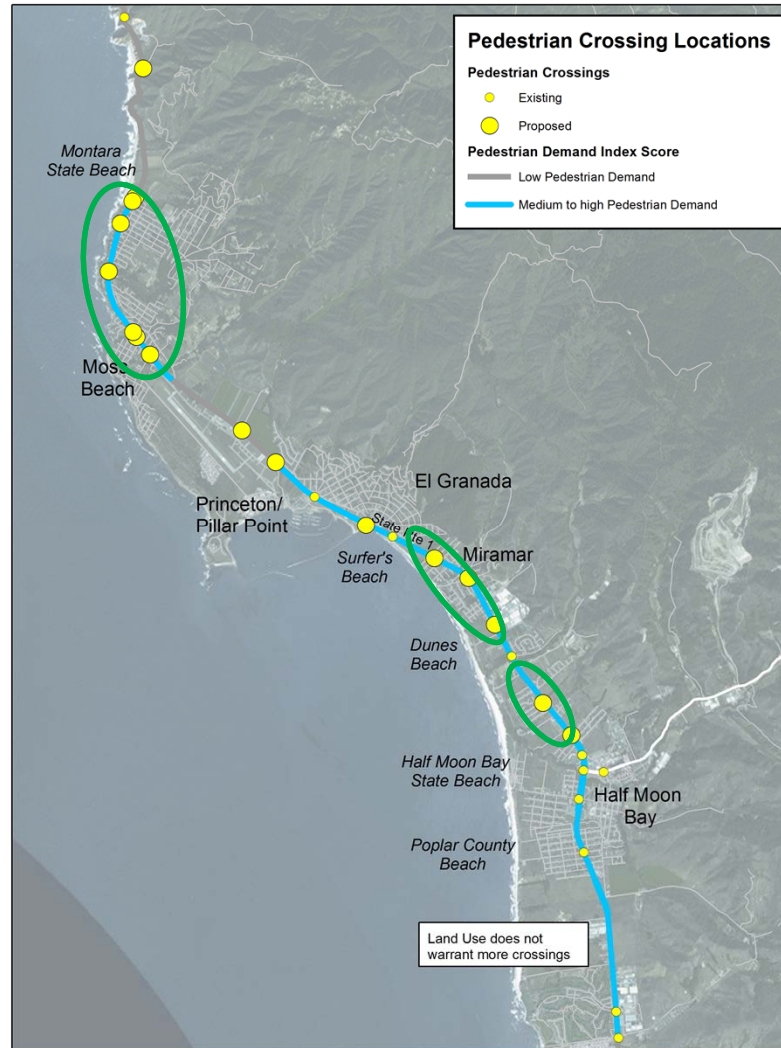
Pedestrian Deficiencies





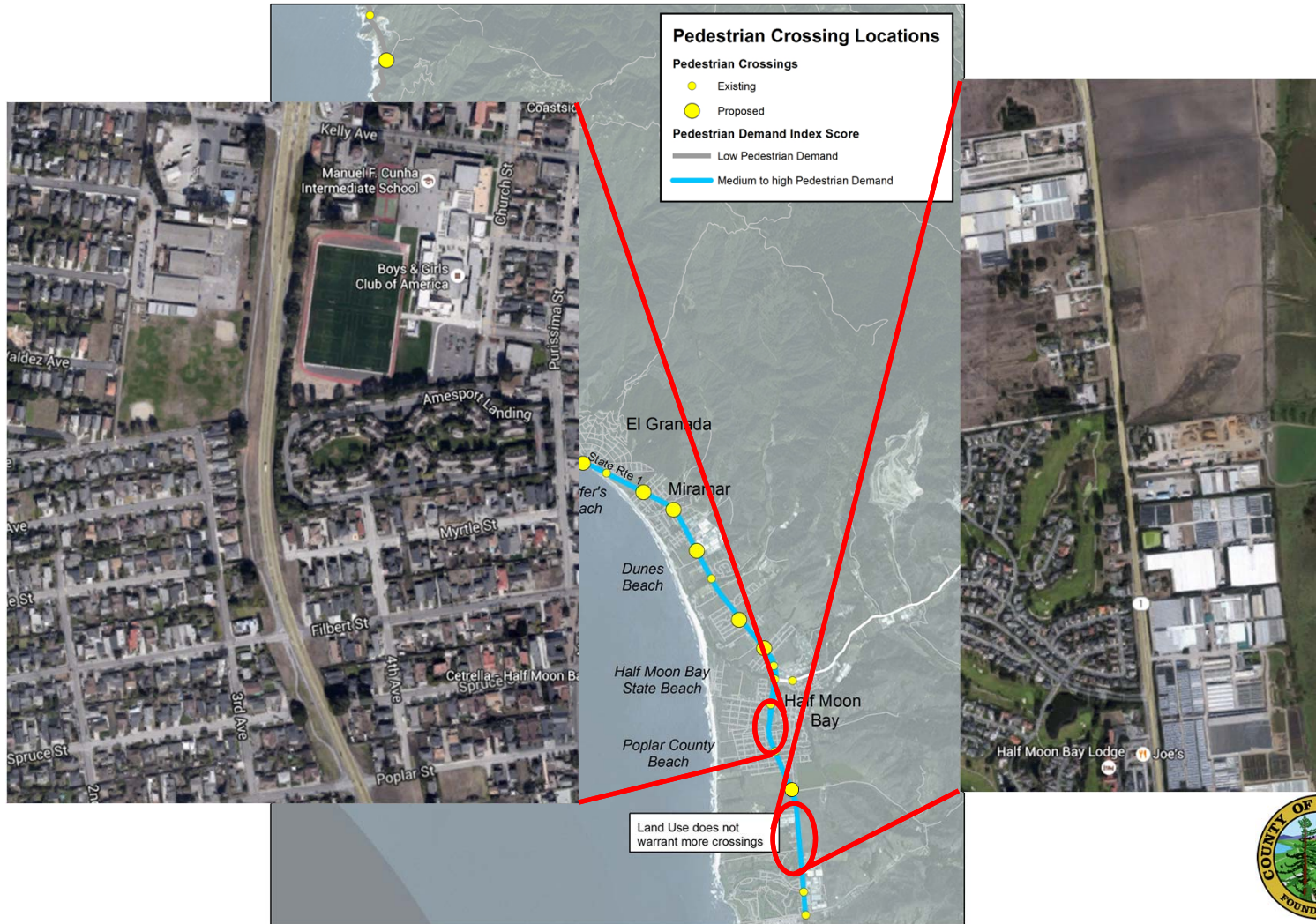
Pedestrian Deficiencies

Additional crossings to reduce the distance between crossings to ½ mile in pedestrian areas





Pedestrian Deficiencies





Effect on Delay Index

Delay Index with Signalized Intersections and Pedestrian Crossings (% of free flow time)

Segment	Weekday AM Peak Delay Index	Weekday PM Peak Delay Index	Weekend Midday Peak Delay Index
1 st Street to Mirada Road	2.28 (+0.11)	2.43 (+0.10)	2.16 (+0.20)
Mirada Road to SR 92	10.04 (+0.27)	8.26 (+0.07)	3.46 (+0.27)
SR 92 to Miramontes Point Road	1.03 (+0.01)	1.05 (+0.02)	1.97 (+0.02)

BOLD – Does not meet Standard for multimodal corridor (3.0)





Pedestrian Circulation and Safety

➤ Pedestrian Improvements

- ADA compliant walking paths along Coronado and Ave Alhambra in El Granada with:
 - 6' wide obstruction-free path
 - Pedestrian scale lighting



Bicycle Deficiencies

➤ Bicycle Deficiencies

Segments along Highway 1 without sufficient bicycle facilities (BEQI score)

Bicycle storage at beach access points and major trip generators that operate at more than 85% occupancy on average during the weekend midday peak



Bicycle Deficiencies

➤ Bicycle Improvements

- Making the Parallel Trail continuous
 - 2nd Street to Ruisseau Francois Ave
 - Wavecrest Rd to southern HMB border
- Making the Coastal Trail continuous
 - Devil's Slide trail to 2nd Street
 - California Avenue between highway 1 and Airport Street
 - Paving the dirt trail in south HMB
- Class II bicycle lane in both directions along Highway 1

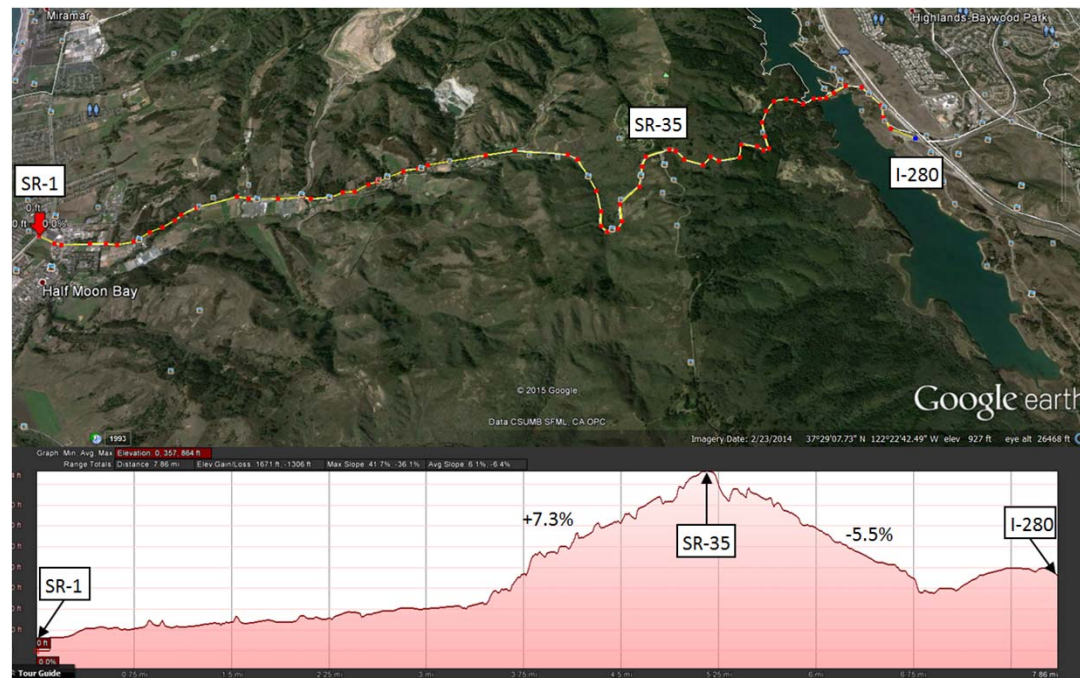




Bicycle Circulation and Safety

➤ Bicycle Improvements

- Class II bicycle lane along SR-92
 - Class II bicycle lane or Class III bicycle route along Airport Street
- Both conditional on demand studies





Pedestrian and Bicycle Improvement Cost

➤ Cost for Deficiency Projects

\$26.2 M

➤ Additional Cost for Circulation and Safety Projects

\$22.8 M





Transit Deficiencies

➤ Transit Deficiencies

Utilization of buses standing capacity
exceeding a 2-hour average of 85%

Bus stops with an average of at least 25 daily
boardings without a bench for riders.

Bus stops with an average of at least 100 daily
boardings without a shelter



Transit Deficiencies

➤ Transit Improvements

- Benches installed at the following locations:
 - Highway 1 & SR-92 (Average of 16 daily riders)
 - Strawflower Shopping Center (Average of 29 daily boardings)
 - Kelly Avenue & Church Street (Average of 24 daily boardings)
 - Main Street & Lewis Foster Drive (Average of 21 daily boardings)

Averages reflect 2015 ridership





Transit Safety and Circulation

➤ Transit Improvements

- Shuttle bus service on summer and fall weekends during special events
- More frequent weekend service for exiting SamTrans routes 294 and 17
- Park-and-Ride shuttle for existing parking lots
- School Bus service for El Cabrillo Unified with storage and maintenance facilities



Transit Improvement Cost

➤ Cost for Deficiency Projects

\$2000-\$3000

➤ Additional Cost for Circulation and Safety Projects

\$525 K annual operating



Parking Deficiencies

➤ Parking Deficiencies

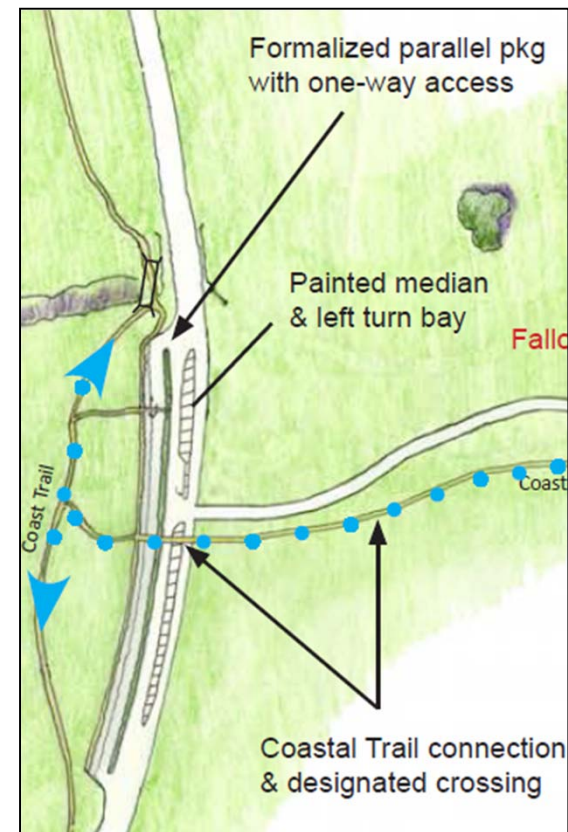
Utilization of beach access parking lot capacity exceeding an average of 85% during the weekend midday peak



Parking Deficiencies

➤ Parking Improvements

- Formalized parallel parking for Montara State Beach with physical separation from Highway 1
- Diagonal separated parking for El Granada





Parking Deficiencies

➤ Parking Improvements

- Coastside access shuttle to serve over-capacity lots as proposed by Supervisor Horsley's office
- Modify parking charges to bring occupancy to 85%





Parking Safety and Circulation

➤ Parking Improvements

- Paving and Striping at the Gray Whale Cove Upper Lot
- Improved wayfinding signage





Parking Improvement Cost

➤ Cost for Deficiency Projects

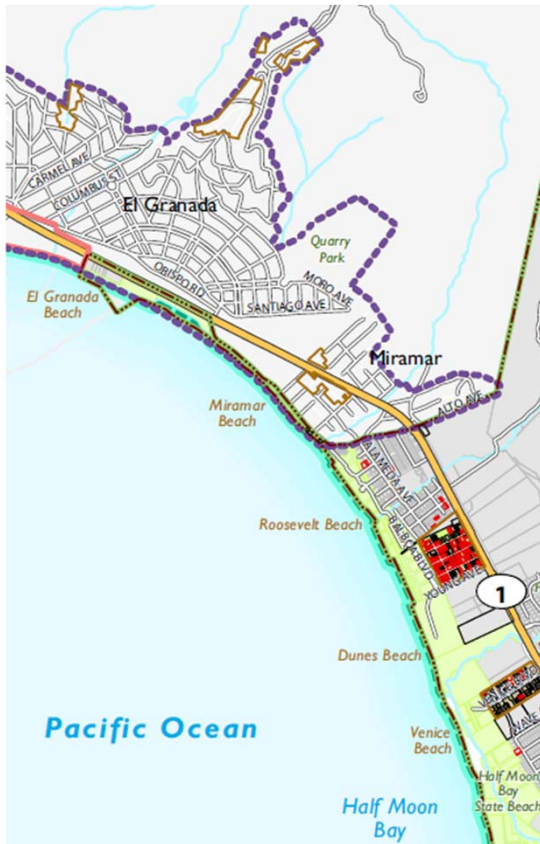
\$611 K + \$250 K annual operating

➤ Additional Cost for Circulation and Safety Projects

\$1.4 M



Land Use Policy Concepts



Land Use Policy Concepts





Land Use Policy Concepts

➤ Paper subdivisions

- Revised Criteria for Legalization of Parcels Included Within Historic Recorded Subdivisions requires chain of title
- Estimated 183 parcels in County jurisdiction

➤ Substandard lots

- Lots that do not meet minimum lot size or lot width standards
- Use permit required where lot is very substandard (smaller than 3,500sf or 35 ft wide where 5,000sf and 50 ft minimums apply)



Land Use Policy Concepts

➤ **Mandatory Lot Merger Program**

- Zoning, Subdivision Ordinance establish process for merger of contiguous parcels
- Board of Supervisors adopted policy in 2006 authorizing mandatory lot merger program
 - At least 2 contiguous parcels in same ownership
 - At least 1 parcel undeveloped
 - Area of at least one parcel <4,500sf in R-1 or R-3, <5,000sf in RM-CZ
 - Voucher for development bonus offered for voluntary merger
 - Process of hearing and appeals for mandatory merger





Land Use Policy Concepts

➤ **Mandatory Lot Merger Program**

- Lot Merger program would support LCP policy 1.21: Lot Consolidation
- Lot Merger assumed in buildout calculation, consistent with methodology used for Midcoast LCP
- 216 lots estimated eligible in Unincorporated Midcoast
- Vacant substandard lots would decrease by 40%



Land Use Policy Concepts

➤ **Mandatory Lot Retirement Program**

- Require 1:1 retirement of development rights on existing lots in exchange for new lots
- Coastal Commission has required this as Condition of Approval for some recent projects, recommended program for Midcoast LCP
- Proposed policy concept for CTMP:
 - Donor sites: located outside of existing developed areas; in areas containing sensitive habitat; or designated for Conservation, Open Space, Recreation or Agriculture
 - Apply only when new residential subdivision is proposed; do not apply to infill development





Land Use Policy Concepts

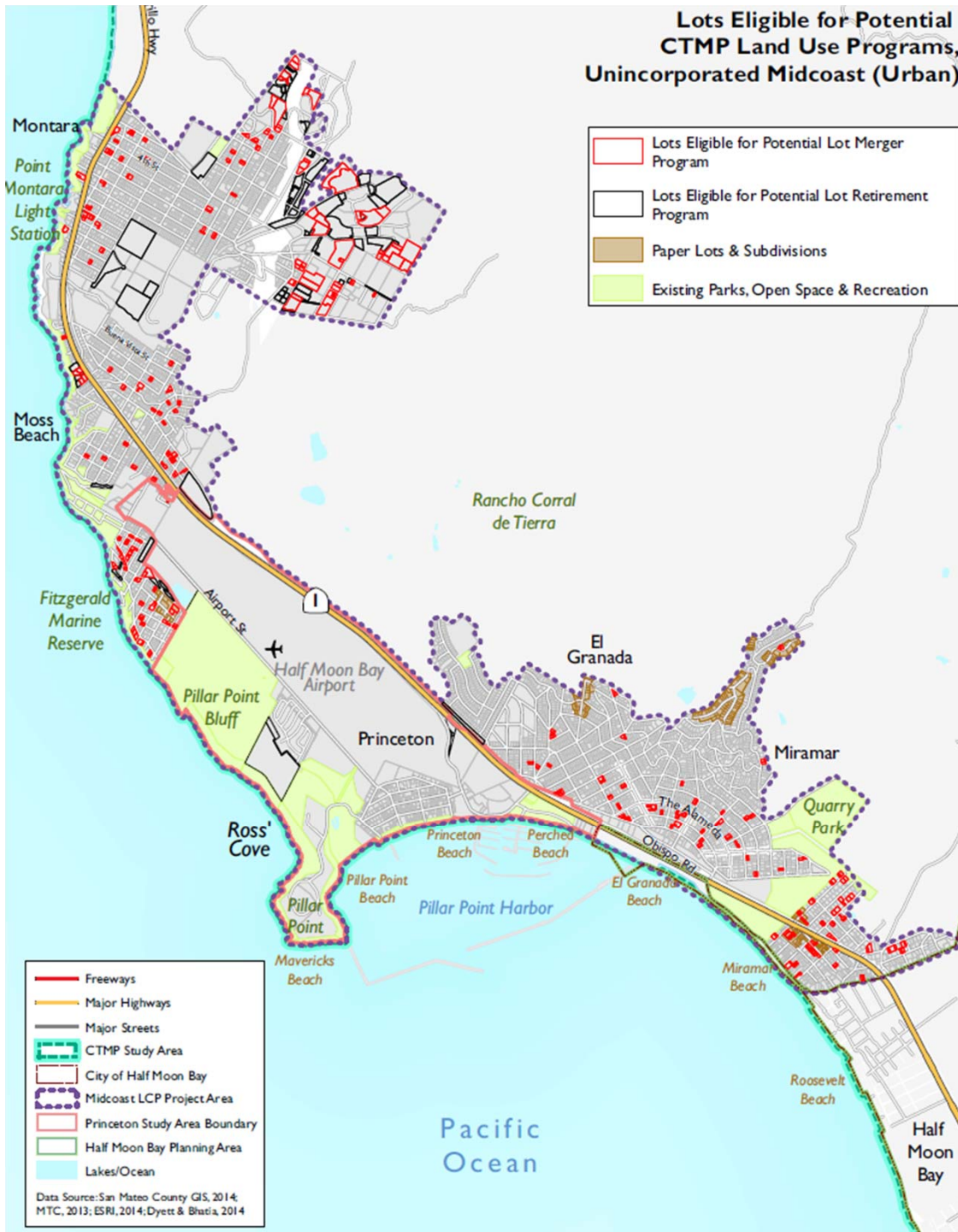
➤ **Mandatory Lot Retirement Program**

- Lot Retirement program would follow Coastal Commission recommendation
- Estimated 148 eligible donor lots in unincorporated Midcoast, assuming Lot Merger program also in effect

Lots Eligible for Potential CTMP Land Use Programs, Unincorporated Midcoast (Urban)

- Lots Eligible for Potential Lot Merger Program
- Lots Eligible for Potential Lot Retirement Program
- Paper Lots & Subdivisions
- Existing Parks, Open Space & Recreation

Urban Midcoast



- Freeways
 - Major Highways
 - Major Streets
 - CTMP Study Area
 - City of Half Moon Bay
 - Midcoast LCP Project Area
 - Princeton Study Area Boundary
 - Half Moon Bay Planning Area
 - Lakes/Ocean
- Data Source: San Mateo County GIS, 2014; MTC, 2013; ESRI, 2014; Dyett & Bhatia, 2014



Rural Midcoast





Land Use Policy Concepts

➤ Traffic Fee Mitigation Program

- Traffic Impact Fee could be established to help fund recommended improvements
- Would apply to new housing and commercial, at rate based on proportion of need attributable to new development; estimated at 30 to 40%
- Not a growth management strategy, but could have the effect of lowering development





Next Steps

- Refine Preferred Alternative based on Outreach
- Presentation of Preferred Alternative to Planning Commission
- Presentation of Preferred Alternative to Board of Supervisors
- Conduct Environmental Review of Preferred Alternative
- Draft CTMP

<http://www.connectthecoastside.com/>

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