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
Project Objectives and Schedule
What is Connect the Coastside?

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
San Mateo County is the project sponsor for Connect the Coastside.

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

<table>
<thead>
<tr>
<th>Task</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
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<td>Task 1 - Community</td>
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<td>Task 2 - Existing and Future Development Potential and Transportation Deficiencies</td>
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<td>Task 3 - Development and Evaluation of Alternatives to Address Deficiencies</td>
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**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
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
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.
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
Midcoast Intersection Deficiencies

- Signalize

Map showing locations for signalization at Moss Beach and Cypress Ave intersections.
Unsignalized Intersections

Highway 1 & California Avenue

Existing travel patterns

Traffic diversion

Vallemar St

Wienke Way

California Ave
Intersection Deficiencies

- Unsignalized Intersections
- Highway 1 & Cypress Avenue
Half Moon Bay Intersection Deficiencies

- **North Half Moon Bay**: Widen and widen approach.
- **Sprindrift Way**: Signalize.
- **South Half Moon Bay**: Widen, restrict turning.
- **Signalize**

Using maps with specific locations and arrows indicating the necessary improvements.
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.
Intersection Deficiencies

- Unsignalized Intersections
  - Highway 1 & Terrace Avenue
  - Highway 1 & Main Street South

Already Planned Design under Caltrans Review
Intersection Deficiencies

➤ Unsignalized Intersections
➤ Highway 1 & Kehoe Avenue
Intersection Deficiencies

- Unsignalized Intersections
  - Highway 1 & Filbert Street
  - Highway 1 & Seymour Street

[Diagram of intersections]
Signalized Intersections

- Highway 1 & Ruisseau Francois Avenue
- 600’ four-lane section plus taper
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.
### Deficiencies at Full Buildout

<table>
<thead>
<tr>
<th>Segment</th>
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<th>Weekday PM Peak Delay Index</th>
<th>Weekend Midday Peak Delay Index</th>
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<td>1st Street to Mirada Road</td>
<td>2.18</td>
<td>2.32</td>
<td>1.95</td>
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<tr>
<td>Mirada Road to SR 92</td>
<td>9.77</td>
<td>8.19</td>
<td>3.19</td>
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<tr>
<td>SR 92 to Miramontes Point Road</td>
<td>1.02</td>
<td>1.03</td>
<td>1.95</td>
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<tr>
<td>Combined Highway 1 Segment</td>
<td>3.35</td>
<td>3.13</td>
<td>2.19</td>
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**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

North Half Moon Bay

Causes of congestion and delay

1-lane section
merge bottleneck

2-lane section

1-lane section
merge bottleneck

1-lane section

signal bottleneck

signal bottleneck

signal bottleneck
Roadway Deficiencies

North Half Moon Bay

Coordination will allow for better flow through downtown Half Moon Bay

1-lane section
merge bottleneck

2-lane section

1-lane section
merge bottleneck

Coordination

signal bottleneck
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
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
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
Cost for Deficiency Projects
$13.6 M

Additional Cost for Circulation and Safety Projects
$12.3 M
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
Currently large portions of Highway 1 without pedestrian crossings
Additional crossings to reduce the distance between crossings to $\frac{1}{2}$ mile in pedestrian areas.
Pedestrian Deficiencies
## Effect on Delay Index

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

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<tbody>
<tr>
<td>1st Street to Mirada Road</td>
<td>2.28 (+0.11)</td>
<td>2.43 (+0.10)</td>
<td>2.16 (+0.20)</td>
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<td>Mirada Road to SR 92</td>
<td>10.04 (+0.27)</td>
<td>8.26 (+0.07)</td>
<td>3.46 (+0.27)</td>
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<td>SR 92 to Miramontes Point Road</td>
<td>1.03 (+0.01)</td>
<td>1.05 (+0.02)</td>
<td>1.97 (+0.02)</td>
</tr>
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</table>

*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

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 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

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 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
Cost for Deficiency Projects
$2000-$3000

Additional Cost for Circulation and Safety Projects
$525 K annual operating
Parking Deficiencies

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

- Formalized parallel parking for Montara State Beach with physical separation from Highway 1
- Diagonal separated parking for El Granada
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
**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)
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
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%
**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
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
Rural Midcoast
Traffic Fee Mitigation Program

- Traffic Impact Fee could be established to help fund recommended improvements
- Would apply to new housing and commercial, at a 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/