Transportation Planning & Projects

Study session #3 to raise community awareness and promote informed public participation in local government.

Midcoast Community Council 7/11/2018 presentation by Lisa Ketcham UPDATED JANUARY 2021

Policies -- Plans -- Studies







Traffic & Trails: *Help Plan the Future*



Midcoast Hwy 1 Safety & Mobility Improvement Study



Midcoast Local Coastal Program (LCP) Policies

(Public Works Component - Roads)

- Maintain SR-1 as a scenic two-lane route in rural areas. (2.47 & Coastal Act)
- Improve bicycle and pedestrian facilities and crossings. (2.50)
- Develop Midcoast pedestrian/bicycle/multi-purpose path parallel to SR 1. (2.50)
- Improve commuter & recreational transit services and facilities. (2.54 2.59)

Protect Road Capacity for Visitors (Policy 2.51)

- Recommend CHP enforce illegal parking regs along SR-1 on peak weekends/holidays.
- Recommend Caltrans install left-turn lanes at all parking lots (>25 spaces) along the shoreline. [such as Grey Whale Cove]
- Prohibit new road or driveway connections to SR-1 & 92 which do not serve recreation facilities, unless no feasible alternative.

Traffic Mitigation for Development in Urban Midcoast (Policy 2.52):

• Require Traffic Impact Analysis and Mitigation Plan for new development, assuming maximum occupancy (exempt 1 or 2-family residential)

Develop Comprehensive Transportation Management Plan (Policy 2.53)

• In progress - see Connect the Coastside





San Mateo Countywide Transportation Plan 2040 -- adopted 2017

http://ccag.ca.gov/wp-content/uploads/2014/05/SMCTP-2040-FINAL .pdf



- Increased emphasis on reducing Vehicle Miles Traveled and Greenhouse Gas Emissions with less emphasis on traffic delay. (2013 Senate Bill 743)
- Significant increases in roadway capacity are not feasible due to funding limitations, constrained right of way, and environmental concerns. Decades of experience & research show increased capacity does not relieve congestion, because it attracts more drivers.
- Integrate transportation and land use planning -- transit-oriented development, traditional neighborhood design, improved bike/pedestrian and transit connections to activity centers.
- Encourage telecommute programs, satellite work centers, teleconferences, and other substitutes for travel.
- Provide a public transit system that is seamless, safe and convenient.
- Develop bike network and pedestrian facilities that are safe, continuous, and convenient to promote healthy, active communities & reduce reliance on the automobile for short trips.
- Congestion Management Plan, through its biennial project priority and programming function, is a vehicle for implementing SMCTP 2040 in the short term. <u>http://ccag.ca.gov/programs/transportation-programs/congestion-management/</u>

Caltrans Complete Streets Program

-- roadways that safely and comfortably accommodate pedestrians and cyclists as well as motor vehicles.

Projects require early collaboration with local transportation agencies on funding sources, project features, and responsibility for maintenance.



Toward an Active California (State Bicycle & Pedestrian Plan) Vision: By 2040, people in California of all ages, abilities and incomes can safely, conveniently and comfortably walk and bicycle for their transportation needs.

Caltrans District 4 Bike Plan 2018 In the Midcoast, the Plan Map shows Devil's Slide and Surfer's Beach bike paths, in addition to bicycles permitted along Hwy 1 with no dedicated bikeway. A green bike lane at the on and off ramp of State Route 280 in Menlo Park.

Examples of

projects include:

https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=73ccad0dbef9482a9c41dd1a223ca4cc



State Route 1 in San Mateo County Transportation Concept Report 2040 -- approved 2018

http://www.midcoastcommunitycouncil.org/home/2018/6/15/caltrans-2018-hwy-1-corridor-study.html

Future concept generally keeps the route's existing capacity and function.

Caltrans strategies for SR 1 between SR 92 and Pacifica:

- Support "Connect the Coastside" efforts.
- Support completion of CA Coastal Trail.
- Implement new Traffic Operations Systems elements including Closed Circuit TV and Variable Message Signs.
- Maintain & improve Park & Ride lots.
- Improve coastal community safety & mobility with consistent roadway edges, shoulders, pedestrian crossings & roundabouts.
- Monitor and plan for sea level rise.

Highway 1 Safety & Mobility Improvement Studies 2012

http://www.midcoastcommunitycouncil.org/hwy-1-mobility-studies/

Concept plans for Midcoast Highway 1 Corridor developed **2009-2012 in 2-phase public planning** effort funded by Caltrans Community-Based Transportation Planning Grant.

Near-term/ high priority: crossings & raised medians

Traffic & Trails: *Help Plan the Future*



MCC Comment 2012:

- Proceed carefully.
- Preserve the rural character of the Midcoast.
- Prioritize simple solutions for highway safety and mobility.
- Prioritize east-side parallel trail.
- Near term priority:

Pedestrian crossings with refuge island in each community, most importantly in Moss Beach.

Under-crossings were not recommended due to complexity, expense, land required for ADA compliance, and public reluctance to use, due to security and longer travel distance.

Highway 1 Safety & Mobility Study -- Action Plan 2012

http://www.midcoastcommunitycouncil.org/hwy-1-mobility-studies/

Implementation: Long term effort, with County in lead role, involving many agencies and stakeholders. Additional public input opportunities during the studies, environmental reviews, and permit hearings for each project.

Priority/Timeframe Criteria: importance, funding availability, complexity

Studies Comprehensive Transportation Mgmt Plan (CTMP) Parking Study https://midcoastcommunitycouncil.org/home/2014/12/4/mcc-meeting-decem	Timeframe Mid Complete ber-10-7pm.html	Priority High
Bike Lane Study – HMB to Devil's Slide	Mid	Medium
Analyze realignment options at Surfers' Beach	Long	High
Speed limit 45 mph throughout Midcoast except airport	Long	High
Infrastructure Projects		
Crossings/ medians/ turn lanes	Short	High
Hwy shoulder parking controls Capistrano to Coronado	Short	High
Parallel Trail (PT)	Mid	High
CA Coastal Trail (CCT)	Mid	High
Carlos St, Moss Beach streetscape improvements (PT)	Short	High
Main St, Montara improvements (PT/ CCT)	Mid	Medium
Airport St bike/ped trail	Mid	Medium
Lighthouse pedestrian overcrossing (CCT)	Long	Medium

Comprehensive Transportation Management Plan Key Pending Midcoast Long-Range Planning Project



http://www.midcoastcommunitycouncil.org/comp-transp-mgmt-plan/

- CONNECT THE COASTSIDE
- 2012 Midcoast LCP Update required development of a Comprehensive Transportation Management Plan (CTMP) to address cumulative traffic impacts of Midcoast development on Highway 1 & 92, including policies to offset and mitigate for significant cumulative impacts of residential development on public access to the beach.
- **2014** Connect the Coastside project to develop CTMP commenced.
- **2016** -- Draft report recommends system improvements, alternative transportation standards; and evaluates mandatory sub-standard lot merger, lot retirement, and traffic mitigation fees for new development.
- **2020 Jan** Draft plan released for public comment.
- **2021 Jan** Final Administrative Draft released for pubic comment.

Design Tools

Caltrans Context Sensitive Solutions



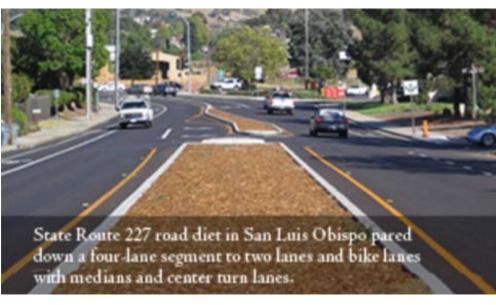
Address needs of all users in a variety of settings.

Traffic calming utilizes design strategies to slow down cars and increase the visibility of pedestrians and bicyclists.

Medians provide traffic calming in community areas and refuge area for pedestrians crossing the road.

Striping Class II bike lanes/ painted shoulders delineates separation of bikeway from vehicle travel way, provides improved visibility for all users preparing to cross or enter the travel way, and space for motorists to move for passing emergency responders.

These improvements can signal a change in context entering community areas, and help narrow the perceived lane width to **encourage speed reduction** in high activity areas.



Caltrans speed survey 2014 recommends no change in Moss Beach 50 mph speed limit due to current prevailing speeds.

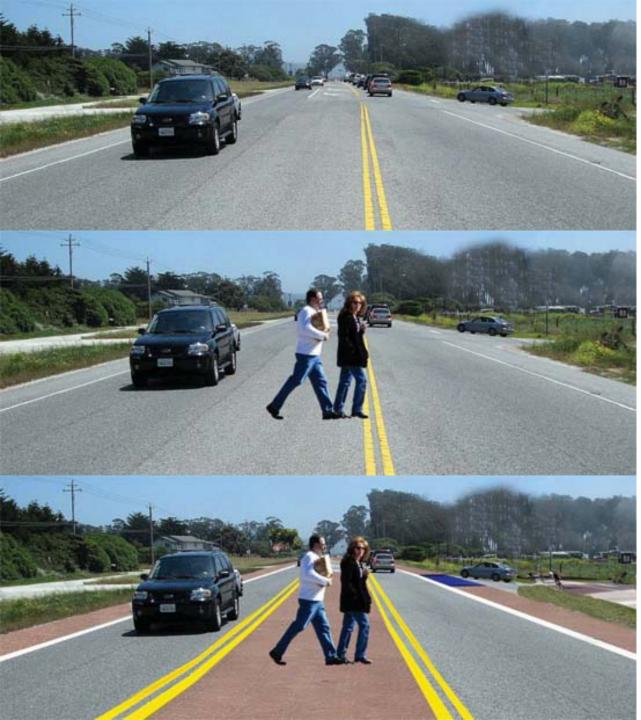
Traffic calming features are needed in order to lower the prevailing speed before Caltrans will lower the speed limit.

Raised Medians & Pedestrian Refuge Areas Safety Benefits

- Notify drivers of a change in context
- Reduce pedestrian crossing complexity cross one direction of traffic at a time (same concept as center acceleration lane for vehicles turning left entering highway).
- Reduce auto/pedestrian crashes at crossings by 46% --7 auto-pedestrian crashes occurred in Midcoast project area 2009 - 2012.
- Reduce vehicle speed (traffic calming) --42% of crashes in Midcoast project area 2009 - 2012 were caused by speeding.
- Physically restrict or channelize turning movements --16% of crashes in Midcoast project area 2009 - 2012 were caused by improper turning maneuvers.
- Required night lighting reduces nighttime pedestrian fatalities at crossings 78%.







Surface Treatments for medians & bike lanes:

Tactile edging on center and fog line alerts wandering drivers.

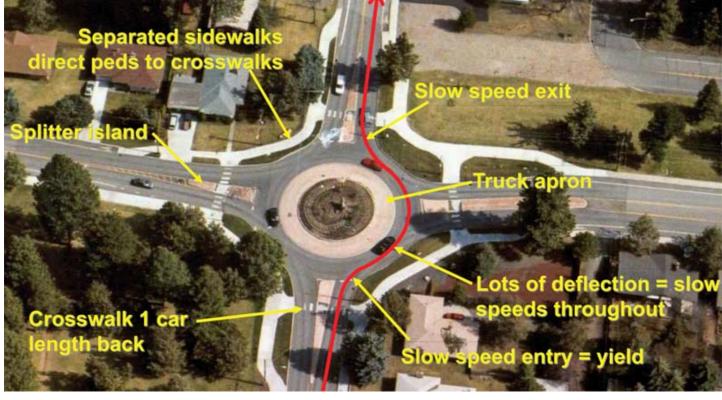
Colorized/textured paving

- increases bike/pedestrian visibility to motorists.
- provides traffic calming narrows the perceived lane width

(images from Safety & Mobility Improvement Study)

Modern Roundabouts

Caltrans requires that roundabouts be considered when state highway intersection improvements are planned.



- Eliminate head-on or broadside crashes -- 75% fewer injury collisions and 90% reduction in overall fatalities. Highest Midcoast accident rates are at signalized Capistrano & Coronado.
- Keep traffic moving through intersections.
- Significantly less delay than signals when managing peak-hour cross-street traffic.
- Increased intersection capacity due to lower speeds & resulting smaller gaps between vehicles.
- Reduced fuel consumption, vehicle wear and tear, emissions, noise, from less stopping, starting, idling.

- Traffic calming long desired for Moss Beach.
- Pedestrians cross one direction of traffic at a time, without stopping traffic.
- Large trucks can make U-turns with rear axle on the central truck apron.
- No signal maintenance or blinking-red signal malfunctions that cause extensive backups.
- More aesthetically pleasing with opportunity for landscaping.

Projects

Midcoast Highway 1 Crossings, Raised Medians, Left-Turn Lanes

http://www.midcoastcommunitycouncil.org/h1-crossings/

SHORT TERM / HIGH PRIORITY -- Midcoast Hwy 1 Safety & Mobility Study

2012: Highway 1 Congestion & Safety Improvement Project \$1.5M TA grant for planning & permitting for:

- at-grade pedestrian crossings at 8 locations
- raised medians in Montara and Moss Beach
- left-turn/acceleration lanes at 8th St and Gray Whale Cove
- *"Raised medians... will provide safe refuges for pedestrians/bicyclists safe crossings will be connected to medians for this purpose."*

2014-2015: 4 public workshops on preferred design alternatives

Apr 2015 MCC 4-page comments on goals, process, and design specifics:

- Public acceptance is highest where safe crossing opportunities do not add to traffic congestion. Raised median refuge islands allow safe crossing one direction of traffic at a time, without necessarily stopping traffic.
- Gray Whale Cove adds 12-ft-wide mid-highway buffer area north of the center turn lane.
 Consider surface treatments for median refuge, such as tactile edging and colorized/textured paving, or even flexible reflective stakes/bollards.

2015 Preliminary Planning Study preferred alternatives & phasing:

- Phase 1: Gray Whale Cove center turn lane & crossing
- Phase 2: Moss Beach crossing with raised median refuge island (Virginia or California)
- **Phase 3: Montara** crossing with raised median refuge island at 2nd St.
- AS OF DEC 2020, NO PERMITTING OR CONSTRUCTION TIMELINE

Highway 1 Parallel Trail – aka Midcoast Multi-Modal Trail

http://www.midcoastcommunitycouncil.org/parallel-trail/

Continuous, predominantly separate trail for bicyclists and pedestrians on the east side of the highway connecting Midcoast communities to each other and to Half Moon Bay.

- Safe and convenient active transportation alternative for residents of all ages and abilities.
- Expected to be completed in 4 segments.

Southern segment prioritized first -- HMB city limit at Mirada Rd to Coronado in El Granada, with bridge across Medio Creek

- 2014: TA grant for planning/permitting
- 2016: 30% designs & Initial Study (CEQA)
- 2018: 60% designs
- 2019: Construction (cost estimate \$3.9M)
- 2020: CDP & Neg/Dec approved by Planning Commission.
- 2021: Expected construction of southern segment



Funding







Caltrans Funding Programs



SHOPP -- State Highway Operation and Protection Program

- Mix of federal & state funds for maintenance, preservation, safety improvements (include 'complete street' assets).
- Midcoast/HMB SR 1 Project List all have 2022 construction start date:
 - Install Bluetooth Detection Systems and Variable Message Signs, enable 2 existing Changeable Message Signs, modify Advance Transportation Management System.
 - Upgrade crossing signals with audible indicators, pushbuttons, countdown timers, upgrade crosswalk markings.
- STIP -- State Transportation Improvement Program
- Prioritized list of highway improvements with state funding.

ATP -- Active Transportation Program

• Grant funding source that combines federal/state programs including Transportation Alternatives Program, Bicycle Transportation Account, State Safe Routes to School.

HSIP – Highway Safety Improvement Program

• Federal aid program administered by Caltrans to reduce traffic fatalities & serious injuries

County Transportation Funding Programs

Funding for transportation projects in SMC comes from federal, state, and local levels. Grants are competitive and often come with restrictions on how funds must be spent.



C/CAG has primary responsibility for programming county discretionary share of federal and state transportation funds allocated to the county.



SMC Transportation Authority (TA) has primary control over allocation of SMC sales tax transportation funds.



Other MCC Study Sessions on Local Government

Introduction to Midcoast local government & special districts District boundaries, services provided, decision-making bodies. https://midcoastcommunitycouncil.org/home/2018/6/8/mcc-meeting-june-13-2018.html

Land Use Policies & Development Approval Process https://midcoastcommunitycouncil.org/home/2018/6/22/mcc-meeting-june-27-2018.html

MCC website: http://www.midcoastcommunitycouncil.org