



Experts Connecting Communities

APPENDIX B - FEASIBILITY AND DESIGN CONSIDERATIONS

FEASIBILITY CONSIDERATIONS

Item #	Alternative 1 – Low/Cost Impact and Planned Improvements	Remarks
<i>Roadway and Intersection Improvements</i>		
1	Addition of southbound left-turn bay and southbound merge lane at the Gary Whale Cove parking lot	Improvement is feasible. Provide adequate storage length for southbound (SB) lane based on expected queuing to minimize the potential for queue spill back from the left-turn lane and rear end collision. The beach access crosswalk should be placed at a location that would accommodate the southbound storage lane. Southbound merge lane is feasible
2	Signage to restrict turning movements to consolidate traffic at key intersections within Midcoast communities and Half Moon Bay	Feasible
3	Stop signs added to unsigned intersections along Highway 1	Feasible
4	Defined curb and paved shoulder along Highway 1 within high pedestrian and bicycle areas to provide a consistent cross section for vehicle and pedestrian safety	While technically feasible, some of the segments of Highway 1 have hills on both sides of the roadway, which can make providing paved shoulders expensive along Highway 1 through the Midcoast area and Half Moon Bay.
<i>Bicycle and Pedestrian Facility Improvements</i>		
5	Striped crossing with beacons at high demand and bus stop locations to alert motorists	Feasible. Specifically, the Rapid Rectangular Flashing Beacon technology can be installed to effectively warn motorists for pedestrian safety.
6	Sidewalks along Highway 1 in Montara, Moss Beach, Miramar, and developed areas of Half Moon Bay	Feasible and recommended because of high pedestrian activities
7	Sidewalk on Coronado Street and Avenue Alhambra in El Granada	Feasible

Item #	Alternative 1 – Low/Cost Impact and Planned Improvements	Remarks
8	Multi-use path along Airport Street	Feasible
9	Traffic signal upgrades at various locations in Half Moon Bay including ped count down signals, bike detectors, ped refuge spaces at wide crosswalk locations, and retiming to accommodate slower walking speeds	Feasible and cost effective.
10	Designation of Main Street as a Class III bike route with sharrows	Feasible
<i>Transit Improvements</i>		
11	Improvements to bus stops such as overhead shelters and seating	Feasible and recommended
12	Increased weekend Samtrans service	Feasible dependent on discussion and negotiation with Samtrans and acquisition of ongoing transit funding
<i>Parking Improvements</i>		
13	Formalized parallel parking for Montara State Beach on the west side of Highway 1 with one way access and separated from Highway 1	Feasible. Confirm the provision of a left-turn bay for northbound traffic to access to the parking lot
14	Paving and striping upper Gray Whale Cove parking lot	Feasible
15	Improved way finding signage	Feasible and highly recommended

Item #	Alternative 2 - Medium Cost/Medium Impact and Consolidation of Access Improvements	Remarks
<i>Roadway and Intersection Improvements</i>		
16	All Alternative 1 roadway improvements	Feasible as noted
17	Defined curb and paved shoulder along Highway 1 within moderate pedestrian and bicycle areas to provide a consistent cross section for vehicle and pedestrian safety	While technically feasible, some of the segments of Highway 1 have hills on both sides of the roadway, which can make providing paved shoulders expensive along Highway 1 through the Midcoast area and Half Moon Bay.
18	Signalization of the following intersections meeting signal warrants: <ul style="list-style-type: none"> • Highway 1 and California Avenue in Moss Beach • Highway 1 and Cypress Avenue in Moss Beach • Highway 1 and Kehoe Avenue in Half Moon Bay • Highway 1 and Main Street (S) in Half Moon Bay 	Traffic signals feasible at all four locations. However, the Highway 1/California Avenue intersection may require careful design considerations because of the Wienke Way leg that makes it a five legged intersection. Striping enhancements may be necessary to create safe pedestrian crossing opportunities at the Highway 1/California Avenue intersection
19	Restricting access to Highway 1 within communities through the following measures: <ul style="list-style-type: none"> • Addition of a median between 7th Street and 9th Street in Montara • Restricting access to Highway 1 between St. Etheldore Street and Vermont Avenue east of Highway 1 in Moss Beach 	As noted, the installation of a roundabout at the Highway 1/9 th Street intersection can be considered as an alternative to the median installation While feasible, the recommendation to install a median between Etheldore Street and Vermont Avenue precludes the need to install a traffic signal at the Highway 1/California Avenue intersection
20	Addition of a median with northbound left-turn bay at the Lighthouse in Montara (16th Street)	Feasible

Item #	Alternative 2 - Medium Cost/Medium Impact and Consolidation of Access Improvements	Remarks
21	Addition of left-turn bay and acceleration lane at 8th Street in Montara	Feasible
22	Consolidation of access to Highway 1 at the following locations: <ul style="list-style-type: none"> • Nurseryman’s Exchange driveways between Mirada Road and Young Avenue • Realign Frenchman’s Creek Road to consolidate intersections at Frenchman’s Creek Road and Venice Boulevard • Grand Avenue and Terrace Avenue 	Feasible
<i>Bicycle and Pedestrian Facility Improvements</i>		
23	All Alternative 1 bicycle and pedestrian facility improvements	Feasible as noted
24	Continuous Parallel Trail adjacent to Highway 1 for the entire study area	While it is feasible to install a parallel trail along Highway 1, it is not likely to be a low cost improvement option as the trail alignment is likely to have uneven profile and will need to be engineered. Additionally, a lot of trees will need to be removed to accommodate the trail
25	Continuous Coastal Trail along entire study area	Feasible
26	Class II bike lane along Capistrano Road (Currently being evaluated for Plan Princeton)	Feasible and expected to narrow lane width to enhance traffic calming effect.
27	Class II bike lane along Airport Street (Currently being evaluated for Plan Princeton)	Feasible and expected to narrow lane width to enhance traffic calming effect

Item #	Alternative 2 - Medium Cost/Medium Impact and Consolidation of Access Improvements	Remarks
<i>Transit Improvements</i>		
28	All Alternative 1 transit improvements	Feasible as noted
29	Shuttle bus service on weekends during peak recreational times and special events	Feasible and recommended
30	Park and Ride locations	Feasible and recommended
31	Cabrillo Unified School District School Bus Service	Feasible and recommended
<i>Parking Improvements</i>		
32	All Alternative 1 parking improvements	Feasible as noted
33	Formalized parallel Montara State Beach parking	Feasible with northbound left-turn lane for access
34	Parking lot for Rancho Corral de Tierra access east of highway (also available for beach overflow)	Feasible. Ensure that the proposed Coastal Trail connection and designated crosswalk has high visibility for Highway 1 traffic. Consider the installation of Rectangular Rapid Flashing Beacon as an effective measure to alert motorists of the presence of pedestrians and bicyclists
35	Parking lot/trail access alternatives to Quarry Park and POST Wicklow property, along Highway 1 near Magellan Avenue	Feasible on east side of Highway 1 to avoid pedestrian crossing of Highway 1
36	Parking lot/trail access alternatives at the intersection of Highway 1 with Etheldore Street or the north end of the agricultural land across from the airport	Feasible on east side of Highway 1 to avoid pedestrian crossing of Highway 1

Item #	Alternative 3 - High Cost/High Impact and Increasing Improvements	Remarks
<i>Roadway and Intersection Improvements</i>		
37	<p>All Alternative 1 and Alternative 2 improvements except roundabout installation instead of traffic signals at the following locations:</p> <ul style="list-style-type: none"> • Highway 1 and 9th Street in Montara • Highway 1 and Etheldore Street (N); Highway 1 and Cypress Avenue in Moss Beach • Highway 1 and Capistrano Road (S); Highway 1 and Coronado Street in El Granada • Highway 1 and Mirada Road in Miramar • Highway 1 and Kehoe Avenue in Half Moon Bay • Highway 1 and Main Street (N) in Half Moon Bay • Highway 1 and SR 92 in Half Moon Bay • Main Street and SR 92 in Half Moon Bay • Highway 1 and Higgins Canyon Road/Main Street (S) in Half Moon Bay • SR 92 and SR 35 	<ul style="list-style-type: none"> • Highway 1/9th Street: While the installation of a roundabout is technically feasible at the Highway 1/9th Street intersection, the intersection's close proximity to the Main Street/9th Street intersection (approximately 130 feet) presents traffic operational challenges that can be addressed with careful design considerations. • Highway 1/Etheldore Street: Similar to the Highway 1/9th Street intersection, the Highway 1/Etheldore Street intersection will need to be integrated with the Etheldore Street/Carlos Street intersection. The concept presented in the Highway 1 Safety and Mobility Improvement Study provides good guidance for how the roundabout should be designed. • Roundabout installation is feasible at the following locations: <ul style="list-style-type: none"> ○ Highway 1/Cypress Avenue ○ Highway 1/Capistrano Road and Highway 1/Coronado Street ○ Highway 1 and Mirada Road in Miramar ○ Highway 1 and Kehoe Avenue in Half Moon Bay ○ Highway 1 and Main Street (N) in

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		<p>Half Moon Bay</p> <ul style="list-style-type: none"> ○ Highway 1 and SR 92 in Half Moon Bay ○ Main Street and SR 92 in Half Moon Bay ○ SR 92 and SR 35 <ul style="list-style-type: none"> ● The Highway 1/Higgins Canyon Road Street intersection will require an innovative roundabout design because of the close proximity to the Higgins Canyon Road/Main Street intersection. Other innovative non-signalized intersection designs can be explored
38	Complete coverage of defined curb and paved shoulder along Highway 1 to provide a consistent cross section for vehicle and pedestrian safety	While technically feasible, some of the segments of Highway 1 have hills on both sides of the roadway, which can make providing paved shoulders expensive along Highway 1 through the Midcoast area and Half Moon Bay.
39	Road capacity increase between 9 th Street in Montara and St. Etheldore Street/Vallemar Street in Moss Beach, and between Cypress Avenue in Moss Beach and Capistrano Road (S) in El Granada	Feasible with careful highway design considerations
40	Traffic calming (Complete Street) implementation along Main Street in Montara	Feasible with good traffic engineering design and appropriate traffic calming device installations
41	Traffic calming (Complete Street) implementation along Carlos Street in Moss Beach	Feasible with good traffic engineering design and appropriate traffic calming device installations
42	Highway 1 realignment in El Granada	Feasible based on Safety and Mobility Study

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43	Construction of a Frontage Road along east side of Highway 1 connecting Main Street with Frenchman's Creek Road	Feasible, however the actual implementation would require large amounts of right-of-way acquisition
44	Left turn lanes at major businesses along SR 92 in Half Moon Bay	Feasible. The left-turn pockets should have adequate storage lengths to minimize their impact on traffic operation along SR-92
45	Passing/Climbing lanes where feasible along SR 92	Feasible with careful highway design considerations
<i>Bicycle and Pedestrian Facility Improvements</i>		
46	All Alternative 1 and Alternative 2 bicycle and pedestrian facility improvements	Feasible as noted
47	Pedestrian over/under crossings at the following locations to replace striped crossings defined in Alternative 1: <ul style="list-style-type: none"> • Gray Whale Cove • Montara Sanitary District building • Surfer's Beach Parking area, north of Coronado Street • Kehoe Avenue 	Feasible, however the design of pedestrian under-crossings may be affected by the water table for locations close to the coast and while pedestrian over-crossings may provide a way for pedestrians and bicyclists to cross Highway 1 without causing any conflicts or speed reduction to highway 1 traffic, the required vertical clearance and ramp for handicap accessibility can potentially result in a large footprint of land needed for the structure.
48	Bike lane/route along SR 92	Feasible with careful highway design considerations
<i>Transit Improvements</i>		
49	All Alternative 1 and Alternative 2 transit improvements	Feasible as noted
50	New SamTrans local Midcoast and Half Moon Bay bus service route	Feasible dependent on discussion and negotiation with Samtrans and acquisition of ongoing transit

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		funding
51	Transit connection to BART and San Mateo with bus pullouts along SR 92	Feasible dependent on discussion and negotiation with Samtrans and acquisition of ongoing transit funding
<i>Parking Improvements</i>		
52	All Alternative 1 and Alternative 2 parking improvements	Feasible as noted
53	Diagonal parking for Moss Beach along Carlos Street	Feasible
54	Diagonal parking for El Granada separated from Highway 1 realignment.	Feasible based on Safety and Mobility Study