

APPENDIX A

SAN MATEO COUNTY HARBOR DISTRICT STRATEGIC BUSINESS PLAN EXISTING INFRASTRUCTURE & FACILITIES ASSESSMENT DRAFT, DECEMBER 2014



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A.1: SEA LEVEL RISE BEST PRACTICES

Existing Infrastructure & Facilities Assessment San Mateo County Harbor District Strategic Business Plan DRAFT, DECEMBER, 2014





Sea Level Rise, Prepared by Moffatt & Nichol Engineers December, 2014

1.1. SEA LEVEL RISE ANALYSIS

The study and predications of sea level rise have varied significantly from difference sources since the topic has come into the public forefront. The recently-released documents, and most widely accepted as credible, include:

- Intergovernmental Panel on Climate Change (IPCC), The Physical Science Basis (AR5), 2013
- National Research Council (NRC), Sea-Level Rise for the Coasts of California, Oregon, and Washington: Past, Present, and Future, 2012
- Coastal and Ocean Working Group of the California Climate Action Team (CO-CAT), State of California Sea-Level Rise Interim Guidance Document, Mar. 2013 update
- San Francisco Bay Conservation and Development Commission (BCDC), San Francisco Bay Plan, 2011 amended

The NRC report contains sea level rise projections for the years 2030, 2050, and 2100 relative to year 2000. Because these projections consider local geologic processes, they are more applicable for design along the West Coast than the global IPCC projections. The reports also consider additional, more conservative, analyses compared to the IPCC projections.

The BCDC released the amended San Francisco Bay Plan in 2011, which recommends that Bayfront developments consider a 16-inch sea level rise value by 2050 (mid-term) and a 55-inch sea level rise value by 2100 (long-term). The California State Coastal Conservancy (SCC) has issued a similar guidance policy, with the same mid-term and long-term values. These values were based on the work done by CO-CAT in 2010, which has been updated with the 2013 update. Given the 2013 CO-CAT document recommends use of the 2012 NRC local projections, the 2012 NRC projections are the most relevant for a sea level rise strategy for the facilities at Oyster Point in San Francisco Bay and Pillar Point Harbor on the Coast. Table 1 summarizes these sea level rise projections, including the low and high range values, for the San Francisco Bay Area.

TABLE 1 SEA LEVEL RISE F	Projections for San Francisco, California
	(inches) (NRC, 2012)

Time Period	Low	Projected	High
2000-2030	2	6	12
2000-2050	5	11	24
2000-2100	17	36	66

The BCDC released the amended San Francisco Bay Plan in 2011, which recommends that Bayfront developments consider a 16-inch sea level rise value from high tides by 2050 (mid-term) and a 55-inch sea level rise value by 2100 (long-term). The California State Coastal Conservancy (SCC) has issued a similar guidance policy, with the same mid-term and long-term values. These values were based on the work done by CO-CAT in 2010, which has been updated with the 2013 update. Given the 2013 CO-CAT document recommends use of the 2012 NRC local projections, the 2012 NRC projections are the most relevant for a sea level rise strategy for the facilities at Oyster Pt in San Francisco Bay and Pillar Point Harbor on the Coast.

1.2. OYSTER POINT RISKS

There is frequent flooding of the parking lot between the East and West Basins at the Harbormaster's office now (see Figure 1 and cover photo), which is caused by high tides. The flooding will only get more frequent in the next 10 years. The harbor office should be moved to higher ground as placing fill to raise the ground will increase surcharge and induce settlement on the compressible landfill below.

Other features that will be affected further into the future are the access gates to all the docks. Figures 2 and 3 show flooding in these areas with sea level rise from the table above. The tops of guide piles may need to be extended if they are not replaced by 2050. The elevations need to be confirmed to ensure the docks will still be restrained. The breakwater is an item of concern as well as it has been "overtopped" during combination high tides and storm surges.

Photograph 1-Flooding at Oyster Pt.

San Mateo County Harbor District Strategic Business Plan Appendix A Draft Existing Infrastructure & Facilities Assessment



Figure 1-Oyster Pt, Existing Water Level (blue shade) During King Tides



Figure 2-Oyster Pt, Water Level (blue shade) During King Tides with 12 inches SLR

Sea Level Rise, Prepared by Moffatt & Nichol Engineers December, 2014

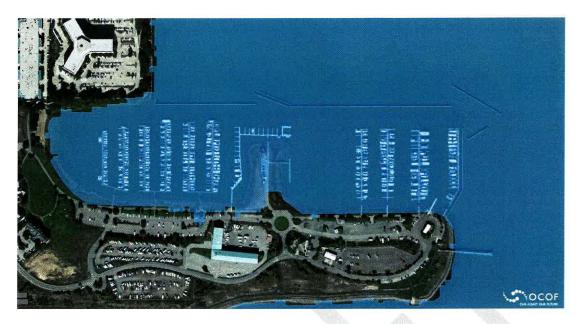


Figure 3-Oyster Pt, Water Level (blue shade) During King Tides with 36 inches SLR



1.3. PILLAR POINT RISKS

The elevation of Johnson Pier and the shoreside facilities at Pillar Point are above the tide level of the sea level rise projections described above. This elevation along with the protection from

wave runup provided by the breakwaters, makes the facility at low risk for flooding in the future as sea level rises. Figures 4 and 5 show the existing water level and with 36 inches of sea level rise with little change in the shoreward extent of the sea.

The current western slope within the harbor is sloughing down into the harbor, resulting in the rip rap falling and the soil being exposed. With SLR this will expose the bare slope to greater erosion and cutting back of the soil. The rip rap protection should be repaired or a seawall installed similar to the portion at the Harbormaster Building and East Basin.

Figure 4-Pillar Pt, Existing Water Level During King Tides

Figure 5-Pillar Pt, Existing Water Level During King Tides with 36 inches SLR

Sea Level Rise, Prepared by Moffatt & Nichol Engineers December, 2014

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1.4. MONITORING AND ADAPTIVE MANAGEMENT PLANS

Ongoing measurements of sea level rise from the scientific community should be incorporated into a Monitoring and Adaptive Management Plan for the SMCHD facilities. The Adaptive Management Strategy should define specific triggers for action, based on the observed changes in sea level. For example: move the Harbormaster building at Oyster Point when Sea Level is is 6 inches, raise the grade 2 ft on the shoreline when sea level rise reaches 12 inches, etc.

The Adaptive Management Strategy could also require 5- or 10-year updates based on observed changes in sea levels as well as any other effects of climate change (e.g., more or less extreme wind conditions). Any updates, as well as the initial strategy that includes coastal and Bay development permits, should be coordinated with relevant stakeholders including the City of South San Francisco, San Mateo County, BCDC and the CCC. Case studies and potential guidelines aimed at informing the Adaptive Management Strategy will be included in the next steps of the Strategic Business Plann process.



A.2: CIRCULATION & PARKING

ASSESSMENT

Existing Infrastructure & Facilities Assessment San Mateo County Harbor District Strategic Business Plan DRAFT DECEMBER, 2014





This section of the Existing Infrastructure and facilities Assessment (Appendix A to the Strategic Business Plan) provides an access, circulation, parking, and connectivity analysis of the Harbor District's facilities. The analysis includes information on all modes of ground transportation (including bicycling, walking, transit, and private automobiles) serving Pillar Point Harbor and Oyster Point Marina/Park. In addition, a description of the Water Emergency Transportation Authority's (WETA) ferry service to Oyster Point is included, along with a description of the WETA ferry service's emergency preparedness role.

A.2.1. PILLAR POINT HARBOR & SURROUNDINGS - CIRCULATION &

PARKING ASSESSMENT

Pillar Point Harbor is located in coastal San Mateo County, adjacent to the unincorporated communities of El Granada and Princeton-by-the-Sea. A small portion of Pillar Point Harbor lies within the City of Half Moon Bay.¹ The harbor's waterside facilities include Johnson Pier, 369 boat berths, a public boat launch facility, a public recreational fishing pier, and an outer harbor for anchoring and moorings that supports commercial fishing and recreational activities. Recreational trails include a beach trail to Half Moon Bay as well as the Mavericks Trail, providing access to the sands of Mavericks Beach. A California Coastal Trail alignment also runs through the harbor. At the time of this report, the San Mateo County Harbor District also maintains ownership of the "post office parcel", a vacant property in El Granada vacant property.

Commercial and sport fishing and recreational tourism at Pillar Point Harbor are thriving industries, enhancing the local economy and economic and social activity throughout the coastal region. The harbor is also host to a number of community and tenant events and activities throughout the year. Together, these various activities generate a significant number of bicycle, pedestrian, transit and private motor vehicle trips.

MOTOR VEHICLE ACCESS AND ROADWAYS

State Route 1 (SR 1) and Capistrano Road form the gateway for drivers traveling to Pillar Point Harbor and related properties under harbor district jurisdiction. SR 1 connects to neighboring coastal cities, as well as the Bay Area via State Route 92. Capistrano Road is a two-lane facility that loops through Princeton-by-the-Sea, with a single access point into the harbor's commercial and recreation areas, and other connections to adjacent commercial areas and the highway.

The intersection of SR 1 and Capistrano Road has been the subject of recent studies, including the 2010 Highway 1 Midcoast Safety & Mobility Improvement Study. More details about this study are available in the following sections.

¹ The Pillar Point Harbor RV Park leasehold, as well as a narrow adjacent strip of oceanfront land, lie within Half Moon Bay city limits. The narrow strip of land, which stretches from just east of the boat launch ramp to just west of Surfer's Beach, includes the stretch of coastal trail leading from the boat launch ramp to Pillar Point RV Park and the outer breakwater.

JOHNSON PIER

Johnson Pier is the focal point of commercial fishing activity at Pillar Point Harbor. The pier supports a commercial fishing fleet of over 100 vessels, businesses, and related semi-trailer truck and van transportation, in addition to sport fishing, boating, and tourism.

In 2014, a Transportation Investment Generating Economic Recovery (TIGER) grant funding application for Johnson Pier infrastructure improvements identified peak commercial activity at an average of 53 semi-trailers, vans, and other loading vehicles accessing the Pier through SR 1 and Capistrano Road. According to the funding application, Johnson Pier and streets as currently designed do not adequately support this level of activity. This potential project would modify the Pier to improve truck loading capability while enhancing multimodal safety, mobility, and circulation in the harbor area, at a cost of \$3.4 million.²

Site visits by the consulting team and numerous interviews with commercial fishermen and other stakeholders confirmed that numerous concerns exist regarding access and safety on the Pier. Those include a lack of separate sidewalks for pedestrians, high levels of activity, particularly on busy weekends and during peak seasons during as squid, crab and salmon seasons. This can include the simultaneous movement of semi- trailer trucks backing onto the Pier; forklifts loading and unloading trucks; commercial fishermen and pier workers operating hoists and loading boats; members of the general public (including families with children) purchasing seafood directly from commercial fishing boats; smaller automobiles and trucks belonging to commercial fishermen loading, unloading, and parking on the Pier; and even occasional intrusions by motor vehicle belonging to the general public, despite clearly signed prohibitions forbidding general motor vehicle traffic on the Pier.

AUTOMOBILE LEVEL OF SERVICE

STANDARDS

Automobile level of service (LOS) is a quantitative performance measure of automobile traffic flow through an intersection under peak hour conditions. LOS A means that motorists experience relatively free flow with minimal delay, while LOS F represents congested conditions with considerable delay. LOS standards in the Pillar Point Harbor area are established by the San Mateo County Local Coastal Program (LCP), with LOS D considered acceptable during commuter peak periods and LOS E considered acceptable during recreation peak periods.³

Existing LOS

A 2007 traffic study related to a proposed development in Princeton-by-the-Sea, analyzed the LOS of several key intersections in the road network surrounding Pillar Point Harbor. The table below summarizes the results of the study for the intersections most relevant to Pillar Point Harbor.

 ² San Mateo County Harbor District. 2014. Johnson Pier: Commercial Fishing Pier Transportation Expansion Project Tiger Grant 2014 – Rural Area. http://www.smharbor.com/harbordistrict/tiger grant 2014.pdf (accessed December 10, 2014)
³ County of San Mateo. Planning and Building Department. 2013. Local Coastal Program Policies. http://www.co.sanmateo.ca.us/planning/pdf/lcp_1098.pdf (accessed December 10, 2014)

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FIGURE 1 PILLAR POINT HARBOR EXISTING LEVEL OF SERVICE

Intersection	AM LOS and Average Delay (in Seconds)	PM LOS and Average Delay (in Seconds)
SR 1/Capistrano Road South	C-25.4	C-23.0
Capistrano Road/Prospect Way	A-6.9	A-7.4
Broadway Avenue/Prospect Way	A-8.1	A-8.2
Airport Street/Stanford/Cornell Avenue	A-2.0	A-2.6

Source: Christopher A. Joseph and Associates. 2007. Big Wave Office Park and Wellness Center. http://www.montarafog.com/video/2009/Big Wave Hexagon Traffic Study 2.pdf (accessed December 10, 2014)

None of these intersections exceeded the LOS threshold as of 2007, and the LOS standards set forth by the LCP have remained unchanged from the time of the study to the present. Capistrano Road and SR 1 had an acceptable LOS C, and the remaining intersections had acceptable LOS A.

BICYCLE AND PEDESTRIAN FACILITIES AND POLICY

RELEVANT PLANNING DOCUMENTS

2000 SAN MATEO COUNTY COMPREHENSIVE BICYCLE ROUTE PLAN (CBRP)

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The 2000 CBRP assessed bicycle infrastructure and identified fifteen key projects across a 231mile network of bicycle routes. These projects included the Coastside Bikeway Projects, part of which is an extension of the California Coastal Irail north from Half Moon Bay. This paved multiuse trail is an alternative route along Highway 1 for recreational cyclists and commuters, and several sections of the trail have now been completed.⁴

2011 SAN MATEO COUNTY COMPREHENSIVE BICYCLE AND PEDESTRIAN PLAN (CBPP)

The 2011 CBPP updated the 2000 plan to include a pedestrian assessment, new projects including those necessary to complete the Countywide Bikeway Network, progress on projects identified in 2000, and recommendations on wayfinding and bicycle parking signage.⁵

2010 HIGHWAY 1 MIDCOAST SAFETY & MOBILITY IMPROVEMENT STUDY

This study developed a plan for multimodal safety and mobility improvements for SR 1 between Half Moon Bay Airport just north of Pillar Point Harbor and the City of Half Moon Bay. The study recommended a number of crossing and connectivity improvements adjacent to Princeton-bythe-Sea and the harbor, designating SR 1 sections here as known to have increased multimodal activity on and off the highway. This study named SR 1 and Capistrano Road as a major gateway into Princeton-by-the-Sea and Pillar Point Harbor, and analyzed the feasibility of transforming the conventional design of the four-legged intersection at SR 1 and Capistrano Road into a roundabout. This new design can potentially improve safety for pedestrians and cyclists while calming vehicle speeds, though the community has yet to determine the optimal

⁴ City/County Association of Governments. 2000. San Mateo County Comprehensive Bicycle Route Plan. http://old.ccag.ca.gov/pdf/documents/archive/San%20Mateo%20County%20Comprehensive%20Bicycle%20Route%2 OPlan%202000.pdf (accessed December 10, 2014)

⁵ City/County Association of Governments. 2011. San Mateo County Comprehensive Bicycle and Pedestrian Plan. https://performance.smcgov.org/download/r4g3-aghc/application/pdf (accessed December 10, 2014)

design solution. The study also identified potential key trail links, including a Class II bicycle lane on Capistrano Road, a Class I bicycle path along the coast through the harbor, and phased completion of the California Coastal Trail.⁶

EXISTING PEDESTRIAN AND BICYCLE FACILITIES

Pedestrian infrastructure at Pillar Point Harbor consists of access to the main harbor properties and Johnson Pier via five foot wide sidewalks on both sides of Capistrano Road and marked crosswalks with signage. However, access to Mavericks Trail through West Point Avenue notably lacks sidewalks and designated crossings, despite pedestrian and bicycle traffic and higher vehicle speeds. Pedestrians often walk in the narrow roadway, which lacks shoulders and has steep terrain on both sides. Exposure to wave, swell stormwater runoff has caused deterioration of the Mavericks Trail, and emergency repairs are needed. The California Coastal Trail is a recreational, paved multi-use trail connecting the harbor northward to the Pillar Point Bluffs via streets in Princeton-by-the-Sea and southward to Half Moon Bay, running parallel to SR 1.7

Bicycling infrastructure surrounding the harbor consists of a Class III bicycle route designation on Capistrano Road (i.e., the street is designated as a bicycle route but does not provide striped bicycle lanes on the roadway) and wide paved shoulders on SR 1. However, the paved shoulders on SR 1 are not designated as a bicycle facility, and at times of high demand, sections may be partially or entirely blocked by parked motor vehicles. Sections of the California Coastal Trail leading north to the harbor are designated as a Class I bicycle facility (i.e., an off-street bicycle and pedestrian path), transitioning to roadway shared with motor vehicles in Princeton-by-the-Sea, and then to a multi-use dirt path in the Pillar Point bluffs.

Planned Pedestrian and Bicycle Facilities

The Harbor District has a strong interest in better extending the California Coastal Trail to and through the harbor. The 2011 CBPP recommended several key pedestrian and bicycle projects to improve accessibility and connectivity to the area surrounding Pillar Point Harbor. Pedestrian improvements include new paths and new or enhanced crossings along SR 1. New multi-use pedestrian and bicycle facilities include the SR 1/Coastal Trail/Parallel Trail project, which would create or upgrade trails from Montara to Half Moon Bay into Class I (i.e., off-street bicycle/pedestrian path) and Class II (on-street bicycle lane) facilities.



⁶ Local Government Commission. 2010. *Highway 1 Safety and Mobility Improvement Study, San Mateo County Midcoast Communities: Princeton, El Granada and Miramar, California.* http://www.co.sanmateo.ca.us/Attachments/parks/Files/Parks%20Planning/Highway%201%20Safety%20and%20Mo

http://www.co.sanmateo.ca.us/Attachments/parks/Files/Parks%20Planning/Highway%201%20Safety%20and%20Mo bility%20Improvement%20Study.pdf (accessed December 10, 2014)

⁷ San Mateo County. 2014. *Plan Princeton: Existing Conditions Report.* <u>http://www.planprinceton.com/uploads/8/1/1/9/8119166/princeton_ecr_compiled_051414_low.pdf</u> (accessed December 10, 2014)

TRANSIT

FIXED-ROUTE SERVICE

Pillar Point Harbor is served by two fixed-route bus lines managed by SamTrans and the San Mateo County Transit District. The nearest bus stops are located at SR 1 & Capistrano Road and Capistrano Road & Prospect Avenue, which serve both Routes 17 and 294.

Route 17 provides weekday service along the coast between Montara and Pescadero and weekend service that extends farther north to Pacifica, from 5:30 AM to 9:30 PM. The line has 15-minute headways during the AM peak that increase to two hours at other times.⁸

Route 294 provides key regional service every day to the Hillsdale Caltrain Station in San Mateo in addition to the coastal cities served by Route 17, from 5:30 AM to 9:00 PM. The line has headways ranging from 1.5 to two hours.⁹

DEMAND-RESPONSIVE SERVICE

Limited demand-responsive transit service for the harbor area is managed by RediCoast, a paratransit subsidiary of MV Transportation. This service provides curb-to-curb transportation for disabled citizens that are unable to use fixed-route bus service and live between Devil's Slide and the Santa Cruz County boundary on the coast. RediCoast operates every day, including holidays, and one-way trips are priced at \$3.75 as of 2013.¹⁰

PARKING

There are a number of on-street and off-street parking facilities at the harbor. Parking facilities are governed by zoning regulations under the County of San Mateo.

On-street parking is available to the public on Capistrano Road and has no price or time restrictions. No on-street parking is allowed on West Point Avenue leading to the Mavericks trailhead due to limited sight distances and limited right-of-way, but an off-street parking facility is available for recreational users at the trailhead itself.

Off-street parking is available in several lots. The 2014 Plan Princeton Existing Conditions Report provides an inventory of parking spaces in and around Pillar Point Harbor (see Figure 2).¹¹

One promising option for improving parking availability, for harbor tenants, visitors, surrounding users and the general public is to develop shared parking solutions for parking at the harbor and nearby destinations, such as businesses and other land uses in Princeton-by-the-Sea and El

⁸ San Mateo County Transit District. SamTrans. 2014. Route 17.

http://www.samtrans.com/schedulesandmaps/timetables/17.html (accessed December 10, 2014)

⁹ San Mateo County Transit District. SamTrans. 2014. Route 294.

http://www.samtrans.com/schedulesandmaps/timetables/294.html (accessed December 10, 2014) ¹⁰ San Mateo County Transit District. SamTrans. 2013. *Paratransit*.

http://www.samtrans.com/Accessibility/Paratransit.html (accessed December 10, 2014)

¹¹ San Mateo County. 2014. Plan Princeton: Existing Conditions Report.

http://www.planprinceton.com/uploads/8/1/1/9/8119166/princeton ecr compiled 051414 low.pdf (accessed December 10, 2014)

Granada. Such shared parking approaches are commonly used in other coastal communities (e.g., downtown half Moon Bay, Monterey Harbor & downtown, San Francisco's Fisherman's Wharf), in order to meet parking needs while minimizing parking capital and operation expenses, land required for parking, and the stormwater and water pollution impacts created by runoff from paved parking areas. The parking inventory table provided below therefore provides information on both Harbor District parking lots and other parking areas nearby.

Parcel Number	Parking Type	Number of Spaces	Regulations
Harbor District Property		a	
Harbor Lot A	Off-Street	215 Standard 5 Disabled 12 Trailer 90 Reserved Standard 1 Reserved Disabled	Free public parking for recreational users and customers. Reserved spaces for boater tenants with slips
Harbor Lot B	Off-Street	52 Standard	Free public parking for recreational users and customers.
Harbor Lot C	Off-Street	105 Reserved Standard 2 Reserved Disabled 40 Reserved Trailer	Reserved for boaters with permits
Boat Launch & Trailer Lot	Off-Street	61 Reserved Standard 4 Reserved Disabled 70 Reserved Trailer	\$13 launch ramp fee includes parking for the boater's vehicle and trailer
Harbor Commercial Fishermen Lot	Off-Street	38 Reserved Standard2 Reserved Disabled2 Reserved Trailer	Reserved for commercial fishermen
Pier	Off-Street	20 Standard	Loading
Launching Facility	Off-Street	18 Standard	Free public short-term parking
Pillar Point Recreational Area	Off-Street	34 Standard 1 Disabled	Free public parking
Pillar Point RV Park	Off-Street	31 RV Size 22 Standard 1 Disabled	\$77/day for ocean view; \$55/day for partial view; \$1100/mo for other sites with max 1 month stay
Post Office Parcel	Off-Street and On-Street	28 Standard 3 Disabled	Undesignated
TOTAL		683 Standard (all spaces) 19 Disabled (all spaces) 124 Trailer (all spaces) 31 RV Size	

FIGURE 2 PILLAR POINT HARBOR AND PRINCETON-BY-THE-SEA PARKING INVENTORY

Nearby Parking Supply			
Capistrano Road (SR 1 to Prospect Avenue)	On-Street	34 Standard	Free public parking
Barbara's Fish Trap	Off-Street	35 Private Standard 2 Private Disabled	Free, customers only
Half Moon Bay Yacht Club	Off-Street	10 Private Standard 5 Private Disabled	Patrons only and public access during non-club hours
Pillar Point Inn	Off-Street	11 Private Standard 2 Private Disabled	Free, patrons only
Half Moon Bay Brewing Co (SE lot)	Off-Street	38 Private Standard	Free, customers only
Half Moon Bay Brewing Co (NW lot)	Off-Street	50 Private Standard	Free, customers only
Nasturtium	Off-Street	12 Private Standard	Free, customers only
American Legion	Off-Street	25 Private Standard	Free, customers only
Mezza Luna	Off-Street	35 Private Standard 2 Private Disabled	Free, customers only
Café Capistrano	Off-Street	8 Private Standard 1 Private Disabled	Free, customers only
Harbor Village Lot	Off-Street	90 Standard 389 Private Standard 9 Private Disabled	Free public parking (90 spaces) for beach access and remaining spaces for customers
TOTAL	and the second s	737 Standard (all spaces) 28 Disabled (all spaces)	

Source: San Mateo County. 2014. Plan Princeton: Existing Conditions

Report. http://www.planprinceton.com/uploads/8/1/1/9/8119166/princeton_ecr_compiled_051414_low.pdf (accessed December 10, 2014)

At Pillar Point Harbor, land is primarily owned by the San Mateo County Harbor District and lies within unincorporated San Mateo County. The Pillar Point RV Park leasehold lies within Half Moon Bay city limits. The "post office lot" in El Granada is, as of this writing, pending sale.

Off-street parking requirements are set by the County of San Mateo Zoning Code for new developments. Figure 3 below shows requirements for land use types that are commonly found in or near Pillar Point Harbor.

Parking capacity, restrictions, safety, conveniences and associated fees were noted by several Harbor District stakeholders as a problem in Pillar Point Harbor and Oyster Point Marina Park. The Strategic Business Plan will address identify potential strategies for addressing these concerns.

FIGURE 3 OFF-STREET PARKING REQUIREMENTS

Land Use	Parking Requirement
Dwellings	1 space for each dwelling unit having 0 or 1 bedroom 2 spaces for each dwelling unit have 2 or more bedrooms
Hotels	1 for each 4 guest bedrooms
Medical or Dental Clinics, Banks, Business Offices, Professional Offices	1 for each 200 sq. ft. of floor area
Restaurants and Bars	1 for each 3 seats or stools
Warehouses	1 space for each 2 employees on largest shift

Source: San Mateo County. 2014. Plan Princeton: Existing Conditions

Report. http://www.planprinceton.com/uploads/8/1/1/9/8119166/princeton_ecr_compiled_051414_low.pdf (accessed December 10, 2014))

The LCP additionally requires that new parking facilities allocate a portion of parking spaces for recreational use and beach access. Section 10.22 states that new commercial or industrial parking facilities of ten or more spaces within a quarter-mile radius of an established shoreline access area must designate 20% of the total spaces for beach user parking during the day from 10:00 a.m. and 4:00 p.m. Bus and secure bicycle parking must also be provided.¹²

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COASTAL ACCESS

Coastal access is governed by the California Coastal Act (CCA) and the County of San Mateo Local Coastal Program (LCP), which establish requirements for new development related to public shoreline access and protection of environmental integrity.

REGULATIONS GOVERNING COASTAL ACCESS

1976 CALIFORNIA COASTAL ACT

The CCA governs the actions of the California Coastal Commission and establishes development standards within the designated Coastal Zone. The CCA decrees that:

- Development must not interfere with the public right to access the sea
- New development must provide access from the nearest public roadway to the shoreline, unless it interferes with safety, military security, agriculture, or fragile coastal resources, or adequate access exists nearby
- Public parking areas and facilities must be distributed such that they mitigate overuse or crowding by the public of any single area
- New development must maintain and enhance public access to the coast with respect to public transit, mixed-use development that minimizes use of coastal roads, promote

¹² County of San Mateo. Planning and Building Department. 2013. *Local Coastal Program Policies*. http://www.co.sanmateo.ca.us/planning/pdf/lcp_1098.pdf (accessed December 10, 2014)

non-motorized travel, provide adequate parking or alternative transit options, and prevent overloading of recreational areas by users through adequate facilities

• New development must minimize adverse impacts to life, property, the environment, and special communities and neighborhoods that are popular visitor destination points¹³

COUNTY OF SAN MATEO LOCAL COASTAL PROGRAM

The LCP implements the CCA in the unincorporated areas of San Mateo County, and establishes County responsibility for issuing Coastal Development Permits. All development in the Coastal Zone requires such a Permit.

EXISTING FACILITIES

Pillar Point Harbor and Johnson Pier is a major public coastal access point. The California Coastal Trail has a multi-use paved portion along the roadway connecting the boat launch facility with Capistrano Road. This trail becomes a dirt path near the entrance of the boat launch parking lot, continuing between the lot and the breakwater in an alignment away from the roadway and closer to the pier.

Capistrano Road also has a walkable beach area that abuts the shoreline directly, which is not accessible during high tide. Though the beach is accessed by stairs connected to Capistrano Road, the stairs are obstructed by riprap that must be climbed by users.

Other coastal access points in the area include the southern ends of Broadway Avenue and Vassar Avenue, the Half Moon Bay Yacht Club on Ocean Boulevard, and West Point Avenue/Pillar Point Parking Lot. The Half Moon Bay Yacht Club allows the public to cross its property to reach the shoreline, as it has a ramp that is currently the only break in existing riprap for those with restricted mobility to access the beach. West Point Avenue and the Pillar Point Parking Lot provide access to beach areas that are walkable even in high tide.

PLANNED FACILITIES

Several planning studies have identified planned facilities for improved coastal access. The 2002 Coastal Access Improvement Plan/Five Coastal Sites, LCP, and California Coastal Trail SMC Midcoast Pillar Point to Mirada Surf plans have prioritized a number of improvements, including:

- Beach access stairways and ramps
- Trail improvements, network completion and extensions
- Enhanced protection of vulnerable, sensitive beach and bluff areas
- Restroom and public facility improvements at trailhead parking lots
- Wayfinding and signage improvements^{14, 15}

¹³ State of California. California Coastal Commission. 1976. *California Coastal Act.* <u>http://www.coastal.ca.gov/ccatc.html</u> (accessed December 10, 2014)

¹⁴ County of San Mateo. 2002. Coastal Access Improvement Plan/Five Coastal Sites.

https://parks.smcgov.org/sites/parks.smcgov.org/files/documents/files/Coastal%20Access%20Improvement%20Plan %20-%20Final.pdf (accessed December 10, 2014)

A.2.2 OYSTER POINT MARINA/PARK AND SURROUNDINGS

Oyster Point Marina/Park is located in the City of South San Francisco, along the San Francisco Bay. The marina has 455 public berths and Oyster Point Park is a 33-acre recreational green space. Oyster Point is located east of US Highway 101 (US 101) and Caltrain tracks. In addition to the Marina/Park, recreational access includes the San Francisco Bay Trail. The Marina Park is owned by the City of South San Francisco and operated by the Harbor District, with some parcels leased out for visitor-serving and marine-related commercial uses, as shown in Figure 5.

FIGURE 4 OYSTER POINT BOUNDARY



MOTOR VEHICLE ACCESS AND ROADWAYS

Oyster Point Marina/Park is located in South San Francisco, accessible by the US 101 freeway. On and off ramps are located at Airport Boulevard. US 101 is the main point of access from the locales to the south on the Peninsula and to the north, such as San Francisco and Marin. Nearby land uses include Genentech, Inc., Oyster Point Business Park, and numerous other biomedical and pharmaceutical companies.

At Oyster Point Marina/Park, there are two main roadways accessing the site: Oyster Point Boulevard and Marina Boulevard. Marina Boulevard is a circuitous roadway that provides access to the marine facilities such as berths, the dock, the fishing pier, and the swimming

¹⁵ Midcoast Community Council. Midcoast Parks and Recreation Committee. 2010. *California Coastal Trail San Mateo County Midcoast Pillar Point to Mirada Surf*. <u>http://www.midcoastcommunitycouncil.org/storage/issues/parks/2010-03-</u> 23-CCT-PillarPt-MiradaSurf.pdf (accessed December 10, 2014)

beach. Oyster Point Boulevard provides access to Oyster Cove Marina and a number of private business properties.

AUTOMOBILE LEVEL OF SERVICE

Automobile level of service at 23 traffic intersections was measured in 2008 as a component of the Oyster Point Specific Plan. The automobile level of service founder that study for locations near Oyster Point Marina /Park is noted below in Figure 5. Oyster Point Boulevard operates at LOS C during both peak periods, which is an acceptable operation for signalized and all-way stop intersections according to the City of South San Francisco's standards. The US 101 freeway segments nearby operate at LOS D and C during peak periods, an acceptable level of service for peak hours, according to the California Department of Transportation's standards for this freeway.

FIGURE 5 LEVEL OF SERVICE AT TRAFFIC INTERSECTIONS

Intersection	AM Peak LOS & Delay in Seconds	PM Peak LOS & Delay in Seconds
Oyster Point Boulevard/Dubuque Avenue/US 101 Northbound On-Ramp	C-23.0	C-22.2
Oyster Point Boulevard/Gateway Boulevard/US 101 Southbound On-Ramp	C-30.0	C-22.3
Oyster Point Boulevard/Gull Drive	C-22.5	C-31.6
US 101 Segment-North of Oyster Point Blvd. (Northbound Traffic)	D Volume: 7,452 Density: 30.1	D Volume: 7,530 Density: 30.5
US 101 Segment-North of Oyster Point Blvd (Southbound Traffic)	D Volume: 6,774 Density: 26.3	C Volume: 6,314 Density: 24.1

Source: City of South San Francisco, "Chapter 16: Transportation and Circulation," Oyster Point Specific Plan and Phase I Project, 2011.

The following tables provide the projected levels of service for 2015 and 2035 at traffic intersections in the study area, and include base projections and projections that reflect the full buildout of the land use is allowed under the Oyster Point Specific Plan. The Oyster Point Boulevard Southbound US 101 ramps are projected to experience the most significant delays, in addition to the northbound traffic segment on US 101. Figure 6 provides more detail on this topic.

FIGURE 6 2015 PROJECTED LEVEL OF SERVICE AT TRAFFIC INTERSECTIONS

Intersection	2015 Base	2015 Base +	2015 Base	2015 Base +
	(AM Peak LOS &	OPSP (AM Peak	(PM Peak LOS &	OPSP (PM Peak
	Delay in	LOS & Delay in	Delay in	LOS & Delay in
	Seconds)	Seconds)	Seconds)	Seconds)
Oyster Point Boulevard/Dubuque Avenue/US 101 Northbound On-Ramp	C- 20.2	C-22.5	C-25.0	C-25.2

San Mateo County Harbor District Strategic Business Plan Appendix A Draft Existing Infrastructure & Facilities Assessment

Oyster Point Boulevard/Gateway Boulevard/US 101 Southbound On-Ramp	F-91.1	F-130.1	D-52.8	E-58.3
Oyster Point Boulevard/Gull Drive	B-10.7	B-18.9	C-32.5	D-33.5
US 101 Segment-North of	D	D	D	D
Oyster Point Blvd.	Volume: 8099	Volume: 8116	Volume: 8092	Volume: 8205
(Northbound Traffic)	Density: 34.0	Density: 34.1	Density: 33.9	Density: 34.8
US 101 Segment-North of	D	D	D	D
Oyster Point Blvd	Volume: 7260	Volume: 7376	Volume: 6792	Volume: 6808
(Southbound Traffic)	Density: 28.5	Density: 29.2	Density: 26.1	Density: 26.1

Source: City of South San Francisco, "Chapter 16: Transportation and Circulation," Oyster Point Specific Plan and Phase | Project, 2011.

FIGURE 7 2035 PROJECTED LEVEL OF SERVICE AT TRAFFIC INTERSECTIONS

Intersection	2035 Base	2035 Base +	2035 Base	2035 Base +
	(AM Peak LOS &	OPSP (AM Peak	(PM Peak LOS &	OPSP (PM Peak
	Delay in	LOS & Delay in	Delay in	LOS & Delay in
	Seconds)	Seconds)	Seconds)	Seconds)
Oyster Point Boulevard/Dubuque Avenue/US 101 Northbound On-Ramp	C-22.7	D-44.1	D-48.3	D-49.0
Oyster Point Boulevard/Gateway Boulevard/US 101 Southbound On-Ramp	F-124	F-231	F-108	F-187
Oyster Point Boulevard/Gull Drive 🖹	C-31.4	B-15.0	D-38.0	D-38.7
US 101 Segment-North of	F	F	E	E
Oyster Point Blvd.	Volume: 9,379	Volume: 9,449	Volume: 8,543	Volume: 8,913
(Northbound Traffic)	Density: N/A	Density: N/A	Density: 36.2	Density: 39.6
US 101 Segment-North of	F	F	D	D
Oyster Point Blvd	Volume: 9,698	Volume: 10,047	Volume: 7,847	Volume: 7,930
(Southbound Traffic)	Density: N/A	Density: N/A	Density: 31.1	Density: 31.6

Source: City of South San Francisco, "Chapter 16: Transportation and Circulation," Oyster Point Specific Plan and Phase I Project, 2011.

BICYCLE AND PEDESTRIAN

RELEVANT PLANNING DOCUMENTS

2011 OYSTER POINT SPECIFIC PLAN¹⁶

The 2011 Oyster Point Specific Plan discusses pedestrian and bicycling infrastructure in Chapter 16: Transportation and Circulation. In this section, the bicycle and pedestrian facilities are described, and discussion of future planned facilities is included. Of significance, there will be a future bike path along the Caltrain right-of-way which residents will be able to utilize as part of their commute. This section also describes the Transportation Demand Management (TDM) plan required of developments that are projected to generate over 100 daily vehicle trips, with a focus on designing new developments to encourage alternative transportation trips. In addition to the TDM Plan, the required mitigation measures for the Oyster Point Specific Plan include pedestrian walkways for the entire length of Oyster Point Boulevard, and bike parking in the development's garages.

2011 SMC COMPREHENSIVE BICYCLE AND PEDESTRIAN PLAN¹⁷

The CBPP provides a countywide assessment of the bicycling and pedestrian infrastructure in San Mateo County. The report describes countywide facilities and needs, and describes pedestrian and bicyclist behavior in the county. In South San Francisco, 0.4% of the population bicycle to work, 2.6% of the population walk, and 9.2% of residents use transit for their commute trips.

Current challenges described for bicyclists and pedestrians include road crossings over/under Highways 1, 101, 280, and the Caltrain railroad line. As a result, a list of needs for alternative transportation users included: direct connections, appropriate crossings, continuous facilities, well-designed infrastructure, and reduced traffic speeds. New Class I (off-street bicycle/pedestrian path) facilities were recommended to complete the San Francisco Bay Trail in South San Francisco.

2012 SAN BRUNO / SOUTH SAN FRANCISCO COMMUNITY BASED TRANSPORTATION PLAN¹⁸ The 2012 San Bruno / South San Francisco Community Based Transportation Plan was a joint effort plan to improve the bicycle amenities, provide free or low cost bicycles to community

¹⁶ City of South San Francisco, Oyster Point Specific Plan and Phase I Project, 2011, <u>http://www.ssf.net/DocumentCenter/Home/View/1701</u>

¹⁷ County of San Mateo, San Mateo County Comprehensive Bicycle and Pedestrian Plan, 2011, https://performance.smcgov.org/Livable-Community/San-Mateo-County-Comprehensive-Bicycle-and-Pedestr/r4g3-aghc

¹⁸ City/County Association of Governments, San Bruno/South San Francisco Community Based Transportation Plans, 2012, <u>http://sanbruno.ca.gov/comdev_images/SBSSF%20CBTP%20-%20Final%20Feb%202012.pdf</u>

members, improve pedestrian amenities, and increase public transportation access and options. Overall, the report identified nine transportation strategies, including those mentioned above, along with specific strategies on increasing access and service on specific transportation networks. The short-term strategies includes improving the affordability of public transportation to low-income users, providing free or low-cost bicycles, increasing public access to information about transportation, and increasing SamTrans Bus Service. Longer term strategies included improving transit stops and amenities, improving bicycling amenities, and improving connectivity of existing transit service. The strategies identified in this plan may assist in improving access to Oyster Point for customers, tenants, and the general public.

EXISTING BICYCLE AND PEDESTRIAN FACILITIES

The pedestrian infrastructure near Oyster Point Marina/Park includes the following:

- Sidewalks on both sides of Oyster Point Boulevard
- Sidewalks on one side of Gull Drive
- At Oyster Point Park, multi-use paved paths are provided for pedestrians and cyclists, which connect to the San Francisco Bay Trail

There are no sidewalks along Marina Boulevard and into the Oyster Point Marina/Park.

The bicycling infrastructure around Oyster Point Marina/Park includes Class II bicycle lanes on Oyster Point Boulevard, from Gateway Boulevard to Marina Boulevard. The lanes do not extend past Marina Boulevard toward the commercial development north of the marina. The Class II lanes extend to Marina Boulevard and Gull Drive. The San Francisco Bay Trail is classified as a Class I bicycle facility, and wraps around Oyster Point Marina.

Street Name	Type of Facility	Length	
San Francisco Bay Trail	Class I	5.55 miles	
Gull Drive	Class II	0.26 miles	
Marina Boulevard	Class II	0.47 miles	
Oyster Point Boulevard (Gateway Blvd to Marina Blvd)	Class II	0.59 miles	
Oyster Point Boulevard (Marina Boulevard to terminus)	Class II	Planned	

FIGURE 8 BICYCLE FACILITIES AROUND OYSTER POINT MARINA/PARK

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PLANNED BICYCLE AND PEDESTRIAN INFRASTRUCTURE

The San Mateo County Comprehensive Bicycle and Pedestrian Plan outlined a number of projects that would improve the bicycle and pedestrian network connectivity in South San Francisco and Oyster Point. Broader goals for the area included connections to transit centers such as Caltrain and BART. The new bicycle facilities proposed include a Class I trail along the Caltrain corridor right-of-way, Class I facilities along Oyster Point Boulevard, Class I facilities along Forbes Boulevard, and unclassified on-street facilities along Gateway Boulevard leaving toward

Oyster Point Boulevard. In addition, the plan highlighted Oyster Point Marina/Park as a pedestrian focus area, and proposes a new pedestrian path from Caltrain to Oyster Point Marina/Park.

TRANSIT

South San Francisco is served by regional transportation networks, such as Caltrain and BART, providing access to San Francisco, the East Bay, and the Peninsula. The Oyster Point Marina is also directly served by the Water Emergency Transportation Authority's San Francisco Bay Ferry, connecting passengers to Oakland, Alameda, and San Francisco. Lastly, both public and private shuttles operate from these major transportation centers to provide direct access to employment centers in the Oyster Point and Utah/Grand areas.

CALTRAIN

The South San Francisco Caltrain station near Oyster Point provides limited stop and local service northbound to San Francisco and southbound to San Jose. Morning frequency varies from 20 minutes to 40 minutes, with all trains from 7:00 am to 9:30 am running limited stop service northbound. The southbound service runs three limited stop trains hourly from 6:40 am to 8:40 am. Evening southbound receives six limited stop trains, with 20 to 40 minute frequency. Caltrain weekday service span ranges from 5:43 am to 12:17 am. Of all the Caltrain stations, South San Francisco ranks 21 of 29 in ridership, with 432 total average weekday boardings and 439 total average weekday alightings.

BART

In addition to Caltrain, Bay Area Rapid Transit (BART) serves South Francisco with two lines: Pittsburg/Bay Point to SFO/Millbrae and Richmond to Daly City/Millbrae. The joint Millbrae BART/Caltrain Station lies approximately seven miles south of Oyster Point, with connections to Oyster Point provided by local bus and shuttle service. Each BART route serves the station every 15 minutes during peak hours, with trains arriving every 7-8 minutes at the platforms. BART service spans from 4:17 am to 1:27 am. The Richmond to Daly City/Millbrae line terminates in the evenings at 8:00 pm.

SAN FRANCISCO BAY FERRY

The Water Emergency Transportation Authority's San Francisco Bay Ferry provides service from Oyster Point Marina to Oakland, Alameda, and San Francisco. The San Francisco Bay Ferry service consists of weekday-only commuter service between Oyster Point and Oakland's Jack London Square and Alameda Main Street terminals in the East Bay; and weekday mid-day service five days a week between South San Francisco and the San Francisco Ferry Building. From Oakland and Alameda, weekday service includes three morning trips and one evening trip to Oyster Point. Return service to the East Bay from Oyster Point also consists of four runs per day, with one ferry departing Oyster Point at 7:20 am and three evening departures. Travel time is 30 minutes to Alameda and 40 minutes to Oakland. Service from Oyster Point to the San Francisco Ferry Building consists of one morning departure, with one return trip to South San Francisco in the afternoon. Travel time to San Francisco Ferry Building is 30 minutes. As of 2013, ridership on

the South San Francisco to Oakland and Alameda route was approximately 255 one-way trips per weekday.19

Aside from providing typical commuting services, the Water Emergency Transportation Authority (WETA) provides transportation in the event of an emergency or disaster affecting Bay Area transportation systems. WETA is responsible for coordinating efforts with local, state, and federal agencies for transporting first responders and disaster service workers, evacuation assistance, and provision of basic mobility for the public. WETA has an Emergency Water Transportation System Management Plan in place, with provisions for following directions from State Operations Center, which are to be carried out by the Regional Emergency Operations Center, of which WETA is a participant, along with Caltrans, the California Highway Patrol, the United States Coast Guard, and the Metropolitan Transportation Commission. The potential use of the Oyster Point Ferry Terminal in a regional emergency response effort is discussed in greater detail in a following section.

SHUTTLES

A number of publicly-funded shuttles cater to employment centers in the area, with shuttle stops provided at several locations in and/or adjacent to Oyster Point Marina/Park. Shuttle stops are located at the Oyster Point Ferry Terminal, and along Oyster Point Boulevard and Gull Drive adjacent to the Marina. The shuttles are free to riders and are operated by Alliance Shuttle. The following employers are participants: Rest in the second

- Apria Healthcare
- **CB** Richard Ellis
- Centennial Towers
- Cushman & Wakefield
- Cytomx
- diaDexus
- Life Technologies
- Monogram BioSciences
- Permanente Medical Group
- Sanrio Inc.
- Shorenstein Realty Services
- South San Francisco Business Center

Aside from the Oyster Point shuttles listed below in Figure 9, there are three shuttles that serve employment areas south of the Oyster Point Marina/Park area. The shuttles served the Utah/Grand Area from the Ferry, BART, and Caltrain stations as well. The South San Francisco-Utah/Grand Ferry shuttle serves different employment centers than those listed above, but is outlined in the table, given that it crosses into the project area. The Utah/Grand area includes Genentech, Inc. campus, South San Francisco Conference Center, a number of biomedical

¹⁹ The Daily Journal, "Ferry ridership boom short-lived: After BART strike halted, commuters return to previous routine," July 2013, http://www.smdailyjournal.com/articles/lnews/2013-07-10/ferry-ridership-boom-short-lived-after-bartstrike-halted-commuters-return-to-previous-routine/1771493.html

and pharmaceutical companies. Genentech, Inc. also operates its own private shuttle service from the ferry terminal to/from its main campus.

Shuttle	Service Span	# of Loops	Funding
So. San Francisco – Oyster Point Ferry	M-F: 7:25 am – 9:13 am 3:44 pm – 6:20 pm	3	Bay Area Air Quality Management District, City/County Association of Governments, San Mateo County Transportation Authority, and Water Emergency Transportation Authority
So. San Francisco – Oyster Point BART	M-F: 6:40 am – 10:02 am 3:00pm – 6:14 pm	7	Bay Area Air Quality Management District, City/County Association of Governments, San Mateo County Transportation Authority, San Mateo County Transit District
So. San Francisco- Centennial Towers BART/Caltrain	M-F: 6:50 am – 10:03 am 4:11 pm – 7:14 pm	5	City/County Association of Governments, Peninsula Corridor Joint Powers Board, San Mateo County Transportation Authority- Measure A
So. San Francisco- Oyster Point Caltrain	Status.		Bay Area Air Quality Management District, City/County Association of Governments, San Mateo County Transportation Authority, Peninsula Corridor Joint Powers Board
So. San Francisco- Utah/Grand Ferry	M-F: 6:45am – 9:25 am 3:35 pm – 6:10 pm	3	City/County Association of Governments, Peninsula Corridor Joint Powers Board, San Mateo County Transportation Authority, Water Emergency Transportation Authority

FIGURE 9 SHUTTLE SERVICE IN OYSTER POINT

SAMTRANS: REDIWHEELS

RediWheels is the paratransit service in San Mateo County that serves the bayside communities of the county. The system is targeted at those with mobility issues who cannot ride regular SamTrans buses. There is a fare for the service at a rate of \$3.75 each way, or \$1.75 for low-income users. Participants may travel within San Mateo County, San Francisco County, and Palo Alto. Participants in possession of a RediWheels identification card may ride the regular SamTrans buses for free.²⁰

PARKING AND TRANSPORTATION DEMAND MANAGEMENT

For all non-residential development that is expected to generate more than 100 or more Average Daily Trips (ADT), the City of South San Francisco requires the implementation of transportation demand management measures to achieve a minimum alternative mode share of at least 28% of all trips. The specific purposes for these objectives include the following: ²¹

²⁰ SamTrans, "Paratransit Service", July 2012, <u>http://www.samtrans.com/Assets/_Agendas+and+Minutes/SamTrans/Board+of+Directors/Presentations/2012/1-11-12+Mobility+Management+-+Paratransit.pdf</u>

²¹ City of South San Francisco Municipal Code § 20.400.

- Reduce the amount of traffic generated by new non-residential development, and the expansion of existing non-residential development.
- Ensure that expected increases in traffic resulting from growth in employment opportunities in the City will be adequately mitigated.
- Reduce drive-alone commute trips during peak traffic periods by using a combination of services, incentives, and facilities.
- Promote the more efficient utilization of existing transportation facilities and ensure that new developments are designed in ways to maximize the potential for alternative transportation use.
- Provide developers with alternatives to provide parking capacity below minimum requirements.

All projects required to submit a TDM Plan in South San Francisco are subject to an annual survey to determine the compliance of specific projects with the TDM Ordinance. Applicants seeking an FAR (Floor Area Ratio) bonus, which are available to developments listed in Figure 10, must also submit a triennial report to measure compliance with prescribed ratios. If a development fails to make the necessary TDM changes to achieve these ratios, or fails to submit a triennial report, the City may assess a financial penalty on the basis of project size and actual percentage of alternative mode use. All of the second s

Project	Base District	Requested FAR	Minimum Alternative Mode Use (percent of total trips)
Non-residential projects resulting in more than 100 ADT	All	n/a	28.0
FAR bonus request	Business and Professional Offices	1.01-1.59	30.0
		1.60-1.99	36.5
and the second second		2.00-2.30	45.0
	Business Commercial and Freeway Commercial	0.51-0.69	30.0
		0.70-0.80	32.0
		0.81-0.90	35.0
	Hotels and Motels in Business Commercial and Freeway	1.21-1.49	30.0
		1.50-1.69	32.0
	Commercial	1.70-1.80	35.0
	Business and Technology Park	0.51-0.69	30.0
		0.70-0.80	32.0
		0.81-1-00	35.0
		1.01-1.12	38.0
			40.0

FIGURE 10 MINIMUM ALTERNATIVE MODE USE SHARE

Source: City of South San Francisco Ordinance. 1432 § 2, 2010

At Oyster Point Marina/Park, the majority of the land is owned by the City of South San Francisco or the Harbor District, or leased to private parties. In this area, there is on-street parking available for public use. In addition, there is free parking available in numerous off-street lots. In total, approximately 683 total spaces exist in the study area. Figure 11 provides further detail on the parking inventory of Oyster Point Marina/Park.

Parcel Number	Parking Type	Number of Spaces	Regulations
Parcel H	On-Street	37 Standard Spaces 2 Disabled Spaces	Free, 30 minute limit for standard, 72-hour limit for disabled spaces
Parcel G-1	On-Street	25 Standard Spaces 4 Disabled Spaces	Free
Parcel G	Off-Street	54 Oversized Spaces 2 Standard Spaces	\$11 Launch Fee \$200 Annual Permit 20% Discount for Seniors & Disability
Parcel 1*	Off-Street	326 Standard Spaces 9 Disabled Spaces	Free
Parcel 2*	Off-Street	41 Standard Spaces 4 Disabled Spaces	Free
Parcel D-1	Off-Street	49 Standard Spaces 2 Disabled Spaces	Customer
Parcel B	Off-Street	125 Standard Spaces 3 Disabled Spaces	Customer
TOTAL		657 Standard Spaces 26 Disabled Spaces	

FIGURE 11 PARKING INVENTORY AT OYSTER POINT MARINA/PARK

*These parcels were labeled by Nelson\Nygaard to distinguish parking lots.

Parcels A, C, E, E-1, E-2, E-4, E-5, F, and G-2 do not have automobile parking. Parcels E, E-1, and E-2 are dry boat storage lots. Parcels E-4 and E-5 are wet boat parking.

FIGURE 12 SAN MATEO COUNTY HARBOR DISTRICT PARCEL MAP



San Mateo County Harbor District: Oyster Point Boundary

On-street parking is not allowed on Oyster Point Boulevard and Gull Drive. On-street parking is available in the area along Marina Boulevard with 30-minute time limits.

Off-street parking requirements for the City of South San Francisco are listed by land use in Figure 13 below. Aside from the required number of spaces, the zoning code also establishes designrelated regulations for parking structures in Oyster Point Specific Plan District that relate to reducing their physical presence.

and a second sec		
REQUIRED ON-SITE PARKING SPACES		
Land Use Classification	Required Parking Spaces	
Public and Semi-Public Use Classifications		
Colleges and Trade Schools, Public or Private	1 per 3 members of the school population (including students, faculty, and staff) based on maximum enrollment.	
Community Assembly	1 for each 4 permanent seats in main assembly area, or 1 for every 28 sq. ft. of assembly area for group activities or where temporary or moveable seats are provided.	
Cultural Institutions	For theaters and auditoriums: 1 for each 4 permanent seats in main assembly area, or 1 for every 50 sq. ft. of assembly area where temporary or moveable seats are provided.	
	Galleries, Libraries and Museums: 1 for every 1,000 sq. ft. of floor area. Other establishments: determined by the Chief Planner.	

	17 A 60 AFC	Construction .	
FIGURE 13 REQUIRED	ON-SITE PARKING	SPACES IN THE C	ITY OF SOUTH SAN FRANCISCO
		3770°	

REQUIRED ON-SITE PARKING SPA	CES		
Land Use Classification	Required Parking Spaces		
Emergency Shelter	1 per 200 sq. ft. of floor area.		
Government Offices	1 per 300 sq. ft. of floor area.		
Schools, Public or Private	Elementary and Middle Schools: 1 per classroom, plus 1 per 250 sq. ft. of office area. High Schools: 7 per classroom.		
Commercial Use Classifications			
Banks and Financial Institutions (All subclassifications)	1 per 300 sq. ft. of floor area.		
Building Materials and Services	1 per 500 sq. ft. of floor area; 1 per 1,000 sq. ft. of outdoor display area.		
Business Services	1 per 300 sq. ft. of floor area.		
	Establishments with seating: 1 for each 4 fixed seats, or 1 for every 50 sq. ft. of seating area where temporary or moveable seats are provided. Athletic Clubs: 1 per 150 sq. ft. of floor area. Bowling alleys: 2 per lane. Golf Courses: 6 per hole Golf Driving Ranges: 1 per tee Miniature Golf: 2 per hole Game Courts (e.g. tennis): 2 per court Swimming pools: 1 per 200 square feet of pool area plus 1 per 500 feet of area related to the pool. Other Commercial Entertainment and Recreation uses: to be determined by Chief Planner.		
Eating and Drinking Establishments	The second s		
Bars/Night Clubs/Lounges	1 per 75 sq. ft. of customer seating area.		
Coffee Shops/Cafes	1 per 100 sq. ft. of customer seating area.		
Restaurants, Full Service	1 per 75 sq. ft. of customer seating area; no parking is required for outdoor seating when seats provided equal to 50 percent or less of total indoor seating.		
Restaurants, Limited Service	1 per 100 sq. ft. of floor area.		
Food and Beverage Retail Sales	1 per 300 sq. ft. of floor area.		
Lodging			
Bed and Breakfast	1 per room for rent in addition to parking required for residential use.		
Hotels and Motels	1 per each sleeping unit, plus 2 spaces adjacent to registration office. Additional parking required for ancillary uses, such as restaurants, according to the parking requirements for the ancillary use. See <u>Subsection 20.330.006(C)</u> Airport-Oriented Hotels and Motels.		
Live-Work	1.5 per unit or 1.5 for every 1,000 sq. ft. of floor area, whichever is		

REQUIRED ON-SITE PARKING SPACES		
Land Use Classification	Required Parking Spaces	
Maintenance and Repair Services	1 per 600 sq. ft. of floor area, plus one space for each fleet vehicle.	
Offices		
Business and Professional	1 per 300 sq. ft. of floor area up to 100,000 sq ft. 1 per 350 sq. ft over 100,000 sq. ft.	
Medical and Dental	1 per 200 sq. ft. of floor area.	
Walk-In Clientele	1 per 300 sq. ft. of floor area.	
Parking, Public or Private	1 per attendant station (in addition to the spaces that are available on the site).	
Personal Services	1 per 300 sq. ft. of floor area.	
Retail Sales	1 per 300 sq. ft. of floor area. 1 per 750 sq. ft. of floor area for appliance and furniture stores.	
Neighborhood	4 spacer per 1,000 sq. ft.	
Community	4.5 spacer per 1,000 sq. ft.	
Regional	5 spacer per 1,000 sq. ft.	
Employment Use Classifications		
Intermediate Processing Facility	1 for each 2 employees on the maximum work shift, or 1 per 1,000 sq. ft. of floor area, whichever is greater.	
Research and Development	1 per 350 sq. ft.	
Salvage and Wrecking	1 per 500 sq. ft. of building area plus 1 per 0.5 acre of gross outdoor use area.	
Warehousing and Storage		
<i>Freight/Truck Terminals and</i> As provided in the Parking and Circulation Study required pursuant to <u>Section 20.350.019</u> , Freight/Truck Terminals and Warehouses.		
Indoor Warehousing and Storage 1 per 2,000 square feet of area up to 10,000 square feet, 1 per 5,000 square feet over 10,000 square feet, plus 1 per 300 square feet of official square feet over 10,000 square feet, plus 1 per 300 square feet of official square feet over 10,000 square feet, plus 1 per 300 square feet of official square feet over 10,000 square feet, plus 1 per 300 square feet of official square feet over 10,000 square feet, plus 1 per 300 square feet of official square feet over 10,000 square feet, plus 1 per 300 square feet of official square feet over 10,000 square feet, plus 1 per 300 square feet of official square feet over 10,000 square feet, plus 1 per 300 square feet of official square feet over 10,000 square feet, plus 1 per 300 square feet of official square feet over 10,000 square feet, plus 1 per 300 square feet of official square feet over 10,000 square fe		
1 per 2,000 square feet of area up to 10,000 square feet, 1 per 5,000 square feet over 10,000 square feet, plus 1 per 300 square feet of off		
Personal Storage	1 space per 75 storage units, plus 1 space per 300 square feet of office area. A minimum of 5 spaces shall be provided.	
Wholesaling and Distribution	1 per 2,000 sq. ft. of use area up to 10,000 sq. ft., 1 per 5,000 sq. ft. over 10,000 square feet, plus 1 per 300 sq. ft. of office plus 1 truck parking space for each delivery vehicle on-site during the peak time.	
Transportation, Communication, ar	d Utilities Use Classifications	
Light Fleet-Based Services	1 per 300 sq. ft. of office floor area, plus one space for each fleet vehicle.	
Transportation Passenger Terminals	To be determined by the Chief Planner.	

REQUIRED ON-SITE PARKING SPACES		
Land Use Classification	Required Parking Spaces	
Utilities, Major	1 for each employee on the largest shift plus 1 for each vehicle used in connection with the use. Minimum of 2.	
Utilities, Minor	None.	
Waste Transfer Facility	To be determined by the Chief Planner	

Source: City of South San Francisco Ordinance. 1432 § 20.330.004, 2010

WETA AND EMERGENCY PREPAREDNESS

The Water Emergency Transportation Authority (WETA) operates ferry service on the San Francisco Bay. As a result of Senate Bill 976, the agency is also tasked with coordinating the water transit response to regional emergencies that slow or disable the Bay Area transportation system. In the event of such an emergency, WETA is responsible for the following:

- Coordinating response efforts with local, state and federal agencies as well as coordinating the emergency water transportation response with the Golden Gate Bridge Highway and Transportation District (GGBHTD) and private passenger vessel operators
- Providing passenger water transit service

In this context, ferries will be utilized to:

- Assist with the transportation of law enforcement, disaster service workers, and other first responders
- Provide evacuation assistance for heavily damaged or unsafe areas
- Provide increased transit service, especially in corridors where other existing transportation options are affected or no longer functional

While WETA's San Francisco Bay Ferry service to South San Francisco / Oyster Point is currently limited to five daily departures and five daily arrivals, in the event of an emergency the facility could see increased ferry activity. For example, during the 2013 Bay Area Rapid Transit (BART) strike, an additional ferry run was added to the South San Francisco route, corresponding with a 134% increase in ridership (595 riders vs. an average of 255 daily riders). Similarly, during the closure of the Bay Bridge in the late summer of 2013, a 53% spike in ridership was observed.²²

WETA does not maintain specific facilities for the sole purpose of emergency response, primarily due to the lack of an operating subsidy for such purpose. Such facilities would require on-going maintenance and rehabilitation to ensure their smooth operation in the event of an emergency. WETA is currently investigating options for dedicated emergency response facilities. However, current policy is to utilize existing ferry terminals in the event of an emergency. As such, the Oyster Point terminal could potentially be utilized as a staging area for disaster relief efforts in San

²² Summary of 2013 Emergency Response Activities, Water Emergency Transportation Authority (June 2014) http://sanfranciscobayferry.com/sites/default/files/weta/publications/Summary2013EmergencyPreparednessRespons eActivities.pdf

Francisco and/or Oakland. The terminal could serve as a destination for evacuation efforts, as well as an access point for first responders to heavily affected areas. It would be a particularly important emergency facility in the event of heavy damage to the Bay Bridge, the Transbay Tube, Highways 101 and 280, and other major access points to the urban centers of the Bay Area (such as San Francisco and Oakland). After the response phase of a disaster, the terminal could serve a continued role in recovery efforts, including expanded ferry service in the event that other major transportation infrastructure is under repair.