

SAN MATEO COUNTY COASTSIDE ACCESS STUDY

Final Report

April 2015



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EXECUTIVE SUMMARY

The San Mateo Coastside Access Study considers access to public lands along the San Mateo County coast between Pedro Point Headlands and El Granada. The partners to the study are San Mateo County Parks, California State Parks, and Golden Gate National Recreation Area (GGNRA). The consultant team carried out an assessment of access capacity and visitor demand. The team considered current conditions and developed a forecast of how visitor access might change in the future.

A review of previous transportation, mobility, and access studies on the Coastside revealed that the San Mateo County Midcoast area is experiencing an increase in visitor attractions. Numerous previous studies emphasize the need to improve bicycle and pedestrian mobility, as well as parking access along Highway 1. Land managers are also considering alternative planning approaches to accommodate visitors at their parks.

Current visitor data is provided for nine primary park sites. The records provided by study partners for analysis included large variations in quantity, span, and accuracy of data across agencies and individual sites. Access facilities of the nine major park destinations in the corridor are discussed, from Devil's Slide Coastal Trail in the north to Mirada Surf in the south. Transit ridership of the Devil's Slide Ride and SamTrans Route 17 is reviewed in the context of public lands access usage. An overview of current parking availability in the study corridor is provided for both formal parking lots owned and managed by the land managers on the Coastside, as well as informal parking areas used by Coastside visitors but not managed by the study partners. A parking supply inventory revealed 28 parking areas of interest and nearly 400 formal spaces within the study corridor. A parking utilization survey was conducted during summer and fall 2014 with results reported in maximum occupancy and discussed by day of visit, time of day, and parking turnover. Details and commentary for each individual parking area is also given.

Visitor and parking demand forecasts are presented based on population projections and observed park visitor growth over a recent six-year period. A range for visitor forecasts is established for key park sites using a minimum based on established regional population growth rates and a maximum based on the rapid growth of visitation observed in recent years. Three park typologies are developed to represent park sites as Regional Attractors, County Attractors, or Local Attractors. Average annual growth rates are determined for each typology and used as estimates for park sites lacking data, and to account for an expected typology shift at Rancho Corral de Tierra and Quarry/Wicklow. Findings are presented in 15 and 25 year visitor forecasts, for years 2030 and 2040, including lower and unconstrained upper bounds for visitation growth as well as separate tables detailing typology shift. Parking demand forecasts are presented based on percent growth in visitation as applied to the maximum observed demand. Findings are detailed and discussed for each park site, and in total could represent a parking demand growth range of 12%-62% by 2030, and 19%-126% by 2040.

A summary of public access to the Coastside is represented by an identification of key issues, a detailed description of opportunities, and recommendation for next steps:

Key Issues

- Incomplete bicycle and pedestrian networks
- Infrequent transit service
- High parking occupancies during peak times
- A lack of wayfinding in some areas
- A lack of access facilities for Rancho Corral de Tierra
- Growing demand
- Competing policy goals

Opportunities

- Continue to improve pedestrian and bicycle connectivity between parks
- Study the potential for a regional shared parking strategy
- Study the potential for a regional paid parking program
- Improve wayfinding
- Provide and promote a more frequent, visitor-oriented regional transit service
- Monitor growth in parking demand and consider strategically expanding the parking supply in accordance with policy goals

Next Steps/Phases

- Formalize Gray Whale Cove informal parking area and Montara State Beach Roadside parking
- Begin discussions of shared parking with potential partners
- Implement improved wayfinding
- Begin discussion of costs, benefits, and tradeoffs of more intensive strategies
- Monitor parking occupancies during Summer 2015 and beyond

BACKGROUND

INTRODUCTION

The San Mateo Coastside Access Study considers access to public lands along the San Mateo County coast between Pedro Point Headlands and El Granada. To address shared issues and work toward comprehensive solutions, the study considers public lands in this corridor managed by various agencies.

The partners to the study are San Mateo County Parks, California State Parks, and Golden Gate National Recreation Area (GGNRA). Although the study was led by the primary land managers, the study takes into consideration multiple open space destinations on the Coastside.



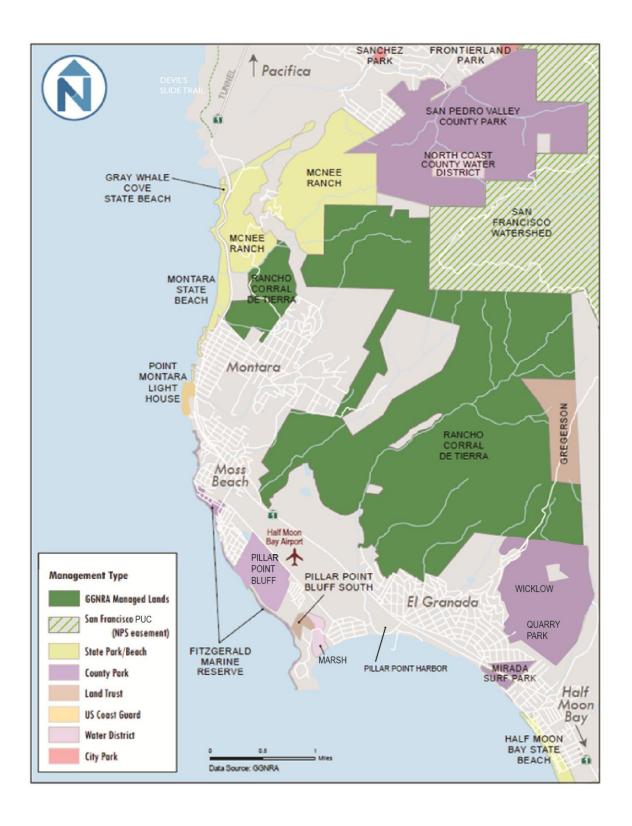
In this first phase of the study, the consultant team carried out an assessment of access capacity and visitor demand. The team considered current conditions and developed a forecast of how visitor access might change in the future.

This report presents the findings of this work, and includes the following elements:

- A review of previous transportation, mobility, and access studies on the Coastside
- Current parking and visitor data
- A forecast of potential future visitor use and parking demand
- A summary of major issues and opportunities for access to the Coastside

In future phases of the study, the study partners will build on the information in this report to develop more specific plans for access investments.

Figure 1-1 Study Area Map



REVIEW OF RELEVANT STUDIES

Several prior plans and studies have considered access to public lands on the San Mateo County Coastside. The consultant team worked with stakeholders to identify the documents that most directly address the concerns of this study. Findings from the review were used to inform visitor and parking demand forecasts and recommendations for enhancements. The documents considered include:

- GGNRA General Management Plan (GGNRA, 2014)
- Assessment of Likely Use and Impacts From Proposed Devil's Slide Trails (Patrick Tierney, prepared for the California Coastal Conservancy, December 2005)
- Initial Study and Negative Declaration, La Costanera Restaurant (County of San Mateo, Planning and Building Department, February 2014)
- SamTrans Service Plan, Draft Final (San Mateo County Transit District, March 2013)
- Highway 1 Safety and Mobility Improvement Study (San Mateo County, Local Government Commission, Phase 1 - April 2010, Phase 2 - November 2012)
- San Mateo County Parks Strategic Plan (San Mateo County Parks Department, February 2013)
- GGNRA Long Range Transportation Plan: Transportation Technical Report (GGNRA, November 2013) and Visitor Experience Technical Report (GGNRA, September 2013)
- California Coastal Trail San Mateo County Midcoast Pillar Point to Mirada Surf (Midcoast Parks & Recreation Committee, March 2010)
- California Coastal Trail San Mateo County Midcoast Pillar Point to Montara Beach (March 2013) / California Coastal Trail proposed alignment south of Devil's Slide (Midcoast Community Council, January 2013)
- Devil's Slide Coast Management Area / Peninsula Working Group (various parks agencies, current)
- Plan Princeton (San Mateo County Planning & Building Department, ongoing)
- Midcoast Action Plan for Parks and Recreation (Midcoast Recreation Planning Team, July 2007)
- Connect the Coastside Comprehensive Transportation Management Plan (San Mateo County Planning & Building Department, ongoing)

One primary goals of this study is to further evaluate and advance the concepts identified in the Highway 1 Safety and Mobility Improvement Study. Relevant issues identified in each study listed above are summarized in Appendix A, Table A-1. Key findings are as follows:

The San Mateo County Midcoast area is experiencing an increase in visitor attractions. Rancho Corral de Tierra, which is approximately 3,800 acres, was acquired by GGNRA in 2011 and will have new trails, trailheads and potentially new visitor facilities. Devil's Slide Trail, a 1.3-mile long Coastal Trail segment, is managed by San Mateo County and opened in March 2014. San Mateo County Parks is also in the process of developing the Green Valley Trail, which will be approximately one mile long and connect the south tunnel area of Devil's Slide to Montara State Beach/McNee Ranch and Gray Whale Cove State Beach. Improvements are planned for other park sites in the area, including new trails at Point San Pedro and enhanced trail connections. San Mateo County also has plans to acquire 0.5 miles of new trails at Fitzgerald Marine Reserve, as indicated in its Strategic Plan

- (February 2013), and will soon open new land to the public at Pillar Point Bluff and the former Wicklow propery overlooking El Granada.
- The land managers in the region articulated general access goals and priorities for their parks, as well as specific strategies proposed to help accommodate the growing number of visitors. Numerous previous studies emphasize the need to work with Caltrans to improve bicycle and pedestrian mobility, as well as parking access along Highway 1. Some documents highlight specific problem areas with respect to access and safety and present potential network and design improvements to address these concerns.
- Land managers are also considering alternative planning approaches to accommodate visitors at their parks. The studies mention a number of measures that could influence the way in which visitors access San Mateo Midcoast parks in the future. For example:
 - GGNRA is examining the potential to enhance its on-line trip planning tools, including real-time traveler information, and improve visitor wayfinding.
 - Surveys reveal that visitors are willing to access Devil's Slide Trail by way of other trails and by free parking shuttles; park managers strongly support shuttle services from Pacifica as well as shuttle service south of Devil's Slide.
 - Shared parking strategies are already in place in some areas, such as at La Costanera Restaurant, whose parking is available to Montara State Beach visitors when the restaurant is closed. Shared parking could be considered elsewhere on the Coastside.

2 EXISTING CONDITIONS

The project corridor includes a mix of public lands and small residential communities, all connected by California's Highway 1.

Public lands in the corridor are managed by several agencies, including Golden Gate National Recreation Area (GGNRA), San Mateo County Parks, California State Parks, Peninsula Open Space Trust and the California Coastal Conservancy. As interest in these public lands has grown, encouraging safe and convenient access for all who wish to experience this area has become more challenging.



VISITOR DATA SUMMARY

The study partners provided the consultant team with visitation data collected from national, state, and county land managers in the region. The data consist of estimated visitor counts by park, available at a limited number of sites during a limited number of time periods. Data collection methodologies differed by resource, and information was provided for different time frames (year, month, or day) and date ranges (from 1996 to 2014). A description of the data collection methodologies used by the land managers is included in Appendix C.

Visitation data were provided by local land managers for over 30 parks throughout the region. San Mateo County Parks provided monthly and annual visitor estimates for 20 park sites between FY 2007 and FY 2014. Count strategies differ by park site, but trail counters, tour reservations, and parked vehicles all factor into visitor estimations.

Visitor information for 13 State Beaches and Parks was provided from FY 1996 through FY 2012. The data reflect estimates of the number of individual visits to the State Park sites during each fiscal year, and the sites employ different techniques with varying levels of accuracy to estimate visitation.

Visitor information for four national park units in San Mateo County, managed as part of GGNRA, were provided for 2007. The data only represents a small sample size over a short period of time, and although it provides a general estimate, it cannot be used to accurately estimate visitation. Since Rancho has only been managed by GGNRA for three years, no data is available yet for this national park unit in the study area.

The project study area consists of nine primary park sites, which are discussed below. Annual counts were provided for four of the locations, while an average daily count was provided for the remaining four sites.

Analysis of the visitation data should be assessed with caution. Figures provided by land managers are often rough approximations of yearly visitor counts, calculated using varying methodologies that are often not well documented. Data accuracy is at times in question, as large fluctuations in visitor counts can be observed over the years at some locations.

Current annual visitation estimates are summarized in Table 2-1.

Table 2-1 **Study Area Visitation Data Summary**

	Annual Visitation during Most Recent Year of Available Data	Year
Key Study Area Park Sites (Land Manager)		
Devil's Slide Coastal Trail ¹ (San Mateo County)	400,000	FY 2014-15
Gray Whale Cove State Beach (State Parks) ²	35,284	FY 2011-12
Montara State Beach + McNee Ranch (State Parks) ²	78,443	FY 2011-12
Point Montara Light Station (State Parks) ²	28,435	FY 2011-12
Fitzgerald Marine Reserve (San Mateo County) ³	170 705	FY 2013-14
Pillar Point Bluff (San Mateo County) ³	- 178,785	FT 2013-14
Mirada Surf E+W, Coastal Trail (San Mateo County) ⁴	200,750	FY 2013-14
Rancho Corral de Tierra (GGNRA) ⁵	100,000	FY 2011-12
Quarry/Wicklow (San Mateo County) ⁶	29,200	FY 2013-14

Notes:

- 1. Current visitation at Devil's Slide Coastal Trail based on San Mateo County Parks estimate of 400,000 anticipated visitors in first year open (Fiscal Year 2014-15).
- 2. Current visitation based on results from State Parks count program. Point Montara Light Station is no longer managed by State Parks but was during FY 2011-2012.
- 3. Current visitation based on results from County Parks count program.
- 4. Current visitation at Mirada Surf based on park ranger estimate of average daily visitation.
- 5. Current visitation at Rancho Corral de Tierra estimated as quantity between annual visitation at Montara/McNee (~78k) and San Pedro Valley (~127k).
- Current visitation at Quarry/Wicklow based on extrapolation of daily hiking visitors at San Pedro Valley County Park.

Source: San Mateo County Parks, California State Parks, GGNRA; Fehr & Peers, 2014.

ACCESS FACILITIES BY PARK SITE

This section discusses each of the major park destinations in the corridor, briefly presenting the facilities that provide access to each park.

Devil's Slide Coastal Trail

Devil's Slide Coastal Trail is a 1.3-mile multi-use trail, converted from a former segment of Highway 1. The paved trail, which opened in March of 2014, provides hikers, runners, and bicyclists with access to Devil's Slide and views of the Pacific Ocean. The trail offers many convenient amenities, including seating, drinking fountains, and restrooms. County Parks estimates that 400,000 people will visit the trail by the end of its first year.

- **Vehicle Access:** Two small parking lots allow for access by car. The lot at the north end of the trail has 17 spaces; the lot at the south end has 22 spaces.
- Transit Access: A community shuttle (the "Devil's Slide Ride"), operated by the City of Pacifica, provides hourly service on the weekends between Pacifica and the north end of the Coastal Trail. SamTrans Route 17 provides service from Pacifica and Half Moon Bay to a stop at the south end of the trail.
- Bicycle and Pedestrian Access: At present, cyclists can access Devil's Slide via
 Highway 1 only, although it is challenging to access Devil's Slide on foot. However, two
 trail projects are underway that may improve access to Devil's Slide in the future:
 - The Green Valley Trail is being designed as a spur off of the California Coastal Trail to connect Devil's Slide with existing trails in the McNee Ranch portion of Montara State Beach and ultimately to Gray Whale Cove over a distance of 1.5 miles. The project is being led by San Mateo County Parks. It will be built for walking, equestrian use, and mountain biking. As of 2015, a contractor has been selected for design and permitting services, but funding for construction of the project has not yet been identified.
 - A second 1.5-mile California Coastal Trail segment is proposed by City of Pacifica and the California Coastal Conservancy to connect the Devil's Slide trail to Pedro Point Headlands and Pacifica. The City of Pacifica is now working to acquire the property necessary to complete the trail. San Mateo County is being considered as possible land manager for the Pedro Point Headlands and trail at this time.

Constructing these projects remains a priority for the County. Funding for restoration and trail improvements could come from the CA State Parks Off Highway Motor Vehicle Recreation Division, the California Coastal Conservancy, and others.

Gray Whale Cove State Beach

Gray Whale Cove State Beach is a sheltered cove surrounded by cliffs that drop into the Pacific Ocean. A steep trail leads down to the beach, and there is a small picnic area on the bluff above. Parking is available in a lot on the east side of Highway 1. Roughly 37,000 people visit Gray Whale Cove each year.

Vehicle Access: The Gray Whale Cove lot is among the larger parking facilities in the
corridor. A parking lot with space for approximately 70 cars sits adjacent to and visible
from Highway 1. An additional parking area immediately uphill from the main lot
provides space for approximately 35 vehicles. The smaller lot is not visible from Highway

1, and space frequently goes unused, likely because visitors often do not know that it is there. As part of its evaluation of improvements to Green Valley Trail, County Parks is also evaluating potential improvements to this upper parking lot at Gray Whale Cove. Visitors must cross Highway 1 on foot to get from the parking lot to the cove. San Mateo County is currently developing a pedestrian crossing from the parking lot to the beach to facilitate access. In addition, the County intends to install a left turn lane/acceleration lane on Highway 1 to support ingress and egress from the parking lot.

- **Transit Access:** There is currently no transit access to Gray Whale Cove. SamTrans Route 17 passes by Gray Whale Cove along Highway 1 but does not currently serve this location. A bus stop could be added here in the future if desired.
- Pedestrian and Bicycle Access: At present, cyclists can access Gray Whale Cove via Highway 1 only. It is possible to walk to the Cove via trails from McNee Ranch, but the location is more remote from any residential area than most of the other parks on the Coastside. The completion of the Green Valley Trail will allow for pedestrian access from Devil's Slide Coastal Trail to McNee Ranch. It is likely that the completion of the Green Valley Trail will also increase demand for access to Gray Whale Cove by all modes.

Montara State Beach and McNee Ranch

Montara State Beach, which is managed by California State Parks, includes both the sandy stretch along the cliffs and the inland parcel referred to as McNee Ranch. The beach offers views and a variety of recreational activities, although swimming is not recommended due to rip currents. McNee Ranch consists of approximately eight miles of moderate and strenuous trails open to hikers, mountain bicyclists, and equestrians. An estimated 78,000 people visit Montara State Beach/McNee Ranch each year.¹

- Vehicle Access: Parking for Montara State Beach is both formal and informal, and is distributed over several locations: a small (approximately seven vehicle) lot is adjacent to the east side of Highway 1 with a sign marked for Montara State Beach; 200 meters south on Highway 1 and just south of Martini Creek is a larger formal lot (42 spaces). A further 275 meters south on Highway 1 is La Costanera Restaurant, whose 43-vehicle lot is used by beachgoers when the restaurant is closed during the day. Adjacent to La Costanera are two smaller lots owned by State Parks: a paved lot with eight spaces and a dirt lot with space for approximately 20 vehicles. There is a large informal pullout area just south of the larger Martini Creek lot with space for approximately 35 vehicles. When these formal and informal lots fill to capacity on sunny summer days, some beachgoers also park along the roadsides. Finally, it is believed that some beach visitors also park on neighborhood streets on the north end of Montara on busy days.
- **Transit Access:** Bus access to Montara State Beach is available by taking SamTrans Route 17 to the 2nd and Main Street stop in Montara, which is just across Highway 1 from the beach.
- Walk/Bike Access: Locals and visitors can access the park on foot from Montara.
 Getting to the beach requires crossing Highway 1 at 1st or 2nd Street. Visitors can also walk

¹ Visitor information for Gray Whale Cove and Montara State Beach are available in the California State Park System Statistical Report, released each fiscal year. That report estimates that visitor data for state beaches and parks were provided by the land manager for FY 1996 through FY 2012.

into the McNee Ranch portion of the park from trailheads at Corona Street or Farallone Avenue.

Point Montara Light Station

Point Montara has a preserved historic lighthouse and turn-of-the-century buildings that offer overnight hostel accommodations. The Light Station is owned by the U.S. Coast Guard, and was managed by State Parks through a partnership until 2013. Roughly 27,000 people visit the Light Station each year.²

- Vehicle Access: Approximately 25 parking spaces are provided on site for hostel guests.
 No parking is available for non-hostel guests.
- **Transit Access:** SamTrans Route 17 stops at Highway 1 and 16th Street, immediately adjacent to the site.
- Walk/Bike Access: Locals and visitors can access the park on foot from Montara by crossing Highway 1 at 16th Street.

Fitzgerald Marine Reserve

Fitzgerald Marine Reserve offers opportunities for tidepool exploration and beach walking. The Reserve also includes approximately one mile of trails. The Reserve is among the most popular destinations in the corridor, drawing more than 178,000 visitors per year.³

- Vehicle Access. The park entrance is located at the intersection of California and North Lake Street in Moss Beach. This location has 36 parking spaces, including two ADA accessible spaces. Just south of Fitzgerald Marine Reserve is a 43-space parking lot at the Moss Beach Distillery, which is used by many visitors to the reserve. Only 14 spaces in the lot closest to the bluff are available for public use from sunrise to sunset. Visitor parking on neighborhood streets is not recommended by any land management agency on the Coastside. However, on-street parking is not currently regulated in Moss Beach, and it is possible that park visitors do park on neighborhood streets in Moss Beach when parking is unavailable in formal parking areas.
- **Transit Access:** There are no bus stops immediately adjacent to Fitzgerald Marine Reserve. To access the park, visitors can use SamTrans Route 17 stops at Cypress Avenue and Highway 1 (a 12 minute walk from the park entrance), or at Etheldore Street and California Avenues (a 9 minute walk).
- Walk/Bike Access: Fitzgerald Marine Reserve can be accessed on foot or by bicycle from Moss Beach, Princeton, Montara and El Granada..

² Visitor information for Point Montara Light Station is available in the California State Park System Statistical Report, released each fiscal year. The Point Montara Light Station visitor data is available for FY 2003 through FY 2012.

³ Visitor information for Fitzgerald Marine Reserve was provided by County Parks as both monthly and annual estimates for 2005 through 2012. Note that Fitzgerald Marine Reserve visitor data from 2007 is missing, and the annual figure from 2008 seems implausible as it is much larger than the count from any other year.

Pillar Point Bluff

Pillar Point Bluff is a 140-acre bluff top that includes a 1.2-mile section of the California Coastal Trail, offering hikers and bird watchers views of the Fitzgerald Marine Reserve, Pillar Point Harbor, and other coastal landmarks. Parking is available in a small lot at the trailhead on Airport St. No annual visitation figures are available for Pillar Point Bluff. The County is currently in the process of acquiring the 21-acre Thompson property from POST, which would connect the Pillar Point Bluff to the Pillar Point Marsh properties at Fitzgerald Marine Reserve.

- Vehicle Access: There is a 10- car parking lot on Airport Street with one ADA accessible parking space. The Moss Beach Distillary lot also serves the Pillar Point Harbor. There are two gravel parking lots off West Point Ave in Princeton: the Harbor District lot at the road terminus (approximately 35 spaces) and the County overflow lot on West Point near Stanford (approximately 20 spaces). The West Point Ave lots are used for access to Pillar Point Marsh, West Trail to Mavericks Beach and Pillar Point tidepools, as well as the southern access point to Pillar Point Bluff.
- Transit Access: SamTrans Route 17 provides hourly service with a stop at the Pillar Ridge mobile home park, which is roughly a six-minute walk from the bluffs.
- Walk/Bike Access: Pillar Point Bluff can be accessed on foot from the south end of Moss Beach, from the Pillar Ridge mobile home park, and from Princeton via West Point Ave.

Mirada Surf Park

Mirada Surf Park has two sections: Mirada Surf West is 15-acre area of coastal bluffs in El Granada just south of Pillar Point Harbor. The California Coastal Trail through the property has been improved from Magellan to Coronado including an updated restroom at Magellan. Mirada Surf East is an unimproved 34-acre area of open space east of Highway 1 with an existing service road.

- Vehicle Access: San Mateo County Parks directs Mirada Surf Park visitors to parking off of Magellan Avenue.
- **Transit Access:** The closest bus stops to Mirada Surf Park are SamTrans Route 17 stops at Highway 1 and Medio Avenue, a six-minute walk from either side of the park.
- Walk and bike access: Mirada Surf West can be easily accessed on foot from neighborhood streets in the Miramar community. From El Granada, pedestrians can cross Highway 1 at Coronado Street and enter the park from the northeast. Additionally, it is easily accessible from Half Moon Bay via the Coastal Trail.

Rancho Corral de Tierra

Rancho Corral de Tierra (Rancho) is a 3,800-acre parcel that occupies the area upland of Montara, Moss Beach and El Granada. GGNRA assumed management responsibility for this area from the Peninsula Open Space Trust in 2011. It is currently crisscrossed by a network of 32 miles of trails; it does not yet have any formal access facilities. GGNRA will be working with the community and various stakeholders to improve trails, trailheads, and trail connections to, from, and within the park. A visitation estimate of around 100,000 annual visitors was provided by GGNRA for Rancho based on comparable sites in the region.

- Vehicle Access: Park visitors arriving by car are currently directed to park at Gray Whale Cove and hike through McNee Ranch to get to Rancho Corral de Tierra. While not recommended by GGNRA, some visitors also park on neighborhood streets around the trailheads, including Corona Street, Le Conte Street, Coral Reef Avenue, Etheldore Street and Park Street.
- Transit Access: SamTrans Route 17 offers access to Rancho via several stops in Montara, Moss Beach and El Granada.
- **Pedestrian Access:** Many of the current visitors to Rancho Corral de Tierra are local residents who hike into the park from neighborhood streets in El Granada, Montara and Moss Beach. Visitors can also access the park by hiking from the trails in McNee Ranch.

Quarry Park/Wicklow

Quarry Park is a 40-acre park located in El Granada. The entrance to Quarry Park is located at the corner of Santa Maria Avenue and Columbus Street. It offers a play area for children, picnic tables, a community garden, and open areas. There is also a one-mile vista point trail to the ocean. The adjacent Wicklow Property is a 478-acre property owned by San Mateo County Parks that currently has no formal access facilities, but can be accessed on foot from Quarry Park.

- Vehicle Access: Quarry Park has a 23-car parking lot with one ADA parking space.
- **Transit Access:** The closest bus stop is at Plaza Alhambra and Coronado Street in El Granada, about an eight minute walk from the park entrance.
- Walk/bike access: Quarry Park can be easily accessed on foot or by bike from neighborhood streets in El Granada.

TRANSIT RIDERSHIP

There are currently two transit services offered in the study corridor.

The Devil's Slide Ride

The Devil's Slide Ride is operated by the City of Pacifica. It provides a free community shuttle through Pacifica as well a free connection to the north end of Devil's Slide Coastal Trail. Service is provided year-round every 70 minutes on weekends only.

During 2014, average weekend ridership was 30 passengers on Saturdays and 24 passengers on Sundays. Total monthly ridership recorded during summer 2014 was 350 passengers during June, 173 passengers during July, 127 passengers during August, and 243 passengers during September.⁴

This level of ridership suggests that, while it provides a valuable car-free option for some visitors, the Devil's Slide Ride currently carries a very small share of visitors to the Coastside. Based on discussions with local residents, low ridership may be attributed to lack of awareness of the service offered, and ridership could likely increase with a targeted marketing effort.

SamTrans Route 17

SamTrans Route 17 operates between Linda Mar Shopping Center in Pacifica and the City of Half Moon Bay. Route 17 stops in the study area are identified in Figure 2-1. Service is provided hourly on weekdays and every two hours on Saturday and Sunday.

The study team examined boardings during June and July 2014 for Route 17 stops in the study corridor (defined as all stops on Highway 1 from Devil's Slide Tunnel to Medio Avenue, which is just north of the boundary of the City of Half Moon Bay). 5 Boarding data revealed the following:

- **Total boardings:** Total boardings during June and July 2014 in the study corridor were 7,056, with roughly 3,500 boardings in each month, for an average of 113 boardings per day.
- **Weekend vs. Weekday:** The typical weekday had 135 boardings in the study corridor, while the average weekend day had just 57 boardings.
- **Highest demand stops:** The highest demand stops in the study corridor are in residential areas: Main Street and 4th Street in Montara; the Pillar Ridge mobile home park; and along Avenue Alhambra in El Granada. Stops that only serve recreational destinations had very few boardings during summer 2014.

Overall, this pattern of use suggests that SamTrans Route 17 service is very lightly used by visitors to the public lands in the corridor. Ridership on the weekend, when the service runs just once every two hours, is particularly low.

⁴ Data provided by the City of Pacifica Department of Public Works - Engineering Division

⁵ SamTrans Automatic Passenger Count Data provided by Michael Eshleman of SamTrans

PARKING CONDITIONS

This section provides an overview of current parking availability in the study corridor. The project team observed both formal parking lots owned and managed by the land managers on the Coastside, as well as informal parking areas used by Coastside visitors but not managed by the study partners.

Parking Data Collection Methodology

The consultant team conducted a parking supply inventory and parking utilization survey during summer and fall 2014.

Inventory: An inventory of available parking areas was conducted adjacent to each of the identified park sites along the Coastside between Devil's Slide to the north and El Granada to the south. The parking areas and park sites in the study corridor are listed in Table 2-2 and are illustrated in Figure 1-1.

Observation: The consultant team conducted three site visits to the study area to collect parking occupancy data. Parking occupancy was recorded at all formal parking areas and informal roadside parking locations between Devil's Slide and Mirada Surf Park, as well as in selected lots and on-street areas near Montara, Moss Beach, Pillar Point Harbor, and El Granada.

- The first site visit took place on Sunday, June 29, 2014. The weather was in the mid-70s and sunny. A count of parked cars in all formal parking areas was recorded between 12:10 p.m. and 1:10 p.m., once at each location traveling south to north.
- A second, more detailed site visit was conducted on Saturday, July 12, 2014. The weather was again in the mid-70s and sunny. This visit included the following elements:
 - One set of data collectors traveled the corridor four times over the course of the day, from north to south, recording information at each formal parking area at two-hour intervals. To determine the rate of turnover, data collectors recorded the last four digits of license plate numbers of all parked vehicles.
 - Simultaneously, another data collector recorded parked car counts at selected informal lots and on-street areas near Montara, Moss Beach, Pillar Point Harbor, and El Granada at two hour intervals. The specific neighborhood streets observed are shown in Figures 2-2, 2-3, and 2-4.
- During a third visit on Saturday, October 11, 2014, data collectors took supplemental
 counts at additional sites including Quarry Park, the Oceano Hotel, Pillar Point Bluff, and
 neighborhood streets adjacent to four informal Rancho trailheads: Corona Street, Park
 and Alamo Street, Etheldore Street, and Coral Reef Avenue.

Table 2-2 Parking Data Collection Sites

Site	Parking Area	Status
Devil's Slide	Devil's Slide North	Formal
	Devil's Slide South	Formal
Gray Whale Cove	Gray Whale Cove Formal Parking	Formal
	Gray Whale Cove Surplus Parking	Formal
Montara State Beach and McNee	Montara State Beach/McNee Ranch Trailhead	Formal
Ranch	Montara State Beach North Lot (Martini Creek)	Formal
	Montara State Beach (South)	Formal
	La Costanera Lot	Informal
	La Costanera Dirt Lot - Montara SB	Formal
	Roadside Parking near Montara SB	Informal
	Montara Neighborhood Streets	Informal / Not recommended
Point Montara Light Station	Point Montara Lighthouse Hostel	Formal (Hostel Guests Only)
Fitzgerald Marine Reserve + Pillar	Fitzgerald Marine Reserve Park Entrance	Formal
Point Bluii	Pillar Point Bluff	Formal
	Moss Beach Distillery Parking Lot	Informal
	Overflow lot near Moss Beach Distillery	Informal
	Moss Beach Neighborhood Streets	Informal / Not recommended
Rancho Corral De Tierra	Kanoff Street	Informal/ Not recommended
	Farallone View Elementary School	Informal/ Not recommended
	Le Conte Ave	Informal/ Not recommended
	Corona St	Informal/ Not recommended
	Park/Alamo St	Informal/ Not recommended
	Etheldore St	Informal/ Not recommended
	Coral Reef Ave	Informal/ Not recommended
Quarry+Wicklow+Mirada Surf	Quarry Park Lot	Formal
Harbor District Area (Harbor District and Oceano Hotel)	Oceano Hotel Public Spaces	Formal
District and Oceano Hotel)	San Mateo County Harbor District	Formal (Harbor users only)
Miramar Beach	Magellan Avenue and Miramar Beach lot	Informal (primarily restaurant only)

Note: Several locations were not included in the initial data collection phase and may be collected during a subsequent phase to accurately capture parking conditions in the study area. Locations include: Pillar Point Lot (Harbor District); County overflow lot at Pillar Point Marsh on West Point Ave.; Day use lot at RV Park (paid parking); public beach access parking spaces at Harbor Village, Barbara's Fish Trap, and HMB Brewing Co.

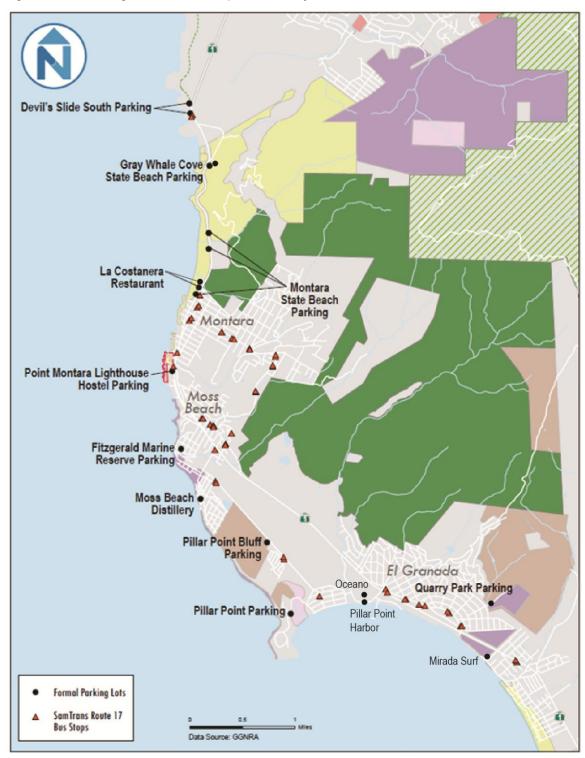


Figure 2-1 Parking Areas and Bus Stops on the Study Corridor

Parking Data Collection Findings

Parking Supply

The study corridor as a whole has an estimated 396 parking spaces in formal parking areas.

When formal lots fill to capacity, some visitors park on the roadside. While parking is legally permitted as long as the vehicle is fully outside the travelled way, it is not the policy of any agency that is partner to this study to promote parking in these areas. During data collection, vehicles parked on the roadside immediately adjacent to a formal or informal parking area were counted as "overflow" parking to the identified area. As a result, counts sometimes show occupancy in excess of the formal capacity.

Some visitors to the area also park on neighborhood streets in Montara, Moss Beach, and El Granada, and it is not the policy of any agency to promote visitor parking on neighborhood streets.

Parking Occupancy

Table 2-3 reports the maximum occupancy observed at parking areas adjacent to each park destination. It aggregates occupancy for both formal and informal areas that provide access to each park destination. Recorded maximum parking occupancies for each individual formal and informal parking facility are provided in Appendix B. For most parking areas, the highest occupancies were observed during the midday June 29th data collection period. These maximum occupancies are used in the forecasts that follow.

Table 2-3 shows that the team observed 423 vehicles parked in the formal and informal parking areas during maximum occupancy, for a utilization rate equivalent to 107% of the formal parking supply (396 spaces). Many of the parking spaces are not striped, which may not provide the most efficient use of the lots.

- Parking Occupancy by Day of Visit. The highest parking occupancies for most locations were recorded during the mid-day Sunday, June 29th data collection period. On Saturday, July 12th, when the cloud cover was slightly greater and the temperature slightly lower, occupancies were somewhat lower; on that day, overflow parking was less severe, and the formal lot at Gray Whale Cove did not exceed capacity.
- Parking Occupancy by Time of Day. On July 12th, vehicle occupancies were recorded at two hour intervals over the course of the day. Vehicle occupancy counts in the formal parking areas generally increased over the course of the day, reaching their highest levels of occupancy between 2 p.m. and 4 p.m.
- Parking Turnover. On July 12th, data collectors recorded the license plates of parked vehicles every two hours, and determined what share of vehicles were newly parked in the parking area during each two hour interval. They found that vehicle turnover within each two-hour period ranged from 74% to 99%, with an average of 84% for the study area as a whole. This finding implies that most visitors to the Coastside stayed less than two hours at any one destination. Note that it does not pinpoint the length of the typical visit, or how long the typical visitor stayed in the Coastside area as a whole.

The sections that follow discuss parking conditions at each park destination individually.

Table 2-3 Maximum Parking Occupancy by Park Site

Parking Area	Formal Parking Capacity	Max Observed Parking Occupancy	Maximum Parking Occupancy Rate
Study Area Public Lands Total	396	423	107%
Devil's Slide (North and South)	39	48	123%
Gray Whale Cove (Formal Lots and Surplus)	107	88	82%
Gray Whale Cove Main Parking Area	72	72	100%
Gray Whale Cove Upper Parking Area	35	16	46%
Montara State Beach and McNee Ranch (All Lots and Informal)	113	155	137%
Point Montara Light Station	25	12	48%
Fitzgerald Marine Reserve	36	44	122%
Pillar Point Bluff	10	6	60%
Moss Beach Distillery (only 14 of 43 are available for public use)	43	43	100%
Rancho Corral De Tierra	0	13	NA
Quarry, Wicklow, and Mirada Surf	23	6	26%
Other Areas Total	512	437	85%
Harbor District Area (Harbor District and Oceano Hotel)	358	242	68%
El Granada Informal Parking	105	146	139%
Miramar Beach/Mirada Surf West	49	49	100%

Note: Several locations were not included in the initial data collection phase and may be collected during a subsequent phase to accurately capture parking conditions in the study area. Locations include: Pillar Point Lot (Harbor District); County overflow lot at Pillar Point Marsh on West Point Ave; Day use lot at RV Park (paid parking); public beach access parking spaces at Harbor Village, Barbara's Fish Trap, and HMB Brewing Co. Based on observations, parking demand frequently exceeds supply at these locations and may increase the maximum parking occupancy rate for the study area.

Devil's Slide

Devil's Slide Coastal Trail has two formal parking areas:

- **Devil's Slide North.** At the north end of the trail, just south of the City of Pacifica, there are two small parking areas with a total of 17 spaces.
- **Devil's Slide South.** At the south end of the trail are two parking areas with a total of 22 spaces.

During June 29th parking counts, the busier of the two days of observation, parking at both areas significantly exceeded formal capacity by midday, and vehicles were parked on the roadside adjacent to the parking lots.

During July 12th counts, parking occupancy rose over the course of the day, and was observed to be at capacity by 2 p.m. Parking turnover was recorded at an average of 85% over a two-hour period, indicating that most visitors park for under two hours.

Gray Whale Cove

Gray Whale Cove has two parking areas: one paved and one unpaved.

- Gray Whale Cove Main Parking Area. A formal parking lot with space for approximately 70 cars sits adjacent to and visible from Highway 1.
- **Gray Whale Cove Upper Parking.** Immediately uphill from the main lot, an unpaved parking area provides space for approximately 35 vehicles. This area is not visible from Highway 1, and space frequently goes unused even when other lots are full likely because visitors often do not know that it is there or that it is available for public use.
- Pullouts. South of Gray Whale Cove there are six shoulder areas that are used as
 pullouts. These areas do not represent true visitor parking supply, because they do not
 offer convenient or safe access to any destination.

During June 29th parking observation, the main lot filled to capacity; all available parking spaces were taken and there was very little room inside the lot to maneuver. Despite this condition, at midday, just 16 cars were observed in the upper parking area.

During July 12th parking observation, parking at Gray Whale Cove did not reach capacity. Occupancy in the main lot increased throughout the day, reaching a peak of 45 vehicles by 4 p.m. Occupancy in the upper parking area never exceeded four vehicles. Parking turnover was recorded at an average of 80% over a two-hour period.

Montara State Beach and McNee Ranch

A group of six parking areas along the coast serve Montara State Beach and McNee Ranch.

- Montara State Beach Trailhead Parking. A small parking area provides space for approximately seven vehicles adjacent to Highway 1. From there, visitors can cross the highway to the beach or walk uphill to connect to McNee Ranch or north to Gray Whale Cove. During the June 29th counts four vehicles were recorded parked at this location at midday. During July 12th counts the parking at this locationwas observed to be at capacity at midday, with fewer vehicles present later in the day.
- Montara State Beach North Lot (Martini Creek). Two hundred meters south of the Montara State Beach Trailhead parking on Highway 1 and just south of Martini Creek is the largest parking facility providing access to Montara State Beach. Positioned on the west side of Highway 1, it provides space for approximately 42 parked cars (spaces are unmarked). When the lot fills to capacity on busy days, many vehicles park informally on the roadside near this lot; during the June 29th count, a total of 63 vehicles were observed parking in and around this lot. On July 12th the lot was observed to be at capacity. State Parks is currently developing improvements to this lot to improve efficiency and maximize use in the existing space.
- Roadside Parking near Montara State Beach. Approximately 200 meters south of the Martini Creek Lot, a large area of roadside has been carved out on the west side of Highway 1 and is used as informal parking by Montara State Beach visitors. The area is approximately 130 meters long and 11 meters wide at its widest point, tapering down at each end. It provides spaces for approximately 35 vehicles. This area is not currently recommended for use as parking by any land management agency on the Coastside. During study observations, this area did not fill to capacity; during June 29th counts, just two vehicles were observed at this location at midday. During July 12th counts, peak

- occupancy of 14 vehicles was observed, with 12:00 noon being the highest-demand time of day. For purposes of aggregate counts and forecasts, parking at this location is treated as overflow parking, meaning it is counted towards the total demand but not considered part of the formal capacity.
- La Costanera Lot. A further 275 meters south along Highway 1 is La Costanera Restaurant. The restaurant opens at 5 p.m., so beach visitors use it for beach access during the daytime. The lot, which is located on both the north and south sides of the restaurant, has space for approximately 43 vehicles. The lot was at capacity during June 29th observation. During July 12th observation, 25 of 43 spaces were occupied by 2 p.m., the highest-demand time of day. Because the restaurant does not open until 5 p.m. on weekends, the paved lot is counted as part of the beach's formal parking supply for purposes of aggregate counts and forecasts.
- La Costanera Dirt Lot. Adjacent to the north side of the La Costanera is a dirt lot owned by State Parks. This lot provides space for a further 13 vehicles. This area filled to capacity during both June and July counts.
- Montara State Beach Lot at La Costanera. On the south end of the La Costanera Restaurant lot is another paved area that is officially designated and signed for beach parking. This area provides space for approximately eight vehicles. This lot exceeded capacity during both June and July counts, reaching a peak of 21 vehicles parking in and around its formal parking spaces.
- Montara Neighborhood Parking. Visitor parking on neighborhood streets is not recommended by any land management agency on the Coastside. However, street parking in Montara is not currently regulated, and it is believed that some park visitors do park on neighborhood streets when parking is unavailable in formal parking areas. To understand on-street conditions, on-street parking in Montara was observed west of Le Conte Avenue between 1st Street and 4th Street on July 12th. Occupancy was highest in the morning, with 32 observed vehicles, and dropped to 24 observed vehicles by around 2:00 p.m. Observed on-street parking was concentrated throughout the day along 3rd Street and around the intersection of 4th Street and Main Street, as shown in Figure 2-2. It is not known what share of the observed parked vehicles belonged to residents, and what share belonged to visitors. For purposes of this analysis, we assumed that half of the 24 vehicles parked west of Farallone Avenue were park visitors, and half were residents.



Figure 2-2 Montara Neighborhood On-Street Parked Vehicles, 9:20 a.m.

Point Montara Light Station

The Point Montara Lighthouse is located roughly 3/4 of a mile south of the southern end of Montara State Beach. The Point Montara Lighthouse Hostel hosts a 25-space parking lot, which is dedicated for the use of hostel guests.

During June 29th counts, eight vehicles were observed parked in this area at midday. During July 12th counts, there were 12 vehicles parked here by 2 p.m., with occupancy increasing over the course of the day.

Fitzgerald Marine Reserve and Pillar Point Bluff

Several parking areas, formal and informal, are used by visitors to Fitzgerald Marine Reserve and Pillar Point Bluff. They are:

- **Fitzgerald Marine Reserve Park Entrance Lot.** This parking lot is located at the park entrance and ranger station. It has 36 marked spaces, including two ADA spots. This lot was observed to be above capacity during both June and July observations.
- Moss Beach Distillery Parking Lot. Just south of Fitzgerald Marine Reserve is the Moss Beach Distillery. Many visitors to the Fitzgerald Marine Reserve park in the 43space distillery parking lot, and in the adjacent eight-space overflow lot. These areas were observed to be over capacity during July counts.
- Pillar Point Bluff. A 10-space formal parking area for Pillar Point Bluff is located off of Airport Avenue, just north of Half Moon Bay Airport. Six cars were observed in this lot during October 11th supplemental counts. (Note: does not include the Princeton lot that serves Pillar Point Bluffs).
- Montara Neighborhood Parking: Visitor parking on neighborhood streets is not recommended by any land management agency on the Coastside. However, this parking is not currently regulated in Moss Beach, and it is possible that many park visitors do park on neighborhood streets when parking is unavailable in formal parking areas.

Neighborhood on-street parking was observed in Moss Beach west of Highway 1 between Cypress Avenue and Nevada Avenue. Occupancy rose steadily throughout the day, from 77 observed vehicles around 9:30 a.m.to 93 observed vehicles around 2:15 p.m. As shown in Figure 2-3, observed parked cars were most concentrated near Highway 1 and thinned towards the water. Given this pattern, it is unlikely that many of these parkers were visitors seeking coastal access. For purposes of aggregate counts and forecasts, they were not counted as park visitors.

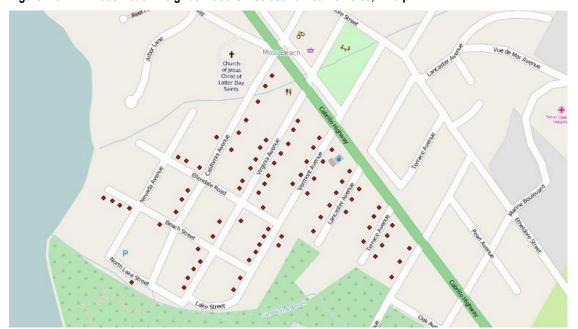


Figure 2-3 Moss Beach Neighborhood On-Street Parked Vehicles, 2:15 p.m.

Rancho Corral De Tierra

Rancho Corral de Tierra has recently come under management of GGNRA. It currently has no formal parking facilities, and many of its visitors are nearby residents who walk into the park lands from nearby neighborhoods. The park currently directs visitors to park at Gray Whale Cove and hike to Rancho. However, some visitors do drive to the area and park on-street in a variety of informal parking areas. These include:

- **Kanoff Street.** An informal Rancho trailhead is signed at Kanoff Street in Montara, and park visitors sometimes park at this location. Five vehicles were observed parked at this location during July 12th observation.
- **Etheldore Street.** An informal Rancho trailhead is signed at Etheldore Street in Montara, and park visitors sometimes park at this location. However, no vehicles were observed at this location during the October supplemental observation.
- **Le Conte Avenue.** An informal Rancho trailhead is signed at Le Conte Avenue in Montara, and park visitors sometimes park at this location. Two vehicles were observed at this location on July 12th.

- **Park Street.** An informal Rancho trailhead is signed at the south end of Park Street, and park visitors sometimes park at this location. Two vehicles were observed at this location during October 11 supplemental observation.
- **Coral Reef Avenue.** An informal Rancho trailhead is signed at Coral Reef Avenue in Montara, and park visitors sometimes park at this location. However, no vehicles were observed at this location during the October 11 supplemental observation.
- Farallone View Elementary School. The Farallone View Elementary School parking lot is sometimes used by park visitors. However, just two vehicles were observed at this location on July 12th.

Because parking at these areas immediately adjacent to the trailheads was not full, other nearby neighborhood parking was not counted as overflow parking for Rancho for purposes of aggregate counts or forecasts.

Quarry Park, Wicklow Property, and Mirada Surf

A 10-space parking lot at the entrance to Santa Maria Avenue and Columbus Street provides access to Quarry Park and Mirada Surf East. This location also provides potential access to the Wicklow Property. During supplemental parking counts, six vehicles were observed at this location.

El Granada and Miramar Informal Parking

There are several areas in the town of El Granada that Coastside visitors use for parking. None of these areas is owned or operated by a public land manager, and it is not the policy of any land manager to recommend parking in these areas.

- Miramar Beach/Mirada Surf West. Parking for Mirada Surf Park is available along Magellan Avenue.
- **Surfer's Beach Roadside Parking.** Visitors to Surfer's Beach park on the east side of Highway 1 the full length of the beach. The shoulder on the west side of Highway 1 is painted red to indicate no parking is permitted. During both June 29th and July 12th observations, this area was at capacity, with 107 vehicles parked along the roadside.
- El Granada Neighborhood Parking: In El Granada, parked vehicles were recorded along Avenue Alhambra between The Alameda and Santiago Avenue. Throughout the day, observed parking was concentrated on Avenue Alhambra near Avenue Portola, and on Avenue Portola itself. Between 10:00 a.m. and 3:00 p.m. a 50% increase in on-street parked vehicles was noted, from 40 to 60 observed cars. As shown in Figure 2-4, at 3:00 p.m. observed on-street parking on Avenue Alhambra was nearly full between Avenue Balboa and Santiago Avenue, and observed on-street parking on Avenue Portola was at capacity.

⁶ It should be noted that this is a sensitive location because it requires travel through the neighborhoods. Any future use of this site as formal recreational parking would require discussions with both the school district and the community to see if it is feasible from their perspective.

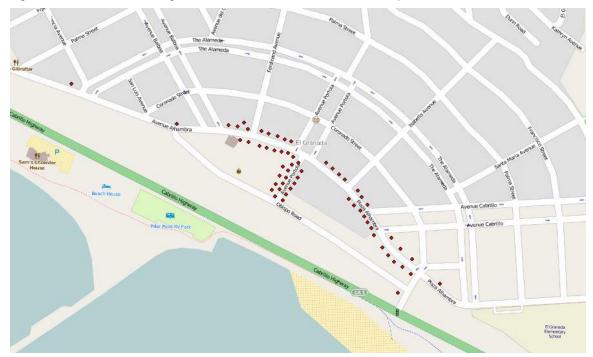


Figure 2-4 El Granada Neighborhood On-Street Parked Vehicles, 3:00 p.m.

Harbor District Area (Harbor District and Oceano Hotel)

In El Granada there is a cluster of uses around Pillar Point Harbor. The land in this area is managed by the Harbor District, and includes several large parking areas dedicated to a variety of uses. It should be noted that during 2015 the Harbor District will be initiating an economic development planning effort that includes an assessment of all parking resources in this area. During this study, parking occupancies were observed at two of the parking areas at the Harbor:

- Pillar Point Harbor Launch Ramp Parking. The Pillar Point Harbor Launch Ramp parking lot adjacent to Highway 1 has approximately 268 parking spaces. During the July observation, 215 of these 268 spaces were observed to be occupied by 2:30 p.m. Many of these spaces are reserved for permit-holders, making them unavailable for the general public.
- Oceano Hotel Public Parking. The Harbor Village parking lot located behind the Oceano Hotel has both public and private parking. The approval of the project required a minimum of 398 parking spaces for the development itself, plus an additional 90 parking spaces for public/beach access parking during certain hours of the day. During October 11th supplemental counts, 27 of these 90 public parking spaces were observed to be occupied.

3 DEMAND FORECAST

Although future visitation and parking demand are uncertain, land managers in the corridor must make some estimate of future park use when deciding what access facilities to provide. This chapter presents visitor and parking demand forecasts. These forecasts are based on population projections and observed park visitor growth over a recent six-year period. The estimates include a wide margin of uncertainty, and it is recommended that park managers use them with a degree of caution.

VISITOR FORECASTS

The consultant team established a range for visitor forecasts at the selected park sites in the study area, using Association of Bay Area Governments (ABAG) population projections and recent observed park visitor growth rates. At a minimum, park visitation would be anticipated to grow at a rate driven by the projected population growth of the surrounding county and larger region. On the higher end, park visitation could continue to grow in the future at the rapid rate observed in recent years. These extremes form the lower and upper bounds of a range of potential visitor forecast estimates. The effect of substantial planned changes on visitation at park sites was also considered. Visitor forecast analysis and results are presented in detail below.

Population Projections

In 2013 the Association of Bay Area Governments (ABAG) released 2040 population projections for the nine-county Bay Area. Table 3-1 presents ABAG population estimates for base year (2010) and forecast year (2040) in the counties immediately surrounding the San Mateo County Midcoast, including San Mateo County, San Francisco County, and Santa Clara County. Table 3-1 also shows the compounded annual growth rates of the population estimates from base to forecast year, calculated as the annual growth rate that would be experienced every year if the population grew at a steady rate from 2010 to 2040.

Table 3-1 ABAG Population Projections, 2010-2040: San Mateo, San Francisco, and Santa Clara Counties

	2010	2040	Compounded Annual Growth Rate (2010-2040)
San Mateo County	718,450	904,430	0.8%
San Francisco County	805,240	1,085,730	1.0%
Santa Clara County	1,781,640	2,423,470	1.0%
San Mateo Midcoast Region ¹	3,305,330	4,413,630	1.0%

Notes:

1. Includes San Mateo County, San Francisco County, and Santa Clara County.

Source: Association of Bay Area Governments, Plan Bay Area, 2013; Fehr & Peers, 2014.

As shown in Table 3-1, San Mateo County's compounded annual growth rate is forecasted to be 0.8% through 2040, and that of the three-county region surrounding the San Mateo Midcoast is forecasted to be 1.0%.

Observed Park Visitor Growth

Visitor data for the eight key park sites was provided by San Mateo County Parks, State Parks, and GGNRA. Half of the key park sites have annual count estimates available between Fiscal Year (FY) 2007 and FY 2012; the other half of the key park sites have an estimate of visitation during only a single recent fiscal year. Table 3-2 presents visitor estimates for FY 2007 and FY 2012 at the key park sites where annual visitor data are available. Table 3-2 also shows the compounded annual growth rates of park visitation over the six-year period at the sites where data are available, calculated as the annual growth rate that would have been experienced every year if visitor counts at the park sites had grown at a steady rate from FY 2007 to FY 2012.

Table 3-2 Observed Visitor Growth at Key Study Area Park Sites, FY 2007 to FY 2012¹

Key Study Area Park Site	Visitation FY 2007	Visitation FY 2012	Compounded Annual Growth Rate over Six-Year Period
Devil's Slide Coastal Trail (San Mateo County)	-	-	-
Gray Whale Cove State Beach (State Parks)	28,079	35,284	4.7%
Montara State Beach +McNee Ranch (State Parks)	72,750	78,443	1.5%
Point Montara Light Station (State Parks)	22,155	28,435	5.1%
Fitzgerald Marine Reserve + Pillar Point Bluff (San Mateo County)	90,040	163,983	12.7%
Mirada Surf E+W, Coastal Trail (San Mateo County)	-	-	-
Rancho Corral de Tierra (GGNRA)	-	-	-
Quarry/Wicklow (San Mateo County)	-	-	-
N			

Notes:

1. San Mateo County and State Parks fiscal year runs from July through June.

Source: San Mateo County Parks, State Parks, GGNRA; Fehr & Peers, 2014.

As shown in Table 3-2, compounded annual growth rates at the key park sites over the six-year period vary widely, from as low as 1.5% at Montara State Beach/McNee Ranch to as high as 12.7% at Fitzgerald Marine Reserve.

Park Typology

Three park typologies with distinct characteristics and primary service areas were defined through discussions with GGNRA, San Mateo County and State Parks staff. Typologies were created to simplify the diverse set of parks by grouping similar locations based on their defining features and the communities that they largely attract. Every key park site was assigned to one park typology under both current conditions and forecast conditions. The three park typologies are presented in Table 3-3, as well as the key park sites that are assigned to them under current and forecast conditions.

[&]quot;-"indicates annual visitor data not available; visitor estimate available for only single recent fiscal year.

Table 3-3 Park Typology Definitions and Assigned Key Study Area Park Sites

		Key Study Area Park Sites						
Park Typology	Definition	Current	Forecast					
Regional Attractor	Developed with full amenities – largely draws visitors from entire region	Devil's Slide Coastal Trail Fitzgerald Marine Reserve/Pillar Point Bluff	Devil's Slide Coastal Trail Fitzgerald Marine Reserve/Pillar Point Bluff Rancho Corral de Tierra					
County Attractor	Includes trails and amenities – largely draws visitors from San Mateo County	Point Montara Light Station Montara SB/McNee Mirada Surf E+W Rancho Corral de Tierra	Point Montara Light Station Montara SB/McNee Mirada Surf E+W Quarry/Wicklow					
Local Attractor	Trails and basic support facilities only – largely draws visitors from local area	Gray Whale Cove SB Quarry/Wicklow	Gray Whale Cove SB					
Source: Fehr & Peers, 201	Source: Fehr & Peers, 2014.							

Typology Visitor Growth Rate

Park typologies are a useful tool for filling in gaps in visitor data at the key park sites that lack annual visitor estimates and average growth rates. A small number of sites were selected as representative parks for each typology, and average compounded annual growth rates were calculated for every typology based on the growth of the representative parks. These average growth rates were used as estimates for key park sites that lacked annual visitor data. Table 3-4 presents the average compounded annual visitor growth rate for the three park typologies over the six-year period between FY 2007 and FY 2012.

Table 3-4 Average Compounded Annual Growth Rate by Park Typology, FY 2007 to FY 2012

Park Typology	Representative Parks	Visitation FY 2007	Visitation FY 2012	Average Compounded Annual Growth Rate over Six-Year Period
Regional Attractor	Big Basin SP	645,361	698,769	
	Año Nuevo SP	139,237	159,557	5.7%
	Fitzgerald Marine Reserve	90,040	163,983	
County Attractor	Sanchez Adobe	5,641	8,327	
	San Pedro Valley	117,560	127,127	4.1%
	Point Montara Light Station	22,155	28,435	4.170
	Montara SB	72,750	78,443	
Local Attractor	Gray Whale Cove SB	28,079	35,284	4.7%

Source: San Mateo County Parks, State Parks, GGNRA; Fehr & Peers, 2014.

Note: A few representative parks listed are outside of the study area but included as comparable facilities.

Table 3-5 Table 3-5 presents a revised version of Table 3-2 above, where missing annual growth rates are replaced by the average annual growth rate of a park site's current typology.

Table 3-5 Observed Visitor Growth at Key Study Area Park Sites, FY 2007 to FY 2012 – With Current Typology Average Growth

Key Study Area Park Site	Current Park Typology	Visitation FY 2007	Visitation FY 2012	Compounded Annual Growth Rate over Six- Year Period
Devil's Slide Coastal Trail (San Mateo County)	Regional Attractor	-	-	5.7% *
Gray Whale Cove State Beach (State Parks)	Local Attractor	28,079	35,284	4.7%
Montara State Beach +McNee Ranch (State Parks)	County Attractor	72,750	78,443	1.5%
Point Montara Light Station (State Parks)	County Attractor	22,155	28,435	5.1%
Fitzgerald Marine Reserve + Pillar Point Bluff (San Mateo County)	Regional Attractor	90,040	163,983	12.7%
Mirada Surf E+W, Coastal Trail (San Mateo County)	County Attractor	-	-	4.1% *
Rancho Corral de Tierra (GGNRA)	County Attractor	-	-	4.1% *
Quarry/Wicklow (San Mateo County)	Local Attractor	-	-	4.7% *

Notes:*Indicates annual growth rate based on average rate of assigned park typology. Rates were derived from visitation data for representative parks within that typology.

Source: San Mateo County Parks, State Parks, GGNRA; Fehr & Peers, 2014.

Typology Shift

Park typologies also help assess the impact on visitation due to shifts in park character caused by substantial improvements at a particular site. Substantial improvements at a park site may correspond with a shift in park typology, and this shift could drive growth in park visitor levels. Significant changes in infrastructure and advertising could cause a park site to attract additional visitors from a larger service area than its current primary catchment, thereby causing forecasted visitation to be even higher than anticipated based on population projections and recent growth alone.

For park sites that shift from one typology to another between current and forecast conditions, an additional bump in visitation would be anticipated.

As shown in Table 3-3 above, Rancho Corral de Tierra is expected to shift from a "County Attractor" site under current conditions to a "Regional Attractor" in the future, and Quarry/Wicklow is expected to shift from a "Local Attractor" under current conditions to a "County Attractor". The park managers anticipate that these shifts will occur as the public

becomes aware of planned improvements to trails and trailheads, as well as construction of new facilities such as toilets and interpretive features. The remaining key park sites are expected to stay within their current park typology in the future.

The expected shifts in park typology (County to Regional and Local to County) are associated with a corresponding increase in service area population. To determine the approximate number of new annual visitors that would accompany an increase in service area population, a rate of annual visitors per service area population was calculated for every park typology. As mentioned above, a small number of sites were selected as representative parks for each typology.

Average annual visitation was calculated over the six-year period between FY 2007 and FY 2012 for all of the sites within each typology. This number was divided by the average population between 2007 and 2012 of the local Census Tracts, San Mateo County and the San Mateo Midcoast Region (i.e., the three service populations) to determine estimated rates of annual visitor generation. Table 3-6 presents average annual visitor generation rates for the three park typologies.

Table 3-6 Average Annual Visitor Generation Rate by Park Typology, FY 2007 to FY 2012

Park Typology	Representative Parks	Average Annual Visitation	Average Service Area Population	Average Annual Visitation per Service Area Population	
Regional Attractor	Big Basin SP Año Nuevo SP Fitzgerald Marine Reserve	334,077	3,257,104	0.103	
County Attractor	Sanchez Adobe San Pedro Valley Point Montara Light Station Montara SB	56,951	709,810	0.080	
Local Attractor	Gray Whale Cove SB	33,109	61,896	0.535	
Source: San Mateo County Parks, State Parks, GGNRA; Fehr & Peers, 2014.					

As discussed above, two of the key study area park sites are expected to shift typologies between current and forecast conditions. Table 3-7 presents the estimated new annual visitation that would accompany the increases in service area population associated with the typology shifts in the forecasted years 2030 and 2040, based on the rates shown in Table 3-6.

Table 3-7 New Annual Visitation Due to Service Area Increase

Key Study Area Park Site	Current Park Typology	Forecast Park Typology	Avg. Annual Visitation per Service Area Pop (Forecast Typology)	Estimated Growth in Service Area Pop 2030	Estimated Growth in Service Area Pop 2040	Estimated Growth in Annual Visitation due to Typology Shift 2030	Estimated Growth in Annual Visitation due to Typology Shift 2040	
Rancho Corral de Tierra (GGNRA)	County Attractor	Regional Attractor	0.103	3,170,449	3,509,200	325,189	359,935	
Quarry / Wicklow (San Mateo County)	Local Attractor	County Attractor	0.080	767,410	828,617	61,572	66,483	
Source: San Mat	Source: San Mateo County Parks, State Parks, GGNRA; US Census; Fehr & Peers, 2014.							

Visitor Forecasts

As a first step in the forecasts, lower and unconstrained upper bounds of the 15-year and 25-year visitor forecast ranges were calculated. The lower bound represents an anticipated minimum level of visitor growth at the key park sites, established using ABAG population projections for the area. The upper bound represents a high level of unconstrained potential visitor growth at the key park sites, established based on observed recent six-year growth rates at the parks.

The lower bounds were based on ABAG population projections for San Mateo County and the three-county region immediately surrounding the San Mateo Midcoast. ABAG population projections are available only at the county level, so the San Mateo County population growth rate was applied to Local Attractor park sites. The estimates assume that future park visitor growth will be determined solely by the population growth within the park's service area under forecast conditions. Table 3-8 presents the lower bounds of the ranges of 2030 and 2040 visitor forecasts for the key study area park sites.

The unconstrained upper bounds of the 15-year and 25-year visitor forecast ranges were based on observed annual visitor growth over the recent six-year period between FY 2007 and FY 2012. The estimates assume that future park visitor growth will reflect a continuation of recent growth trends at the individual park sites, or representative park sites. Table 3-9 presents the upper bounds of the ranges of 2030 and 2040 visitor forecasts for the key study area park sites.

Forecasted annual visitor counts at Fitzgerald Marine Reserve/Pillar Point Bluff were capped at 182,500 persons, based on the park's Master Plan target goal of limiting use to no more than 500 visitors per day in order to protect the resource.

Table 3-8 Visitor Forecasts – Lower Bounds based on ABAG Population Projections

Key Study Area Park Site	Annual Visitation	Year	Compounded Annual Population Growth Rate (Current Typology)	Visitor Forecast 2030	Visitor Forecast 2040
Devil's Slide Coastal Trail (San Mateo County)	400,000	FY 2015	1.0%	462,000	509,000
Gray Whale Cove State Beach (State Parks) ¹	35,284	FY 2012	0.8%	41,000	44,000
Montara State Beach +McNee Ranch (State Parks)	78,443	FY 2012	0.8%	90,000	97,000
Point Montara Light Station (State Parks)	28,435	FY 2012	0.8%	33,000	35,000
Fitzgerald Marine Reserve + Pillar Point Bluff (San Mateo County) ¹	178,785	FY 2014	1.0%	182,500	182,500
Mirada Surf E+W, Coastal Trail (San Mateo County)	200,750	FY 2014	0.8%	227,00	245,000
Rancho Corral de Tierra (GGNRA)	453,811	FY 2012	0.8%	115,00	124,000
Quarry/Wicklow (San Mateo County) ²	29,200	FY 2014	0.8%	33,000	36,000

Notes:

Fitzgerald Marine Reserve/Pillar Point Bluff forecasts capped at 182,500 persons, based on park's Master Plan target goal of limiting use to no more than 500 visitors per day to protect Moss Beach Reef.

Local Attractor park sites are assigned County growth rates because ABAG population projections are not available at the Census Tract level.

Source: San Mateo County Parks, State Parks, GGNRA; US Census; Fehr & Peers, 2014.

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Table 3-9 Visitor Forecasts – Unconstrained Upper Bounds based on Observed Six-Year Visitor Growth

Key Study Area Park Site	Annual Visitation	Year	Compounded Annual Visitor Growth Rate (Current Typology)	Visitor Forecast 2030	Visitor Forecast 2040
Devil's Slide Coastal Trail (San Mateo County)	400,000	FY 2015	5.7% *	919,000	1,600,000
Gray Whale Cove State Beach (State Parks)	35,284	FY 2012	4.7%	80,000	127,000
Montara State Beach +McNee Ranch (State Parks)	78,443	FY 2012	1.5%	103,000	120,000
Point Montara Light Station (State Parks)	28,435	FY 2012	5.1%	70,000	115,000
Fitzgerald Marine Reserve + Pillar Point Bluff (San Mateo County) ¹	178,785	FY 2014	12.7%	182,500	182,500
Mirada Surf E+W, Coastal Trail (San Mateo County)	200,750	FY 2014	4.1% *	381,000	568,000
Rancho Corral de Tierra (GGNRA)	453,811	FY 2012	4.1% *	205,000	306,000
Quarry/Wicklow (San Mateo County)	29,200	FY 2014	4.7% *	61,000	96,000

Notes:

Source: San Mateo County Parks, State Parks, GGNRA; Fehr & Peers, 2014.

[&]quot;*"indicates annual growth rate based on average rate of assigned park typology.

^{1.} Fitzgerald Marine Reserve/Pillar Point Bluff forecasts capped at 182,500 persons, based on park's Master Plan target goal of limiting use to no more than 500 visitors per day to protect Moss Beach Reef.

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The second step in the forecasts incorporated the new visitor levels generated by the typology shifts of Rancho Corral de Tierra and Quarry/Wicklow. These additional "typology shift" visitors were added to the ranges of forecasted 2030 and 2040 visitor counts. The resulting 15-year and 25-year forecasted visitor figures for the key study area park sites, accounting for the typology shifts, are summarized in Table 3-10.

Table 3-10 Visitor Forecasts Summary

Key Study Area Park Site	Visitor For	recast 2030	Visitor Forecast 2040			
	Lower Bound	Upper Bound	Lower Bound	Upper Bound		
Devil's Slide Coastal Trail (San Mateo County)	462,000	919,000	509,000	1,600,000		
Gray Whale Cove State Beach (State Parks)	41,000	80,000	44,000	127,000		
Montara State Beach +McNee Ranch (State Parks)	90,000	103,000	97,000	120,000		
Point Montara Light Station (State Parks)	33,000	70,000	35,000	115,000		
Fitzgerald Marine Reserve + Pillar Point Bluff (San Mateo County) ¹	182,500	182,500	182,500	182,500		
Mirada Surf E+W, Coastal Trail (San Mateo County)	227,000	381,000	245,000	568,000		
Rancho Corral de Tierra (GGNRA) ¹	440,000	531,000	484,000	666,000		
Quarry/Wicklow (San Mateo County) ²	95,000	122,000	102,000	162,000		
				•		

Notes:

- 1. Fitzgerald Marine Reserve/Pillar Point Bluff forecasts capped at 182,500 persons, based on park's Master Plan target goal of limiting use to no more than 500 visitors per day to protect Moss Beach Reef.
- 2. Forecasts include additional visitors as result of typology shift.

Source: San Mateo County Parks, State Parks, GGNRA; US Census; Fehr & Peers, 2014.

PARKING DEMAND FORECAST

Demand for parking on the Coastside depends on overall visitation: if park visitation grows in the future, demand for parking is likely to grow as well. In addition, parking demand depends on a number of other factors, including the price, convenience, and availability of parking, as well as the availability of other modes of access.

Given all of these factors, the future demand for parking cannot be known with any certainty. However, Coastside land managers require some sense of the potential range of future parking demand in order to inform access investment decisions. This section provides that forecast.

Methodology

To forecast the potential range of future parking demand, this analysis assumes that the demand for parking will grow at roughly the same rate as the overall visitation to each park. It includes the following steps:

- Calculate the percent growth in visitation. Based on the forecasted 2030 and 2040 visitation ranges summarized in Table 3-10, a percent growth in visitation was calculated from current year to 2030 and 2040 lower and upper bound estimates.
- Apply the forecast growth in visitation to current parking demand. The forecast growth in visitation was applied to the current maximum observed parking demand at each park destination. This step generated a lower and upper bound parking demand forecast for 2030 and 2040.

Table 3-11 summarizes the forecast parking demand at the level of major park destinations. Appendix B details the forecasts for individual parking facilities and informal areas.

When using these forecasts, it is important to remember that they are based on maximum observed parking occupancy during summer 2014 counts. As such, they do not represent typical conditions on the Coastside, but conditions at the highest-demand time of day on a summer weekend with good weather. During other times of day, other times of year, and during foggy weather conditions that are common on the Coastside, parking demand is lower.

It is also important to remember that the forecasts are not constrained by supply or price. In reality, the availability and the price of parking may constrain the number of people who park on the Coastside.

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Table 3-11 Parking Demand Forecasts Summary

					2030 Forecast							2040 F	orecast		
Parking Area	Formal Parking Capacity	Max Observed Parking Occupancy	Max Parking Occupancy Rate	Increase in Parking Demand by 2030		Total Forecast Parking Demand		Excess Demand for Formal Parking		Increase in Parking Demand by 2040		Total Forecast Parking Demand		Excess Demand for Formal Parking	
				Low	High	Low	High	Low	High	Low	High	Low	High	Low	High
Study Area Public Lands Total	396	423	107%	12%	62%	473	686	77	290	19%	126%	504	956	108	560
Devil's Slide	39	48	123%	16%	130%	55	110	16	71	27%	300%	61	192	22	153
Gray Whale Cove	107	88	82%	15%	128%	101	200	(6)	93	24%	259%	109	316	2	209
Montara State Beach and McNee Ranch	113	155	137%	15%	31%	178	203	65	90	24%	52%	192	236	79	123
Point Montara Light Station	25	12	48%	15%	146%	14	29	(11)	4	24%	305%	15	49	(10)	24
Fitzgerald Marine Reserve/Pillar Point Bluff	89	101	113%	2%	2%	103	103	14	14	2%	2%	103	103	14	14
Rancho Corral De Tierra	0	13	NA	15%	105%	15	27	15	27	24%	206%	16	40	16	40
Quarry+Wicklow +Mirada Surf	23	6	26%	13%	108%	7	12	(16)	(11)	22%	228%	7	20	(16)	(3)

Source: Nelson Nygaard

Parking Demand Forecast Findings

The forecasts suggest that if the growth in visitation reflects only the region's forecast population growth and major planned changes in park typology (lower bound scenario), overall demand for free parking at the public lands on the Coastside will grow by 12% by 2030 and 19% by 2040. In such a scenario, the demand for free parking would exceed today's existing supply by 77 spaces in 2030 and 108 spaces in 2040. If, instead, visitation growth reflected a continuation of the recent trend in visitor growth (upper bound scenario), parking demand would increase 62% by 2030 and 126% by 2040. In such a scenario, demand would exceed the existing supply by 290 spaces in 2030 and 560 spaces in 2040.

Devil's Slide

In the future lower bound scenario, demand would grow by 16% by 2030 and 27% by 2040. Demand for parking would exceed formal supply by 16 spaces in 2030 and 61 spaces in 2040. In the upper bound scenario, which reflects a continuation of recent growth trends, demand for parking would grow 130% by 2030 and 300% by 2040, leading to a demand that exceeds supply by 71 spaces in 2030 and 153 spaces in 2040.

In reality, these forecasts probably significantly understate current demand for access to Devil's Slide, where visitation is already constrained by the minimal parking supply. However, with no feasible options for expanding parking supply at or near Devil's Slide, land managers must instead focus on expanding access opportunities by other modes. These opportunities are discussed in Chapter 4 of this report.

This area has a high potential for growth given other proposed projects in the area, including construction of the Green Valley Trail, the transfer of Pedro Point Headlands to San Mateo County, and extension of the Coastal Trail north to Pacifica. Given the space constraints for parking in this area, land managers may consider additional parking opportunities in Pacifica outside of the study area.

Gray Whale Cove

In the lower bound scenario, demand for parking at Gray Whale Cove would increase by 15% by 2030 and 24% by 2040. The existing supply would be adequate to serve the forecast demand. In the upper bound scenario, demand would grow much faster, by 128% by 2030 and 259% by 2040, leading to excess demand of 93 spaces in 2030 and 209 spaces in 2040.

In reality, counts probably understate current peak demand for free parking at Gray Whale Cove. The existing informal parking area at Gray Whale Cove is not well utilized. With improved signage and other upgrades, this area will likely fill on high demand days in the near term. Completion of the Green Valley Trail will likely further increase demand for parking by shifting some of the overflow parking demand from Devil's Slide. For planning purposes, it makes sense to assume that future unconstrained demand for free parking at Gray Whale Cove exceeds the currently available supply, and will fall somewhere between the lower and upper bound forecasts.

Montara State Beach and McNee Ranch

In the lower bound scenario, demand for parking at Montara State Beach and McNee Ranch would grow by 15% in 2030 and 24% by 2040. Demand would exceed the formal supply by 65 spaces in 2030 and 79 spaces in 2040. The upper bound scenario forecasts growth of 31% by

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2030 and 52% by 2040, leading to demand that exceeds supply by 90 spaces in 2030 and 123 spaces in 2040.

As these parks are not expected to change in character significantly, the lower bound scenario reflects only forecasted regional population growth. The lower bound estimate is a useful baseline for planning purposes.

Point Montara Light Station

In the lower bound scenario, parking at Point Montara Light Station would grow by 15% by 2030 and 24% by 2040. In the upper bound scenario, growth would be far faster at 146% by 2030 and 305% by 2040. Only in the upper-bound scenario would demand exceed existing supply: by 4 spaces in 2030 and 24 spaces in 2040.

Parking in the Light Station lot is limited to hostel guests. With no plans to expand the hostel itself, there is no reason to expect rapid growth in visitor parking.

Fitzgerald Marine Reserve/Pillar Point Bluff

Given the visitor capacity at Fitzgerald Marine Reserve, the parking demand at this site is not expected to increase as much as other destinations in the study area. The Reserve already operates near capacity and is controlled by scheduled tour times. The forecasts estimated a 2% increase on both the lower and higher bound scenarios for both study years. The excess demand for formal parking is 14 spaces.

Rancho Corral De Tierra

Current parking observed at informal Rancho trailheads is low: 13 vehicles were observed during peak times around all of the trailheads (this does not count any visitors to Rancho that may be parking at Gray Whale Cove and hiking to Rancho, which is the park's recommended parking option). However, Rancho is a new park with no formal trails and no dedicated access facilities. Demand can be expected to grow as it becomes better known.

In the lower bound scenario, demand for parking at Rancho would increase by 15% by 2030 and 24% by 2040. Demand would exceed supply by 15 spaces in 2030 and 16 spaces in 2040. In the upper bound scenario, demand would grow faster, by 105% by 2030 and 206% by 2040, leading to excess demand of 27 spaces in 2030 and 40 spaces in 2040.

Because Rancho is a new park, there is a significant amount of uncertainty around future demand for parking at this location. While some dedicated formal parking capacity for Rancho may be called for in the near term, a cautious approach that monitors demand over time would be appropriate.

Quarry Park, Wicklow Property, and Mirada Surf Park

A 23-space parking lot at Quarry Park serves that park as well as the Wicklow Property and Mirada Surf east. During supplemental counts on October 11th, 6 vehicles were observed at this location. In the lower bound case, demand at this location would grow 13% by 2030 and 22% by 2040. In the upper bound case, demand would grow 108% by 2030 and 228% by 2040. In all cases, existing supply would be sufficient to meet the forecast demand.

4 KEY ISSUES AND OPPORTUNITIES

As identified in this access study and other recent studies and plans, key issues for access to public lands on the San Mateo County Coastside include the following:

- Incomplete bicycle and pedestrian networks. The Coastside's bicycle and pedestrian networks are incomplete, and there is currently no safe and inviting way for visitors to navigate between certain parks on foot. Highway 1, which is currently the primary bicycle route for most of the corridor, is inviting only to the most adventurous cyclists. There are plans to build out a network of trails, including the California Coastal Trail and a Parallel Trail, but these proposed projects are not yet fully funded.
- Infrequent transit service. Public transportation service in this corridor is currently very limited, particularly on weekends when visitor demand is highest. SamTrans Route 17 provides service through the study area between Pacifica and Half Moon Bay, but only operates every two hours on weekends. The Devil's Slide Ride, operated by the City of Pacifica, provides hourly service from Pacifica but only as far as the north end of the Devil's Slide Coastal Trail.
- High parking occupancies during peak times. Most visitors arrive at the Coastside by car. While there is wide variation in parking demand between seasons, days, and over the course of each day, during points of maximum parking occupancy, the study team observed total demand for parking in excess of formal capacity. During these peak demand times (generally mid-late afternoon on the sunniest summer weekends), visitors overfill the several formal parking facilities, park on the roadside, and park on residential streets in Montara, Moss Beach, and El Granada to gain access to the Coastside parks.
- A lack of wayfinding in some areas. Certain parking areas in the study area are
 underutilized likely because they are not clearly visible from Highway 1 and are not well
 known by Coastside visitors.
- A lack of access facilities for Rancho Corral de Tierra. Rancho, which has only recently come under management of GGNRA, lacks formal parking facilities. While a small number of vehicles park on residential streets adjacent to existing informal trailheads, GGNRA does not see residential street parking as a long-term access strategy for this park. Additional access facilities are required for Rancho.
- **Growing demand.** Visitation to the parks in the study area has grown substantially in recent years. As the regional trail network is built out, the parks become more widely known, and the Bay Area population grows, visitation to the parks can expect continued growth. If recent trends continue for any length of time, certain parks may see much higher visitation in future years. At the same time, the precise level of future visitation cannot be known with certainty. The land managers require a flexible approach to providing visitor access that can increase access opportunities in response to future growth in demand.

• Competing policy goals. Public land managers, including the partners to this study, must juggle several policy goals that are sometimes in tension with each other. Land managers must balance resource protection, visitor access, fiscal stability, and the need to maintain strong relationships with neighboring communities. To formulate the region's access strategy, the partners to this study must make policy decisions that strike an appropriate balance between these important policy goals.

COASTSIDE ACCESS OPPORTUNITIES

To address the challenges described above, the consultant team recommends further investigation of the following opportunities to improve access to the destinations in this corridor. The list below is not prioritized in order, but identifies potential strategies that could be implemented independently or in conjunction with one another.

- 1. Continue to improve pedestrian and bicycle connectivity between parks
- 2. Study the potential for a regional shared parking strategy
- 3. Study the potential for a regional paid parking program
- 4. Improve wayfinding
- 5. Provide and promote a more frequent, visitor-oriented regional transit service
- 6. Monitor growth in parking demand and consider strategically expanding the parking supply in accordance with policy goals

Implemented as a group, these strategies would be mutually reinforcing, working together to manage demand and provide access in a coherent way for the region as a whole. The opportunities are discussed in more detail below.

1. Continue to improve pedestrian and bicycle connectivity

A challenge for access to the Coastside today is the relatively poor pedestrian connectivity between park locations. Several projects are planned that would improve connectivity between parks and from the parks to neighboring residential areas. Continuing to advance these efforts will be an important step in improving access to the Coastside as a whole. Major projects include:

- Green Valley Trail. The proposed 1.5-mile Green Valley Trail would connect the Gray
 Whale Cove parking lot to the southern entrance of the Devil's Slide Trail. Planning and
 permitting funds have been appropriated, although construction funds have not yet been
 identified.
- The connection between Pacifica and Devil's Slide Coastal Trail. Another proposed 1.5-mile long trail would connect the north end of Devil's Slide to Pacifica through Pedro Point Headlands. Funding for this project has not yet been identified, and the City of Pacifica has yet to acquire piece of private property necessary for its implementation.
- "Parallel Trail." Coastside stakeholders have helped to develop various plans and proposals for an alignment of a continuous multi-modal trail running from Half Moon Bay to Second Street in Montara. This facility will be known as the Parallel Trail. It would include a bi-directional multi-use path and enhanced crossings where needed. Design treatments would follow the guidelines set forth in the Highway 1 Safety and Mobility Improvement Study. According to that study, the Parallel Trail is intended to be located on the east side of Highway 1 to the degree feasible. The San Mateo County

Transportation Authority recently approved a \$500,000 request for planning/permitting the southern segment of the Midcoast Highway 1 Parallel Trail, which would travel from Half Moon Bay to the Coronado intersection in El Granada. The County will continue to pursue funding to develop additional segments of the trail.

- Coastal Trail. Several gaps still exist in the Coastal Trail along the midcoast. The
 California Coastal Conservancy and San Mateo County are proposing that the Coastal
 Trail through San Mateo County be designated as a Priority Conservation area, which has
 the potential to attract funding to complete the construction of undeveloped segments.
- Other improvements to provide safe pedestrian crossings of Highway 1. San Mateo County is currently working to improve the safety of pedestrian crossings of Highway 1 through this study area. The Highway 1 Safety and Mobility Improvement Study Phase 2 proposed the following improvements to pedestrian safety:
 - Gray Whale Cove: Suggested improvements near Gray Whale Cove include the
 installation of vehicle left turn lanes and a marked crosswalk from the parking lot to
 the beach trail, as well as pedestrian crossing warning signs at the crosswalk with
 pedestrian activated flashing beacons at the crosswalk.
 - Montara State Beach: Suggested improvements include a new marked highway crossing at the proposed Coastal Trail alignment.
 - Communities of Moss Beach and Montara: The Highway 2 Safety and Mobility Study recommends a variety of projects in Moss Beach and Montara, including sidewalk and crosswalk improvements, traffic calming, and other intersection changes such as turn pockets to improve pedestrian safety.

With Rancho Corral de Tierra now under management of GGNRA, stakeholders may wish to consider pursuing a grant from Federal Lands Access Program (FLAP)⁷ as a funding source for one or more of these projects. The two trail segments connecting from Pacifica to the Gray Whale Cove lot (and, by extension, to Rancho), might be a strong candidate for this funding source.

2. Study the potential for a regional shared parking strategy

Currently, parking demand is unevenely distributed in the region, with some facilities oversubscribed, while others have capacity available even during peak times. The most efficient access strategy for the region is one that regards the Coastside parking resources as a shared pool, and facilitates easy movement from one park site to another via all modes.

The bicycle, pedestrian, and transit proposals discussed in this study will help to enable the sharing of parking resources on the Coastside. Similarly, wayfinding and public information can be used to direct vistors to publicly available parking. Finally, parking pricing could be used to incentivize some visitors to switch to parking locations with lower rates of utilization.

In addition to these strategies, the land managers along the Coastside may wish to investigate formal shared parking arrangements with owners of other parking facilities in combination with a

⁷The Federal Lands Access Program (Access Program) was established in 23 U.S.C. 204 to improve transportation facilities that provide access to, are adjacent to, or are located within Federal lands. The Access Program supplements State and local resources for public roads, transit systems, and other transportation facilities, with an emphasis on high-use recreation sites and economic generators.

regional shuttle service (discussed in Section 5). The ideal shared parking arrangements mix uses that have peak periods of parking demand on different days or different times of day. For example, currently Montara State Beach visitors are able to make use of a shared lot provided by La Costanera Restaurant, which does not open until 5 PM. A challenge to further developing shared parking on the coast is that many of the other uses have peak demand periods that overlap with periods of peak demand for the Coastside parks. However, a group of other uses might still be worth investigating as shared parking partners.

Opportunities may include:

- **SamTrans park-and-ride lots in Pacifica and Half Moon Bay.** SamTrans Route 17 serves park-and-ride lots in Pacifica and Half-Moon Bay that have their highest demand during working hours on weekdays. These lots have capacity available on summer weekend days, and should be investigated as satellite parking for Coastside visitors. These locations could be served by a higher-frequency, visitor-oriented transit service as discussed in Section 5 of this memo.
- Harbor District lots at Pillar Point. In the data collected for this study, Pillar Point Harbor was among the few large areas with parking availability even during the busiest times on the Coastside. However, most Harbor District parking is not open to the general Coastside visitor: some areas are restricted to use by those who have a boat berthed in the Harbor, are using RV's, or are patronizing businesses located at the Harbor. The Harbor District is now beginning an economic development plan, which will evaluate the supply and demand for parking at Pillar Point Harbor, consider future needs, and investigate potential satellite parking opportunities as recommended in its 1991 Master Plan. While the weekends are the highest-demand times for both the Harbor District and other Coastside parks, the very highest demand weekends for the Harbor District may fall at other times, such as the opening of the three fishing seasons each year. If a shuttle were present on the coast, Coastside parks and the Harbor District may have the opportunity to manage a shared pool of parking in a mutually beneficial way. The partners should open a conversation with the Harbor District as it begins its economic development plan.
- Half Moon Bay Airport. Space at the Half Moon Bay Airport is currently used for visitor parking during the annual Mavericks Surf Contest, a major spectator event on the Coastside. Partners should consider opening discussions with the airport to see if there is a possibility of staging visitor parking at the same location during the busiest summer weekends on the Coastside. This strategy would require further discussion with the airport manager. In addition, 3-Zero Café (located adjacent to the airport), is open from 7 a.m. to 3 p.m., Saturday and Sunday. With the highest observed parking occupancies on the Coastside occuring in the late afternoon, a shared parking arranagement with the café may also be possible.

3. Study a regional paid parking program

In several recent transportation plans, Coastside land managers have identified potential transportation demand management (TDM) strategies for managing parking demand on the Coastside, including parking pricing . The San Mateo County Planning Department's Comprehensive Transportation Management Plan, which is currently being developed, may contribute additional TDM strategies.

While priced parking is not a priority for Coastside land managers, and no priced parking has been formally proposed for the facilities in this study area, it is recommended that the study partners consider priced parking as an effective tool to manage high peak weekend demand in excess of the supply of free parking. This strategy would only be effective if it is considered regionally, as pricing individual lots may encourage visitors to seek out free parking, leaving available lots underutilized. However, there are several advanatages to priced parking as a demand management strategy:

- Priced parking has the potential to incentivize higher vehicle occupancies and the use of non-auto modes of access to the corridor, reducing the overall peak parking demand while accommodating the same number of visitors.
- Priced parking could help to both manage and better distribute parking within the
 corridor, particularly in combination with an improved network of trails and/or improved
 regional transit access. Other parking locations would need to be clearly identified as
 alternatives to the paid parking lots.
- Many nearby recreational destinations on the Coastside, including public lands, charge parking fees. Priced parking is therefore likely to be percieved as both familiar and fair by many visitors and other stakeholders. Paid parking would require approval of the California Coastal Commission, but the commission has given its approval to reasonable parking fees at several nearby locations. Examples of other recreational areas using priced parking include:
 - The City of Pacifica. The city has a paid parking program for Pacifica State Beach lots, which include the north and south lots and the Crespi Drive Community Center. Daily fees are \$4 for a period of less than 4 hours and \$8 for a period of more than 4 hours. The City also offers an annual pass for \$50.
 - The City of Half Moon Bay. The City of Half Moon Bay also charges for parking at public parks including Poplar Beach. The cost is \$2 per hour or \$10 per day.
 - State, County, and Regional parks throughout California. Priced parking is used at Half Moon Bay State Beach, San Pedro Valley County Park and many others.
- Parking facilities are costly to build and maintain. User fees could help to offset these
 costs. Parking fees could also be used to pay for enforcement, and to help fund other
 transportation options, such as a regional shuttle service.

Priced Parking Implementation

Paid parking for the Coastside could be implemented in a number of ways. Initially, facilities with parking shortages could establish fees during peak times on an individual basis.

However, paid parking as a transportation demand management strategy would be most effective if implemented using a single, comprehensive approach for the Coastside as a whole. Partners may wish to consider a region-wide paid parking program, to be managed in common by all stakeholders.

Such a program could have the following characteristics:

Demand-responsive pricing

Parking fees could be implemented in response to oversubscribed conditions on the Coastside. If desired, payment for parking could be required only during the highest-demand periods of time

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on the Coastside, such as summer weekends. Parking fees could initially be set so that prices were comparable to other nearby destinations, such as Pacifica State Beach and Poplar Beach. Occupancies would be monitored, and prices adjusted in an effort to ensure approximately 90–95 percent occupancy at each facility. In locations where occupancies fell below 90 percent occupancy, fees could be lowered or eliminated.

Flexible payment collection

Payment could be collected using:

- Automated pay stations: Automated pay stations are in use at many park locations regionally. They should be considered for the largest and highest-demand public lots in the corridor, such as Gray Whale Cove, Montara State Beach lot at Martini Creek, and Fitzgerald Marine Reserve.
- Pay-by-phone: Pay-by-phone technology has become a common strategy for collecting parking payments in the Bay Area. It has the advantage of being relatively unobtrusive for the Coastside landscape. In addition, pay-by-phone opportunities could be offered throughout the Coastside without having to install pay stations at all locations. Pay-by-phone could be available at all locations (pending cellular service), and offered as the primary option at smaller lots. Visitors without cell phones who wished to park at one of these smaller parking locations could pay for parking at a large lot with a pay station before proceeding to their destination.

Management of overflow parking

If paid parking were implemented at formal lots adjacent to areas with free on-street parking, some visitors may shift from paid areas to free street parking to avoid fees. If this shift happened at a large scale, it could have undesired impacts on neighborhood parking availability. In these areas, it would be important to monitor any impacts to on-street parking. Areas of concern could include Moss Beach neighborhoods adjacent to Fitzgerald Marine Reserve, the streets in Montara adjacent to Montara State Beach, and others.

If a significant problem with on-street parking availability for residents were observed on a regular basis, strategic policies could be put in place to manage the use of curb space. Steps could include:

- Residential Parking Permit areas: Residents could be either granted or sold permits to allow on-street parking, and other users could be prohibited.
- Residential Parking Benefit Districts: If desired by residents, non-residents could
 be permitted to park on residential streets but be required to pay a fee to do so. The fees
 could be used to pay for local benefits, such as beautification and access improvements.

These approaches would be challenging to implement because they would require enforcement, which would require a commitment of funding. It is possible that parking fees could be used to help fund enforcement of residental parking permit areas.

Implementation of such strategies should be carried out in collaboration with local communities, and on an as-needed basis in response to ongoing monitoring of occupancies.

4. Improve wayfinding

While demand for parking appears to exceed the overall supply of parking corridor-wide during the highest-demand times, some facilities have capacity available. Where capacity is available, it may be possible to improve visitor experience by providing additional signage directing visitors to available parking. New wayfinding may include:

- California Coastal Trail Signage. County Parks with Coast Walk California⁸ have already placed California Coastal Trail wayfinding signs from the Ritz Carlton in Half Moon Bay to Princeton. This effort should continue north to Pacifica as additional segments of the trail are constructed.
- Signage to Gray Whale Cove surplus lot. At present, the unpaved lot just uphill from the paved lot at Gray Whale Cove does not fill to capacity, even during times when adjacent facilities are full. This is likely because the lot is not well known, and is not easily visible from Highway 1. County Parks is improving the upper lot owned by State Parks as part of improvements to the Green Valley Trail that are being planned. Additional parking at this location may be particularly valuable once the Green Valley Trail connects Gray Whale Cove and Devil's Slide.
- **Signage to Oceano Hotel Public Parking.** Ninety parking spaces in the Oceano Hotel parking lot are available to the general public. However, these spaces are not well known to Coastside visitors, and as a consequence they do not always fill. Additional signage on Highway 1 could help to alert Coastside visitors to the availability of this parking. This strategy would prove particularly useful if paired with the frequent regional shuttle discussed below.
- Changeable message signs indicating parking availability. For weekend days that are expected to be particularly busy on the Coastside, study partners may wish to place changeable message signs on Highway 1 indicating the status of Coastside parking and directing visitors to use transit from available satellite parking resources. This strategy would need to be paired with the frequent regional shuttle discussed below. A similar strategy has been implemented with success by GGNRA to provide access to Muir Woods National Monument. Study partners should consult closely with local residents to gauge public opinion before proceeding with this strategy.
- Messaging about Coastside access on park web sites. Each of the State, County, and GGNRA parks in this corridor has its own web site, which presents information about visitor parking and access. Study partners may wish to develop shared language that summarizes parking conditions in the region during peak times, describes paid parking policy (if implemented), and describes all access opportunities to the Coastside, including any regional transit and trails. This language could be presented to visitors on each park web site.

5. Provide and promote a more frequent, visitor-oriented transit service

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^{8 &}lt;a href="http://coastwalk.org/">http://coastwalk.org/

- SamTrans Route 17 operates between Linda Mar Shopping Center in Pacifica and the City of Half Moon Bay. While this route does make a car-free trip to the corridor possible, service every two hours on weekends is too infrequent to be attractive to most Coastside visitors.
- The Devil's Slide Ride is operated by the City of Pacifica. It provides a community shuttle
 through Pacifica as well as a connection to the north end of Devil's Slide Coastal Trail.
 Service is provided every 70 minutes, which is also too infrequent to be attractive for
 most Coastside visitors.

Stakeholders may wish to explore a recreation-oriented service in the corridor to replace or supplement the existing transit. Service for this area could have the following characteristics:

- Operating during daylight hours on Saturdays and Sundays in the summer
- Providing service from Pacifica to Half Moon Bay, with stops at key destinations such as Devil's Slide, Montara State Beach, Point Montara Light House, Rancho, Fitzgerald Marine Reserve, Pillar Point Harbor, El Granada/Princeton and downtown Half Moon Bay. Pacifica Stops could include the SamTrans park-and-ride at Linda Mar shopping Center and Pacifica State Beach.
- Service at least every 20 minutes with clockface headways
- Real-time departure information from major stops provided via mobile devices
- Implemented in tandem with a paid parking strategy for the corridor as a whole, and provided at no cost to the rider

Such a service could serve to better distribute demand throughout the study area and shift demand to satellite lots in the cities at either end of the corridor, while making a car-free trip to the Coastside possible for many local residents.

Satellite /Shuttle Parking Areas

The shuttle could serve the following parking areas:

- The SamTrans Park-and-Ride facility at Linda Mar Shopping Center in Pacifica (71 spaces). This facility is very lightly used on the weekends.
- The SamTrans Park-and-Ride facility at San Mateo Road in Half-Moon Bay (54 Spaces).
- The SamTrans Park-and-Ride facility at Crespi Drive and Route 1 (97 Spaces). Note that this lot is owned and operated by the City of Pacifica, and that parking here requires payment under the Pacifica State Beach parking program.
- The Pillar Point Harbor parking lot (268 spaces, many of which will be used by users of the Harbor). This location should be discussed as potential satellite parking for Coastside park visitors in parternship with the Harbor District.
- Oceano Hotel beach access parking (90 spaces). These spaces are currently underutilized
 because they are not well known by Coastside visitors. They also have the limitation of
 being a roughly a quarter mile off of Highway 1, which would require either a costly
 diversion from the bus route or (more likely) a short walk by the visitor.

Transit Operating Model

A logical operating model for the regional recreational shuttle would be for SamTrans to operate the service in partnership with Coastside public land managers and the cities of Pacifica and Half

Moon Bay. This service could supplement SamTrans' existing Route 17, which currently provides a very similar (but much less frequent) service, or potentially replace the weekend service.

A weekend route in this corridor likely does not meet SamTrans ridership requirements for higher-frequency service. However, study partners could consider contributing the funding required to allow for more frequent service. Revenue for this funding could be drawn in part from parking fees, if implemented. Given the need to serve federal lands including Rancho Corral de Tierra, additional funding could also be pursued through the Federal Lands Access Program (FLAP).

Transit Capital Investments

Transit service in the corridor could be made more attractive (and therefore more able to absorb significant visitor demand) through capital investment in transit from the north and south of the study area. Strategies could include:

- Upgrade major Coastside bus stops. Improvements could include high quality shelters, fully ADA-accessible boarding/alighting areas, and improved crossings of Highway 1.
- Consider transit priority improvements at congested intersections. Certain intersections in Half Moon Bay and Pacifica become congested during high-demand weekend days on the Coastside. A transit route that was able to bypass some traffic congestion would perform better and could therefore attract more riders. The study partners may wish to open a dialogue with SamTrans and the cities to consider transit priority improvements such as queue jumps or transit signal priority at these locations.

Transit Marketing

Park operators could also heavily promote the proposed transit service to park visitors. Transit promotional information could provided in several locations, including:

- Park web sites
- Parking pay stations (if implemented)
- On signage at other regional destinations
- On particularly busy weekends on the Coastside, or if parking demand becomes very high, the park could use changeable message signs on Highway 1 to encourage visitors to divert to park-and-ride lots. GGNRA has used this strategy with success at Muir Woods.

Monitor growth in demand and consider strategically expanding the parking supply in accordance with policy goals

If visitor demand grows as forecast and sharing of existing parking facilities proves insufficient to meet access goals, stakeholders may wish to consider construction of one or more new shared parking facilities. Additional parking capacity may be needed, for example, to meet access goals for Rancho Corral de Tierra, which currently lacks any formal parking capacity.

It should be noted that there are tradeoffs to expanding the parking supply. These include resource impacts, viewshed impacts, and increased traffic in the corridor, as well as both capital and ongoing maintenance costs. It is also important to note that while the demand for free

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parking currently exceeds supply during the afternoons on the sunniest summer weekends, there is plenty of available parking along the Coastside at other times. Weighing the tensions and tradeoffs between policy goals, partners to the study must decide how much additional Coastside visitor demand to accommodate.

Available strategies for the expanding the parking supply include:

Parking Lot Reconfiguration and Formalization

Reconfiguration of existing large formal lots does not appear to provide significant opportunity for expanded supply. The largest facilities, which include the formal Gray Whale Cove lot, the Montara State beach lot adjacent to Martini Creek, and Fitzgerald Marine Reserve lot, all appear to be parked very close to their maximum potential capacity during peak times. However, opportunites do exist to formalize existing informal parking areas:

- Consider paving, formalizing, and signing the informal lot just uphill from Gray Whale Cove. County Parks plans to improve this parking area as part of planned improvements to the Green Valley Trail. The existing parking area could accommodate up to 30 vehicles parked perpendicular. Partners may also wish to investigate whether existing grades will allow for expansion of this facility. Once improved, signage from the main Gray Whale Cove parking lot could direct visitors to this facility.
- Consider formalizing the roadside parking at Montara State Beach. The roadside pullout just west of Highway 1 that visitors now use as informal parking to access Montara State Beach could be formalized as diagonal parking, signed, and added to the formal parking supply. While it is not currently signed, some visitors now use this area to park and either walk west along informal trails to the beach, or to cross Highway 1 and walk to upland areas. At its current length of 420 feet, this pullout could accommodate approximately 30-35 vehicles parked at a diagonal while maintaining space for safe pullouts. This area is under the jurisdiction of Caltrans, and any changes would require their approval.

Construction of a new shared parking facilities on the Coastside.

Land mangers may wish to consider a new shared parking facility at the fallow field, located east of Highway 1 and just south of Martini Creek (this site was identified in the Highway 1 Safety and Mobility Improvement Study as a potential parking location; GGNRA currently holds an easement over the site that allows for the development of parking). This site is well-suited to provide additional access to some of the highest-need areas identified through this study area. In particular, the site could provide access to Rancho Corral de Tierra, which currently lacks formal parking facilities, as well as to Montara State Beach and McNee Ranch. With construction of the Green Valley Trail, this location could also provide walk and bike access to Devil's Slide trail.

Further investigation of this site is required. Any parking designs proposed for this site will need to remain context sensitive and take into consideration the adjacent agricultural lands, sensitive habitat, viewshed, and access from Highway 1, among others.

NEXT STEPS / PHASING APPROACH

Because future demand cannot be known with certainty, Coastside land managers may wish to proceed with an incremental approach to the opportunities discussed in this memo. We recommend the following steps:

- 1. Formalize Gray Whale Cove informal parking area and Montara State Beach Roadside parking. As noted earlier in this memo, these areas are already used as parking by some Coastside visitors. However, they are not paved or formally designated for parking. They are frequently not fully utilized even when formal parking areas are full. In the near term, land managers may wish to take steps toward formalizing these parking areas. For the Montara State Beach roadside parking, a key first step will be engaging Caltrans on their willingness to have this roadside area developed as parking. It will also be important to identify safe pedestrian paths of travel between the roadside parking area and the beach, as well as between the parking area and Rancho Corral De Tierra trailheads.
- 2. **Begin discussions of shared parking with potential partners.** This memo identifies the Harbor District, San Mateo Airport, and SamTrans as potential shared parking partners. Coastside land managers may wish to begin discussions with these partners regarding future shared parking arrangements. The Harbor District, in particular, is just beginning an economic development study that will engage the issue of shared parking, so a discussion with their staff would be timely.
- 3. **Implement improved wayfinding.** The wayfinding improvements discussed in this memo could begin immediately. Signage should identify the formal parking areas at Gray Whale Cove, and at the Montara State Beach roadside. Improved signage should also direct visitors to the public parking spaces at the Oceano Hotel. Land managers may also wish to begin working together on shared website language regarding travel options to and from the Coastside.
- 4. **Begin discussion of costs, benefits, and tradeoffs of more intensive strategies.** In the long-term, the full set of strategies discussed in this memo may be necessary to manage demand for access to the Coastside. However, future demand is uncertain, and Coastside land managers have choices about which strategies to implement and when. A regional paid parking strategy, a regional shuttle, changeable message signs, and/or a new parking facility at the fallow field all have potential benefits as well as costs and tradeoffs. It will be valuable to begin discussions of these tradeoffs with commmunity members, stakeholders, and and potential partners about which strategies they wish to consider.
- 5. **Monitor parking occupancies.** Given conditions observed on the Coastside in summer 2014, as well as the uncertainty about future demand, it would be valuable to continue to monitor parking demand and utilization patterns during summer 2015 and beyond. The implementation of additional strategies, such regional paid parking, a regional shuttle, or new parking construction could follow based on findings, funding availability, and the preferences of the community and other stakeholders.

APPENDIX A

Review of Prior Studies and Plans

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Table A-1 . Review of Prior Studies and Plans: Access Goals, Priorities, and Constraints

Document	Agency	Access goals and priorities	Proposed access improvements	Access challenges and constraints
GGNRA General Management Plan (April 2014)			Proposed: A. Increased transit access to trailheads, through coordination with county transit agencies B. Congestion management tools C. Improved trail connectivity to communities and other public lands D. Improved safety at trailheads near Highway 1	A. Limited availability of resources to implement and maintain planned improvements
"Assessment of Likely Use and Impacts From Proposed Devil's Slide Trails" by Patrick Tierney (December 2005)	Prepared for the California Coastal Conservancy	Priorities: A. (Based on survey of potential visitors) 1) Adequate supply and access of parking - ranked second on question of most needed facilities (15.7%) 2) Minimal impact to parking and traffic - two of top four concerns on question of potential problems with opening Devil's Slide Trail	Proposed: A. Free shuttle from parking facilities in Pacifica and Montara, supported by potential visitors and adjacent park managers	A. On-site parking is insufficient to meet visitor demand B. Status of funding to sustain shuttle route unknown
Notice of Intent to Adopt Negative Declaration, La Costanera Restaurant (February 2014)	Prepared for the California Coastal Conservancy Priorities: A. (Based on survey of potential visitors) 1) Adequate supply and access of parking - ranked second on question of most needed facilities (15.7%) 2) Minimal impact to parking and traffic - two of top four concerns on question of potential problems with opening Devil's Slide Trail County of San Mateo, Planning and Building Department Goals: Notice of Intent was denied by San Mateo County Planning Commission on September 24, 2014 A. Would have required mitigation measures to: 1) Reduce conflicts between pedestrians, bicyclists, and vehicle traffic at parking lots 2) Prevent further reduction of beach user parking at restaurant site 3) Ensure consistency with Highway 1 Safety and Mobility Improvement Study: Phase 2 Goals: A. Increase frequency of service to coastal areas between Pacifica and Half Moon Bay B. Reduce redundancy of lines 17 and 294 serving coastal area between Pacifica and Half Moon Bay		Proposed: Notice of Intent was denied by San Mateo County Planning Commission on September 24, 2014 A. Mitigation in the form of painted paths across parking lot and driveways to minimize conflicts between pedestrians, bicyclists, and cars B. Mitigation in the form of formalization of historical parking uses by beach users on State Parks property, including access and landscaping improvements 1) Leveling and gravelling of State Parks lot to improve user access to beach by making parking easier 2) Creation of one accessible parking space in State Parks lot	Notice of Intent was denied by San Mateo County Planning Commission on September 24, 2014 A. Overall parking available to beach users would have increased by 11 spaces after 5:00 p.m. and increased by 16 spaces on Mondays through Thursdays, due to increased availability in Restaurant Lot C and State Parks Lot B. However, overall parking available to beach users would have decreased by nine spaces on Fridays and weekends, due to decreased availability in Restaurant Lot C.
SamTrans Service Plan, Draft Final (March 2013)	SamTrans	A. Increase frequency of service to coastal areas between Pacifica and Half Moon Bay B. Reduce redundancy of lines 17 and 294 serving coastal area between	Proposed: A. Increased frequency of line 17 between Half Moon Bay and Pacifica to one hour on weekdays and two hours on weekends B. Extension of line 17 northern terminus to Pacifica Park & Ride on weekdays C. Rerouting of line 294 to eliminate operation between Half Moon Bay and Pacifica D. Termination of line 294 from San Mateo in Half Moon Bay at Route 17 transfer point	Currently only line 17 serves GGNRA park sites on Highway 1 B. 55% of SamTrans ridership currently uses El Camino Real corridor, far from Highway 1 Frequency not ideal for park visitors, especially on weekends

Document	Agency	Access goals and priorities	Proposed access improvements	Access challenges and constraints				
Highway 1 Safety and Mobility Improvement Study, Phase 1 (southern study area, Half Moon Bay Airport to Frenchmans Creek Road) (April 2010)	A. "[P]rovide alternatives to vehicle trips on the highway [to] improve roadway function and maintain capacity" by connecting trails, adding new ones, and providing additional highway crossings B. Design concepts B & C: two roundabouts to facilitate safer U-turns and improve traffic flow C. Design concepts C & D: bring Highway 1 closer to existing community to spur development and reduce need for residents to travel to other communities		Proposed: A. Improved bicycle and pedestrian facilities, such as wider paved shoulders, bicycle lanes, enhanced sidewalks, separated bicycle or multimodal trails B. Network of low-speed, low-traffic on-street bicycle routes 1) Bicycle boulevard/path couplet on Airport Street and Alameda Avenue C. Network of upland trails to serve as "feeders" from residential neighborhoods and to connect Highway 1 with Midcoast Foothill Trail D. Concept design A: six-foot sidewalks and new crossings with possible HAWK signals E. Concept design B: roadway alignment shifted toward eastern edge of Caltrans right-of-way and away from coast; parking on west side of freeway to reduce need for crossing					
Highway 1 Safety and Mobility Improvement Study, Phase 2 (northern study area, Half Moon Bay Airport to Devil's Slide) (November 2012)	San Mateo County, Local Government Commission	Priorities of design concepts: A. Treatments to improve pedestrian and bicycle safety B. Parking configuration to improve beach/trail access C. Roundabouts to improve traffic flow	Proposed: A. Improved bicycle and pedestrian facilities, such as medians, designated crossings, roundabouts, bicycle boulevards on parallel minor roadways B. New crossing and left turn lane at Gray Whale Cove C. New crossings, trail connections, left turn lanes, and parking lots at Rancho Corral de Tierra trailheads D. Revised trail alignment and new parking lot at Etheldore Street and Highway 1	A. Challenge to accommodate potential increased use at Rancho Corral de Tierra B. Challenge to balance multimodal access with vehicle flow on Highway 1 C. Challenge at Montara State Beach to balance access for beach, trail, and restaurant users				
San Mateo County Parks Strategic Plan (February 2013)	San Mateo County Parks	Goals: A. Widen trails for better maintenance and emergency access B. Perform ADA improvements as funding permits Priorities: A. Green Valley Trail, which accounts for a fraction of the 2014-2015 Capital Project Plan's expenditures B. Increased maintenance of roads and other infrastructure by 2018 C. (Based on results of community survey) 1) Recreation opportunities - more hiking trails, biking trails, and camping facilities; new types of facilities to draw more visitors; benches on trails to increase accessibility 2) Environmental protection - restore and protect biodiversity and endangered species; improve air/water quality 3) Interpretive and educational programs - more K-12 programs 4) Volunteer programs and community engagement - more community events in parks D. Explore feasibility of acquisition of San Pedro Point Headlands for future development of CA Coastal Trail from Devils Slide to Pacifica by 2015 [noted by County staff – not included in Plan]	Proposed: A. Trail Maintenance and Signage Plan B. Trail Master Plan Update	A. Roads and other aging infrastructure may be in need of repair				

Document	Agency	Access goals and priorities	Proposed access improvements	Access challenges and constraints
GGNRA Long Range Transportation Plan, Transportation Technical Report (November 2013)	GGNRA	Goals: A. Work with county transit providers to improve connections to trailheads and enhance east-west transit options between bayside communities and Highway 1 - preferred transportation demand management strategy	Proposed: A. Improvements designed to comply with the Americans with Disabilities Act.	A. San Mateo County GGNRA sites have lower current visitor numbers than other sites in the GGNRA, but in the future they may expand or play a different role within the park system, and issues around parking, traffic congestion, and transit, bicycle, and pedestrian access could require new solutions.
GGNRA Long Range Transportation Plan, Visitor Experience Technical Report (September 2013)	GGNRA	Goals: A. Improve advanced travel planning information B. Install or upgrade wayfinding signage C. Improve parking conditions D. Increase use of alternative transportation systems E. Make park accessible to all users, including people with disabilities and typically underrepresented ethnic/cultural communities	Proposed: A. Directions to San Mateo County sites posted on website and inclusion of San Mateo County sites in 'Map Areas of Interests' B. Welcome signs at trailheads and improved signage along trails C. Safe paths and/or sidewalks to connect local communities to trailheads	A. San Mateo County trailheads have limited dedicated parking spaces, and most are not formalized. B. Park sites are far from one another, which makes access and connections between park sites challenging.
California Coastal Trail San Mateo County Midcoast Pillar Point to Mirada Surf (March 2010)	Midcoast Parks & Recreation Committee	Goals: A. Identify near and long term options for route of California Coastal Trail between Pillar Point and Mirada Surf B. Examine considerations for creating action plan for implementation	Proposed: A. Improved quality of Pillar Point parking lot and associated signage B. Consultation with Harbor District about eliminating up to 8 parallel parking spaces along outside edge of Inner Harbor lot to allow for multiuse Coastal Trail	A. In this time of limited resources, the major objective is to ensure that the trail is created, even if it is not ideally designed.
California Coastal Trail San Mateo County Midcoast Pillar Point to Montara Beach (March 2013) / California Coastal Trail proposed alignment south of Devil's Slide (January 2013)	Midcoast Community Council	Goals: A. Identify coastal trail routes in Midcoast from Pillar Point to Montara State Beach that provide local residents and visitors opportunity to enjoy varied views and coastal access B. Work with appropriate San Mateo County agencies to have selected routes designated as part of California Coastal Trail (CCT) C. Identify walking trail that provides closest access to shoreline D. Create Midcoast CA Coastal Trail map as a concept plan to be reviewed by public and appropriate agencies and presented to Board of Supervisors for approval	Proposed: A. Focused improvements to California Coastal Trail segments between Pillar Point and Montara Beach 1) Enhance trail from north portal into beaches and points of Pacifica 2) Convert old Highway 1 roadbed to linear park 3) Enhance trail through agency lands to tunnel at south portal 4) Enhance trail along bluffs, coves and beaches of Midcoast 5) Enhance trail along Half Moon Bay with extension to Fitzgerald Marine Reserve 6) Establish multi-use trail along Airport Street near Pillar Point Bluff	A. North of Fitzgerald, the only route of the Midcoast CCT is away from the shoreline for significant stretches, so vertical access points to the shoreline along the route would need to be developed.
Devil's Slide Coast Management Area / Peninsula Working Group (current)	various parks agencies	Goals: A. Contribute knowledge, expertise and/or other resources to complete joint projects among park agencies throughout San Mateo County	N/A	A. Devil's Slide Coastal Trail has limited parking and bike/pedestrian access. Peninsula Working Group will continue to coordinate on shared parking opportunities and improved connectivity to trail network.
Plan Princeton (ongoing)	San Mateo County Planning Department	Goals: A. Update land use plan for Princeton, focusing on area west of and including Highway 1 between Pillar Point Harbor and Moss Beach, to achieve following goals:	Proposed: A. Gateway improvements at intersection of Highway 1 and (north) Capistrano Road B. Designation of appropriate route for through traffic between	A. There is significant traffic congestion along Highway 1 in the Princeton area, in particular at "choke points" that restrict access in and out of communities. B. There is a lack of support facilities for pedestrians and bicyclists along

Document	Agency	Access goals and priorities	Proposed access improvements	Access challenges and constraints		
	1) Enhance coastal access, recreation, research, and education opportunities. 2) Support and expand coastal-dependent and coastal-related uses. 3) Provide facilities needed by the commercial fishing industry and recreational boaters. 4) Create local jobs and services. 5) Abate neighborhood blight and zoning violations. 6) Address parking, circulation, and infrastructure needs. 7) Identify and evaluate potential solutions to shoreline erosion problems. 8) Protect and restore water quality and sensitive habitats. 9) Maintain compliance with the State Coastal Act and State airport compatibility requirements.		Prospect Way and Airport Street, along Cornell Avenue C. Creation of multi-use path along Highway 1 (the Parallel Trail) D. Class II bike lane on Cypress Avenue and clearly-marked Class III bike route along streets in Princeton waterfront area E. Site potential park-and-ride or public parking lot	Highway 1, including marked street crossings and bicycle parking.		
Midcoast Action Plan for Parks and Recreation (July 2007)	Midcoast Recreation Planning Team	Goals: A. Provide Midcoast neighborhoods and community recreation services/facilities with action plan to help implement recommendations from previous assessments	Proposed: A. Completion of Coastal Trail through sections of Princeton, Moss Beach and Miramar B. Implementation of safe crossings C. Development of commuter trail along Highway 1 within Caltrans easement	A. Highway 1, with high-speed and heavy traffic, bisects the Midcoast community with few safe points for pedestrians to cross and no clear bike lanes or adequate shoulders.		

Table A-2. Review of Prior Studies and Plans: Information to Guide Data Collection, Parking Demand, and Visitor Forecasts

Document	Agency	Information for data collection	Information for parking demand	Information for visitor forecasts
GGNRA General Management Plan (April 2014)	GGNRA	A. General Management Plans for national park units are required to determine a maximum carrying capacity of park areas and to develop a process for monitoring and management. Carrying capacity will be determined based on specific indicators/standards, such as traffic congestion or amount of parking in non-designated areas; carrying capacity could provide an upper limit on park visitation.	A. Congestion management/transportation demand management and improving non-motorized access are stated strategies of GGNRA; to the extent that GGNRA adopts new management and non-motorized access measures, this will influence the number of visitors that arrive by automobile.	A. GGNRA plans to improve trails and facilities at many of its parks 1) Develop trails at Point San Pedro 2) Create welcome/visitor centers in Pacifica and in the community south of Devil's Slide 3) Improve Montara Lighthouse Hostel; enhance trail connections; establish multi-agency visitor center and orientation facility 4) Develop trails and campsites at Rancho Corral de Tierra; improved trailheads and visitor facilities on Highway 1; introduce educational center, picnic area, campsite, horse camp
"Assessment of Likely Use and Impacts From Proposed Devil's Slide Trails" by Patrick Tierney (December 2005)	Prepared for the California Coastal Conservancy	A. A visitor survey found the following; results from the study could supplement independent data collection. 1) One quarter of Devil's Slide Trail visitors are local, and more than half are from non-local parts of the Bay Area 2) Over 2/3 of all visitors and 3/4 of local resident visitors are willing to access Devil's Slide Trail from other trails 3) Over 63% of respondents are very or extremely likely to visit Devil's Slide Trail 4) Viewing the ocean, beach activities, walking/hiking/jogging, and accessing other trails are the most desired activities at Devil's Slide Trail 5) 31% of respondents are very or extremely likely to take a free parking shuttle B. Sawyer Camp Trail is very comparable to Devil's Slide Trail; it is one of the most popular trails in San Mateo County, used by 350,000 people in 2004.	A. Visitors are highly willing to access Devil's Slide Trail by way of other trails and to use free parking shuttles. B. The distribution of visitors on a typical fall weekend day shows that peak parking demand occurs during the 10am to 12pm time period (37% of the day's visitors).	A. Between 50,000 and 100,000 person-visits were projected for the first year of Devil's Slide Trail, and that figure could double within five years. B. Among survey respondents, many had visited other parks in the area: 78% had visited Pacifica State Beach, 65% Montara State Beach, 45% Montara Mountain, and 41% Gray Whale Cove State Beach C. County Parks data collected after trail opening indicates use is significantly higher than estimated.
Notice of Intent to Adopt Negative Declaration, La Costanera Restaurant (February 2014)	County of San Mateo, Planning and Building Department	A. A gap analysis that looked at breaks in vehicle traffic during peak hours found sufficient gaps for turns.	A. La Costanera's parking lot contains 52 parking spaces; the parking lot can be re-striped to accommodate 58 parking spaces under expanded restaurant hours; posted signs notify customers that restaurant parking is not permitted at the beach parking lot. B. La Costanera parking lots are available only to restaurant customers when the restaurant is open (i.e., after 5pm Mondays to Thursdays and all day Fridays to Sundays); beach parking is allowed at the restaurant when the restaurant is closed. C. The beach parking lot is formalized.	A. Lunchtime service on line 17 will generate an additional 19 trips during the peak midday hour.

Document	Agency	Information for data collection	Information for parking demand	Information for visitor forecasts
SamTrans Service Plan, Draft Final (March 2013)	SamTrans	A. SamTrans bases its transit performance assessment partially on average weekday passengers per revenue hour; many community lines perform well based on this metric because they run during limited hours.	A. Pacifica Park & Ride will become the northern terminus of SamTrans line 17 on all days of the week, instead of just on weekends.	N/A
Highway 1 Safety and Mobility Improvement Study, Phase 1 (southern study area, Half Moon Bay Airport to Frenchmans Creek Road) (April 2010)	San Mateo County, Local Government Commission	A. Conceptual bikeway alignments are proposed within the Highway 1 study area; consider collecting existing bicycling data along these routes to inform an assessment of their suitability.	A. Design concept A proposes eliminating informal parallel parking on Highway 1 to provide space for pedestrian and bicycle facilities, as well as creating a new parking facility east of Highway 1. B. Design concept B proposes allowing parking on both sides of Highway 1. C. Design concept C proposes diagonal on-street parking on both sides of Highway 1. D. Design concept D proposes aligning Highway 1 on existing streets and providing one-way frontage roads for parking.	A. Design concept C creates an opportunity to increase the significance of central El Granada as a commercial village.
Highway 1 Safety and Mobility Improvement Study, Phase 2 (northern study area, Half Moon Bay Airport to Devil's Slide) (November 2012)	San Mateo County, Local Government Commission	A. Gray Whale Cove is a problem spot: parking is located on the east side of Highway 1, forcing an unsafe crossing of the highway; vehicle turns are also difficult. B. There is a strong need to improve parking signage, increase parking enforcement, and regulate peak use on weekends at Montara State Beach.	A. New parking lots are proposed at Montara Trailhead for Rancho Corral de Tierra and at South Portal at the southern end of Devil's Slide. B. Montara State Beach parking facilities will likely be impacted by Rancho Corral de Tierra parking demand. C. Montara State Beach currently has 163 parking spots, 104 of which are legal; there is a proposal to convert this to 195 legal spots. D. There is a proposal to build a new 20-space parking lot at Etheldore Street and Highway 1 to facilitate access to Rancho Corral de Tierra.	A. Rancho Corral de Tierra (approximately 4,000 acres) currently has hiking, biking, and equestrian trails; the park will see more visitors as the facilities and connections are improved.
San Mateo County Parks Strategic Plan (February 2013)	San Mateo County Parks	A. San Mateo County is investigating technology to automate parking payment and day use fee collection; if implemented, these technologies could provide useful data on visitation to county park sites.	A. San Mateo County Parks parking demand will likely increase due to an acquisition of 262 acres of new properties between 2012-2014, including Devil's Slide Trail (70 acres) and Green Valley Trail (13 acres), coupled with capital expenditures on those properties; 10.6 new miles of trails are planned, including 0.5 miles at the Fitzgerald Marine Reserve, 1.3 miles at Devil's Slide, and 7 miles at Green Valley.	A. San Mateo County population is forecasted to grow by 4% from 2010 to 2020. B. There are 1.7 million visitors per year to the county park system. C. San Mateo County Parks visitation will likely increase due to an acquisition of 262 acres of new properties between 2012-2014, including Devil's Slide Trail (70 acres) and Green Valley Trail (15 acres), coupled with capital expenditures on those properties; 10.6 new miles of trails are planned, including 0.5 miles at the Fitzgerald Marine Reserve, 1.3 miles at Devil's Slide, and 7 miles at Green Valley.

Document	Agency	Information for data collection	Information for parking demand	Information for visitor forecasts
GGNRA Long Range Transportation Plan, Transportation Technical Report (November 2013)	GGNRA	A. Total parking capacity at GGNRA park sites in San Mateo County. 1) John Daly Overlook: 22 spaces 2) Milagra Ridge: 16 spaces (6 spaces not for visitors) 3) Rancho Corral de Tierra: 37 spaces 4) Mori Point: 20 spaces 5) Phleger Estate: 180 spaces 6) Sweeney Ridge: 75 spaces (10 spaces not for visitors)	A. Capacity utilization is available for some GGNRA park sites outside of San Mateo County; underlying data could be useful in modeling parking demand by time period.	N/A
GGNRA Long Range Transportation Plan, Visitor Experience Technical Report (September 2013)	GGNRA	A. School groups have unique needs regarding parking/transportation. For example, it is difficult for school groups to access park sites without nearby bus parking available.	A. Park users tend to be higher income and have automobile access. B. According to a 2004 study, over one quarter of visitors to Milagra Ridge/Mori Point walked, 18% walked to Sawyer Camp Trail, and 7% walked to Sweeney Ridge (while another 13% biked to Sweeny Ridge). C. The recent economic downturn led more locals to visit the parks as "staycations", and these individuals tend to become local users. Local users are more likely to drive to the parks than non-local users.	A. Bay Area population is forecasted to grow by two million people by 2035. B. 55% of visitors to Mori Point and Sweeney Ridge live within 2 miles, and an additional 36% live in the Bay Area. 78% of visitors to Milagra Ridge live within 2 miles. 25% of visitors to Phleger Estate live within 2 miles, and an additional 67% live in the Bay Area, despite the fact that the park is removed from residential communities. C. Visitors generally come in small groups of 1 to 4 people.
California Coastal Trail San Mateo County Midcoast Pillar Point to Mirada Surf (March 2010)	Midcoast Parks & Recreation Committee	N/A	N/A	N/A
California Coastal Trail San Mateo County Midcoast Pillar Point to Montara Beach (March 2013) / California Coastal Trail proposed alignment south of Devil's Slide (January 2013)	Midcoast Community Council	A. Information on existing trails, recreation, and amenities is summarized for 12 park sites: Mori Point, Rockaway and Pacifica State Beaches, Pedro Point Headlands, Coastal Trail at Devil's Slide, Sweeney Ridge, Sanchez Adobe Historic Site, San Pedro Valley County Park, McNee Ranch, Montara State Beach, Fitzgerald Marine Reserve, Rancho Corral de Tierra, and Pillar Point Bluff.	N/A	N/A
Devil's Slide Coast Management Area / Peninsula Working Group (current)	various parks agencies	N/A	N/A	N/A
Plan Princeton (ongoing)	San Mateo County Planning Department	N/A	N/A	N/A
Midcoast Action Plan for Parks and Recreation (July 2007)	Midcoast Recreation Planning Team	N/A	N/A	N/A

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APPENDIX B

Parking Counts and Forecasts

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Table B-1. Observed Maximum Parking Occupancies by Site and Forecast Parking Demand

				2030 Forecast						2040 Forecast						
Parking Area	Formal Parking Capacity	Max Observed Parking Occupancy	Maximum Parking Occupancy Rate	Par Dema	ase in king and by)30	Total F Uncons Parking		Excess Demand for Formal Parking		Increase in Parking Demand by 2040		Total Forecast Unconstrained Parking Demand		Excess Demand for Formal Parking		
				Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	
Study Area Public Lands Total	396	423	107%	12%	62%	473	686	77	290	19%	126%	504	956	108	560	
Devil's Slide (North and South)	39	48	123%	16%	130%	55	110	16	71	27%	300%	61	192	22	153	
Devil's Slide North	17	26	153%	16%	130%	30	60	13	43	27%	300%	33	104	16	87	
Devil's Slide South	22	22	100%	16%	130%	25	51	3	29	27%	300%	28	88	6	66	
Gray Whale Cove (Formal Lots and Surplus) ¹	107	88	82%	15%	128%	101	200	(6)	93	24%	259%	109	316	2	209	
Gray Whale Cove Formal	72	72	100%	15%	128%	83	164	11	92	24%	259%	89	259	17	187	
Parking Area Gray Whale Cove Informal	35	16	46%	15%	128%	18	36	(17)	1	24%	259%	20	57	(15)	22	
Parking Area Montara State Beach and McNee Ranch (All Lots and Informal)	113	155	137%	15%	31%	178	203	65	90	24%	52%	192	236	79	123	
Montara State Beach/McNee	7	7	100%	15%	31%	8	9	1	2	24%	52%	9	11	2	4	
Ranch Trailhead Montara State Beach North Lot	42	63	150%	15%	31%	72	83	30	41	24%	52%	78	96	36	54	
(Martini Creek) Montara State Beach (South)	8	21	263%	15% 15%	31%	24	28	16	20	24%	52% 52%	26	32	18	24	
La Costandera Lot	43	25	58%	15%	31%	29	33	(14)	(10)	24%	52%	31	38	(12)	(5)	
La Costanera Dirt Lot -	13	13	100%			15	17	2	4		52%	16	20	3	7	
Montarra SB Roadside Parking near Montara SB	0	14	NA NA	15% 15%	31% 31%	16	18	16	18	24%	52%	17	21	17	21	
Montara Neigborhood Streets	0	12	NA	15%	31%	14	16	14	16	24%	52%	15	18	15	18	
Point Montara Light Station	25	12	48%	15%	146%	14	29	(11)	4	24%	305%	15	49	(10)	24	
Point Montara Lighthouse Hostel	25	12	48%	15%	146%	14	29	(11)	4	24%	305%	15	49	(10)	24	
Rancho Corral De Tierra	0	13	NA	15%	105%	15	27	15	27	24%	206%	16	40	16	40	
Kanoff Trailhead Parking	0	5	NA	15%	105%	6	10	6	10	24%	206%	6	15	6	15	
Farralone View Elementary School	0	2	NA	15%	105%	2	4	2	4	24%	206%	2	6	2	6	
Le Conte Trailhead Parking	0	2	NA	15%	105%	2	4	2	4	24%	206%	2	6	2	6	
Rancho Corona	0	2	NA	15%	105%	2	4	2	4	24%	206%	2	6	2	6	
Rancho Park/Alamo	0	2	NA	15%	105%	2	4	2	4	24%	206%	2	6	2	6	
Rancho-Etheldore	0	0	NA	15%	105%	-	-	-	-	24%	206%	-	-	-	-	
Rancho Coral Reef Ave	0	0	NA	15%	105%			-	-	24%	206%	-	-	-	-	
Fitzgerald Marine Reserve + Pillar Point Bluff	89	101	113%	2%	2%	103	103	14	14	2%	2%	103	103	14	14	
Fitzgerald Marine Reserve Formal Parking area	36	44	122%	2%	2%	45	45	9	9	2%	2%	45	45	9	9	
Pillar Point Bluff	10	6	60%	2%	2%	6	6	(4)	(4)	2%	2%	6	6	(4)	(4)	
Moss Beach Distillery Parking Lot	43	43	100%	2%	2%	44	44	1	1	2%	2%	44	44	1	1	
Overflow lot adjacent to M.B.D.	0	8	NA	2%	2%	8	8	8	8	2%	2%	8	8	8	8	
Moss Beach Neighborhood Streets	0	93	NA	2%	2%	95	95	95	95	2%	2%	95	95	95	95	
Quarry+Wicklow+Mirada Surf	23	6	26%	13%	108%	7	12	(16)	(11)	22%	228%	7	20	(16)	(3)	
Quarry Park /Mirada Surf/Wicklow Property	23	6	26%	13%	108%	7	12	-16	-11	22%	228%	7	20	-16	-3	
Other Areas Total	512	437	85%	13%	13%	492	492	-20	-20	22%	22%	533	533	21	21	
Harbor District Area (Harbor District and Oceano Hotel	358	242	68%	13%	13%	273	273	(85)	(85)	22%	22%	295	295	(63)	(63)	
Oceano Hotel Public Spaces ⁷	90	27	30%	13%	13%	30	30	(60)	(60)	22%	22%	33	33	(57)	(57)	
San Mateo County Harbor District	268	215	80%	13%	13%	242	242	(26)	(26)	22%	22%	262	262	(6)	(6)	
El Granada Informal Parking 8	105	146	139%	13%	13%	165	165	60	60	22%	22%	178	178	73	73	
Burnham Strip	0	9	NA	13%	13%	10	10	10	10	22%	22%	11	11	11	11	
El Granada Neighborhood Streets (50%)9	0	30	NA	13%	13%	34	34	34	34	22%	22%	37	37	37	37	
Surfers Beach Roadside		407	4000/			404		40	40			121	424	26	26	
Parking	105	107	102%	13%	13%	121	121	16	16	22%	22%	131	131	20	20	

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APPENDIX C

San Mateo County Parks and State Parks
Data Collection Methodologies

DATA COLLECTION METHODOLOGIES

SAN MATEO COUNTY PARKS

Source: Katherine Wright, Park Ranger II, San Mateo County Parks; reported in emails by Samuel Herzberg, 11/14/14 and 11/5/14

District IV: Current Counts

Fitzgerald Marine Reserve: Visitor counts are divided into regular visitors and tours. The tour counts are determined by the number of people for which they reserve the tour. The regular visitor counts are obtained by estimating the number of cars in the parking lot multiplied by 5. They use 5 as a multiplier to compensate for the people who walk-in to the park from other entrances.

San Pedro: Visitor counts are into two categories: hiking and picnicking. To obtain these counts, rangersestimate depending on the number of vehicles, any events, and the weather.

Pillar Point Bluff/Mirada Surf/Devil's Slide/Quarry Park/Sanchez Adobe: Vvisitor counts are not collected for these parks. Devil's Slide Trail Ambassadors provide a count for the visitors they viewed during their shift, brokendown into the following categories: adults, children, bikers, and dog walkers.

Sanchez Adobe: Numbers are provided by Historical Association who [San Mateo County Parks] co-manage with and who run all events and educational tours, and are not provided by County Park staff.

District IV: Future Counts

Devil's Slide Trail: Two trail counters will be installed at Devil's Slide Trail, one at either end of the trail. These will count everyone that passes the beam. Quarterly data will be gathered from the counters to do analysis on the data.

Fitzgerald Marine Reserve: Two trail counters will be installed, one at the ramp entrance and one at the Seal Cove Staircase. These will count everyone that passes the beam. Quarterly data will be gathered from the counters to do analysis on the data.

Mirada Surf/Pillar Point Bluff/Sanchez Adobe: No plans currently to count visitors at these parks.

Quarry Park: One trail counter will be installed at the main trail head into the park. This will count everyone that passes the beam. Quarterly data will be gathered from the counters to do analysis on the data.

San Pedro Valley: One car counter will be installed at the entrance to the park. One trail counter will be installed at the Weiler Ranch Road trail head. These will count the vehicles entering the park and the users on the trail. Quarterly data will be gathered from the counters to do analysis on the data.

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STATE PARKS

Source: California State Park System Statistical Report, 2011/12 Fiscal Year

Visitor Attendance

Data on visitor attendance reflects an estimate of the number of individual visits (not the number of individual visitors) to the units of the State Park System during the fiscal year. Using this approach, an individual visiting three units in a day is recorded in the attendance data three times rather than one.

Attendance data is collected at the unit level, sent to the district offices, and thereafter conveyed to the Field Services Division in headquarters. Some units or districts may collect a variety of more detailed attendance or visitor use data (e.g. attendance at a specific area or facility, like a boat launching ramp), but only the unit-wide data on three required categories – free day use, paid day use, overnight use - are conveyed to headquarters to be used for system-wide records. Source: Park Operations, California State Parks.

The two different categories of visitor attendance reported in this statistical report are generated in different ways, and their consistency and accuracy differ widely.

- Day Use This is the number of day (non-overnight) visits to the unit in question. "Day use", as used in this column, includes both free day use and day use for which a fee is paid for entry into the park. Day use includes park entry by any means, by motor vehicle of any type, on foot, on bicycle, by boat or on horseback. A single visit is counted regardless of the length of stay or variety of activities undertaken. Historically, approximately 30% of day use is paid and the remainder is free. Day use admission based on the use of annual passes is included in this data.
- Camping This is the number of overnight visits to the unit in question by visitors using the many types of sites and structures listed above, as well as using temporary overflow areas.

Not all units collect visitor attendance information for day use and overnight use in the same way. In a few instances, usually historic units with per-person admission charges, there are actual counts of visits. In most units, however, attendance figures are the result of making estimates, using various techniques and producing results of widely different levels of accuracy. The estimation techniques may range in quality from one unit to the next and they may be changed at any unit at any time. While the accuracy of these figures has substantial limitations, it is believed that in the aggregate, over time, orders-of magnitude and broad trends in visitor use can be determined with some validity.

It is clear that, for the entire State Park System, total attendance is underestimated for three reasons.

- 1. Little or no data is collected from State Park System-operated units which are small, remote and little used, where gathering this information would not be cost-effective;
- 2. Data is rarely collected from units which, in large part or in their entirety, are managed not by the State Park System but by another agency or organization through an operating agreement. Many of these units are heavily used ocean beach units with substantial attendance.
- 3. The failure to report all of the visitors who spend the night in a unit not through traditional camping but instead through the occupancy of such structures as lodges, cabins, yurts, and hostels.

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GOLDEN GATE NATIONAL RECREATION AREA

Source: Robert E. Manning Park Studies Laboratory, University of Vermont, 2007.

Park use and users of San Mateo County units of GGNRA were documented in 2007. The visitor counts and survey were administered at four study park units:

- College Avenue for Milagra Ridge 7 days
- Moose Lodge and "North Trailhead" for Mori Point 9 days
- Sneath Lane for Sweeney Ridge 9 days
- Miramontes Trail access area for Phleger Estate 10 days

Visitor counts and surveys were conducted from 7am-3pm on half of the sample days, and from 12pm – 8pm on half of the sample days.

Rancho Corral de Tierra was not yet part of GGNRA; however, three questions were included on the questionnaire to inquire about familiarity of the future NPS site, types of recreation that should be provided, and what important qualities should be protected.

The relatively low sample size and limited data collected do not provide an adequate baseline to estimate future demand. GGNRA is in the process of developing a data collection program to understand baseline conditions at all the GGNRA-managed sites in San Mateo County.