

PACIFICA BICYCLE PLAN

CITY OF PACIFICA

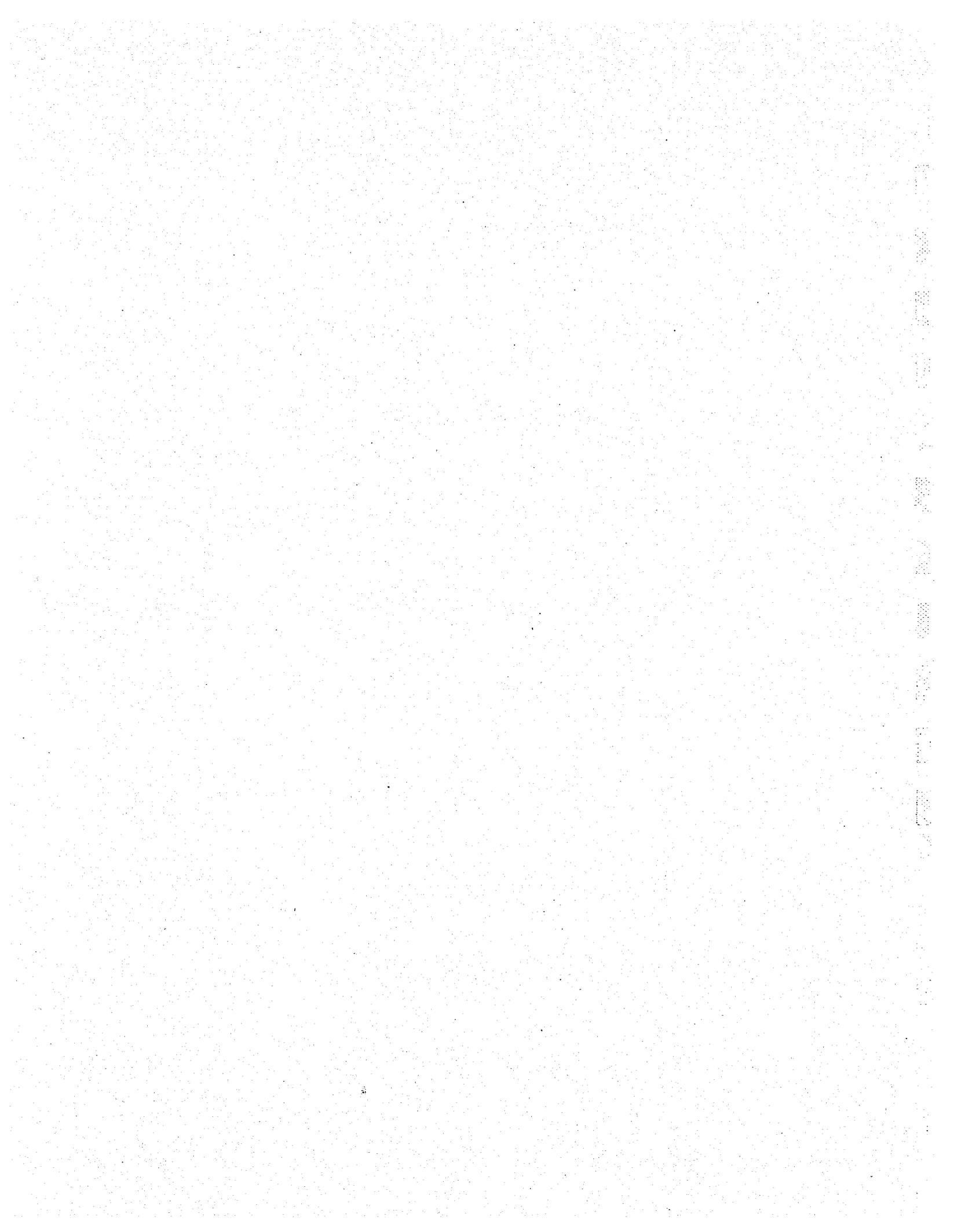
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I INTRODUCTION

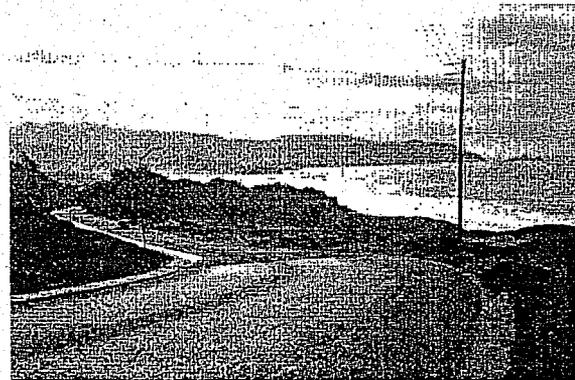
This document is a bicycle plan for the City of Pacifica, prepared in conformance with the State of California Bicycle Transportation Act. This Bicycle Master Plan has been prepared by John Northmore Roberts & Associates, in association with Design, Community & Environment, a planning and urban design firm. It takes Pacifica's existing routes and earlier bicycle plan as a basis, and proposes additions and improvements necessary to provide a safe and efficient network of bikeways.

A. About Pacifica

Pacifica is a city of approximately 40,400 people stretched along the Pacific Ocean just south of San Francisco. Highway 1 forms the spine of the community, with clusters of fairly dense development extending off of it to the east and west. These neighborhoods are separated from each other by the steep headlands and coastal hills that characterize this part of the Northern California coastline, forming natural greenbelts around developed areas within the city.

Trails and bikeways to link Pacifica's neighborhoods, commercial areas, schools and open space resources have been a priority in the city since the early 1970s. The first trail plan was developed in 1973, and major revisions were made in

1980 and 1991. There are currently two bikeways in Pacifica: a north/south route that runs the length of the city parallel, and sometimes immediately adjacent to, Highway 1, and an eastbound Class II facility on Sharp Park Road that connects Highway 1 to Skyline Boulevard.



Much of the existing north/south bikeway runs directly along the Pacific Ocean.

B. Types of Bikeways

This section describes the three different kinds of bikeways that are discussed in this Bicycle Plan: Class I bicycle paths, Class II bicycle lanes, and Class III bicycle routes.

1. Class I Bicycle Paths

Class I bikeways are bicycle paths or trails that have exclusive rights-of-way separated from roads. There is already a stretch of Class I trail along the southbound side of Highway 1 between Mori's Point Road and Reina del Mar Avenue, and another on the northbound side of High-

way 1 from approximately 0.3 miles south of Reina del Mar Avenue to Rockaway Beach Road.

2. Class II Bicycle Lanes

Class II bikeways are marked by painted stripes on the roadway. They lie on the paved part of the road and provide preferred but not exclusive use to cyclists. There are Class II bicycle lanes along Highway 1 in the southern half of Pacifica, and eastbound on Sharp Park Road.

3. Class III Bicycle Routes

Class III bicycle routes share traffic lanes with motor vehicles and are designated only by signs, not striped lanes. There are currently Class III bicycle routes along much of Palmetto Avenue and all of Esplanade Drive, for example.

C. Plan Proposals

The basic framework of the bicycle network proposed here consists of:

- A north/south corridor with two parallel routes: a direct route along busy streets, and an alternative route that runs on separate pathways or on less-traveled streets. The north/south corridor would connect all of the commercial areas and many of the major public facilities in Pacifica.
- Class II facilities creating east/west corridors into each of Pacifica's neighborhoods.
- A network of Class II and III facilities linking the primary corridors described above

to schools, open spaces, and other key destinations.

- Improved signage and education programs to increase safety and promote bicycle use. The proposed education programs include continuation of the Police Department's annual Bicycle Rodeo; bicycle safety programs in public schools, including driver's education classes; and education programs for adult cyclists and drivers.
- Priorities for implementation, so that Pacifica can focus limited funds on the areas that need it most. The number one priority is closing gaps in the existing north/south bikeway south of Manor Drive, on the west side of Highway 1 between Reina del Mar and Rockaway Beach Road, and at the San Pedro Creek Bridge on Highway 1.

D. Plan Preparation

This Plan was developed through an extensive public participation process that began in 1990 with the development of the Draft Trails Master Plan on which the Pacifica Bicycle Plan is largely based. In a series of public workshops, Pacifica residents proposed and refined a network of trails and a series of goals that form the heart of the current Plan. In 1999, a final public workshop was held to revise the bikeway network proposed in 1991 in the face of changed conditions. In all, over one hundred residents participated in the development of this Bicycle Plan.

2 EXISTING CONDITIONS

This chapter describes Pacifica's existing land use patterns, and the condition of its bikeways and other bicycle-related facilities.

A. Land Use

Pacifica is mostly built out. Much of the interior land is designated open space, or is too steep to build on easily. When the quarry just north of Rockaway Beach is closed at some point in the future, there will be an opportunity for a significant amount of new development on this 117-acre site. There are also a few much smaller parcels available along the ocean cliffs, but erosion limits the potential build out on this land.

Major destinations for pedestrians and bicyclists include public facilities such as City Hall, the public libraries, the post offices, the Pacifica Community Center, and the eleven elementary and middle schools and 2 high schools. Other major destinations are the City's commercial districts, parks, and ocean beaches.

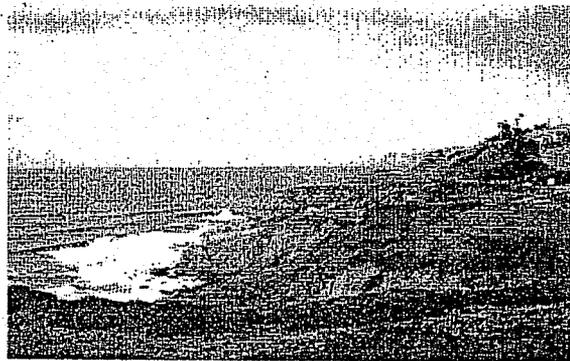
B. Existing Bikeways

There are currently two main designated bikeways in Pacifica: the north-south route that runs parallel to, and sometimes on Highway 1, and an eastbound route on Sharp Park Road.

1. North-South Bikeway

For ease of description, discussion of the north-south bikeway is split into short sections. Each segment description begins with a discussion of the physical characteristics of the bikeway: its type, additional facilities such as bike racks, any design or safety issues, and the condition and placement of signage. The second part of the description discusses views and key destination points along the bikeway.

a. Palmetto Avenue from Westline Drive to Esplanade Drive



The first segment of the bikeway runs between the Ocean and low undeveloped hills

- Facilities

The intersection of Palmetto Avenue and Westline Drive is the northern boundary of the existing bikeway in northwest San Mateo County; the bikeway does not currently continue into Daly City.¹ This segment is a Class III facility. The bikeway is designated with peri-

odic green "Bicycle Path" signs that provide directions for cyclists and reminders to drivers that cyclists are sharing the roadway with them. There are no bicycle racks or other facilities along this segment of the bikeway.

- Signage

There are two sets of signs in this segment of the bikeway. At the northern end of the bikeway, signs in both the north and southbound directions indicate its end/start. There are no further signs until the bikeway turns west onto Esplanade Drive. Southbound, the turn is marked with a bicycle route sign with accompanying arrow. Northbound, there is only a green arrow with no indication other than color that it applies to bicycles.

- Safety Issues

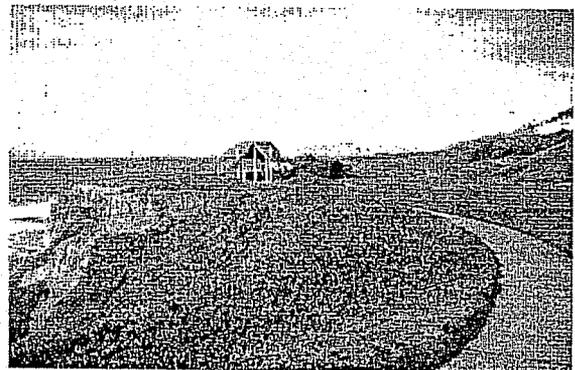
The bikeway begins with a steep slope on a tight curve that obscures sight lines for motorists. There are places throughout this segment, especially on the northbound side of the road, where the pavement is quite rough. Finally, the speed limit on Palmetto Avenue is 35 miles per hour, and motorists seem to exceed this routinely. The speed and heavy flow of traffic on Palmetto Avenue could intimidate many cyclists.

- Views and Major Destinations

The northern end of this segment begins with spectacular views of the Pacific Ocean that continue for approximately 0.2 miles. Coastal housing developments allow only fleeting glimpses

of the Ocean for the remainder of this segment. On the eastern side of Palmetto Avenue, the bikeway is bordered by undeveloped coastal scrubland that slopes up and away from the road. After approximately 0.4 miles, Highway 1 curves west to meet Palmetto Drive, and the bikeway runs along the bottom of the vegetation-covered Highway embankment for the remainder of this stretch. There are no important destination points along this segment of the bikeway, but there is a city park a few block east of the end of the route.

b. Esplanade Drive from Palmetto Avenue to Palmetto Avenue



One of the main destinations in this segment of the bikeway is a park overlooking the Pacific

- Facilities

The first approximately 0.8 miles of this segment of the bikeway is a Class III facility. Apparently, when Esplanade Drive was still a two-way street its entire length, the bikeway ran along

Esplanade Drive to its terminus at Avalon, and then turned east to meet Palmetto Avenue. Because of severe erosion of the land on the western side of Esplanade Drive, however, the street has been closed to southbound traffic, and the bikeway rerouted.

Instead of staying on Esplanade Drive, at the intersection with Manor Drive the bikeway currently shifts off-street onto an unpaved trail surfaced in tight-packed gravel. This unpaved trail continues southwards past the end of Esplanade Drive, skirting the seaward edge of the mobile home park. Approximately 0.2 miles later, the bikeway turns left into a paved parking lot that continues as far as Palmetto Avenue.

There is an overpass over Highway 1 at Manor Drive, two blocks away from the existing route, that is usable by bicyclists. There is also a bridge for pedestrians and cyclists that crosses Highway 1 just slightly north of where the bikeway rejoins Palmetto Avenue. There are no bike racks or other facilities in this segment.

- Signage

There is not sufficient signage in this segment. Most of the signs indicating the former alignment of the bikeway seem to have been removed, and none have been erected to direct cyclists to the new alignment. There is no sign directing northbound cyclists to turn off of Palmetto Avenue at the beach access lot at the southern end of this segment. Nor are there signs directing southbound cyclists to the off-road trail

parallel to the southern end of Esplanade Drive, or to return to Palmetto Avenue at the beach access lot. The bikeway seems to disappear, and there are no indications for cyclists of how to rejoin it.

There are two old signs along the current alignment of the bikeway. For southbound cyclists, there is a sign with an arrow at the intersection of Esplanade Drive and Aura Vista, but no indication of where to go from that point. For northbound cyclists, there is a sign at the northern end of this segment directing northbound cyclists to turn left onto Palmetto Avenue, but it is only an arrow with no indication other than color that it directs the bikeway.

The other remaining signs left over from the old alignment are not in useful locations. There is a sign directing southbound cyclists at the intersection of Palmetto Avenue and Avalon, even though there is no longer any direct legal way for southbound cyclists to reach this intersection. There is also a sign for northbound cyclists just south of Manor Drive at the end of the one-way, northbound portion of Esplanade Drive. Although this sign is parallel to the current alignment, it is far enough east of the off-road trail that it is not very visible.

Finally, there are no signs directing cyclists to the two Highway 1 crossings.

- Safety Issues

The unpaved segment of the trail at the southern end of Esplanade Drive could present an obstacle for cyclists using road rather than hybrid or mountain bikes. There is a steeply sloping curve at the northern end of the segment, but the turn is not tight and sight lines are good.

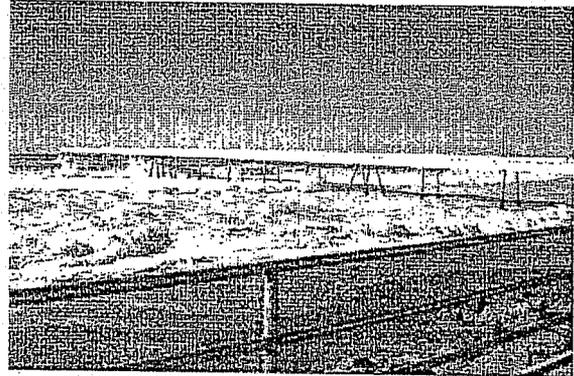
- Views and Major Destinations

The steep hill at the northern end of this segment terminates in an open park on the bluffs, allowing panoramic views of the Ocean. Housing developments block all views of the Ocean from the park south to Aura Vista. From Aura Vista to Manor Drive, views of the Ocean are obscured by chain link fencing that follows the edge of Esplanade Drive. On the final section of the bikeway between Manor Drive and the beach access lot that connects back to Palmetto Avenue, there are clear views up and down the coast. Important destination points along this segment of the bikeway include the park, overlook, and stairs to the beach at its northern end, the Manor Plaza shopping area, the U.S. Post Office branch at the intersection of Manor and Esplanade Drives, and the beach access at the southern end of this segment.

c. Palmetto Avenue from the Beach Access Lot to Clarendon Road

- Facilities

This segment is a Class III bicycle route. It is quite flat, with no major hills. As described



The Municipal Pier lies one long block off of this segment of the bikeway

above, there is a pedestrian/bicycle bridge over Highway 1 just slightly north of where the bikeway leaves Palmetto Avenue. There is a bridge over Highway 1 for pedestrians and bicyclists at San Jose Avenue, one long block east of the bikeway. There is also a bridge for automobiles that is usable by cyclists on Paloma Avenue. There are three bicycle parking facilities in this segment, including a ten-bike rack at the Sharp Park School, a four-bike rack behind City Hall, and a rack at the Municipal Fishing Pier. Finally, there is a restroom/changing facility at the Municipal Fishing Pier, in close proximity to the bicycle rack. This facility does not have either showers or lockers.

- Signage

There is a bright yellow cautionary sign across from the entrance to the beach access lot at the northern end of this segment alerting drivers to the presence

of cyclists. There are no signs directing either north or southbound cyclists, however.

For southbound cyclists, there is an old sign left over from the former bikeway alignment approximately 50 feet north of where the bikeway rejoins Palmetto. More usefully, there are signs with arrows at the intersection of Palmetto and Paloma Avenues, and at the end of the segment where the bikeway turns onto Clarendon Road. Northbound, there are two arrows with only their color to indicate that they are directional signs for the bikeway. The first of these is just north of the Sharp Park School playing fields, and the second is just south of the intersection of Palmetto and Paloma Avenues.²

There are no signs directing cyclists to the Highway 1 crossings.

- Safety Issues

There are no safety or design issues along this segment of the bikeway.

- Views and Major Destinations

This part of the bikeway runs through heavily developed areas, so the only views of the Ocean are down east/west streets. There are a number of destinations along this segment. City Hall, the police station, and a branch of the library are within a block of the bikeway. Sharp Park Elementary and Middle School is directly on the bikeway, as are a number of businesses. Oceana High School is just across Highway 1 on the other side of the Paloma Avenue highway over-

pass. Finally, there is access to the Sharp Park State Beach and the Municipal Fishing Pier just west of the bikeway.

d. Clarendon Road to Lakeside Avenue to Francisco Boulevard to Bradford Way to Mori's Point Road



This segment of the bikeway has beautiful views of the Sharp Park Municipal Golf Course

- Facilities

This is a Class III facility. There is an automobile underpass under Highway 1 that is usable by cyclists one block off the bikeway at Clarendon Road. There is also a pedestrian and bicycle underpass under Highway 101 at Fairway Drive, directly off of the bikeway. There are no bike racks or other facilities in this segment.

- Signage

For bicyclists traveling south, the signage in this segment is quite good. There are six southbound

signs with directional arrows at the following intersections:

- Palmetto Avenue and Clarendon Road
- Clarendon Road and Lakeside Avenue
- Lakeside Avenue and Francisco Boulevard
- Bradford Way just north of Westport
- Bradford Way and Mori's Point Road
- Mori's Point Road and Highway 1

There is also a bicycle route sign without a directional arrow at the intersection of Bradford Way and Fairway Drive.

For bicyclists traveling north, the signage in this segment is not adequate. On the southern end of this segment, there are signs with arrows at the intersection of Mori's Point Road and Highway 1, on Bradford Way just south of Westport, and on Francisco near the golf course's clubhouse. There is also a green arrow directing cyclists from Francisco Boulevard onto Lakeside Drive. There are, however, no signs for northbound riders at either the intersection of Lakeside Drive and Clarendon Road, or of Clarendon Road and Palmetto Drive.

There is no signage directing cyclists to the two Highway 1 crossings. Even more importantly, there are no signs indicating that Pacifica's east/west and north/south bikeways intersect in this segment.

- Safety Issues

Clarendon Road and Francisco Boulevard both see a significant amount of traffic, but at fairly low speeds: Francisco Boulevard's posted speed limit is 30 MPH; there is no speed limit posted on Clarendon Road. A safety issue in this segment is the free right turn from Highway 1 onto Mori's Point Road for southbound motorists. This could lead to conflicts between motorists and northbound cyclists, but visibility here is good.

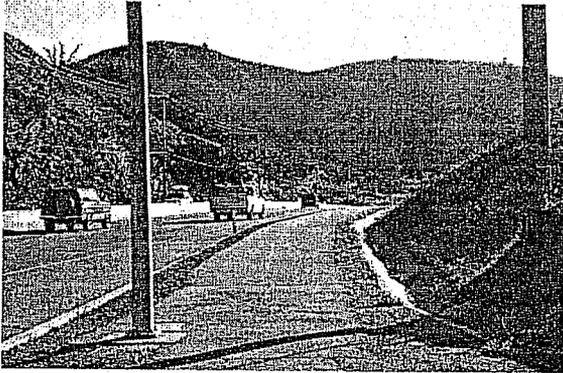
- Views and Major Destinations

The northern 2/3 of this segment is one of the most beautiful stretches on the north-south bikeway, running alongside the Sharp Park Golf Course on Clarendon Road and Lakeside Avenue. The remainder of this stretch runs through a residential neighborhood of single family homes. There are no major destinations directly on the bikeway, since it seems unlikely that golfers would bicycle to the course with their clubs. There is, however, a park with a baseball diamond a few blocks off the bikeway, which is reachable through the Clarendon Road underpass.

e. Highway 1 from Mori's Point Road to Reina del Mar Avenue

- Facilities

This Class I facility is the first stretch of the bikeway that runs along Highway 1. The trail is 8' wide, and runs directly adjacent to the



Within this segment of the bikeway, north- and southbound riders share a Class 1 trail

on the western side of the Highway. There are no bicycle racks or other bicycle facilities in this segment of the bikeway.

- Signage

Signage in this stretch of the bikeway is good, with both north- and southbound signs with arrows at the beginning and end of the segment.

- Safety Issues

Although the posted speed limit on this segment of Highway 1 is 45 MPH, cars are often moving significantly faster than that. However, the separation between the Class I trail and the roadway is adequate. There is a lamp post in the pathway at its northern end, but there are no other obstructions or rough pavement.

- Views and Major Destinations

There are views of the coastal hills that line the eastern side of the Highway. There are no ma-

ior destinations along this segment of the bikeway.

f. Highway 1 from Reina del Mar Avenue to Rockaway Beach Road

- Facilities

The intersection of Highway 1 and Reina del Mar Avenue is the southern terminus of the officially-designated north/south bikeway. There is sufficient room to accommodate cyclists on the roadway as far south as Linda Mar Boulevard, and there are signs to direct them, but neither Caltrans nor the City of Pacifica recognizes the bicycle lanes in this stretch as official bikeways.

The unofficial bikeway divides at the intersection of Highway 1 and Reina Del Mar, with northbound traffic on the east side of the Highway and southbound traffic on the west. Conditions for cyclists are not as good in this segment as they are further south between Rockaway Beach and Linda Mar.



Rockaway Beach is the primary tourist destination in Pacifica

On the western side of the Highway, the bicycle path continues for about 50 feet, at which point the sidewalk stops abruptly with no warning. From there, cyclists can continue within a narrow striped lane. At the intersection with San Marlo on the northern end of Rockaway Beach, signs direct cyclists off of the Highway and then onto Old County Road, a quiet street that parallels the Highway. Southbound cyclists return to Highway 1 at Rockaway Beach Road.

Conditions vary wildly for northbound bicycle traffic. For the northern 0.3 miles of this segment, the unofficial bikeway is on a narrow, two- to three-foot sidewalk with frequent curb cuts and light posts obstructing the path. At the end of this stretch, the sidewalk widens and leaves the highway, running on top of a berm for the next 0.5 miles, approximately. This stretch is an 8' wide, paved path with one-way traffic. The southernmost 0.1 mile of this stretch has bicyclists riding on a very quiet one-way street below, but immediately adjacent to the Highway, separated from it by a three- to six-foot high retaining wall. Throughout this stretch there is not sufficient room on the Highway for cyclists to share the roadway.

There is an existing changing room without lockers, running water, or sanitary facilities at the southern end of this segment on the San Marlo Esplanade at Rockaway Beach. Construction will begin on a second changing facility that will include running water and restrooms on the new Calera Creek Bike Trail, which will run through

the quarry site. There are no bicycle racks or other facilities in this segment.

- Signage

There is adequate signage for cyclists traveling in either direction. Southbound, there is a sign with an arrow just south of Reina Del Mar Avenue. There are also southbound signs at the turnoff at San Marlo, at the intersection of San Marlo and Old County Road, and at the intersection of Rockaway Beach Avenue with Highway 1. The latter sign is clearly visible from the intersection of Old County Road and Rockaway Beach Avenue, so the absence of a sign there is not a significant problem.

There is a northbound sign just south of Reina Del Mar Avenue that directs cyclists to the Class I facility on the other side of Highway 1 via a signalized intersection with a pedestrian phase. There is also a northbound sign with arrow at the intersection of Rockaway Beach Avenue with Highway 1.

- Safety Issues

Northbound cyclists are currently routed onto a narrow sidewalk with frequent curb cuts and obstructions where the Class I segment ends. At the intersection with Rockaway Beach Avenue, motorists have a free right-turn off of the Highway, which could create conflicts between cyclists and automobiles.

On the southern side of the bikeway, the path terminates abruptly. South of the where the sidewalk ends, the surface of the path is poorly main-

tained, and is periodically obstructed by dirt and gravel.

- Views and Major Destinations

There are good views of the Pacific Ocean from the southern end of this segment. There are views of the low hills along the Highway frontage of the quarry for the remainder of the segment. There is an elementary school a few blocks east of the bikeway on Reina Del Mar Avenue. The Rockaway Beach area also has a high concentration of retail and service businesses, and is the center of tourist activity in Pacifica. Finally, there is the San Marlo Esplanade and Rockaway Beach itself.

g. Highway 1 from Rockaway Beach Avenue to Crespi Drive

- Facilities

The unofficial bikeway remains divided in this stretch, with northbound traffic on the eastside of Highway 1 and southbound traffic on the westside. The Highway rises steeply out of Rockaway Beach, and descends just as quickly on the southern side of the Rockaway Headland. For southbound riders, there is a nine-foot wide, striped lane on the Highway. The lane narrows to 4 feet in the 0.1 mile before Crespi Drive. Northbound cyclists have the same conditions: a nine-foot wide striped lane on the Highway until just before Crespi Drive, where it narrows to 4 feet as well.

- Signage

There is one northbound sign with an arrow at the intersection of Crespi Drive and Highway

1. There are no southbound signs in this segment.

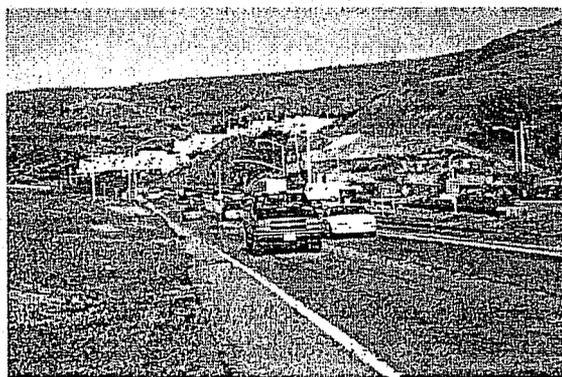
- Safety Issues

There are free right turns at Rockaway Beach Avenue and Coast Lane, both of which could create conflicts between automobiles and northbound cyclists. The surface of the bicycle lane is poorly-maintained, allowing sand and debris to accumulate.

- Views and Major Destinations

This segment has striking views of the Rockaway Headland and the Pacific Ocean in both directions. There are no major destinations on this segment of the bikeway, as the land on either side of the Highway is undeveloped.

h. Highway 1 from Crespi Drive to Linda Mar Boulevard



As on most of the southern half of the existing bikeway, bicyclists travel along Highway 1

- Facilities

The grade flattens out in this segment, and the bikeway remains divided. For southbound cyclists, the unofficial lane continues throughout this segment. For most of its length, the lane is four-feet wide, although in some places it gets as wide as six feet. Sand and gravel completely cover the lane in some places, and in others narrow it to only three feet in width.

On the northbound side, there are two parallel facilities. The unofficial lane on the Highway continues throughout this segment, approximately six-feet wide with some sand and gravel obstructing the lane. A few feet east of the Highway is a second path which runs two- to three-feet below grade. This path is paved with asphalt and is six feet wide, although sand and dirt spilling over the edges of the path often narrow the usable surface to only five feet. This path is not wide enough to qualify as a Class I facility, but it does provide an alternative route for cyclists with greater separation from traffic on Highway 1.

There is an existing changing facility with running water, restrooms, and an outdoor shower at Pacifica State Beach. There was a set of bicycle lockers at the Crespi Park and Ride lot, but they have recently been removed. There is a bicycle rack at Pacifica State Beach that will accommodate approximately ten bicycles.

- Signage

There are two northbound signs in this segment. One is on Linda Mar Boulevard directing cyclists onto Highway 1. The second is on High-

way 1 just north of Linda Mar Boulevard. There is no southbound signage along this segment.

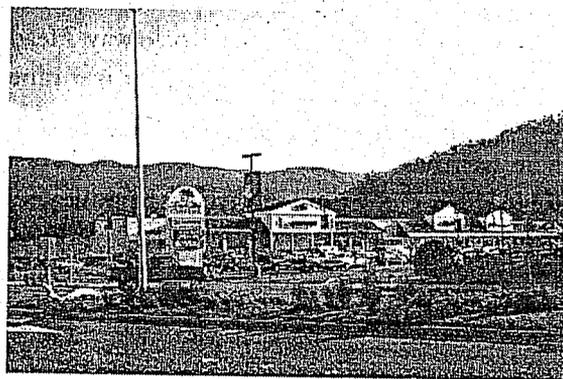
- Safety Issues

There is sand and gravel in the bicycle lanes on both the north- and southbound sides. There is also a free right turn into the parking lot at Pacifica State Beach, but the sight lines are relatively clear.

- Views and Major Destinations

This segment has views of the Pacific Ocean, although the water is obscured by dunes and development in some stretches. There are a number of major destination points in this segment. The City's intermodal exchange - the Crespi and Linda Mar Park-and-Ride Lots - is located in this segment. The Pacifica Community Center and Pacifica State Beach are both directly on the bikeway. Cabrillo Elementary and Middle School and Pedro Valley Elementary School are each a few blocks east of the bikeway.

i. Highway 1 from Linda Mar Boulevard to Pacifica City Limits



The Linda Mar Shopping Center is one of the major destinations along this segment

- **Facilities**

The unofficial bikeway currently ends just south of the San Pedro Creek Bridge, although it may continue southwards in the future as an official bikeway if the Countywide Bicycle Plan is implemented.

For southbound cyclists, the narrow lane continues as far as San Pedro Creek. At the San Pedro Creek Bridge, cyclists are squeezed into a very narrow, two- to three-foot shoulder. This is a serious break in the continuity of the unofficial bikeway. After the San Pedro Creek Bridge, the lane widens back to a standard 5-foot width. A short distance later, the lane terminates with no warning.

On the northbound side, the bicycle lane is initially 10 feet wide, then narrows quickly to five feet. At the San Pedro Creek Bridge, northbound cyclists are also squeezed into a very narrow, two- to three-foot shoulder, creating a serious break in the continuity of the unofficial bikeway. After the Bridge, the lane widens back to five feet, then narrows and disappears without warning.

There are bicycle racks at the Linda Mar Shopping Center and in the Pedro Point Shopping Center that hold approximately six and five bicycles respectively. There are no other facilities in this segment.

- **Signage**

There is no signage along this segment.

- **Safety Issues**

There are very narrow lanes in both directions on the San Pedro Creek Bridge. The lane surface is also poorly maintained, especially on the southbound side.

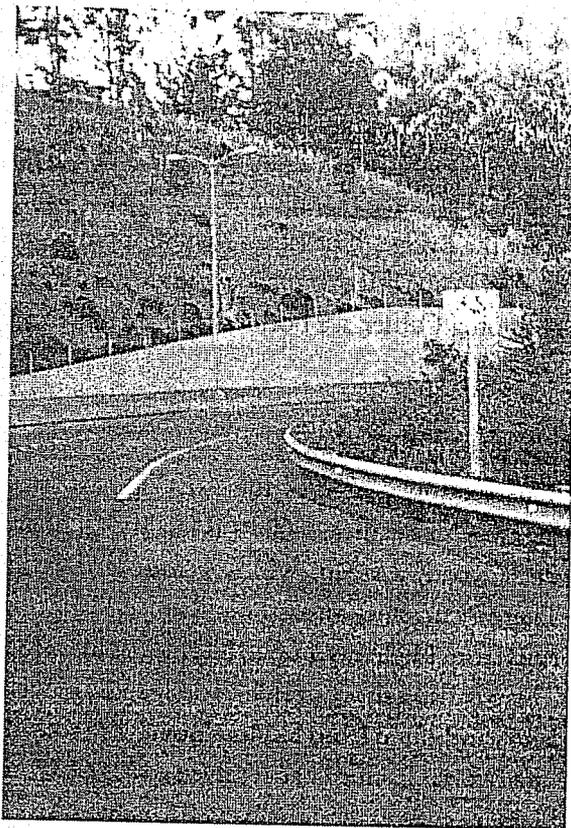
- **Views and Major Destinations**

There is a view up and down San Pedro Creek from the Bridge. The Linda Mar Shopping Center and Post Office Branch, and the Pedro Point Shopping Center are both just off the bikeway.

2. East-West Bikeway

This section describes the existing east/west bikeway in Pacifica, a Class II facility on Sharp Park Road, a steep, winding four-lane road. There is currently an eastbound bicycle lane that runs from Highway 1 up to Skyline Boulevard.³ There is also a short stretch of designated bicycle lane westbound from Skyline Boulevard to College Drive. Pacifica has received \$300,000 from Measure A to extend the bicycle lane west from College Drive to Highway 1. Construction of a bicycle lane from College Drive to Gypsy Hill Road, and of a slightly narrower four-foot lane from Gypsy Hill Road to Highway 1, will begin in Spring, 2000. This section evaluates the condition of the existing segments of the bikeway.

For ease of discussion, the existing Sharp Park Road bicycle facilities are separated into three segments.



The existing eastbound bicycle lane winds up Sharp Park Road

a. Highway 1 to Gypsy Hill Road

- Facilities

In this segment of the bikeway there is a Class II facility eastbound but no westbound facility.

Eastbound, the striped bicycle lane is 5-feet wide. There are no bicycle racks or other facilities in this segment.

- Signage

There is good signage along this segment of the bikeway. There are three bicycle lane signs painted on the surface of the lane, approximately 0.2 miles apart, to remind motorists that cyclists are sharing the road with them. There are also two bicycle route signs on poles.

- Safety Issues

This is a steep and winding road with a posted speed limit of 30 MPH that is routinely exceeded. The first curve is both steep and tight with poor sightlines for automobiles. The lane striping is worn away here from automobiles cutting across the outer edge of the lane. Apart from this, conditions are generally very good. The bicycle lane provides separation from automobiles, sight lines around the remaining curves are fairly good, and there are frequent signs alerting drivers to the presence of cyclists. No roads come in from the south along this stretch of the bikeway, so there are no potential conflicts with cross-traffic. Finally, the asphalt is in excellent condition.

- Views and Major Destinations

There are beautiful views of the coastal hills along this stretch of the bikeway. There are no major destinations along this stretch of the bikeway; the major function of this east/west corridor is to connect the bicycle facilities and development

along the ridgeline on Skyline Boulevard to those along the coast.

b. Gypsy Hill Road to College Drive

- Facilities

Sharp Park Road is divided for most of this stretch. There is a Class II facility on the lower end of this stretch. Where the road divides, the bikeway moves up onto a four-foot wide sidewalk immediately adjacent to the roadway. There is currently no westbound facility. There are no bicycle racks or other facilities in this segment.

- Signage

There are three bicycle route signs on poles and a number of painted signs on the lane itself in this segment of the bikeway. There is also one westbound sign just before the road divides, although there is no bikeway in this direction.

- Safety Issues

Conditions are similar to those in Section 1. There is a free right turn for motorists onto College Drive, which could cause conflicts with eastbound cyclists. In addition, the paving on the bikeway is in poor condition with dirt obstructing the surface in a number of locations.

- Views and Major Destinations

There are beautiful views of the coastal hills along this stretch of the bikeway. The major destination in this area is Skyline College, which is located a few blocks south of the bikeway off of College Drive.

c. College Drive to Skyline Boulevard

- Facilities

There are Class II facilities eastbound and westbound along this segment of Sharp Park Road. Eastbound there is a five-foot lane. Westbound, there is a five-foot lane for the eastern 2/3 of this segment, then the bikeway moves up onto a sidewalk. There are no bicycle racks or other facilities in this segment.

- Signage

Eastbound, there is a "begin bicycle route" sign, and then a number of very small white signs on posts along the first half of this segment. Accompanying each of the posted signs is a painted sign on the surface of the lane. There is no sign indicating the end of the bikeway, which terminates at Skyline Boulevard.

Westbound, there is a "begin bicycle route" sign. There are no other signs until the western end of the segment, where there are two of the small white signs, and then an "end bicycle route" sign.

- Safety Issues

Conditions are similar to those in Section 1. While there are a few streets that intersect the bikeway, the potential for conflicts with cross traffic remains small. The eastern end of the westbound route is very narrow, and the eastbound route is obstructed in places by vegetation growing out over the roadway.

- Views and Major Destinations

There are beautiful views of the coastal hills along this stretch of the bikeway. The major destinations in this area are Skyline Boulevard, a major north/south corridor, and the commercial development along it.

C. Existing Bicycle Parking Facilities

There are currently 24 publicly-accessible bicycle racks in Pacifica with a combined capacity of 130 bicycles. Most of the major destination points along the bikeway have bicycle racks within fairly close proximity. The exceptions to this are the park and beach access at the northern end of Esplanade Drive, the Manor Plaza commercial area, a number of the public schools, Rockaway Beach, the park-and-ride lots, and the Pedro Point area, where there is no bicycle parking at all.

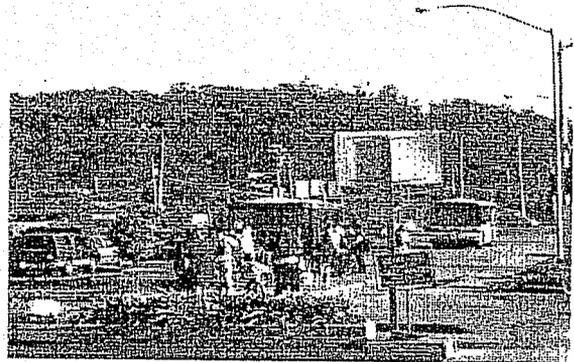
Up until recently, there was one set of bicycle lockers, described below at the end of Section D, but that has been removed

D. Existing Intermodal Exchanges

There is one intermodal exchange in Pacifica located at the southern end of the City. This intermodal exchange is served by two park and ride lots, one on the southeast corner of the intersection of Crespi Drive and Highway 1, and one on the north side of Linda Mar Boulevard just east of its intersection with Highway 1. The two lots provide parking for people transferring to any of the six SamTrans routes that start there,

which in turn connect to other public transit services including BART and Caltrain. Buses serving this location are:

- The CX, an express service to the Colma BART Station.
- The DX, an express service to the Transbay Terminal.
- The 14, a local route through the southern end of Pacifica.
- The 110, which runs through Daly City to the Daly City BART Station.
- The 112, which follows the same route as the 110 into southern Daly City, then splits off to run through Colma to the Colma BART Station.
- The 294, which runs south along the coast as far as Half Moon Bay, where it turns inland, eventually connecting to the Hillsdale Caltrain Station.



SamTrans buses provide connections to BART, CalTrain, the Transbay Terminal, and other local and regional destinations

There was a set of bike lockers adjacent to the Crespi park-and-ride lot until early December, 1999, but it has been removed. There are currently no bicycle facilities associated with either lot.

³ Although this description covers the bikeway from College Road to Skyline Boulevard, this segment is not within Pacifica's city limits.

E. Existing Changing Facilities

There are no changing facilities with indoor showers and lockers in Pacifica. At present, there are three more basic changing facilities near employment centers that could be used by cyclists. The existing facilities are as follows:

- Pacifica State Beach: changing facility with toilets and an outdoor shower.
- Rockaway Beach: changing facility without water or sanitary services.
- The Municipal Pier: public restrooms that could be used for changing.

A fourth such facility is already funded and will be constructed in Spring, 2000. It is to be located at the new staging area on the Calera Creek Bike Trail, and will include a changing facility with restrooms.

¹ The *Draft San Mateo County Comprehensive Bicycle Route Plan* proposes the extension of this bikeway through Daly City and into San Francisco, as shown on Figure 5 below.

² There are no signs directing cyclists onto Beach Boulevard, or on Beach Boulevard itself.

3 PROPOSED FACILITIES

This chapter describes the Plan's proposals for improvements to existing bikeways, construction of new bikeways, and placement or improvement of other bicycle facilities such as bike racks, changing facilities, and storage lockers.

A. Improvements to Existing Bikeways

This section describes proposed improvements to the existing north/south and east/west bikeways. It also describes general types of mitigations that could be applied to each of the potential safety issues pointed out in Chapter 2, above.

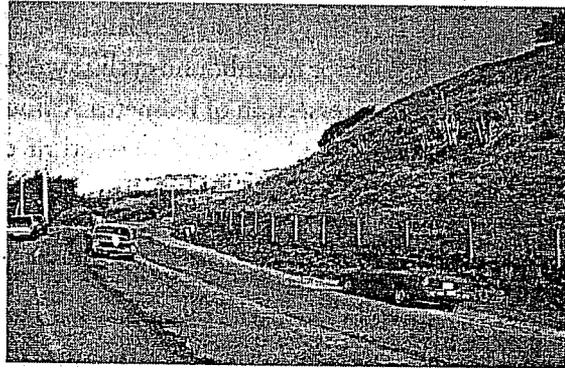
1. Improvements to the Existing North/South Bikeway

This section describes proposed improvements to the existing north/south bikeway. It is divided into three sections.

a. Palmetto Avenue/Esplanade Drive: Palmetto Avenue from Westline Drive to Esplanade Drive/Esplanade Drive from Palmetto Avenue to Manor Drive/Off-road trail back to Palmetto Avenue

From its northern terminus to Manor Drive, this segment of the bikeway would be upgraded

to a Class II facility. From Manor Drive to Avalon, the existing dirt trail west of the road would be paved to complete the link back to Palmetto Avenue.



The existing Class III facility on the northern end of Palmetto Avenue would be upgraded to a Class II bicycle lane

Signage would be improved for northbound cyclists at the intersection of Esplanade Drive and Palmetto Avenue. Signage would also be improved for both north- and southbound cyclists where the bikeway leaves the road at Manor Drive. Signage would be installed where the segment of Class I trail meets Palmetto Avenue to indicate the bikeway alignment. Finally signs would be installed to direct cyclists wishing to cross Highway 1 to the overpass at Manor Drive and to the pedestrian bridge that is located approximately 100 feet north of the southern point of this segment of the bikeway (see Figure 2).

b. Palmetto Avenue to Mori's Point Road: Palmetto Avenue from off-road trail to Mori's Point Road

This segment of the bikeway would be improved into a Class II facility with striped lanes on the roadway. Signage for northbound cyclists would be added at the intersection of Palmetto Avenue and Clarendon Road, at the intersection of Clarendon Road and Lakeside Avenue, and at the intersection of Lakeside Avenue and Francisco Boulevard. Additional signs would be added to direct cyclists wishing to cross Highway 1 to the overpass on Paloma Avenue, the pedestrian bridge at San Jose Avenue, the underpass at Clarendon Road, and the pedestrian tunnel at Fairway Drive.

c. Highway 1: Highway 1 from Mori's Point Road to San Pedro Creek

Most of the unofficial bikeway in this segment already has 8- or 9-foot wide lanes on either side of the Highway, and some signage is in place. Class II lanes would be constructed or designated throughout this segment, with special attention to the following locations:

- Between Reina del Mar Avenue and Rockaway Beach (north and southbound)
- Between Crespi Drive and Linda Mar Boulevard (north- and southbound)
- On the San Pedro Creek Bridge (north- and southbound)

Creating Class II facilities throughout this segment would involve widening the existing shoulders in places where they narrow to less than five feet. It would also involve painting bicycle lane signs onto the lane surface and/or providing bicycle route signs at every major intersection. Signs on the lane surface or on poles should be provided at least every 0.5 miles in between intersections.



Among other improvements, new directional signage will be added to mark the bikeway

2. Improvements to the East/West Bikeway

Aside from the safety issues addressed below, no improvements to the Class II facility on Sharp Park Road are proposed.

3. Safety Issues

Chapter 2 and Figure 2 identify a number of conditions on the existing north/south and east/west bikeways that could present safety issues. Many of these conditions could also occur along new bikeways as the network of bicycle facilities in Pacifica expands. The following discussion includes a range of possible mitigations for each type of potential problem. While each instance will have to be studied individually to select the most appropriate mitigations, the lists that follow will provide a starting point for City staff.

a. Speeding

Some segments of the bikeway run along roadways where automobiles are traveling at high speeds, which can intimidate some cyclists. In those cases, the following mitigations could be considered:

- Post speed limits
- Add signage to remind motorists of the presence of cyclists
- Wherever feasible, create parallel routes off-road or along alternate streets

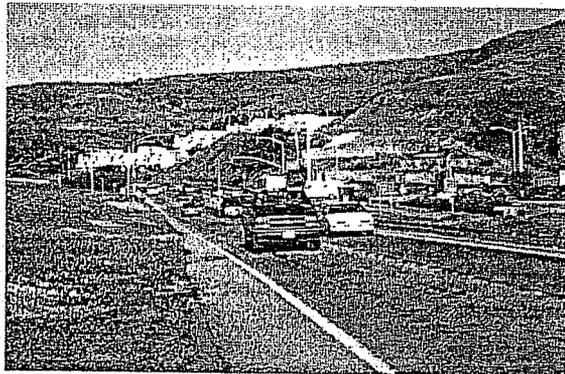
b. Obstructions

Where obstructions such as light posts, signage, vegetation, and curb cuts occur along designated bikeways, the following mitigations could be implemented:

- Clear designated bikeways of all obstructions
- Realign designated bikeways to avoid obstructions

c. Narrow Lanes

In some segments of the bikeway, Class II facilities narrow to four feet in width. Wherever feasible, these bicycle lanes would be widened to at least five feet.



Wherever feasible, narrow lanes would be widened to at least five feet

d. Rough Pavement

Where bikeway paving is rough, cracked, or pitted, the City could consider the following mitigations:

- Maintain the pavement in good condition
- Resurface the designated bikeways as necessary

e. Poorly Maintained Pavement

In some segments of the bikeways, substantial quantities of sand and gravel build up on the road surface. Maintenance of trail surfaces would be improved.



Maintenance of lane surfaces will be improved

f. Poor Sight Lines

Where there are tight curves or other situations with poor sightlines, one or more of the following mitigations could be implemented:

- Adjust parking to make more room for cyclists
- Upgrade Class III facilities to Class II facilities
- Add signage to remind motorists of the presence of cyclists
- Add raised lane markers

g. Free Right Turns Across Bikeways

Where motorists are allowed uncontrolled right turns across bikeways, one or more of the following mitigations could be implemented:

- Additional striping to indicate cyclists' right-of-way
- Additional signage to remind motorists of the presence of cyclists

B. Proposed Bikeways

Pacifica consists of a north/south spine along Highway 1 with six clusters of development extending off of it into the comparatively flat areas between the steep headlands and coastal hills that characterize this part of the Northern California coastline. For purposes of this document,

the clusters of east/west development are grouped by neighborhood:

- **Edgemar:** the area from the intersection of Highway 1 and Skyline Boulevard south to Milagra Ridge.
- **Sharp Park:** the area from Sharon Way to Mori's Point Road.
- **Vallemar:** the narrow developed area east of Highway 1, adjacent to Reina Del Mar Avenue.
- **Rockaway Beach:** the narrow strip of development along Rockaway Beach and Fassler Avenues.
- **Linda Mar:** a large developed area east of Highway 1 running roughly between Crespi Drive and San Pedro Terrace.
- **Pedro Point:** the developed area west of Highway 1 between Pacifica State Beach and the undeveloped ridge of Pedro Point, the southernmost edge of Pacifica.

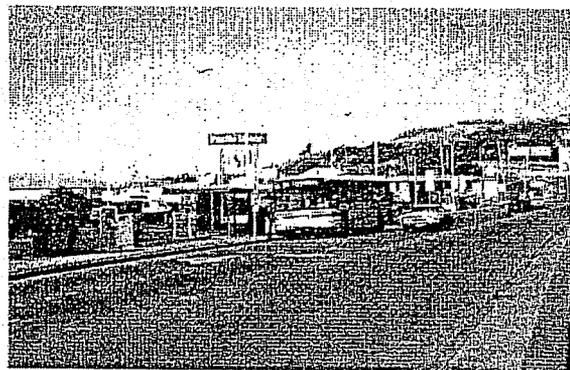
This section first discusses the north/south routes, then describes the other proposed bikeways in each of the six developed areas listed above.

1. North/South Routes

The existing north/south bikeway in Pacifica, described above in Chapter 2: Existing Conditions, runs parallel, and at times immediately adjacent, to Highway 1 for almost the entire length of the city (see Figure 2). In addition to the improvements to the existing bikeway de-

scribed above, this Bicycle Plan proposes expanding the north/south corridor to include bikeways on either side of Highway 1 to minimize crossings where possible. This Plan also proposes a secondary system of alternate bikeways that would be located parallel to the main facility for most of its length. In some cases, these alternate bikeways would be more circuitous Class I trails, in others they would be Class II facilities along quieter streets to provide a greater margin of comfort for less experienced or recreational cyclists. In all cases, signage would be added to direct cyclists to these alternative bikeways.

i. Palmetto Avenue/Esplanade Drive



A new Class II facility will extend the entire length of Palmetto Avenue

A new Class II facility is proposed on Palmetto Avenue from Esplanade Avenue to the southern end of this segment. This would create a continuous Class II facility the entire length of Palmetto Avenue, offering cyclists a more efficient north/south route if they desire it. On the

eastern side of Highway 1, a new Class II facility would be constructed on Oceana Boulevard extending south from Manor Drive.

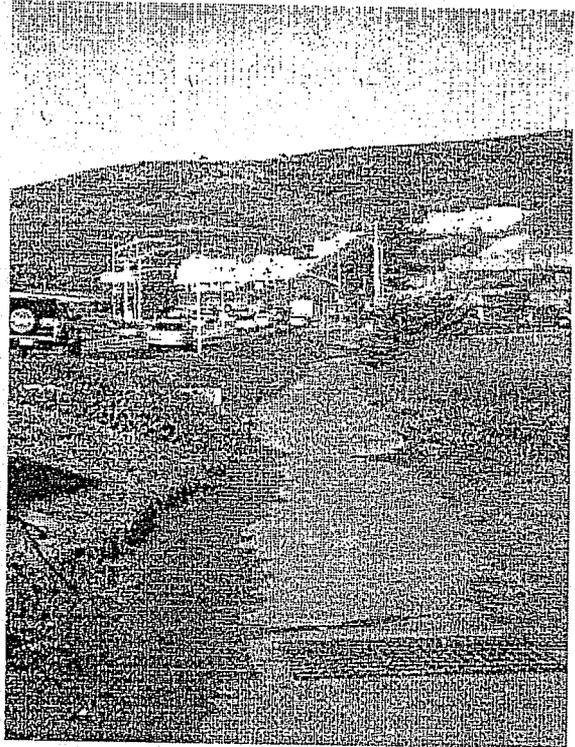
ii. Palmetto Avenue to Mori's Point Road

In addition to the existing north/south bikeway, a parallel Class III facility would be added to Beach Boulevard from Paloma Avenue to Clarendon Road, so that southbound cyclists could ride next to the Ocean. On the eastern side of Highway 1, the proposed Class II facility on Oceana Boulevard would continue throughout this segment.

iii. Highway 1

On the west side of Highway 1, an alternate Class I trail would leave the Highway at the main quarry road and take a curving route all the way south to Pacifica State Beach. There would be one short stretch of Class II on-street bicycle lane to bring this new bikeway through the developed area of Rockaway Beach.

On the east side of Highway 1, there would be an alternative Class II route some distance off the Highway between Fassler Avenue and Crespi Drive. The existing off-street path between Crespi Drive and Linda Mar Boulevard would be improved to a Class I facility, and would be extended past Linda Mar Boulevard parallel to Highway 1.



An existing path parallel to Highway 1 will be converted into a Class 1 trail

This Class I trail would turn eastwards to run parallel to San Pedro Terrace, and continue as far as Peralta Road.

2. Edgemar

In addition to the main and alternative north/south bikeways described above, a number of other bikeways are proposed for the Edgemar neighborhood. The following bikeways would be Class II:

- Gateway Drive from Skyline Drive to Hickey Boulevard

- Hickey Boulevard from Skyline Boulevard to Monterey Road, Monterey Road west to Fremont Avenue, Fremont Avenue to Nelson Avenue, Nelson Avenue to Manor Drive, and Manor Drive across Highway 1 to Esplanade Drive.
- Catalina Avenue from Hickey Boulevard to Brookhaven Court
- Inverness Drive from Hickey Boulevard to Glencourt Way, and Glencourt Way east to Skyline Boulevard.
- Westline Drive from Palmetto Avenue to Mussel Rock

The Class III bikeway in Edgemar would run along Catalina Avenue from Brookhaven Court to Coral Ridge Avenue, on Coral Ridge Avenue to Farallon Avenue, on Farallon Avenue to Channing Way, on Channing Way to Fremont Avenue, and on Fremont Avenue as far as Nelson Avenue, where the bikeway would become a Class II facility.

3. Sharp Park

In addition to the north/south bikeways described above, a number of bikeways would run through the Sharp Park neighborhood.

The Class II on-street bicycle lanes would be:

- Paloma Avenue from the western side of Highway 1 to Mirador
- San Jose Avenue from Beach Boulevard to Oceana Boulevard
- Eureka/Talbot Avenue from Oceana Boulevard to its eastern terminus
- Sharp Park Road from the western side of Highway 1 to College Road. The eastbound lane is already in place and does not require improvements. The westbound lane is being constructed in Spring, 2000. Sharp Park Road provides connections to a number of paved and unpaved trails within the GGNRA.
- Rifle Range Road from Oceana Boulevard to its eastern terminus
- Mori's Point Road from the eastern edge of Highway 1 to its eastern terminus.

The Class III on street bicycle routes would run along:

- Paloma Avenue from Beach Boulevard to the western edge of Highway 1
- Mirador to Carmel Avenue, and Carmel Avenue to its eastern terminus. This has the potential to link to an unpaved trail in the GGNRA. However, there is a narrow strip of private property between the terminus of Carmel Avenue and the beginning of the trail, so no link is possible at this time. If conditions in the future were to make such a connection possible, the City would pursue it.
- Moana Avenue from Oceana Boulevard to its eastern terminus

- Clarendon Road from Oceana Boulevard to Frances Avenue, Frances Avenue to Brighton Road, Brighton Road to Kohala Avenue, Kohala Avenue to Goodman Road, and Goodman Road to Eureka/Talbot Avenue.
- Ridgeway Drive from its eastern terminus to Lundy Way, Lundy Way to Westport, Westport under Highway 1 to Bradford Way, Bradford Way to Fairway Drive, Fairway Drive to Seaside Gate Drive, and Seaside Gate Drive back to Bradford Way.

The off-street trails in the Sharp Park Neighborhood include paved trails within the Golden Gate National Recreation Area, and a Class I facility along the levy on the western side of the Sharp Park Golf Course. This trail would dead end at Mori's Point Road, where it runs into private property. If the opportunity to continue the trail across this privately-owned land to meet up with the Class I Calera Creek Trail in the quarry arose, the City would pursue it.

4. Vallemar

In addition to the north/south bikeways described above, there would be a Class II bicycle lane along Reina Del Mar Avenue which would loop back on Berendos Avenue. There would also be a number of paved and unpaved trails within the Golden Gate National Recreation Area and the City-owned property within the quarry site connecting over the headland to Rockaway Beach.

5. Rockaway Beach

In addition to the north/south bikeways described above, there would be a Class II bicycle lane on Fassler Avenue from Highway 1 to its eastern terminus. This lane would link to two main routes in the Linda Mar neighborhood – Class II facilities on Terra Nova Boulevard and Crespi Drive. The lane on Fassler would also connect to a Class I trail through the Golden Gate National Recreation Area. There would be a Class III bicycle route on Rockaway Beach Avenue from Highway 1 to its eastern terminus. Finally, there would be a Class I off-road trail extending west off of Crespi Drive a short distance parallel to Fassler Avenue.

6. Linda Mar

In addition to the north/south bikeways described above, a number of bikeways would run through the Linda Mar neighborhood.

The Class II on-street bicycle lanes would be:

- Crespi Drive from Highway 1 to Fassler Avenue.
- Terra Nova Boulevard from Fassler Avenue to Oddstad Boulevard.
- Everglades Drive from Terra Nova Boulevard to Oddstad Boulevard.
- Alicante Road from Terra Nova Boulevard to Linda Mar Boulevard.
- Oddstad Boulevard from its southern end to Cape Breton Drive, and Cape Breton Drive to its eastern terminus.

- San Pedro Valley Park's entrance road, from Oddstad Boulevard to its eastern terminus.
- Rosita Road from its western terminus at Peralta Road to its eastern terminus at Oddstad Boulevard.
- Peralta from its intersection with San Pedro Terrace to its eastern terminus at Higgins Way.
- Perez Drive from Rosita Road to its southern terminus.
- Linda Mar Boulevard from Highway 1 to De Solo Drive, and De Solo Drive to Montezuma Drive.

The proposed Class III bicycle lanes are:

- Lerida Way from Crespi Drive to Terra Nova Boulevard.
- Manzanita Drive from Crespi Drive to Alicante Road.
- Seville Drive from Crespi Drive to Linda Mar Boulevard, and Adobe Drive from Linda Mar Boulevard to Rosita Road.
- Montezuma Drive from De Solo Drive to Peralta Road, and Peralta Road to Rosita Road.

7. Pedro Point

In addition to the north/south routes described above, there would be one Class II bicycle lane in the Pedro Point neighborhood running on San Pedro Avenue from Highway 1 to Danmann, and on Danmann to its northern ter-

minus. There would also be a number of off-road trails constructed as part of a separate effort.

C. Proposed Bicycle Parking Facilities



The City would work with merchants to install bicycle racks at Manor Plaza.

This plan proposes the addition of new racks at the following locations:

- The Manor Plaza shopping area. The City should work with private landowners to encourage the installation of several sets of bicycle racks in this area.
- The park and beach access at the northern end of Esplanade Drive.
- The new Pedro Point Headlands
- All public schools.
- All employers with more than 30 employees

Until December of 1999, there was one set of bicycle lockers in Pacifica at the Crespi park-and-ride lot. This plan proposes that the Crespi lot lockers be replaced, and that a second set of lockers be added at the Linda Mar park-and-ride lot.

D. Proposed Intermodal Facilities

There is one intermodal facility in Pacifica, located at the southern end of the City as described above in Chapter 2: Existing Conditions. No other intermodal facilities are proposed in Pacifica.

E. Proposed Changing and Storage Facilities

As described above in Chapter 2: Existing Conditions, there are no changing facilities with indoor showers and lockers in Pacifica. There are currently three more basic changing facilities near

employment centers that could be used by cyclists. A fourth such facility is already funded and will be constructed in Spring, 2000.

This plan proposes upgrading the Rockaway Beach changing facility to add toilets and outdoor showers. No new changing facilities are proposed.

4 SAFETY & EDUCATION PROGRAMS

This chapter describes accident rates and bicycle-related community safety programs in Pacifica.

A. Accident Rates

The rate of reported injury accidents involving bicyclists in Pacifica has declined somewhat over the period between 1994 and 1999: from a peak of eleven in 1995, the number of reported injury accidents involving bicycles has decreased to five in both 1998 and 1999.¹ Bicycle accident locations for each of these years are shown in Figure 4.

There were three intersections with multiple accidents. Each of the following intersections had two reported accidents:

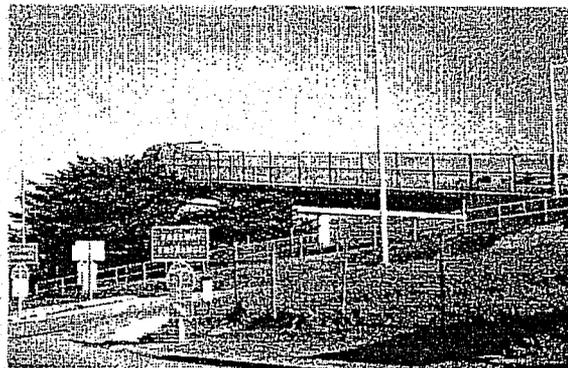
- The intersection where the freeway overpass on Manor Drive meets Palmetto Avenue.
- The intersection where the freeway overpass on Paloma Avenue meets Francisco Boulevard.
- The intersection of Reina del Mar Avenue and Highway 1.

Of the 43 reported accidents between 1994 and 1999, 12 were on one of the existing bikeways,

and 21 were on one of the proposed bikeways, which suggests that the proposed network of bikeways reflects actual use patterns in Pacifica. In 28 of the 40 incidents where fault was recorded, the bicyclist was reported to be at fault in the collision. The most common causes for the collisions were:

- 6 incidents of cyclists traveling on the wrong side of the road;
- 11 incidents of improper turns or passing, in six cases by a cyclist; and
- 13 incidents where cyclists violated an automobile's right-of-way, in at least six cases by running a stop sign or signal.

Other causes were driving at unsafe speeds, driving under the influence of alcohol, and road hazards.



Pacifica has three highway crossings especially for pedestrians and cyclists to enhance safety

The age of the cyclists involved in the accidents ranged from five-years old to over 60. 17 of the 40 accidents where age was recorded involved

cyclists between the ages of eleven and 20, which indicates that youth are particularly at-risk for bicycle accidents in Pacifica.

B. Education Programs

This section describes existing and proposed education programs in Pacifica. Education is a key component of promoting cycling because it can help reduce accidents and increase cyclists' confidence and urban riding skills. Teaching children riding skills can improve their safety now, and encourage them to ride more in the future.

1. Existing Education Programs

Existing education programs in Pacifica are focused on children. A police officer gives a talk in elementary schools in the spring of most years. In 1999, the Pacifica Police Department and local merchants sponsored a "Bicycle Rodeo" for children. The Bicycle Rodeo featured carefully-supervised courses to test different types of riding skills, safety tips, and the distribution of free helmets. Several hundred children participated in the event, which the Police Department hopes to hold annually.²

2. Proposed Education Programs

There are a number of programs that could be implemented in Pacifica to further promote cycling and improve safety.

a. Youth Education

- Make the Bicycle Rodeo an annual event.
- In addition to the Bicycle Rodeo, provide a program to ensure wide distribution of free or very inexpensive bicycle helmets to all bicycling children under the age of 16.
- Expand the police department's outreach program to schools.
- Distribute appropriate informational material to all schools in Pacifica in conjunction with bicycle education campaigns that include safety information and guides to the existing bicycle facilities in Pacifica.
- Develop and implement a bicycle safety component for high school driver education programs.

b. Adult Education

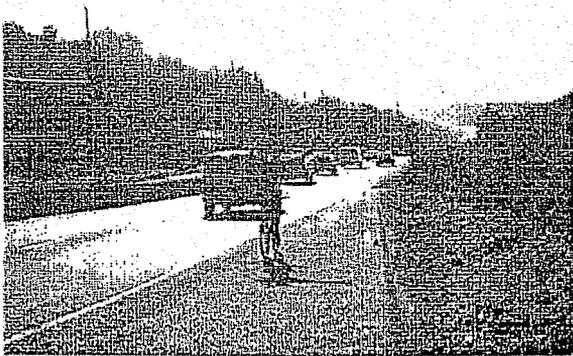
- Promote and encourage bicycle-related education, including repair and maintenance classes, safe bicycle handling classes for adults and children, and other bicycle-related events, such as a Bike-to-Work day, or races.
- Publicize the importance of wearing a bicycle helmet to adults.
- Distribute brochures regarding bicycle safety at public events

c. *Motorist Education*

- Work with utility companies to provide an insert into mailings describing cyclists' right to the road and how motorists should operate vehicles when cyclists are present.
- Develop a "Share the Road" campaign.
- Create a public service campaign that focuses on courtesy when operating around bicyclists.

¹ Accident data for 1997 was not available.

² Conversation with Jim Tasa, Pacifica Police Department. January 6, 2000.



Because cyclists will travel on the roadway on the majority of Pacifica's bikeways, education programs for motorists will be crucial

d. *Other Education*

- Enforce traffic rules for bicyclists and motorists.
- Educate City maintenance and utility crews about bicyclists' needs.

5 COSTS AND PRIORITIES FOR IMPLEMENTATION

The following table shows the project costs for improvements proposed in this Plan, and groups the proposed improvements and additions to the existing bikeway system in Pacifica into categories based on their priority for implementation.

The top priority is to close the gaps in the existing north/south route south of Manor Drive, between Reina del Mar and Rockaway Beach, and at the San Pedro Creek Bridge. Other immediate actions including filling in identified gaps in signage, encouraging merchants to provide bicycle parking, and providing bicycle lockers at the intermodal facility. Medium term priorities include upgrading the existing north/south bikeway, installing new signage and bicycle parking, and constructing new east/west Class II routes. Long term priorities include constructing alternative routes parallel to the main north/south routes and completing the proposed system of bikeways.

The estimated total for all of the proposed improvements would be \$1,008,282. Details of the cost estimate can be found in Appendix C, below.

Table 1: Priorities for Implementation

Priority	Project	Costs
Immediate Priorities		
1	Close gaps in existing north/south route	
	- South of Manor Drive	\$54,208
	- West side of Highway 1 between Reina Del Mar and Rockaway Beach	\$1,014
	- San Pedro Creek Bridge, both sides of Highway 1	\$200,000
2	Fix identified gaps in existing signage	\$1,330
3	Work with business in the Manor Plaza area to install bicycle parking.	\$2,093
4	Restore bicycle lockers at Crespi park and ride lot and add them to the Linda Mar park and ride lot.	\$30,000

Priority	Project	Costs
Medium Term Priorities: 2000 to 2005		
5	Upgrade existing north/south route to a Class II facility or better between Westline Drive and Mori's Point Road	\$5,070
6	Place bicycle route signage along all roads with proposed bikeways to bring them to a Class III level.	\$17,955
7	Provide bicycle racks at all schools in Pacifica.	\$9,758
8	Add signage directing cyclists to existing Highway 1 crossings	\$1,064
9	Begin work on major east/west Class II routes to provide safe connections to as many schools and open spaces as possible. The following alignments are the highest priorities:	
	- Hickey Boulevard from Skyline Boulevard to Monterey Road, Monterey Road west to Fremont Avenue, Fremont Avenue to Nelson Avenue, Nelson Avenue to Manor Drive, and Manor Drive across Highway 1 to Esplanade Drive.	\$3,042
	- Reina del Mar Avenue	\$1,560
	- Fassler Avenue	\$2,145
	- Terra Nova Boulevard	\$2,223
	- Crespi Drive	\$3,783

-Rosita Road \$2,418

Priority	Project	Costs
Long Term Priorities: 2005-2010		
10	Construct alternative routes parallel to the main north/south route:	
	- Oceana Boulevard	\$3,042
	- East side of Highway 1 between Reina del Mar Avenue and Westport Road	\$819
	- Lundy Way from Westport Road to Sharp Park Road	\$702
	- Palmetto Avenue from Esplanade Drive to beach access lot	\$936
11	Extend new Class I facility between Crespi Drive and Linda Mar Avenue as far as Peralta Road.	\$224,576
12	Fill in remaining Class II and recreational routes as possible.	\$410,544
	Total	\$1,008,282

APPENDIX A: COMMUNITY INVOLVEMENT WITH THE PLAN

The proposed system of bikeways and other facilities in this Bicycle Plan has been generated and refined through extensive feedback from more than 100 members of the Pacifica community. The current Plan is based on the City's 1991 Draft Trails Master Plan, which was created through an intensive public process. The Pacifica Bicycle Plan was developed on the basis of feedback from a public meeting in December 1999 where residents reviewed and updated the recommendations of the 1991 Draft Plan, and other comments from Pacifica residents as described below.

A. 1991 Draft Trails Master Plan

In 1990, the City conducted a preliminary public workshop to identify existing trails and commonly-used bicycle routes. John Northmore Roberts & Associates conducted two additional public workshops during the creation of the 1991 Trails Master Plan so that community members could review and rework the Plan's recommendations. More than 100 Pacifica residents attended each of these workshops.

The first of these two workshops was held in November 1990 to present the consultant team's evaluation of the existing trails system; to draw on local knowledge of existing trails and bicycle routes to identify locations where new facilities were needed; and to develop goals and policies for the Plan. The preliminary Plan was completed on the basis of this public input, and presented to the community at a second public workshop in January 1991 and subsequent smaller meetings. A preferred plan was developed based on input from the public workshop, additional meetings with City staff and commissions, and letters from concerned citizens.

B. The Pacifica Bicycle Plan

The present Bicycle Plan for Pacifica took the 1991 Draft Trails Master Plan as a starting point. A public meeting was held December 15, 1999 to review the recommendations of the 1991 Plan and an assessment of existing conditions prepared by the consultant team. In addition to feedback received at the meeting, handouts of the proposed network of bikeways were distributed with questionnaires on the back to enable people not at the meeting to respond to the Plan's proposals.

APPENDIX B: RELATIONSHIP TO OTHER LOCAL AND REGIONAL PLANS

This section describes the relationship between the proposed bicycle plan for Pacifica and existing local and regional transportation, air quality, and energy policy.

A. City of Pacifica

This section describes the relationship between the Bicycle Plan and existing City of Pacifica policies in its General Plan and 1991 Draft Trails Master Plan.

1. General Plan

This Plan would be consistent with policies in the Circulation, Open Space, and Conservation Elements of the Pacific General Plan.

The Circulation Element of Pacifica's General Plan contains the following policies relevant to bicycle planning:

- Encourage alternatives to motor vehicle transportation.
- Develop safe and efficient bicycle, hiking, equestrian and pedestrian access within Pacifica and to local points of interest.

- Develop a system of internal pedestrian/bicycle pathways connecting all neighborhoods to the City's north-south pathway.¹

The Draft Bicycle Plan implements all three of these policies. In addition, the Circulation Element includes a map of proposed bicycle facilities almost all of which are incorporated into the network of facilities in this Draft Bicycle Plan.

The Open Space Element of the Pacifica General Plan contains Policy 4, which calls for the creation of "communitywide links to open space and recreation facilities."² The third goal of the Action Program for this Element elaborates on this, calling for the promotion of bikeways, "as links between open spaces. Each valley neighborhood should be connected to the linking trail system to make open space and recreation facilities available to all."³ Finally, the third access goal of the Open Space Element lists as a goal, "To enhance public safety and facilitate visitor access, safe bicycle and walking paths should be established between neighborhoods and throughout the City."⁴ As shown in Figure 6, the comprehensive network of bikeways proposed in this Draft Bicycle Plan would create links between Pacifica's many open space resources. The proposed network would also serve each of Pacifica's neighborhoods and create safe links between them.

Finally, promoting the use of bicycles is in keeping with Policy 6 of the Conservation Element

of the Pacifica General Plan, which calls for the development of policies to conserve energy, and specifically lists the creation of bikeways as an energy-saving measure.⁵

2. 1991 Draft Trails Master Plan

As described above in Appendix A, this Bicycle Plan took the system of bikeways proposed in the 1991 Draft Trails Master Plan as its starting point, revising it to respond to community input and changed conditions. This Plan continues to promote the goals of the previous plan, and would implement many of its recommendations.

B. San Mateo County

This section describes the relationship between this Draft Bicycle Plan and San Mateo County's current transportation policies as developed in the Draft San Mateo County Comprehensive Bicycle Route Plan, the Countywide Transportation Plan, and the Final Congestion Program for 1999.

1. Draft San Mateo County Comprehensive Bicycle Route Plan

As shown in Figure 5, the County has proposed two main bicycle corridors through Pacifica:

- A north/south corridor parallel to Highway 1.
 1. For the most part, the proposed alignment of this Class II facility closely follows the existing route. Where it diverges in fol-

lowing a more efficient path down Palmetto Avenue, it follows one of the new bikeway alignments proposed in this Plan. In addition, the County's Plan proposes a Class I facility paralleling the main north/south route on the western side of Highway 1 from Pacifica State Beach to Mori's Point Road. The Draft Pacifica Bicycle Plan proposes a Class I trail along roughly the same stretch of Pacifica.

- An east/west corridor along Sharp Park Road. This proposed Class II facility corresponds to the existing major east/west bikeway in Pacifica.

Thus this Plan is compatible with the County's proposed routes.

2. Countywide Transportation Plan

The City/County Association of Governments of San Mateo County is currently updating the Countywide Transportation Plan. The policies detailed in the Draft Plan include, "Developing and maintaining a bicycle transportation system that encourages the use of bicycles as a safe, efficient, and convenient alternative to the automobile." The Countywide Transportation Plan's specific provisions regarding bicycle facilities in San Mateo County will be drawn from the Comprehensive Bicycle Route Plan, which corresponds closely to the Pacifica Bicycle Plan as discussed above.

3. Countywide Congestion Management Plan

As part of its Congestion Management Plan, San Mateo County has implemented a number of initiatives to promote alternative transportation methods including bicycles as a tool for reducing congestion on the County's road. Among the programs relating to bicycles are:

- The Bicycle Parking Project, which funds bicycle lockers and racks at work places.
- Distributing funds from the Bay Area Air Quality District for, "bicycle facility improvement projects that are included in an adopted countywide bicycle plan or congestion management plan."⁶

Promoting the use of bicycles by providing safe and efficient bikeways throughout Pacifica is thus in keeping with the Countywide Congestion Management Plan

¹ City of Pacifica General Plan, pages 13-14, and 91c.

² City of Pacifica General Plan, page 17.

³ City of Pacifica General Plan, page 18.

⁴ City of Pacifica General Plan, page 126.

⁵ City of Pacifica General Plan, pages 16 and 117.

⁶ Countywide Congestion Management Plan, pages 5-10.

APPENDIX C: BICYCLE FACILITIES IMPROVEMENTS AND PRIORITIES

Priority	Description	Total Length or Units	Unit Cost	Total Cost ¹	Timeframe
1	Close gaps in existing north/south bikeway: South of Manor Drive (Class I, 8' wide) West side of Highway 1 between Reina Del Mar and Rockaway Beach (Class II)	5,600 ft ² paved path	\$5/ft ² asphalt + \$4.68/ft ² rough and finish grading \$0.39/lf	\$54,208 \$1,014	Immediate
	San Pedro Creek Bridge, both sides of Highway 1 (Class II)	1,200 lf of paved path		\$200,000	
2	Fix identified gaps in existing signage	10 signs	\$133/sign	\$1,330	Immediate
3	Bicycle parking at Manor Plaza	3 racks	\$697/rack	\$2,093	Immediate
4	Restore bicycle lockers at Crespi Lot and add them to Linda Mar lot	2 sets of 10 lockers	\$1,500/locker	\$30,000	Immediate
5	Upgrade existing north/south bikeway to a Class II facility or better between Westline Drive and Mori's Point Road	13,000 lf of striping	\$0.39/lf	\$5,070	2005
6	Place bicycle route signage along all roads with proposed bikeways to bring them to a Class III level. Assumes signs approximately every 1,000 feet. 135 signs	135 signs	\$133/sign	\$17,955	2005
7	Provide bicycle racks at all schools in Pacifica (2 racks at each of the seven schools that do not currently have racks)	14 racks	\$697/rack	\$9,758	2005
8	Add signage directing cyclists to existing Highway 1 crossings	8 signs	\$133/sign	\$1,064	2005

Priority	Description	Total Length or Units	Unit Cost	Total Cost ¹	Timeframe
9	Begin work on major east/west Class II routes to provide safe connection to as many schools and open spaces as possible. The following routes are the highest priorities: Hickey Boulevard to Esplanade Drive Reina del Mar Avenue Fassler Avenue Terra Nova Boulevard Crespi Drive Rosita Road	7,800 lf of striping 4,000 lf of striping 5,500 of striping 5,700 lf of striping 9,700 lf of striping 6,200 lf of striping	0.39/lf	\$3,042 \$1,560 \$2,145 \$2,223 \$3,783 \$2,418	2005
10	Construct alternative bikeways parallel to the main north/south route: Oceana Boulevard East side of Highway between Reina del Mar and Westport Road Lundy Way from Westport Road to Sharp Park Road Palmetto Avenue from Esplanade Drive to the Beach Access Lot	7,800 lf of striping 2,100 lf of striping 1,800 lf of striping 2,400 lf of striping	0.39/lf	\$3,042 \$819 \$702 \$936	2010
11	Extend the new Class I facility between Crespi Drive and Linda Mar Avenue as far as Peralta Road (8' wide)	23,200 ft ²	\$5/ft ² asphalt + \$4.68/ft ² rough and finish grading	\$224,576	2010
12	Fill in remaining Class II and recreational routes as possible Class I bikeways (8' wide) Class II bikeways	40,800ft ² 40,000 lf	\$5/ft ² asphalt + \$4.68/ft ² rough and finish grading 0.39/lf	\$394,944 \$15,600	
Total				\$1,008,282	

¹ Includes 32% mark-up for GC, OH, PB, C, and a 24% mark-up for design and administration.

APPENDIX D: RELATIONSHIP TO REQUIREMENTS OF BICYCLE TRANSPORTATION ACT

California law requires that bicycle plans prepared by local jurisdictions include eleven distinct components in order to qualify for funding from the State Bicycle Lane Account under the California Bicycle Transportation Act. This appendix details how this plan conforms to the State's requirements.

A. Estimated Number of Existing and Future Bicycle Commuters

According to the 1990 Census transportation-to-work data, only 0.3% of Pacifica's population, or 70 people, commuted to work by bicycle. This is rather low when compared to the percentage of people bicycling to work in the surrounding area: 0.8% of the population of San Mateo County, and 1.1% of the population of the Bay Area as a whole. These numbers do not take into account trips by school children, however, which may represent a substantial portion of the bicycle trips in Pacifica.

There are a number of likely reasons for the relatively low numbers of bicycle commuters reported in Pacifica in the 1990 Census. First, there

were only a few short unconnected segments of designated bicycle route in Pacifica in 1990. Second, bicycling any significant distance in Pacifica requires negotiating steep grades, whether over the headlands that separate many of the developed areas of the City, or into the residential development that stretches east into the coastal hills. A final cause may be the relatively low number of jobs in Pacifica, which is a predominantly residential community.

The potential pool of cyclists is quite large, however, and consists of two main groups: adults who could bicycle to work, as covered in the Census, and children who could bicycle to school. It is generally accepted in transportation planning that people will be most likely to bicycle to work if they can make the trip in 30 minutes or less. According to the 1990 Census, 1,484 people in Pacifica lived within a 9-minute drive of their place of work, which typically translates into a 30-minute or less bicycle ride. Thus 7.1% of Pacifica's workforce could conceivably switch to bicycling for their primary commute mode. Generally, planners estimate that roughly 10% of the potential bicycling population could be induced to switch modes of transportation. This would suggest a target population of 148 riders, an increase of over 200% over 1990 ridership to work figures.

The second pool of potential riders consists of children bicycling to school. While there is no way to know how many students bicycle to

school now, it is possible to develop a rough estimate of how many could bicycle to school in the future if their parents considered the bicycle facilities safe. According to the Pacifica School District, there are 4,392 students in Pacifica schools.¹ Although most of the children are not old enough to drive themselves, some percentage of them are driven to school by parents, and thus some trip reduction would result from children bicycling to school. Following the lead of the San Mateo County Comprehensive Bicycle Route Plan, we estimate that approximately 1/5 of the population of school age children, or 878 children, could bicycle to school if facilities were improved.² Thus the total target population of riders to be served by the Pacifica Bicycle Plan would be 1,026 people.

**B. Land Use and Population Density
(map and description)**

The City of Pacifica's General Plan includes a map and description of land uses, in addition to information on population and density. The General Plan is hereby incorporated into the City's Bicycle Plan by reference.

**C. Existing and Proposed Bikeways
(map and description)**

Pacifica's existing bikeways are described in Chapter 2: Existing Conditions, and shown in

Figures 1 and 2 of this Plan. The proposed bikeways are described in Chapter 3, and shown in Figure 3 of this Plan.

**D. Existing and Proposed End-of-Trip
Bicycle Parking Facilities (map
and description)**

There are currently 24 bicycle parking facilities in Pacifica, as shown in Figure 1 and discussed in Chapter 2 above. Proposed bicycle parking facilities are discussed in Chapter 3 and shown in Figure 3 of this Plan. Among other recommendations, this Plan proposes the provision of bicycle parking at all public schools and all major employers.

**E. Existing and Proposed Bicycle
Transport and Parking Facilities
for Transportation Connections
(map and description)**

The only intermodal exchange in Pacifica is at the southern end of the City where a number of bus routes meet, including an express bus to downtown San Francisco and several lines connecting to BART and Caltrain stations. This intermodal exchange is discussed in Chapter 2, and shown in Figure 1. At present this exchange is served by two park-and-ride lots, neither of which has any facilities for bicycle parking. This Plan proposes adding a set of bicycle lockers at each lot.

F. Existing and Proposed Changing Facilities (map and description)

There are currently no indoor shower facilities for bicycle commuters within the City of Pacifica. There are three changing facilities, however, two of which have running water and restrooms as described in Chapter 2, and shown in Figure 1. This Plan proposes the upgrade of the third changing facility with water and sewer connections, and the construction of a fourth facility as part of the Calera Creek Bicycle Trail. No indoor shower facilities for bicycle commuters are proposed.

G. Bicycle Safety and Education Programs (description)

The existing and proposed bicycle safety and education programs in Pacifica are described in Chapter 4 of this Plan.

H. Citizens and Community Participation

Appendix A of this document describes the extensive public involvement that went into developing and refining this Bicycle Plan, including four public workshops.

I. Consistency with Long Range Transportation, Air Quality, and Energy Plans

Appendix B describes the relationship between this Draft Bicycle Plan and local and regional transportation, air quality, and energy plans including the Pacifica General Plan, the 1991 Draft Trails Master Plan for Pacifica, the Draft San Mateo County Comprehensive Bicycle Route Plan, the Countywide Transportation Plan, and San Mateo's Final Congestion Program for 1999. This Bicycle Plan is compatible with all of the above plans.

J. Project Descriptions and Priority Listings

Descriptions of the proposed bicycle facilities are contained in Chapter 3. Descriptions of proposed education programs are contained in Chapter 4. A list prioritizing projects for implementation is contained in Chapter 5 of this Plan.

K. Past Expenditures and Future Financial Needs

1. Past Expenditures

In the last ten years, Pacifica has spent approximately \$51,000 on planning for bicycle facilities, including staff and consultant time. The City

has spent approximately \$200,000 on the construction of a Class II bicycle facility on the eastbound side of Sharp Park Road, and \$8,000 on signage and improvements to the north/south bikeway that runs parallel to Highway 1. In addition, the City has received approximately \$520,000 in grant money for the Headland Pedestrian Trail and Calera Creek Bike Trail, and will be spending an additional \$60,000 of City funds on projects starting in spring of 2000, including the creation of a westbound bicycle lane on Sharp Park road, the construction of a Class I trail skirting the quarry site, and the upgrade of an existing off-street pathway between Crespi Drive and Linda Mar Avenue to a Class I facility.

2. Future Financial Needs

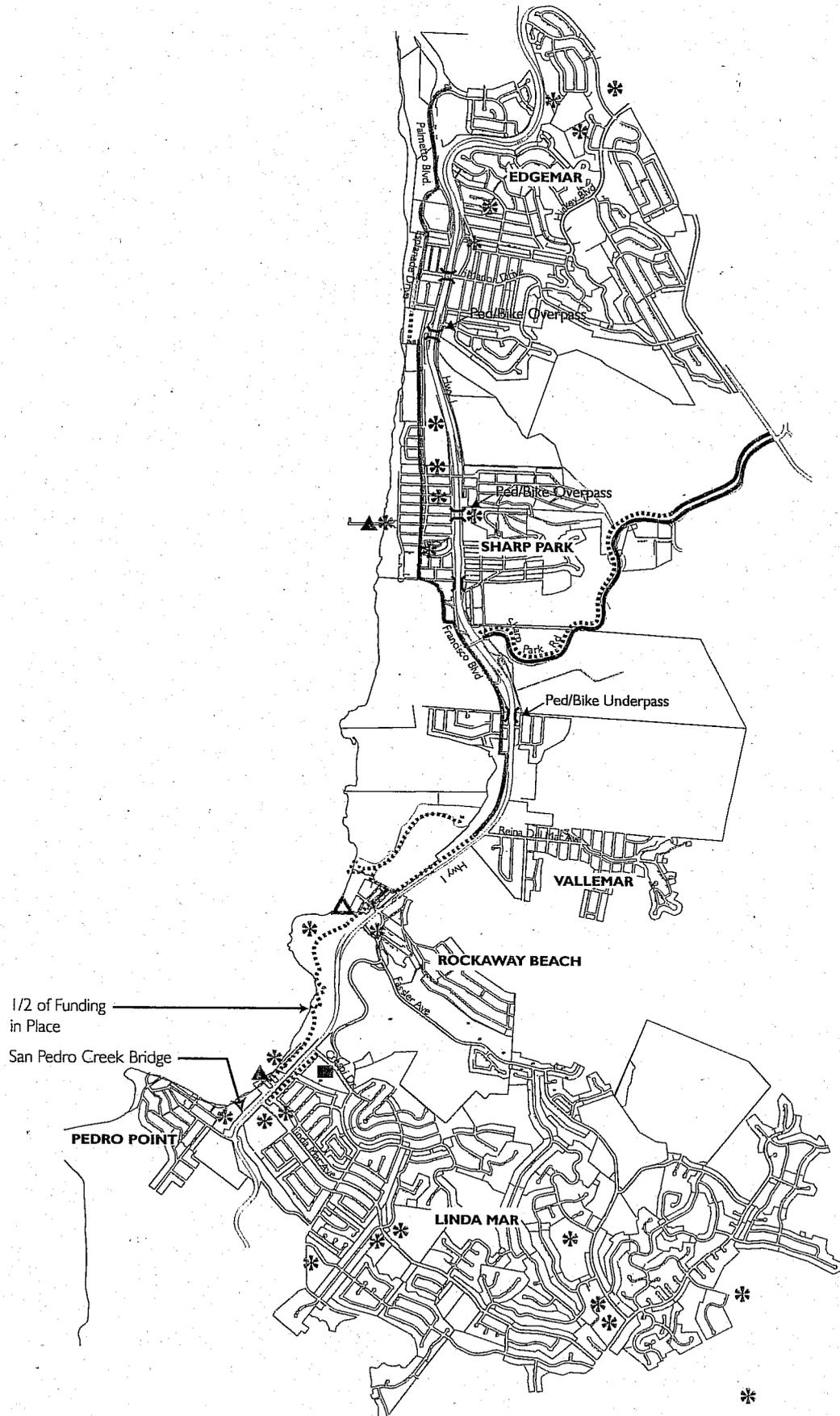
Chapter 5 lists the proposed improvements to Pacifica's bicycle facilities by priority for implementation. It also includes preliminary cost estimates for each project, details of which can be found in Appendix C, below.

The top priority is to close the gaps in the existing north/south route south of Manor Drive, between Reina del Mar and Rockaway Beach, and at the San Pedro Creek Bridge. Other immediate actions including filling in identified gaps in signage, encouraging merchants to provide bicycle parking, and providing bicycle lockers at the intermodal facility. Medium term priorities include upgrading the existing north/south bikeway, installing new signage and bicycle park-

ing, and constructing new east/west Class II routes. Long term priorities include constructing alternative routes parallel to the main north/south routes and completing the proposed system of bikeways.

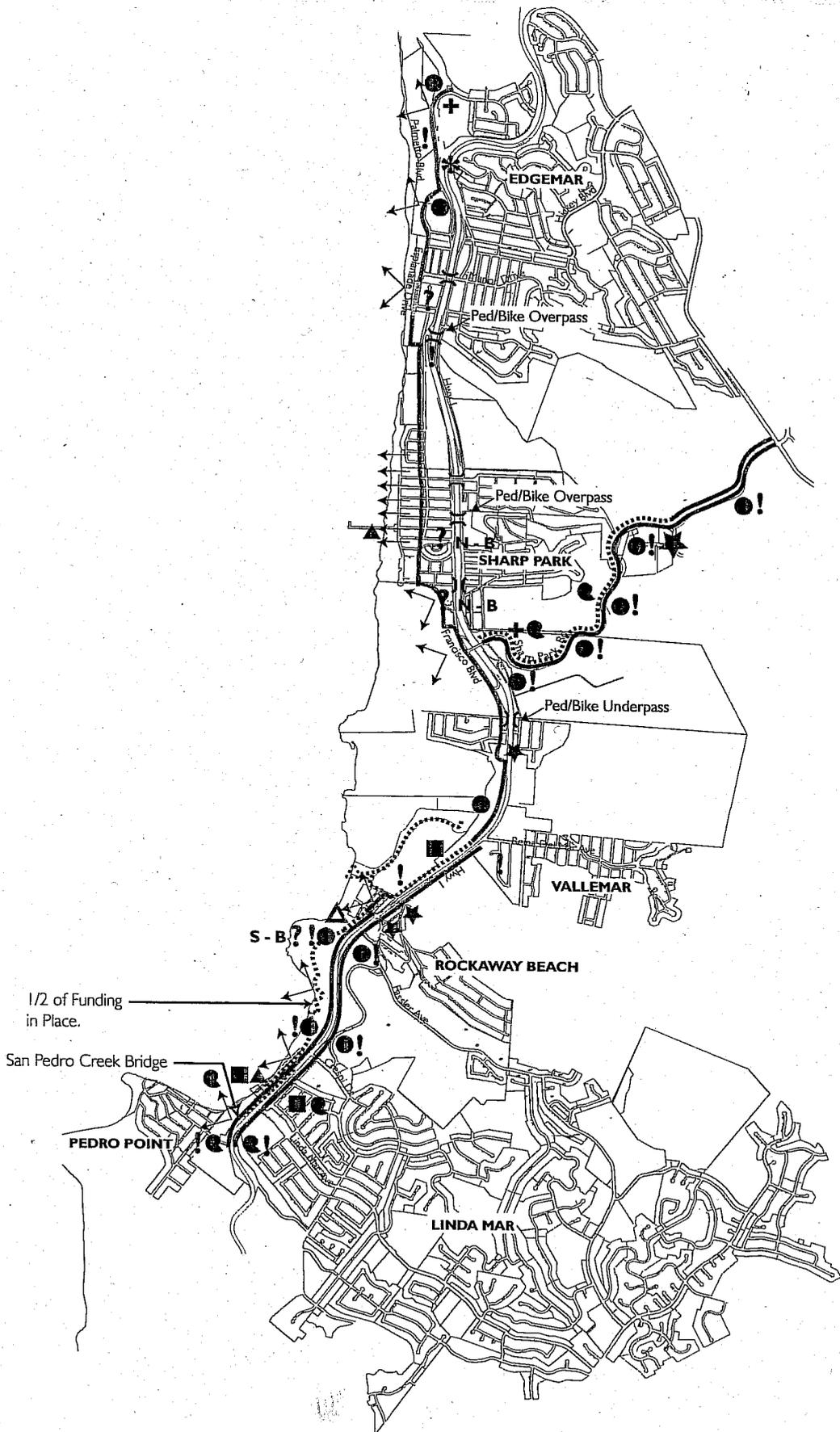
The estimated total for all of the proposed improvements would be \$1,008,282.

¹ 1/12/2000 conversation with John Perry, Superintendent of the Laguna Salada School District (K-8). 1/11/2000 conversation with Sue Cook, Assistant to the Superintendent of the Jefferson Union High School District.



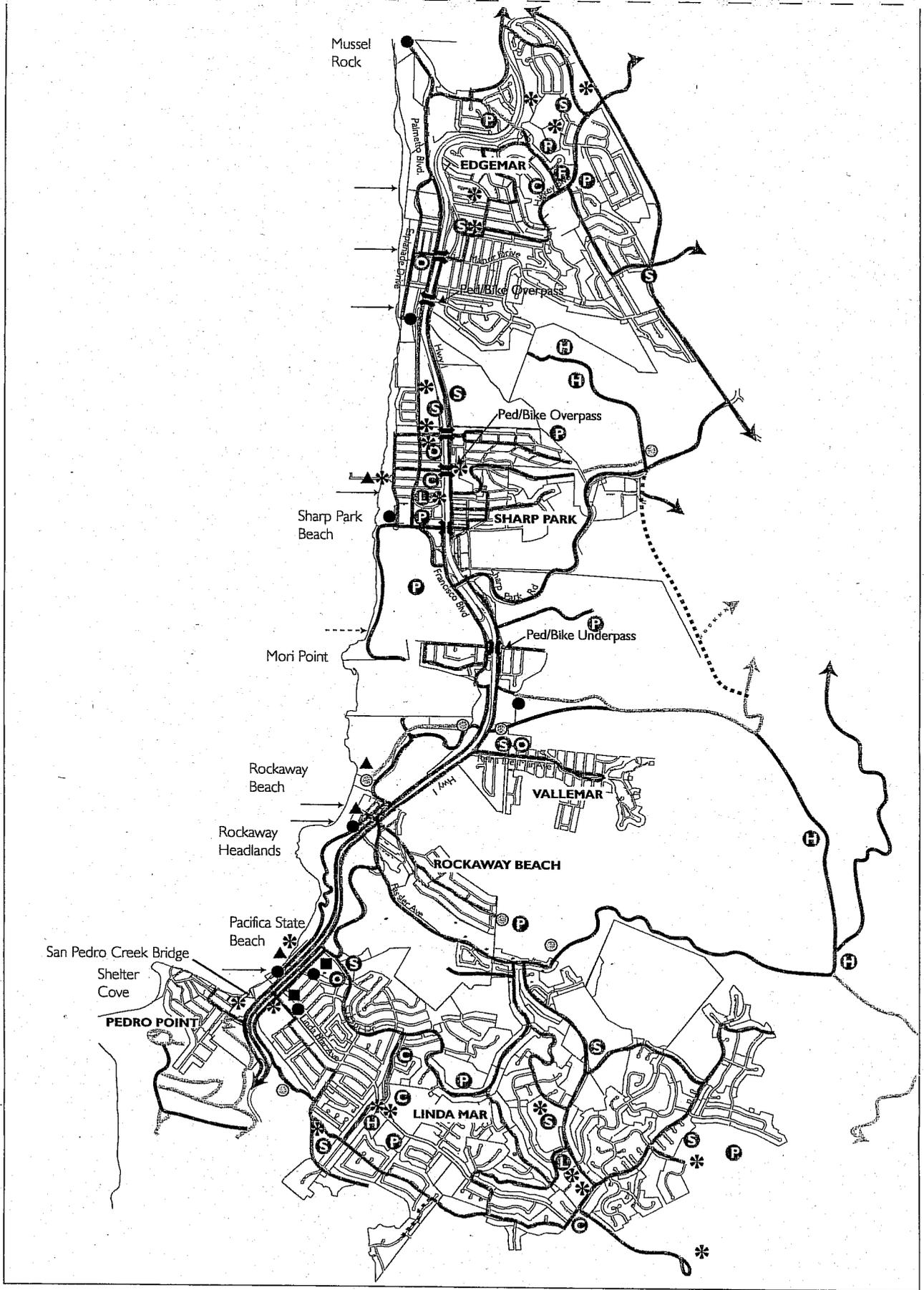
- | | |
|---------------------------------|-------------------------|
| Class I Trail | Changing Room w/Water |
| Class II Lane or Better | Changing Room w/o Water |
| Class III Route | Bicycle Parking |
| Dirt Trail | Bicycle Lockers |
| Bridge Over Hwy I | |
| Tunnel Under Hwy I | |
| Dashes Indicate Funded Projects | |

FIGURE 1
EXISTING BICYCLE FACILITIES



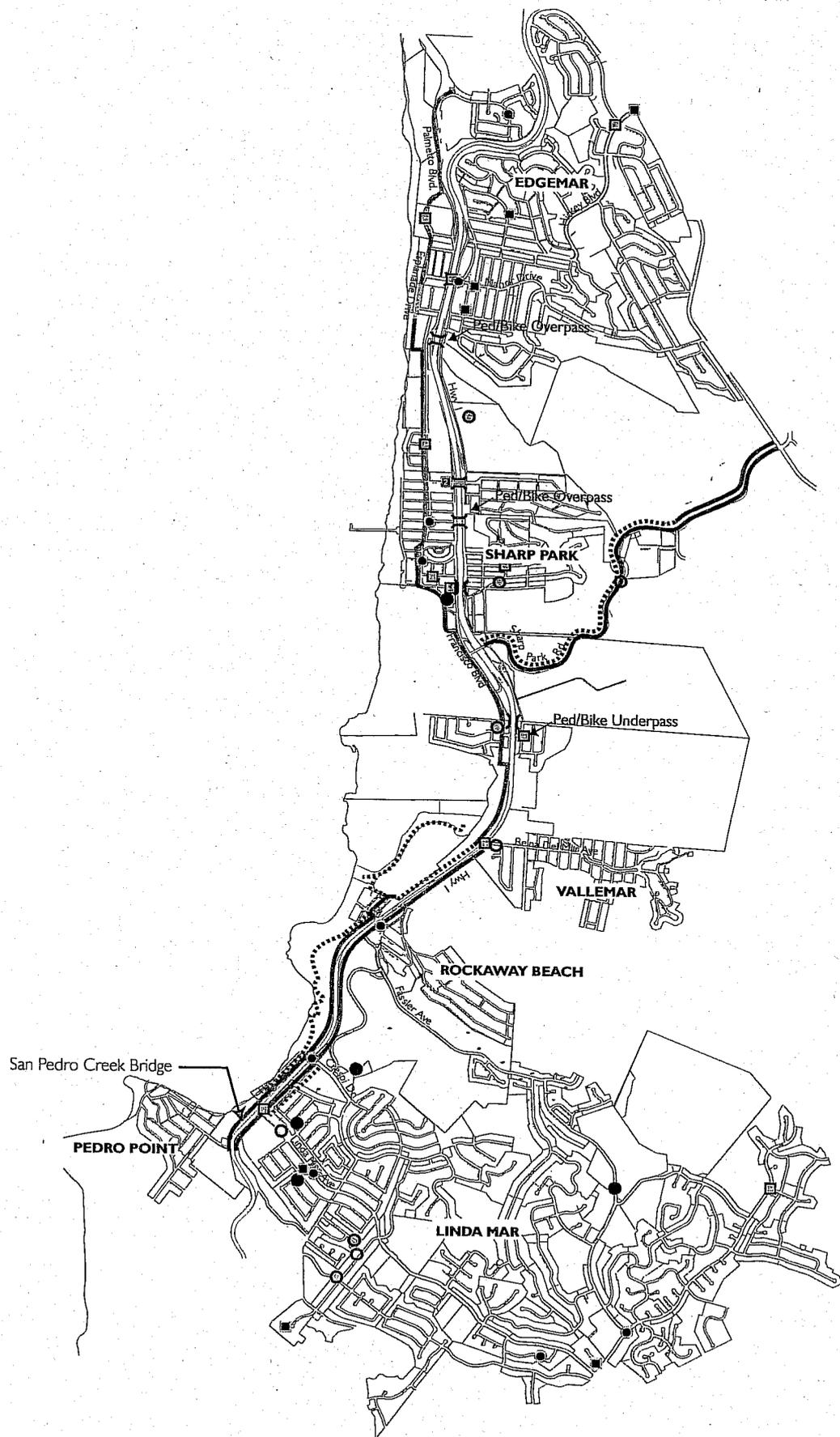
— Class I Trail	! Speeding	? Poor Signage(north or south)
— Class II Lane or Better	⊗ Narrow and/or Obstructed	★ Free Right Turn Across Lane
— Class III Route	* Rough Pavement	▲ Changing Room w/Water
- - - Dirt Trail	⊠ Poorly Maintained Surface	△ Changing Room w/o Water
⌒ Bridge Over Hwy I	⊙ Steep Grade	↙ Ocean View
⌒ Tunnel Under Hwy I	+ Poor Sight Line	
..... Dashes Indicate Funded Projects		

FIGURE 2
EXISTING CONDITIONS
 CITY OF PACIFICA BICYCLE PLAN



<ul style="list-style-type: none"> — Class I All Weather Trail - - - - - Dirt Trail — Class II Lane or Better — Class III Route () Bridge Over Hwy I () Tunnel Under Hwy I Dashes Indicate Alternate Route 	<p>Community Facility:</p> <ul style="list-style-type: none"> P= Park S= School L= Library O= Public Offices C= Church F= Fire Station H= Historic Site 	<ul style="list-style-type: none"> ● Existing Bicycle Staging Area ⊙ Proposed Bicycle Staging Area ■ Proposed/Restored Bicycle Lockers — Coastal Access - - - - - Proposed Coastal Access ▲ Changing Facilities * Bike Parking Facilities
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FIGURE 3
PROPOSED SYSTEM OF BICYCLE FACILITIES
CITY OF PACIFICA BICYCLE PLAN



- Class I Trail
- Class II Lane or Better
- Class III Route
- Dirt Trail
- Bridge Over Hwy I
- Tunnel Under Hwy I
- Dashes Indicate Funded Projects

- Bicycle Accident Locations 1994
- ▣ Bicycle Accident Locations 1995
- Bicycle Accident Locations 1996
- Bicycle Accident Locations 1997
- Bicycle Accident Locations 1998
- ⊙ Bicycle Accident Locations 1999

FIGURE 4
**BICYCLE ACCIDENT
 LOCATIONS 1996-1999**
 CITY OF PACIFICA BICYCLE PLAN

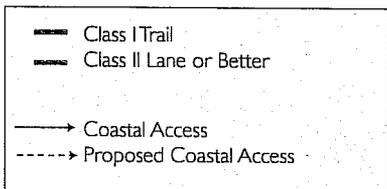
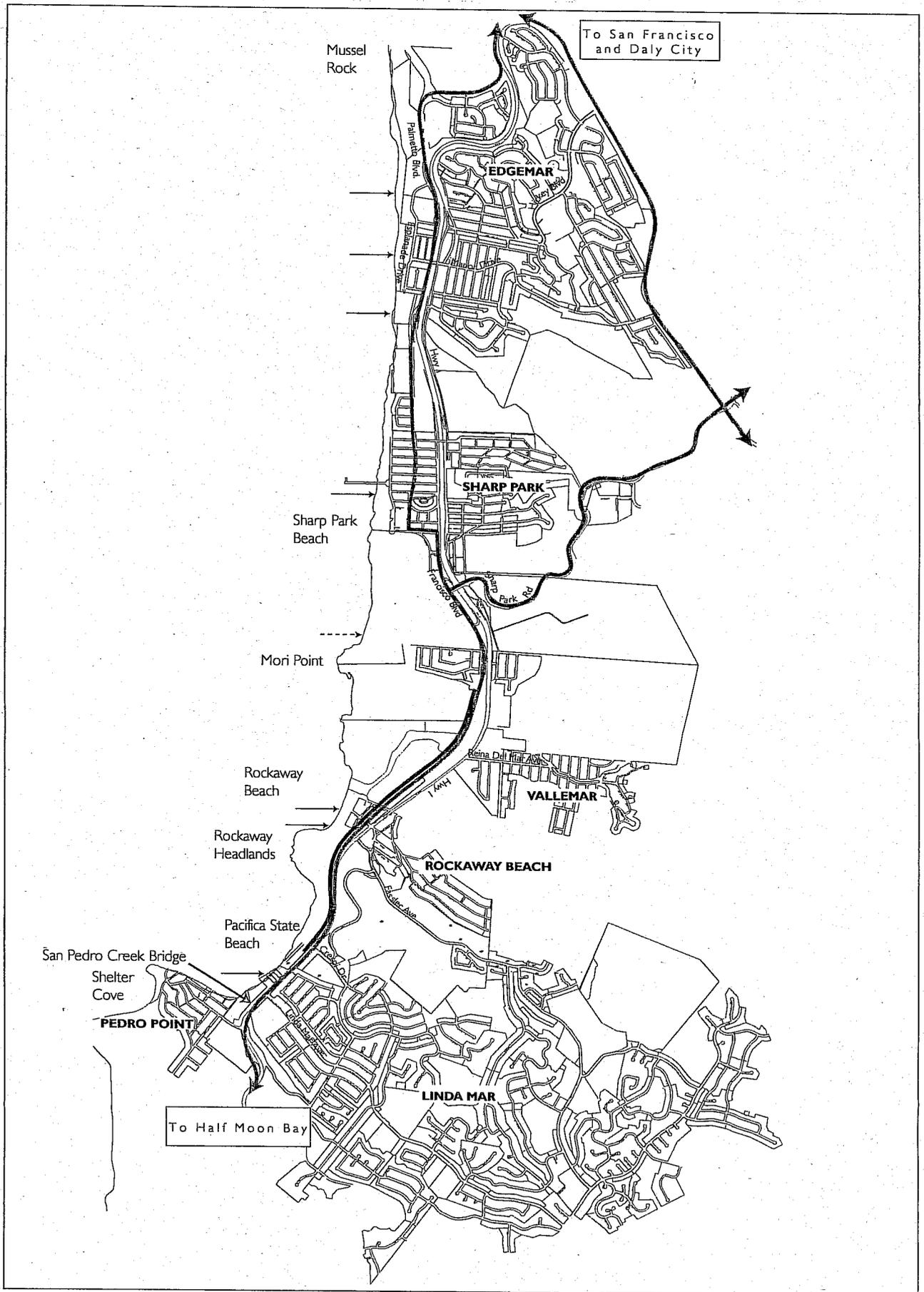


FIGURE 5
 1999 SAN MATEO COUNTY
 COMPREHENSIVE BICYCLE
 ROUTE PLAN

PROPOSED BICYCLE
 FACILITIES IN PACIFICA

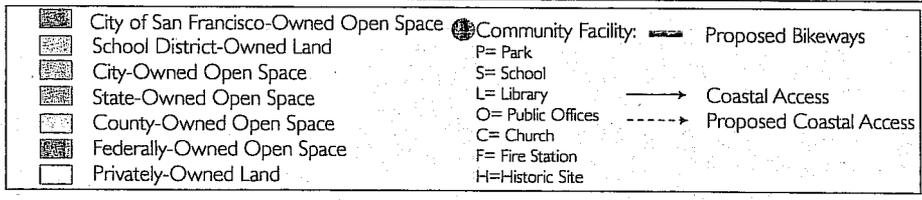
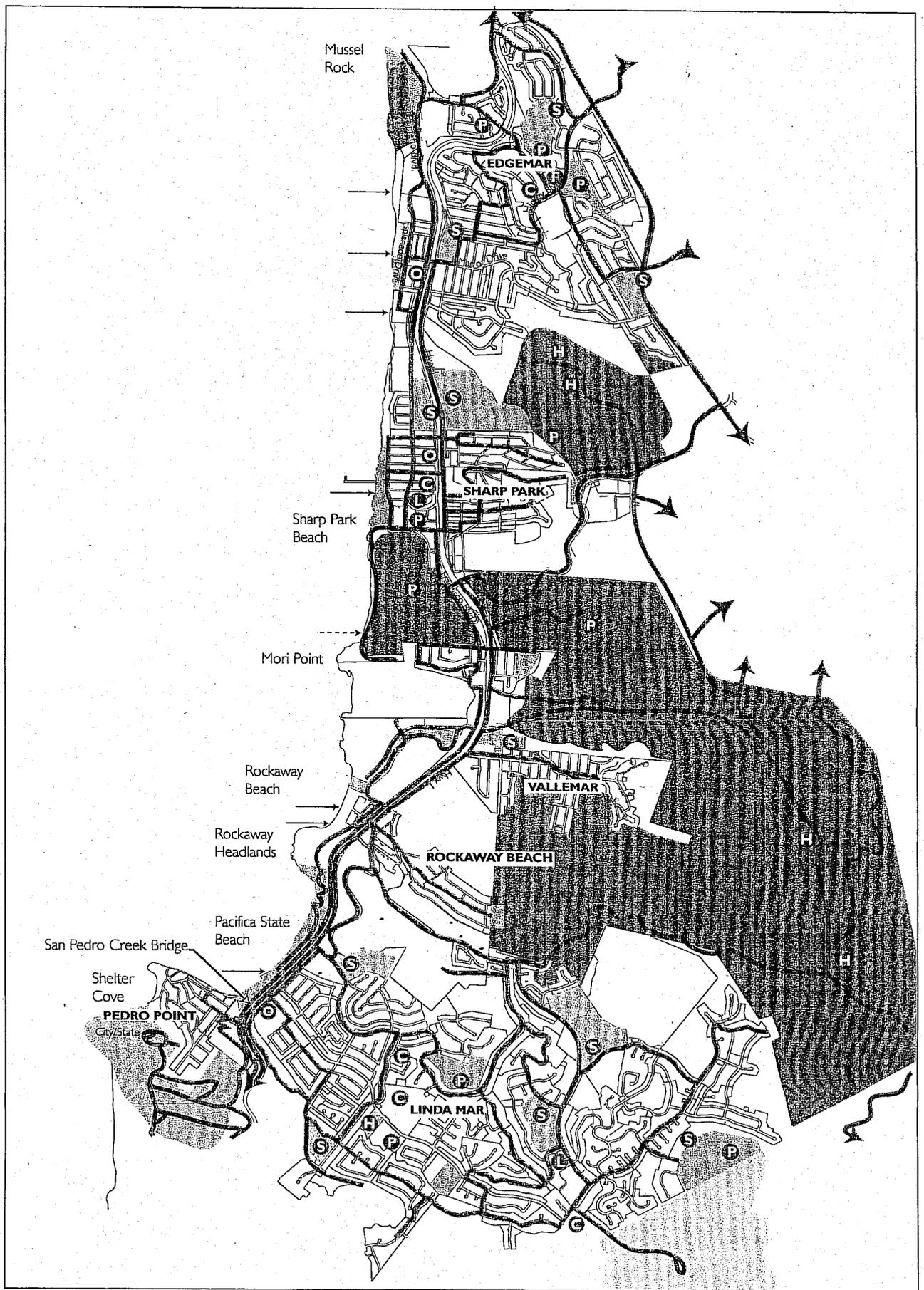


FIGURE 6

PROPERTY OWNERSHIP