people being attracted to two or more land uses during a single vehicle trip. For example, a person interested in purchasing a clothing item may visit several clothing stores while parking only once if the stores are in fairly close proximity. Most commercial uses experience some overlap which means that some of the City's parking standards could be reduced. For example, the City's current parking requirement for new general commercial uses is 5.0 spaces for each 1,000 square feet of gross floor area. The Urban Land Institute has recently lowered their recommended standard from 5.5 spaces per 1,000 square feet to 4.0 spaces per 1,000 square feet for shopping centers. Their study shows that a ratio of 4 spaces per 1,000 square feet satisfies the parking demand for all but the 10 highest days of use during the year. It is uneconomic to provide a higher parking ratio to meet such limited peak demands.

The following modifications to the City's parking standards are suggested:

	Current Standard	Suggested Standard
General Retail Comm.	5 spaces/1000 sqft	4 spaces/1000 sqft
Furniture & Appliance	2 spaces/1000 sqft	No changes
Service Commercial	varies by use	No changes
Theaters	1 space/4 seats	No changes
Restaurant/Freestanding	1 space/4 seats	No changes
Restaurants w/hotel	1 space/4 seats	1 space/6 seats
Offices	3.3 spaces/1000sqft	No changes

Another measure which reduces the amount of land area necessary to park cars is the inclusion of smaller spaces for compact automobiles. Almost all of the foreign automakers produce small automobiles. Newer domestic automobiles are also smaller, on the average, than the automobiles produced before 1980. The City should continue its existing policies which allow one- fourth of the spaces in each parking lot to be smaller dimensions to accommodate compact cars. This percentage may be increased if trends to smaller cars continue. The resultant lot area saved by using compact spaces could be used to provide additional landscaping, pedestrian amenities or building space.

Industrial: Parking for industrial uses does not appear to present a major problem. This is partially due to the small number of industries. Pacific Gas and Electric owns the majority of the land zoned for industrial use in the City of Morro Bay (approximately 30% of the power plant site is presently unimproved and reserved for power plant uses). Their existing parking lot is adequate for their present needs.

A parking problem related to industrial uses is the difficulty in determining the needs for various specific uses. Studies have shown that industrial users can require from as little as 0.21 spaces per 1,000 square feet of floor area to 20 spaces per 1,000 square feet of floor area. iAutomated manufacturing uses require lower ratios while labor intensive industrial uses such as clothing manufacturers have a much higher ratio. The City's flat ratio of 2.0 spaces per 1,000 square feet may not be appropriate for all cases. There should be some flexibility to account for the variations which may be encountered.

It may be more appropriate to tie parking requirements to the number of employees for each industrial use. A minimum of one space for each two employees should be provided for the number of employees expected on the largest shift. Adequate on-site loading areas should also be required as a condition of development. When the number of employees for a given industrial development cannot be accurately determined or if the number of employees is expected to fluctuate, the City should then determine parking on the basis of total building area.

Recreation: Morro Bay's prominence as a tourist destination point means that recreational areas have a greater significance than they would if they were only used by local residents. Greater usage results in a need for more parking. In most cases, current parking is adequate to meet normal use requirements. However, some of the public parking areas lack adequate improvements. Examples include Coleman Park near Morro Rock and the public beaches near Morro Creek and near the end of San Jacinto Avenue. Tidelands Park will be expanded to help accommodate expected parking needs at the south end of the Embarcadero. Parking needs for other recreational areas in the City appear to be met by existing parking either on the street or in parking lots. As was stated for commercial uses, it is uneconomical to try to provide for the needs of the extremely high parking demand periods.

Motel: Almost all motels in Morro Bay currently provide adequate off- street parking. The current City standard of 1.1 spaces per motel room appears to be appropriate based on expected parking needs.

Institutional: The City is presently in the process of expanding off- street parking facilities at the governmental center on Harbor Street. The parking at the police station on Morro Bay Boulevard appears to be marginal and will certainly be inadequate to meet future needs. Additional parking will be needed. Most public or institutional meeting halls have inadequate off-street parking.

Some community churches have large parking areas while others have minimal off-street parking. Since many churches are located within residential areas, there are undoubtedly some

parking hardships for nearby residents during Sunday services and other social gatherings at churches. Fortunately, most church functions are conducted sporadically so that parking impacts are only felt occasionally by residents. New churches are required to provide adequate off-street parking. The redevelopment of existing churches should necessitate the improvement of parking when existing parking is inadequate. However, additions to churches which do not involve increases to the existing parking demand may be acceptable without requiring additional parking.

b. Lack of Full Parking Improvements

Many parking areas in Morro Bay are simply dirt lots where people park their vehicles haphazardly. These lots should be improved pursuant to the City's standards. The dirt parking areas downgrade the appearance of the adjoining area. Drainage is usually poor. They result in a dusty eyesore in summer and a muddy mess during winter. Also, the number of parking spaces can frequently be increased if the dirt parking areas are paved. Drainage and visual appearance would also be improved. Parking districts and/or development fees could be used to provide money for improving these parking areas or improvements can be required as a condition of approval for additions. (See Appendix "B" for financing mechanisms.)

c. Conflicts Created by On-Street Parking

On-street parking is necessary in some areas of the city due to the lack of adequate off-street parking. However, on-street parking creates many points of potential conflict, especially on highly traveled routes. Each parallel parking maneuver has the potential to disrupt traffic flow. When cars are parked close to the end of the curb return, visibility is sometimes limited from the cross-street. Based upon criteria established by the American Association of State Highway and Transportation Officials (AASHTO), a vehicle traveling at 25 mph should be visible from a driver on a connecting side street from a distance of 260 feet. Ideally, in order to meet this criteria, there should be no on-street parking allowed within 85 feet of the ends of each curb return. This criteria may not be feasible to attain in the Downtown area or Embarcadero due to the lack of off-street parking spaces. At a minimum, spaces on public arterial and collector streets should not be located closer than 25 feet from the ends of each curb return. In cases where travel speeds warrant, this distance could be even greater and sight-line analysis should be conducted. In future studies of

intersections, the following AASHTO criteria for sight distances should be used to determine if obstructions like parked cars should be eliminated:

Travel Speed	Minimum Sight Distance
20 mph	210 ft.
25 mph	260 ft.
30 mph	310 ft.
40 mph	415 ft.
50 mph	515 ft.

(Sight distance from center of intersection determined from a point on the side street 15 feet back of the edge of the roadway.)

Foremost in importance for the selective removal of parking near corners are the Downtown sections of Main Street and Morro Bay Boulevard, the Embarcadero south of Beach Street, and north Main Street. (See "Street Policies and Programs" section.)

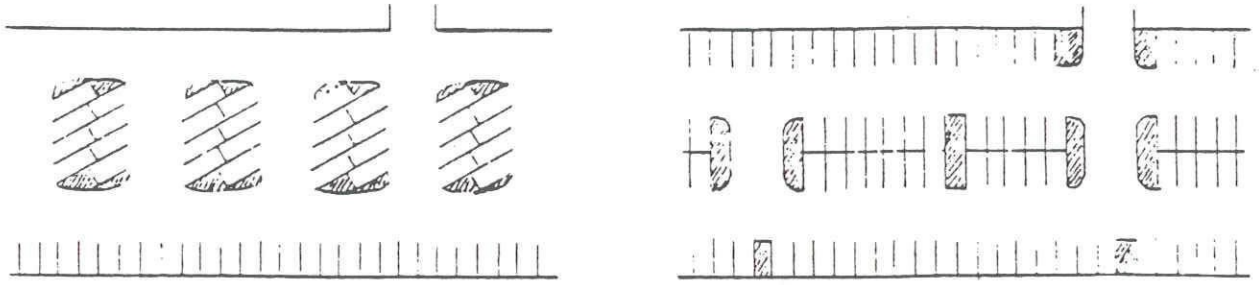
d. Poor Parking Configuration

Most off-street parking lots in Morro Bay are adequate in terms of accessibility, parking efficiency and parking geometry. The current City zoning criteria for parking lot design are comparable with the generally recommended standards. Lots designed pursuant to the current parking lot design standards exhibit good access and flow characteristics.

The shopping centers located on Quintana Road were constructed prior to the current regulations. They exhibit examples of poor design, inefficiency and poor appearance. Some parking aisles are too short, resulting in excessive land being used for the number of spaces provided. Much of the paved area of the southernmost center is not striped. Driveways are confusing and there is a lack of landscaping, resulting in a barren appearance. As these centers expand or redevelop, efforts should be made to correct the current deficiencies. The same could be said for other parking lots in Morro Bay, most notably the Giant Food parking lot on north Main Street and the parking lots along the north Embarcadero.

For example, the Williams Brothers Shopping Center, located on Quintana Road, is comprised of short parking bays which are oriented perpendicular to the buildings. This orientation results in very short parking bays of 60 to 80 feet in length. Consequently, many turning movements are necessary and the land area needed for each space is higher than it should be. If the

parking bays in this lot were reoriented parallel to the buildings, the length of the bays could be increased and the number of spaces in the parking lot could be increased by as much as 20 percent. Landscaping could also be added. The following conceptual diagram indicates one possible redesign.



Inefficient Parking Layout

Redesign Efficient Layout

f. Lack of Handicap Parking

Recent surveys of the City indicate that many of the newer developments have incorporated handicap parking spaces. All new developments must, where feasible, make accommodations for handicap parking, preferably near the building entrance. Existing uses should also provide handicap parking spaces at the time of remodeling or expansion, when feasible. The handicap parking should be consistent with State criteria both in terms of design and number.

There are only a few on-street handicap spaces in the City. They are generally located in front of the City offices in the Downtown. The commercial areas of the Downtown and Embarcadero have no on-street handicap spaces. Off-street handicap spaces within commercial parking lots are preferable to on-street spaces since they are generally closer to the building entrances, and street curb cuts can be reduced. However, in some cases, on-street handicap spaces may be more convenient, especially where parking lots are relatively distant from the commercial uses. Examples of such situations include the area of Market Avenue across from the intersection with Morro Bay Boulevard; the block of Morro Bay Boulevard between Monterey and Napa Avenues; and most of the blocks along the Embarcadero between Beach Street and Tidelands Park. A total of about 6 to 10 on-street spaces may be necessary to meet the handicap parking needs of these two areas unless additional off- street handicap spaces are provided in built-up areas. Figures 31 and 32 indicate possible additional on-street handicap parking locations.

Existing uses which do not currently provide handicap parking should be encouraged to add such spaces, when feasible. In conjunction with the handicap spaces, accessibility to and into the buildings should be improved when necessary.

Handicap parking spaces must meet the following minimum design standards:

1. They must be open on one side or a minimum of 14 feet wide.

2. The spaces must be clearly marked with blue signs identifying the spaces for handicapped persons use only.

3. Slopes should not exceed 2 percent in the immediate area of the space.

4. The spaces should be located near level or ramped building entrances or elevators.

5. They should be located in areas of parking lots to minimize travel of the handicapped person behind parked vehicles.

6. They should meet all other applicable State Criteria for handicap parking spaces.

g. Poor Appearance

Parking areas must be paved and have sufficient sub-base material. Drainage should effectively remove surface water from the parking lot. There should be adequate landscaping, screening and lighting. They must be maintained regularly to prevent pot holes and trash from accumulating. If these criteria are used to judge the adequacy of the parking lots in Morro Bay, many would not pass. The City Zoning criteria for new parking lots ensures that future parking will be attractive and well maintained. Engineering standards require proper drainage. There are no existing specific regulations regarding parking lot lighting. Criteria for security and safety lighting should be adopted. The criteria should also preclude conditions where lighting could create glare. The following minimum standards should apply to the lighting of parking lots:

1. The minimum light at ground surface should be 0.3 footcandles and the maximum light should not exceed 1.0 footcandles.

2. Lighting must be shielded and directed so that it does not create glare into adjacent residential uses or streets.

3. Lighting standards should not exceed the allowed height of buildings on the same site. Such lighting standards and fixtures shall be attractive and complement the design of the buildings on the site.

2. Specific Parking Problems in the Downtown

Based on generalized commercial parking criteria, the Downtown appears to have enough parking to meet normal operating needs. Using a parking ratio of 4.0 spaces per 1,000 square feet of gross floor area, 1,284 spaces would be necessary. Within the study area, there are about 1,527 spaces, of which 671 are off-street and 856 are on-street spaces. However, many of the Downtown blocks are underutilized. It is likely that the Downtown will experience significant growth in the future. This growth will bring its attending need for additional parking.

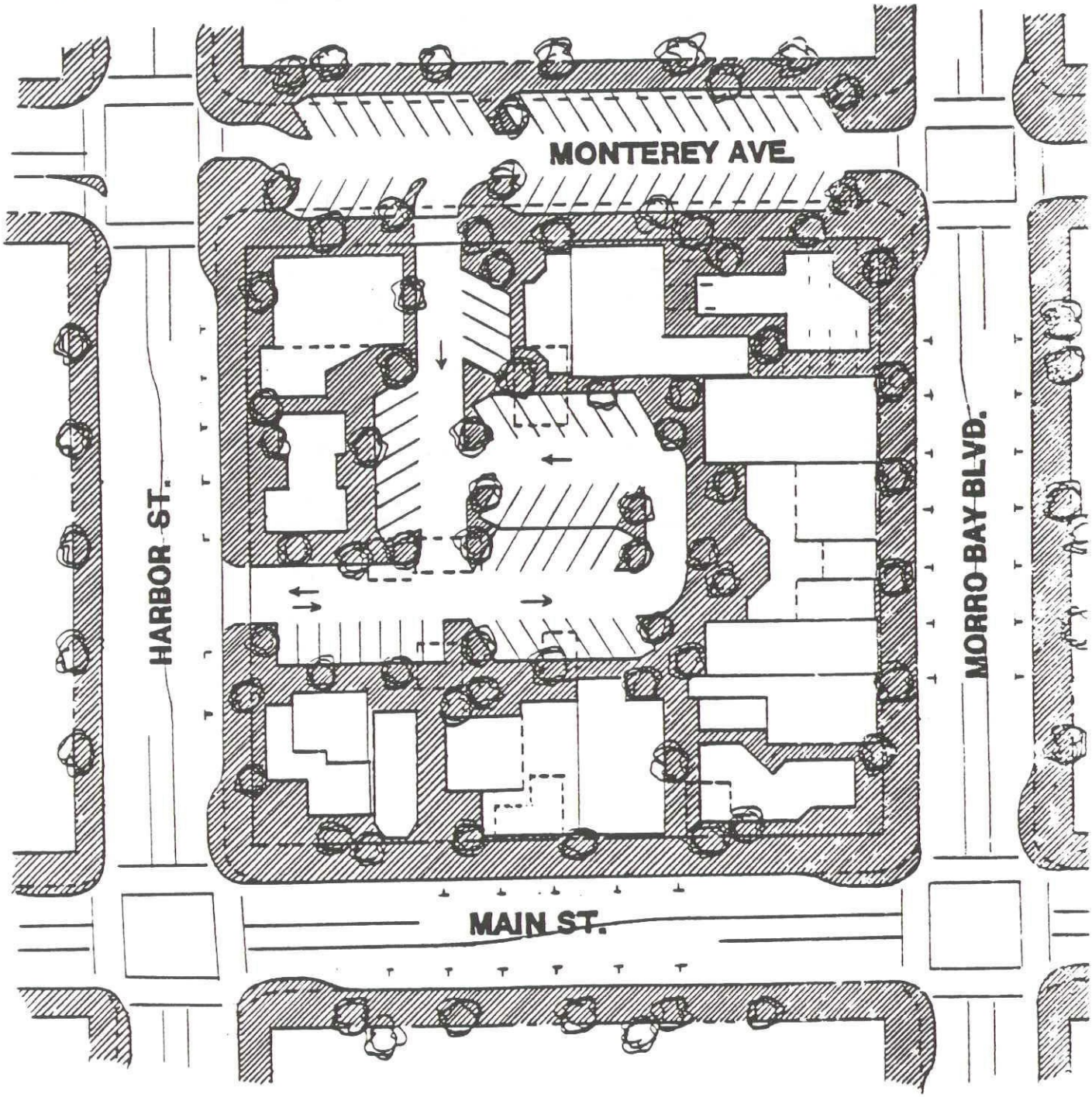
Many existing commercial uses occupy most or all of the property on which they are located and there is no room for on-site parking. These businesses would benefit from the provision of additional parking because they would be accessible to a larger number of patrons. It will take a concerted effort of all Downtown businesses to provide the parking needed if existing businesses are to continue to succeed and grow. This section discusses several examples of how additional parking could be provided.

The number of parallel on-street spaces is fixed. To improve safety, some on-street spaces near intersections should be eliminated. It would be possible to gain additional spaces to replace spaces removed near inter sections if several of the lesser traveled side streets were converted from parallel parking to diagonal parking. Access to adjoining properties would have to be continued. Businesses within those blocks would probably flourish since the added parking would accommodate more customers.

FIGURE

TOTAL ON-STREET AND OFF-STREET PARKING FOR BLOCK AS SHOWN:	110 SPACES
TOTAL OF EXISTING ON-STREET AND OFF-STREET PARKING	64 SPACES
NET GAIN IF REDESIGNED	46 SPACES

This is only one concept. There may be other viable alternatives.



CONCEPTUAL SCHEMATIC PARKING EXAMPLE FOR DOWNTOWN AREA

FIGURE 31

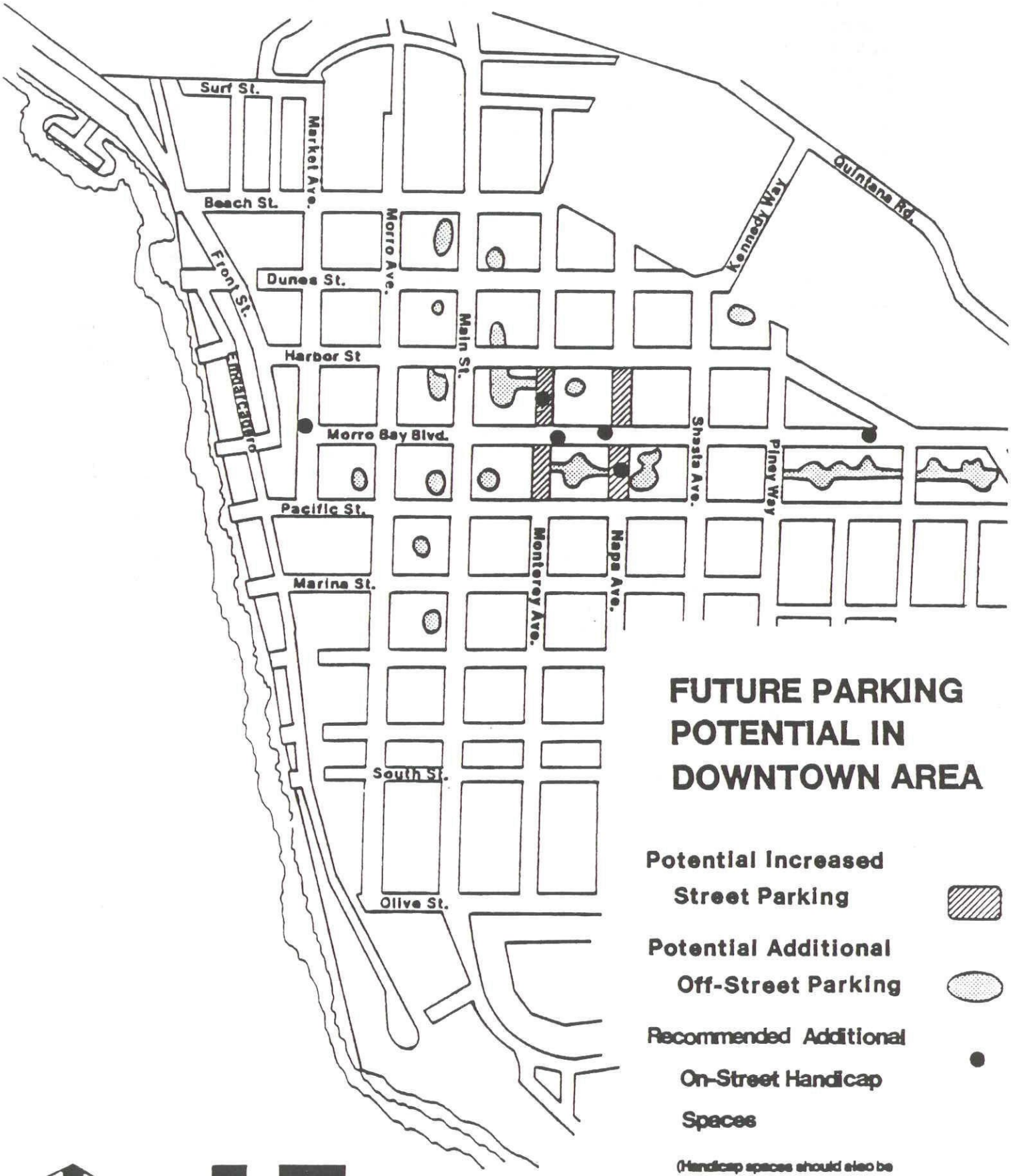

Surf St.
Market Ave.
Beach St.
Morro Ave.
Front St.
Dunes St.
Main St.
Harbor St
Embarcadero Rd
Morro Bay Blvd.
Shasta Ave.
Piney Way
Pacific St.
Monterey Ave.
Napa Ave.
Marina St.
South St.
Olive St.
Kennedy Way
Quintana Rd.
FUTURE PARKING POTENTIAL IN DOWNTOWN AREA
Potential Increased Street Parking
Potential Additional Off-Street Parking
Recommended Additional On-Street Handicap Spaces
(Handicap spaces should also be included in new off-street parking lots)
NORTH

Figure 30 shows conceptual on-street diagonal parking for one sample block. In some blocks, the number of on-street parking spaces could be doubled by use of diagonal or perpendicular parking since each parallel space occupies 22 linear feet of curb while a perpendicular parking space needs less than 10 feet of linear curb. The side street would essentially be converted into a parking lot. Through traffic would be slowed down. This approach would result in better utilization of the available land.

Vitality could be given to many Downtown blocks by the addition of attractive off-street parking lots. The interior portions of many blocks are vacant, unused yards which frequently present a shoddy appearance. If these vacant areas were combined, they could provide opportunities for considerable additional parking. Figure 31 indicates some of the blocks where off-street parking could be added. Figure 30 gives a conceptual plan for the addition of off-street parking in one Downtown block. This block is one of the most important in the City since it is located adjacent to the intersection of the two highest travelled streets: Morro Bay Boulevard and Main Street. From a strategic standpoint, this block should contain a high concentration of busy commercial uses. However, in actuality, this block is only marginally developed. It currently contains only about 16,000 square feet of commercial building area while other Downtown blocks contain as much as 26,000 square feet. Only about 22 percent of the total land area of the block is occupied by buildings. If additional parking were provided, the building area for this block should be at least double the existing area. Parking District or Improvement District funds could be used to purchase and improve these vacant areas or to obtain easements for the purpose of providing common parking. If a redevelopment agency were ever formed for this area, the agency could provide the funds necessary to provide common parking for the Downtown.

Other blocks in the Downtown could also benefit from addition of off- street parking. Parking Districts could be used to provide the necessary funds to implement the development of these parking lots. (See discussion of improvement districts in Appendix "B"). The total amount of off-street parking in the Downtown could be doubled. This amount of off-street parking could support as much as 170,000 square feet of additional commercial floor area in the Downtown. The City will need to address the City's anticipated growth patterns in the commercial area before planning for future parking lots.

3. Specific Parking Problems in the Embarcadero

Parking problems are more pronounced along the Embarcadero than for any other area of the City. There are 923 total existing spaces of which 251 are on-street and 672 are off-street (including street-ends). Based upon City zoning

criteria, as many as 1,149 spaces would be necessary to meet the needs of both the commercial and the marine uses. Extremes in parking demand are much more noticeable on the Embarcadero. There are more than enough spaces to meet the needs of most fall, winter and spring days and even many summer weekdays. However, when all existing marine uses are in operation and tourists are at their peak, parking does reach full or near-full levels. This congestion in the Embarcadero is as much an asset for businesses as it is a problem. People often congregate where it is active and busy. There is a common perception that the food or merchandise is better at establishments that are crowded. In this way, the tourist element of the Embarcadero benefits from the fact that it is often crowded.

As mentioned previously, tourists appear to be willing to walk farther distances between their car and their destination than local shoppers. The inconvenience caused by parking in fringe parking areas rather than central parking areas does not seem to deter tourists from visiting the Embarcadero. There is a definite need to find additional parking solutions to meet the extreme demand periods to prevent tourists from becoming discouraged to the point where they do not visit the Embarcadero. Also, as with the Downtown, many of the blocks on the Embarcadero are underdeveloped. Additional parking will be necessary before new development can easily occur.

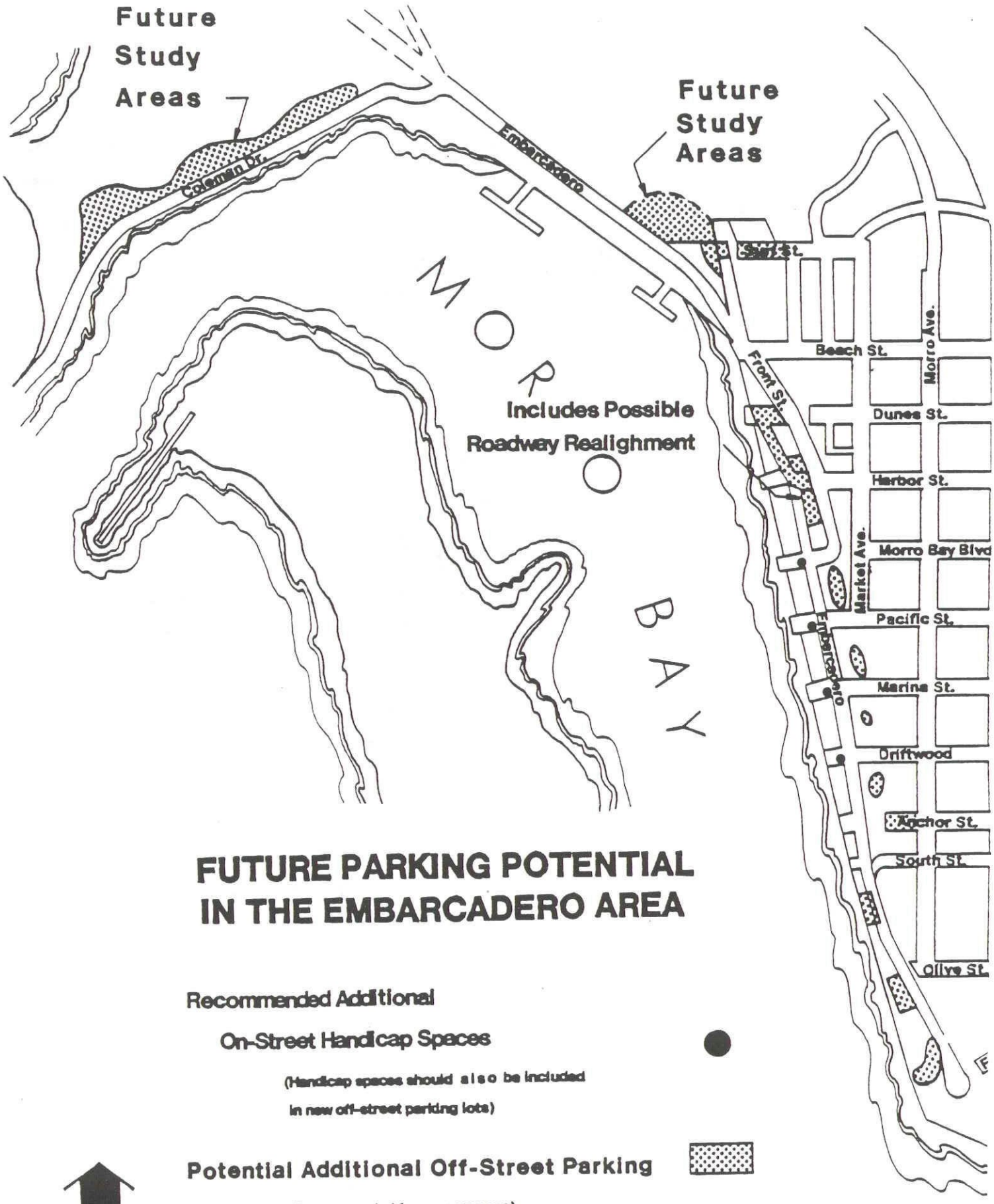
The harbor-fronting properties along the west side of the Embarcadero are among the most valuable commercial properties in the City. This land is too precious to be used indiscriminately for surface parking lots. As parking is provided along the east side of the Embarcadero and at the northern and southern ends of the Embarcadero, the existing parking on properties which front on the harbor should be eliminated. The City should work to intensify the development of harbor fronting properties. If this parking is for the common usage of all businesses on the Embarcadero, the number of parking spaces necessary to meet the needs of existing and future uses may be substantially less than required by existing City parking standards. The overlapping of parking needs described in Tables 6 and 7 would apply. In addition, since tourists are expected to visit more than one store on each trip to the Embarcadero, further reductions may be possible. The actual parking need for each retail establishment on the Embarcadero may be as low as 3.0 parking spaces for each 1,000 square feet if one considers the available parking for the common usage of all businesses.

Double parking by delivery trucks is a problem for many parts of the City but the problem appears to be greatest along the Embarcadero. The street is very narrow which increases the difficulty for traffic maneuvering around double-parked vehicles. Commercial uses have little or no on-site space to accommodate loading spaces for delivery trucks. On-street parking is at a premium which makes it hard to justify on-street

loading spaces. It will take a cooperative effort through a parking district to provide off-street loading spaces near commercial uses in each block.

Parking problems for the Embarcadero are shared collectively by all uses. It will take the cooperation of all of the various enterprises to solve the parking problems of the Embarcadero. A parking district would provide the most logical and equitable means of financing the project. Various forms of parking districts are described in Appendix "B". The popularity of the Embarcadero may justify the initiation of paid parking in the future which would help to defray the costs of providing additional parking. Development fees could also augment the income obtained through a parking district.

FIGURE 32



FUTURE PARKING POTENTIAL IN THE EMBARCADERO AREA

Recommended Additional

On-Street Handicap Spaces ●

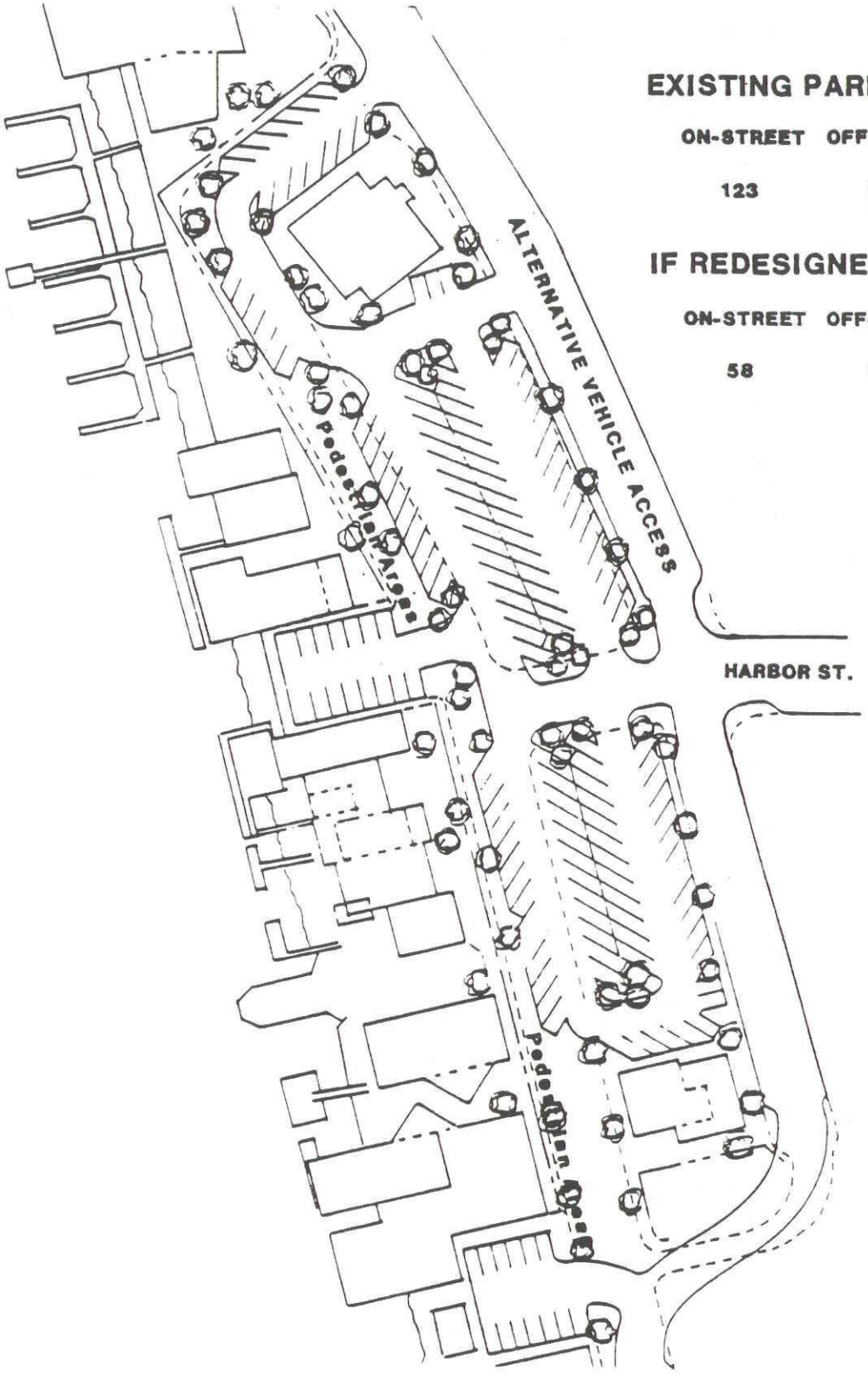
(Handicap spaces should also be included in new off-street parking lots)

Potential Additional Off-Street Parking ▨

(Recommended for common use)

NORTH

FIGURE 33



PARKING ALTERNATIVE CONCEPT
EMBARCADERO BLOCKS #7 & #8

Only limited areas are available for parking within the central Embarcadero. Figure 32 shows the location of potential parking areas. A redesign of the area of the Embarcadero and Front Street between the extension of Morro Bay Boulevard and the extension of Dune Street could provide a number of additional parking spaces while at the same time improving the appearance of the existing dirt lots. A concept for one possible alternative for this area is shown on Figure 33.

Additional spaces can be gained by redesigning the public parking lot located north of Beach Street and east of the Embarcadero. If the City storage yard is moved to another location and the lot geometrics are improved, it may be possible to add as many as 60 additional parking spaces.

Since parking is critical for only a few weeks out of the year, it may be advisable to consider the provision of temporary parking lots. Two possible locations would be Coleman Park at the north end of the Embarcadero and the vacant P.G.&E. property located southeast of the plant adjacent to the City's public parking lot. P.G.&E. may be willing to lease this area on a temporary basis to a Parking District as an interim parking solution as well as for use as a City storage yard.

As the Embarcadero continues to develop, more permanent parking solutions will have to be found. Many of these solutions may place parking further from the central Embarcadero. One intriguing idea is the provision of a water taxi service. It could provide a means of ferrying passengers between the Coleman Park area and north and south Embarcadero to the commercial center. Surface trams would have difficulty serving the Embarcadero because of the frequent congestion and lack of potential loading zones. On the other hand, a water-born transit service would face less congestion and would be an enjoyable experience for tourists and local residents alike. A transit service would open up additional potential parking solutions on the fringes of the Embarcadero. (See "Harbor" section.)

A Specific Plan should be developed for the Embarcadero incorporating the parking solutions suggested in this Circulation Element. The Specific Plan could address alternative parking solutions for the Embarcadero which could differ from those indicated in the Circulation Element. The Specific Plan could establish standards for development and measures for financing of the development of additional parking. It is possible that a combination of financing methods may be necessary to provide the parking needed to ensure that growth will occur and that existing uses will continue to prosper.

c. PARKING DESIGN CRITERIA SUMMARY

There are virtually innumerable parking lot design solutions to meet varied circumstances. The following diagram is generalized to cover the more common parking situations. The existing City Zoning Regulations are adequate to control the development of new parking facilities except as noted in this section of the Circulation Element.

FIGURE 34

SAMPLE PARKING LAYOUTS

AND

SUGGESTED STANDARDS

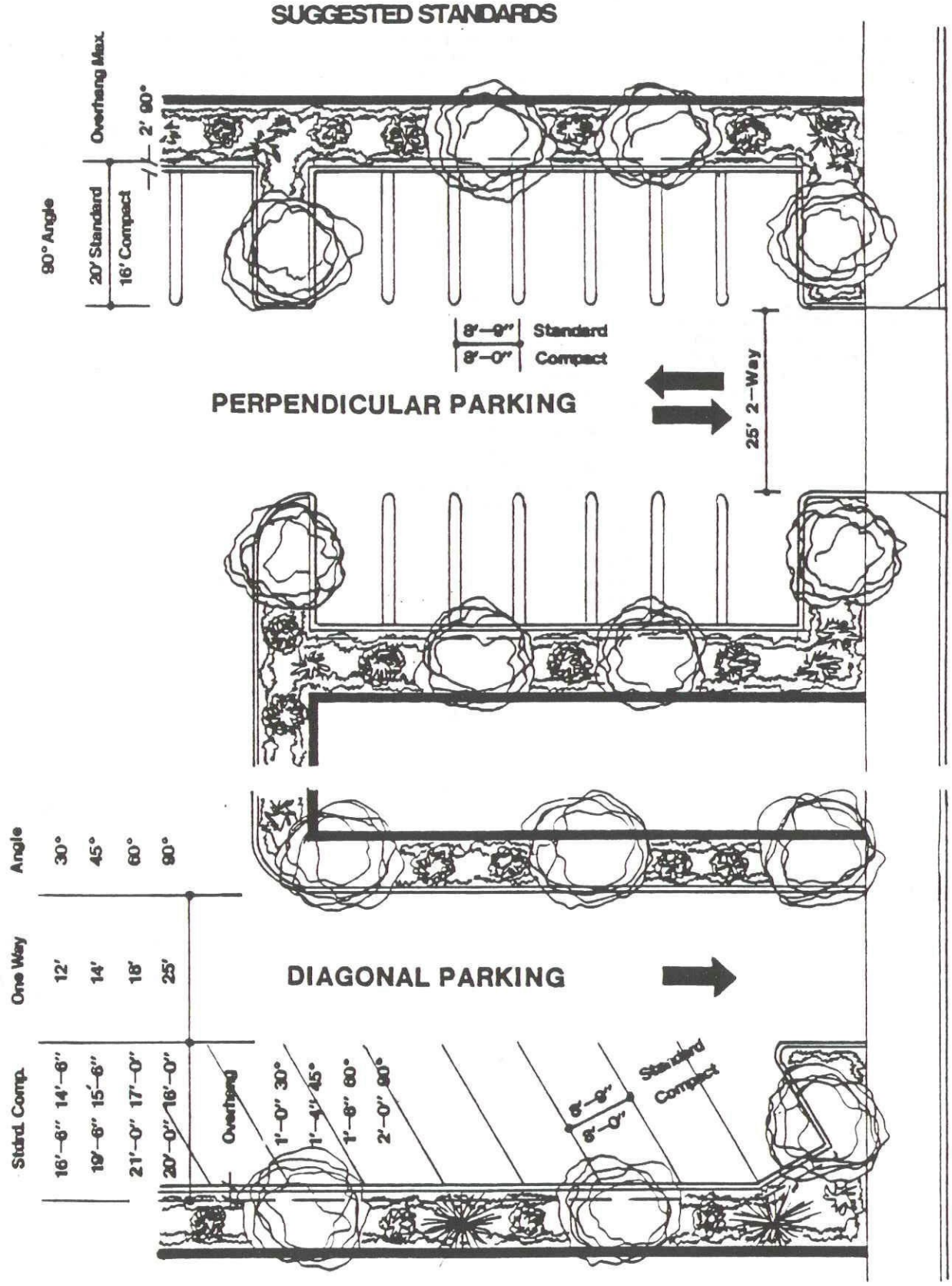


TABLE 8
SEQUENCE OF PARKING PRIORITIES

	PROBLEM	GENERAL SOLUTIONS (See Policies and Programs)	COMMENTS (See also Text)
1.	Lack of parking for existing Commercial Uses in the Downtown and need for improvement of existing dirt parking areas.	Establish in-lieu parking fees for new development and establish a parking district for all uses. Parking districts should construct new common parking facilities in un-used yard areas of blocks. Conversion of low traffic carrying side streets to public parking facilities should also be considered. Access to properties must be maintained. (See Figure 31 for location of parking.)	Suggest use of Vehicle Parking District Law of 1943 or the Parking and Improvement Area Law of 1965 because free parking may be necessary to compete with other shopping centers. (See Appendix B)
2.	Lack of parking for existing Commercial Uses in the Embarcadero and need for improvement of existing dirt parking areas. (This is the City's highest priority)	Establish in lieu parking fees for new development and establish a parking district for all uses. Parking districts should construct new common parking facilities on the east side of the Embarcadero and at the north and south extremes of the Embarcadero. Use of P.G.&E. property for temporary parking should also be considered. (See Figure 32 for location of parking)	Suggest use of Vehicle Parking District Law of 1943 or the Parking and Improvement Area Law of 1965 because free parking may be necessary to ensure continued success of businesses. Coordinate with transit services.
3.	Excessive parking required for some uses.	Amend Zoning Criteria for certain commercial and industrial uses. Allow shared parking when uses have different peak hours.	See text for suggested criteria. Other minor development standard changes suggested in Text Design Criteria could also be made at the same time.
4.	Illegal garage conversions.	Enforcement with cooperation of real estate and banking industry and creation of additional mini-storage.	Initial voluntary or mandatory code compliance inspection upon sale of residences.
5.	R-V parking on streets and vacant lots.	Continue 72 hour parking enforcement and allow additional commercial R-V storage.	Police may need additional manpower to ensure continued enforcement.
6.	Conflicts created by on-street parking (sight-visibility restriction).	Prohibit on-street parking near cross-street intersections.	See text for suggested criteria for setback of parking from cross-streets.
7.	Poor parking configuration-existing parking lots.	Correct by redesigning parking lots to current parking standards upon redevelopment of properties.	Parking lots should incorporate spaces, isles, landscaping and surface improvements required by current zoning standards.
8.	Lack of Handicap Parking.	Require handicap parking spaces in new parking lots. Implement on-street handicap parking per parking plans.	Off-street public handicap parking and on-street handicap parking should be included in parking districts for Downtown Embarcadero.
9.	Poor appearance of existing parking lots.	Require upgrading of existing parking lots upon redevelopment of properties (Landscaping, screening, etc.). Institute minimum parking lot lighting standards.	See text for suggested criteria for parking lot lighting.

5. TRANSIT SYSTEMS

a. INTRODUCTION

Public transit plays an important role in the transportation of Morro Bay residents. Many rely on public transit to get them to various destinations in the City. The dependency creates challenges to the City to provide a cost effective transit plan.

Two transit plans have been prepared which form the City transit policies: The San Luis Obispo Regional Transportation Plan- 1986 Update (RTP), and the Short-Range Transportation Development Plan,- 1983-1988 (TDP). The RTP was prepared by the San Luis Obispo Area Coordinating Council of which the City of Morro Bay is a member. This plan outlines a regional transportation system emphasizing coordination of transportation plans and programs on a County-wide level. The RTP sets goals, policies and programs for public transit. The City of Morro Bay prepared a short-Range TDP to guide the City's major transit system- Morro Bay Dial-A-Ride (DAR)- to the year 1988. DAR is a Door-to-Door public transit system for all ages and is accessible to disabled persons. The City is currently updating the TDP for the next five year period, 1988-1993. Pursuant to an UMTA Section 8 Planning Grant, the City has hired a Transit Consultant with expertise in small and medium-sized demand-response public transit systems. The TDP update is expected to be completed in the near future.

The purpose of the TDP update is to increase effectiveness of public transit planning, management, and operations in Morro Bay by providing a comprehensive guide to assist the City in making decisions regarding the delivery of public transit services for the next five years. The TDP update will also evaluate the inter-relationship between Morro Bay DAR and the three regional public transit systems serving Morro Bay; Central Coast Regional Transit, SLOCAT, and Runnabout/Regional Handicapped System as well as South Bay Dial-A-Ride.

The TDP update will emphasize the following:

1. Evaluation of the DAR system;

2. Development of clear and measurable goals, objectives, standards, and performance measures and incentives;

3. Productivity improvements, including a "scatter-gather" operation similar in concept to a form of checkpoint deviation, revising data collection requirements and the monthly management report, and computer applications for a personal computer to be acquired pursuant to a recently awarded UMTA Section 18 Grant.

4. Evaluation of organizational options to operate DAR, i.e., private contractor, contract with the County of San Luis Obispo, and direct City operation.

5. Comprehensive marketing analysis and plan.

6. Long-term financial requirements and creative financing alternatives.

The preparation of the TDP update is an opportunity to address and help resolve several long-standing concerns associated with DAR operations. The TDP update was one of the recommendations included in the Service Planning Section of the most recent DAR performance audit, which was completed in December, 1986. Although the performance audit indicated that DAR is operating quite well, the performance auditor recommended that the City focus on the areas described above. The TDP update should be an implementation management tool that is practical, concise, and easy to use.

The RTP/1986 update, TDP/1983-1984, and the TDP/1988-1993 should be considered with this Chapter and are incorporated herein by reference.

Table 9 summarizes the existing transit services to and within Morro Bay City Limits. The principal City service is the Morro Bay DAR which began operations on May 2, 1977. The DAR provides the following types of services to the City:

(1) Immediate service, when a person desires to travel as soon as he can be picked up.

(2) Deferred service when a person desires to travel at a specific pick-up time, usually an hour or more after hiS call in time, or if DAR cannot pick-up someone within 30-45 minutes after he calls.

(3) Periodic or subscription service used when a person wishes to be regularly picked up on a specific day at a specific time and location.

TABLE 9
EXISTING MORRO BAY TRANSIT SERVICES

CHARACTERISTIC	DIAL A RIDE	CENTRAL COAST TRANSIT	SLOCAT MORRO BAY SAN SIMEON ACRES	RUNABOUT REGIONAL HANDICAPPED SERVICES
Funding Entity	City	JPA	SLO County	SLO County & all cities through JPA
Contractor /Operator*	Laidlaw Transit	Laidlaw Transit	SLO County	Santa Barbara Transportation Co.
Service Area	City Limits	SLO/Morro Bay/ Los Osos	Morro Bay/San Simeon Acres/Hwy 1	SLO County
Type of Service	Dial-A-Ride	Fixed route	Fixed route	Dial-A-Ride
Fare Structure*	$.75./ .60 seniors	$1.00 Rt. 7	$1.75/1.50/1.25/1.00/ .75/.50(Zonal Structure)	$2.00
Transfers	Yes	Yes	Yes	No
No. of Routes	N/A	2	1	N/A
Operating Hours*	M-F 7-6 Sat.9-1	M-F 6:52-6:18 S&S None	M-F 6:24-6:41 Sat 7:15-6:58	M-F 8-5 Sat 10-5
Passes	No	Yes	Yes	No
Accessibility	Yes	Yes	Yes	Yes
Exclusive	No	No	No	Frail Elderly/Disabled

Source: City of Morro Bay Department of Public Works

* Figures as of 8/1/88 and are subject to change

TABLE 10

RIDERSHIP STATISTICS
1978-1988

	1978-79	1979-80	1980-81	1981-82	1982-83
DIAL-A-RIDE					
Regular Fee	47,540	45,220	29,240	27,855	31,490
Senior/Handicapped	14,920	15,470	21,980	25,420	29,250
Free	5,460	7,040	3,240	3,460	3,630
SUBTOTAL	67,920	67,730	54,460	56,735	64,370
Senior Van	939	710	490	680	940
TOTAL	68,859	68,440	54,950	57,415	65,310

	1983-84	1984-85	1985-86	1986-87	1987-88
TOTAL DIAL-A-RIDE	53,910	48,054	48,691	44,256	43,309

Source: Short-Range Transportation Development Plan 1983 to 1988 for FY 1978/79-FY 1982/83. Statistics for FY 1983/84-FY 1987/88 are from the City of Morro Bay Department of Public Works.

Since August, 1983, the DAR system has been operating weekdays from 7:00 a.m. to 6:00 p.m. and Saturdays from 9:00 a.m. to 1:00 p.m. The City of Morro Bay owns and maintains four vehicles, (one is a back-up vehicle) and support facilities needed for DAR operations. The average response time for a pick-up is less than 15 minutes, which is much less than average response times of between 30 minutes to an hour in other communities. DAR Ridership statistics are shown on Table 10.

The TDP/1983-1988" was prepared by a private consultant and evaluated the City's DAR system. According to this plan, the most cost-effective and beneficial public transit system for City residents is a DAR service. The plan concluded that a fixed route system does not provide adequate transportation for all City residents. The TDP/1988-1993 will also address this issue and evaluate options such as status quo, status quo with reduced level of service, "scatter-gather" (or checkpoint deviation DAR), and fixed route combined with limited DAR for elderly and handicapped only, including a possible shuttle to link the Embarcadero, downtown, and motel and commercial areas, including North Main Street.

Public transportation which connects to the Dial-A-Ride is provided on State Highway 1 between San Simeon Acres and Morro Bay by the County of San Luis Obispo (SLOCAT). The Central Coastal Transit System connects Morro Bay with South Bay, Cuesta College, City of San Luis Obispo and the California Men's Colony. These are fixed route and fixed time systems which provide the only public transit link between Morro Bay and these nearby areas. The pick- up location for the Central Coastal Transit and SLOCAT is at City Park on Harbor Street.

The Santa Barbara Transportation Company operates a County-wide Dial-A- Ride ("Runabout") for frail elderly and disabled persons. This system can be used,as space is available, by other senior citizens.

The City is a member of the Central Coast Transit Regional Joint Powers Authority (JPA) which operates Central Coastal Transit and is also a member of the San Luis Obispo County Area Transit Authority (TPA) which operates the Runabout.

b. ISSUES

Problems and issues identified with public transit include (1) cost and efficiency of the City DAR, (2) the need to improve public awareness and ridership, (3) provision of pick-up points to reduce costs, (4) inter- connection service with Los Osos, and (5) the addition of transit stop improvements. These issues are discussed in the following sections.

1. Cost and Efficiency of Dial-A-Ride Operations

Problems of the DAR system include cost of operations and service efficiency. The (TDP)/1983-1988 was prepared specifically to assist the City in making decisions regarding the delivery of transit services for FY 1983-84 through 1987-88. The TDP outlines a fiscal program which has been implemented by the City to reduce operating costs and increase efficiency; however, the cost of operating the system still exceeds the City's State Transportation Development Act funds, (TDA). Any cost reductions should consider the City's commitment to supporting a DAR system with a high level of service.

Currently, costs of the DAR system are met by a combination of TDA funds, passenger fares, interest, and general fund monies as needed. The most appropriate option to increase revenues, when needed, is to increase fares; however, this may result in reduced ridership. The last increase became effective on July 1, 1987. An additional fare increase may be warranted in the near future. A reduction in the level of service would reduce costs, but may result in unmet transit needs in the City.

Ridership can also be increased, resulting in increased revenues from passenger fares; however, this may increase costs as well. This by far is the best alternative to improve the financial stability of the DAR system, and methods to reach this result should continue to be investigated. Other methods to reduce cost and to provide efficient service would be to: 1) encourage subscription service and advance call-ins; and 2) computerize paperwork.

The TDP/1988-1993 will explore financing alternatives. To improve the efficiency of DAR operations, the City has received an UMTA Section 18 Grant for a personal computer (PC) and related accessories. The PC will be used to more efficiently maintain and use rewired data and prepare monthly management reports, replacing the existing manual system. Appropriate software and programming will enable the rewired data to be easily stored on a daily basis and reported in various ways for different purposes, including but not limited to the number of passengers/vehicle hour, average wait and travel times, passengers/mile, miles/passenger, and revenue, expenses, and other financial data. The PC can also be used to more efficiently manage subscription service data, including pre-provided trip tickets. Computer assisted dispatch should also be considered. The PC can be a valuable management tool that will make system performances monitoring and reporting easier to accomplish, resulting in better productivity.

2. Public Awareness and Ridership

DAR should be visible to residents and visitors to increase public awareness and ridership. During the first six months of DAR's operations, a promotional campaign was undertaken to inform residents of its existence and to encourage its use. The campaign included distribution of brochures, telephone stickers, complementary tickets, and radio coverage. Although there was no on-going marketing program from January 1978 through July 1986, the DAR contractor routinely distributed and continues to distribute DAR brochures to high use destination points, including but not limited to: The Chamber of Commerce, Library, Senior Center, and tourist destinations. DAR brochures have been and continue to be distributed through the Welcome Wagon and City Hostess programs. The City and DAR contractor conducted a comprehensive marketing campaign from October, 1983 through March, 1984. Since August, 1986 the city has actively and aggressively marketed DAR program through numerous advertising and promotional methods. The city has successfully solicited isupport from the business community to jointly sponsor free rides and ticket books as well as provide driver recognition awards. Despite these extensive efforts, DAR ridership has declined. The San Luis Obispo Area Coordinating Council staff has concluded that this reflects state and national trends.

The city should continue its DAR marketing efforts. TDP/1988-1993 will include a marketing analysis and plan that can be implemented during the next five years. This element of the TDP/1988-1993 will address enhancing the city/business community partnership to promote public awareness of DAR. This partnership has developed during the past two years and the city should continue to encourage this partnership.

3. Provision of Pick-Up Points and Other System Alternatives

Several alternatives to the existing door-to-door service have been suggested by the public, County and City staff, transit authority members, and other sources. None of the alternatives totally eliminates door-to-door service but provide options in addition to it.

Pick-up points could be designated at specific heavy use locations, such as points along the Embarcadero, Morro Bay Medical Center, The Pacific Care Convalescent Center, shopping centers, Senior Center, and the Lucky Seven Market. Passengers could be dropped off and picked up at these high use locations when destinations are in close proximity to them.

A fixed shuttle service along The Embarcadero during summer months is another alternative. The Embarcadero, however, is especially crowded during the summer and traffic is heavy. Instead of a shuttle service, the City could include pick-up points at various locations in the Embarcadero area, such as at

Tidelands Park, the Centennial Stairway, the T-Pier and Coleman Park. Other roads could be traversed instead of The Embarcadero. This would reduce the stop and go traffic problems on The Embarcadero. In addition, the water-taxi proposed in the "Harbor" section of this Element would provide a unique fixed route system along the waterfront which would meet transit needs along The Embarcadero. The water-taxi would not be affected by street congestion on The Embarcadero. (See "Harbor" section.)

Another technique for improving service is the "scatter-gather" system which can be incorporated into the existing DAR system. The scatter-gather system means that vehicles make regularly scheduled stops at fixed locations or check-points. Passengers boarding at these locations are delivered to their destinations in between regular door-to-door service responses. The possible inconvenience of a long ride for a check-point passenger is offset by the convenience of a regular service at certain times and locations.

The TDP/1988-1993 will address the above alternatives and may consider other alternatives as well.

4. Interconnecting Services

SLOCAT provides fixed route service between Morro Bay, San Simeon Acres, Cambria, Cayucos, Los Osos/Baywood Park, and San Luis Obispo. Central Coast Transit (CCT) provides fixed route service between Morro Bay, Los Osos/Baywood Park, Cuesta College, California Men's Colony, San Luis Obispo, and Atascadero. Morro Bay residents and visitors can use DAR to collect with these two regional public transit systems. SLOCAT and CCT connect with the new SLOCAT service in San Luis Obispo. SLOCAT is a fixed route service between San Luis Obispo, Pismo Beach, Grover City, Arroyo Grande, and Oceano. SLOCAT service started March, 1988.

Existing service between Morro Bay and Los Osos/Baywood Park could be improved by coordinating a designated pick-up point for Morro Bay DAR and South Bay Dial-A-Ride. The schedule could incorporate two or three daily or weekly pick-ups and delivery times depending on demand, to a convenient location such as Calvary Baptist Church in Morro Bay or the Church of the Nazarene in Baywood Park. The city has explored this possibility with the County, the operator of South Bay Dial-A-Ride, during the past two years. Although the city has the capacity to offer this service the county has indicated it lacks sufficient vehicles to provide both regular service and services to designated pick-up point.

The TDP/1988-1993 will examine the feasibility of a coordinated pick-up point for Morro Bay DAR and South Bay Dial-A-Ride.

5. Community Transit Stops

Two issues are apparent regarding to transit stops. The first is the need to provide covered benches at various collection points, particularly at the SLOCAT/CCT bus stop at City Park, shopping centers, and a central point on the Embarcadero. The second is the need to provide loading and unloading space at shopping centers to reduce congestion and make it easier for passengers to safely enter and exit the buses. Both types of improvements are needed but should be planned commensurate with the availability of funds to provide them.

The city has received an Urban Mass Transportation Act (UMTA) Section 18 Grant to construct accommodating twenty passengers. This bus stop shelter will offer protection from wind and rain and will include a public pay telephone and information display area. This project will be constructed in conjunction with City Park Master plan improvements. The bus stop and other park improvements will share a common architect and design theme. Construction of these facilities is scheduled to begin in mid-1989.

According to the DAR supervisor, there are common destinations which possible locations for benches and other improvements. They are listed as follows:

Williams Brothers and Payless Shopping Centers
Morro Bay Medical Center
City Park
Pacific Care Convalescent Center
Senior Center
Downtown
Embarcadero Chess Board
Lucky Seven Market (San Jacinto and Main Street)
Circle K convenience store (Hwy. 41 and Main St.)
Residential Area at Yerba Buena Street

The Williams Brothers and Payless centers should provide a parallel loading area along the store front entrances for use by the Runabout and DAR systems. This would require the elimination of 3 to 4 parking spaces at each location but would assure safe loading and unloading and reduce traffic congestion when the busses are present. In addition, a bench (preferably covered) at each location should be provided for use by passengers waiting for the bus. Other locations, where traffic congestion is not a major problem, should have benches (covered where necessary) for waiting passengers.

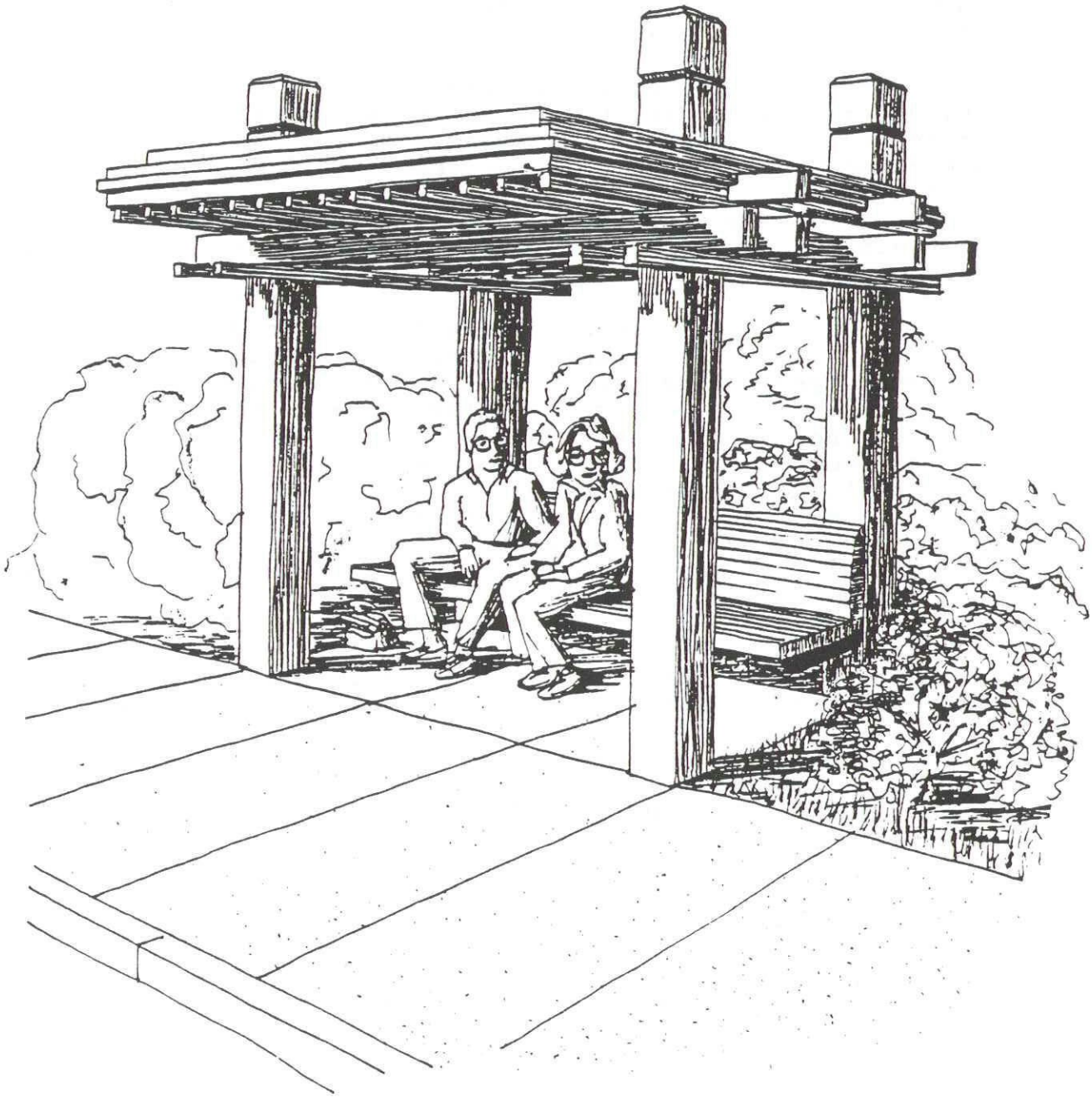
Due to the need to keep the DAR system as cost effective as possible, innovative means to provide funds for benches and other improvements should be encouraged. Possible methods would

be obtaining public grants and/or requesting community service organizations to sponsor or provide benches needing city specifications as a public service project. The City also could use the benches for advertising space, with the charge for advertising offsetting the cost of the benches.

Figure 35 shows an example of a bench design for both covered and uncovered benches. The design of the benches should coordinate with other City-wide sidewalk improvements and landscaping plans. Consideration should also be given to provide protection from rain and wind.

FIGURE 35

EXAMPLE OF COVERED BENCH



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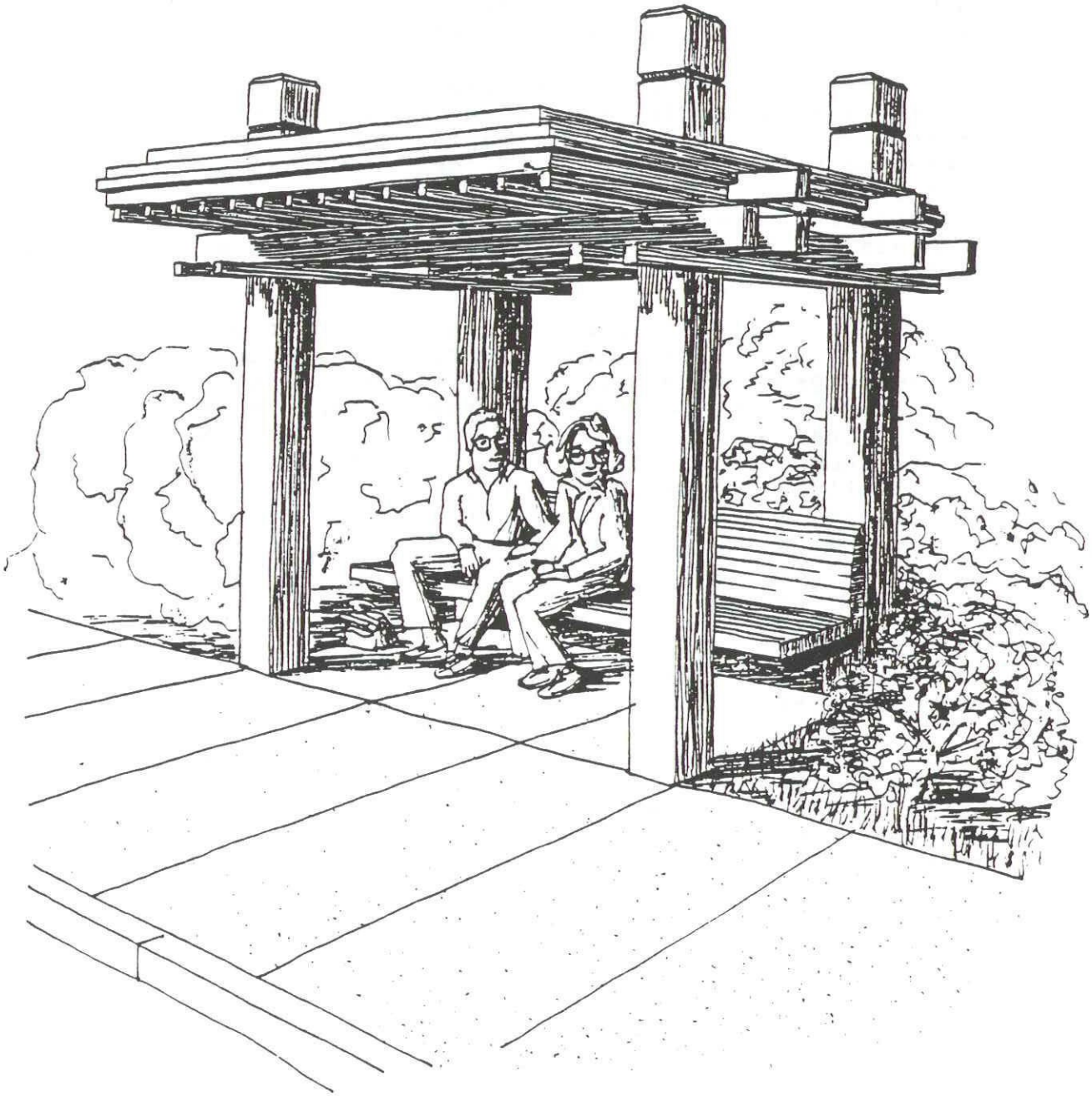


6. HARBOR

a. EXISTING CONDITIONS

The "Harbor" section of the Circulation Element concerns onl navigational channels, mooring areas and dockage. Major harbor issue are addressed in the Local Coastal Program Land Use Plan section titled "Commercial Fishing and Recreational Boating", and "Diking Dredging, Filling, and Shoreline Protection". These LCP section should be referenced with this section as there are many interrelate issues that affect harbor circulation.

Morro Bay Harbor is designated as a navigational waterway of th United States and is considered by the United States Coast Guard as "Safe Harbor" during inclement weather. It is the only full protected harbor between Monterey and Santa Barbara. The Unite States Coast Guard is responsible for enforcement of boating laws i the harbor. The U.S. Army Corps of Engineers is responsible fo maintaining the harbor channel and revetments up to the State Par Marina.

The City's responsibility for harbor development stems in par from its State Tidelands Grant. The State originally granted tid and submerged lands in trust to San Luis Obispo County. The Cit succeeded to the County's interest when Morro Bay incorporated i 1964. The statute provided the City with the lands for th establishment, improvement and conduct of a harbor and for th construction, maintenance and operation of wharves, docks, piers slips, and other facilities necessary or convenient for the promotio and accommodation of commerce and navigation. The City cannot conve the lands but may grant franchises for public purposes or leases fo a limited period (not to exceed 50 years) for purposes consisten with the public trust and with the requirements of commerce an navigation at the harbor. In 1970, the grant was amended expandin its original purposes to include other land uses within the grant (See LCP, page 158 for further information on land uses.)

The maintenance and dredging of the navigational channel in th harbor maintains the existing federal channels at presentl authorized widths and depths and assures the continued navigabilit of the channels. Authorized channel configurations are as follow (See Figure 36 for locations):

	Width	Depth	Length
Entrance Channel	350 ft.	16 ft.	2,500 ft
Navy Channel	Variable	16 ft.	4,500 ft
Morro Channel	generally 150 ft.	12 ft.	5,300 ft

The draft of boats able to be accommodated in the harbor is limited due to channel and mooring depths. The harbor can only accommodate a boat that has about a 10 foot draft because the moorage and slip areas are less than 12 feet deep due to sandbars in the channel. Portions of the mooring areas can only accommodate a boat with a draft of less than 8 feet and a length of 45 feet. Since almost all of the slips can accommodate only boats less than 45 feet in length, longer boats are limited to the T-Pier for dockage. Boats over 130 feet in length cannot enter the harbor beyond the first T-Pier.

Tables 11 and 12 summarize the dockage and mooring (anchorage) facilities which accommodate a total of 494 vessels, including temporary tie-ups for 23 fishing vessels. Figure 36 shows general areas for dockage and mooring. Presently, Morro Bay has 278 moorings and slips for recreational and recreational fishing boats and the remainder for commercial fishing, Coast Guard and City boats. The available spaces are either in the designated mooring spaces or adjacent to the shoreline in various areas of the bay. (Note: Table 11 gives 1982 counts. These are being updated by City Harbor Officials.)

Dockage facilities are listed on Table 11. The actual capacity can vary according to the size of the vessel. The space for 366 vessels is based on an average vessel length of 40 feet. Of these spaces, the City manages 91 spaces, leases 237 permanent spaces and 23 temporary spaces. There are two privately-owned docks in the harbor with space available for about 15 vessels, and the Morro Bay State Park has a marina with 135 slips.

The number of moorings in the harbor's two anchorages total 128. Boats are moored in a grid pattern measuring 100 feet on center. In addition, the City has a pilot program underway to test the acceptability and feasibility of pile anchored floating docks in the mooring areas. One experimental floating dock has been constructed in the Free Anchorage Area (mooring area) in the northern portion of the harbor. The City is responsible for dredging mooring areas and turning basins.

Since incorporation, the City has prepared plans for harbor development, once in 1966 and again in 1971. These plans proposed major marina expansion within the harbor but were on a scale inconsistent with protection of coastal resources in accordance with Coastal Act requirements. The latest plan, proposed in 1971, set as a major objective a minimum of 1,500 boat slips in the harbor as compared with the current 494 moorings and slips.

There is a public launch ramp in the harbor which is the only salt water access of its type between Santa Barbara and Monterey. This facility is offered free to the public year around.

A water taxi service is available in the harbor. The "Clam Taxi" is privately operated and it provides shuttle service to the sand spit and to mooring areas. Water shuttle service for purposes of

commercial fishing maintenance (repair of boat engines and othe equipment, boat touring, etc.) is usually provided by the Associate Divers Company.

There is no regular taxi service to transport people by wate from various points along the waterfront (e.g. from the State Par Marina to Morro Rock). A service of this nature would be beneficia in order to provide transportation for visitors from one part of th Embarcadero to another. This service could either be a privat concession or publicly sponsored, and would likely be most feasibl during the tourist season. A water taxi service along th harborfront would have advantages over a land-based tram along th Embarcadero because the harbor channel is far less congested than th street. Also, the existing public docks located throughout th Embarcadero would provide convenient pick-up and drop-off points.

FIGURE 36

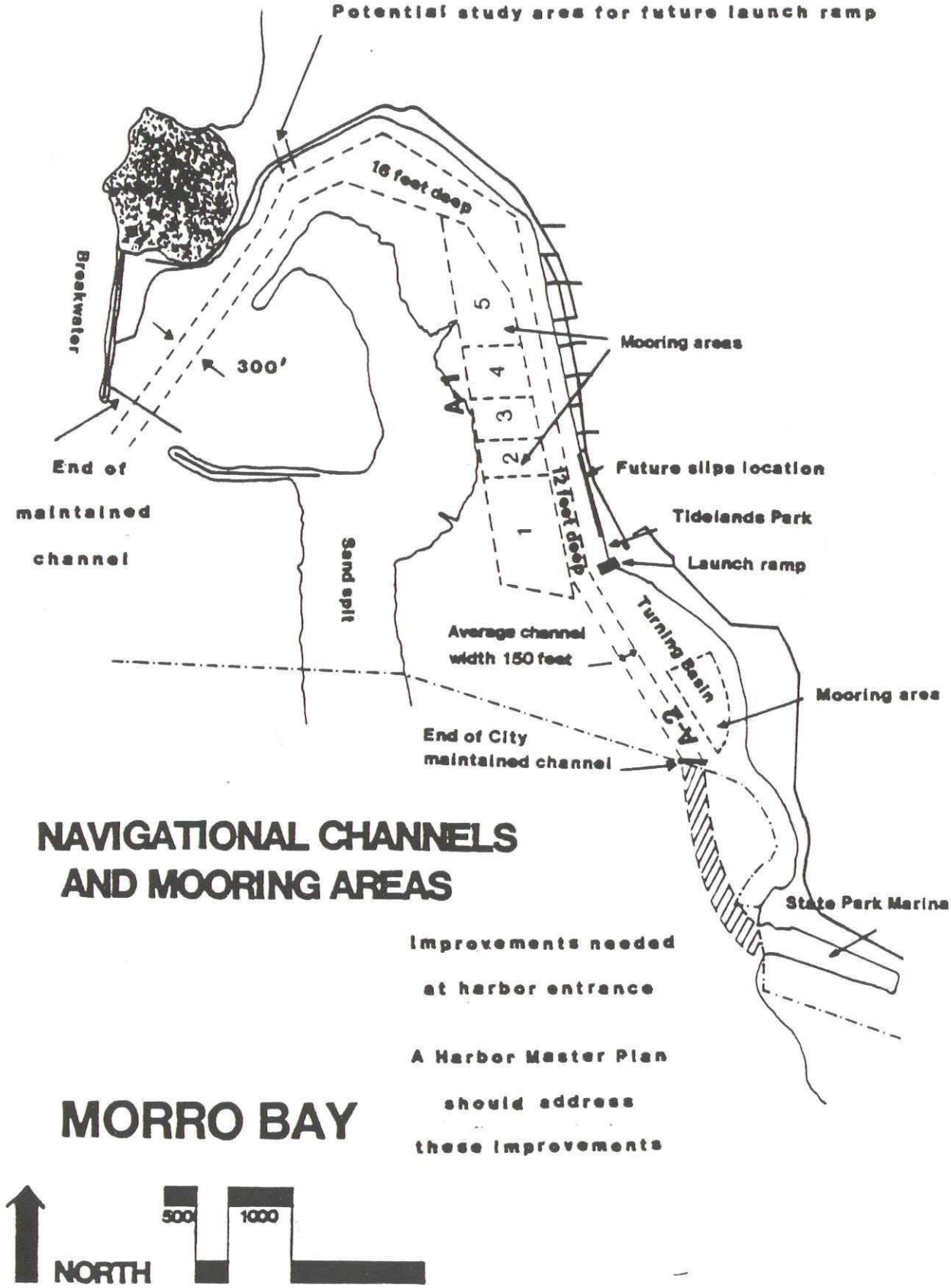

Potential study area for future launch ramp
16 feet deep
Breakwater
300'
Mooring areas
A-1
5
4
3
2
1
12 Feet deep
Future slips location
Tidelands Park
Launch ramp
End of
maintained
channel
Sand spit
Average channel
width 150 feet
Turning Basin
A-2
Mooring area
End of City
maintained channel
State Park Marina
NAVIGATIONAL CHANNELS
AND MOORING AREAS
Improvements needed
at harbor entrance
A Harbor Master Plan
should address
these improvements
MORRO BAY
NORTH
500
1000

TABLE 11 - SUMMARY OF SLIPS AND MOORINGS, 1982 MORRO BAY HARBOR

(NOTE: THIS TABLE IS IN THE PROCESS OF BEING UPDATED BY HARBOR OFFICE)

NAME/IDENTIFICATION	SPACES PERMANENT	SPACES TEMPORARY	OWNERSHIP
Midway Marina	90	0	Lease
Golden Tee	11	0	Lease
Floats South Fisherman's Fuel Dock	3	0	Private
Beacon Fuel Dock	30	3	Lease
Gladys Walton	4	0	Lease
All Seasons Seafood	0	0	Lease
Pacific Haven Boatworks	16	0	Lease
City Launch Ramp Rental Slips	14	0	City
Fry	1	0	Lease
Batteiger	1	0	Lease
Associated Divers	6	0	Lease
Sylvester Brothers	4	0	Lease
Morro Bay Yacht Club	10	0	Lease
Hittles	0	0	Lease
McGurns	2	0	Lease
Pyle	2	0	Lease
Deanna	2	0	Lease
Aquarium	2	0	Lease
The Chandlery	4	0	Lease
The Ship Store	4	0	Lease
Morro Bay Marina	11	0	Lease
Fuel Dock	0	0	Lease
Zeke's Wharf	4	0	Lease
Johnsons Morro Bay Oyster	2	0	Lease
Roses Landing	4	0	Lease
Fish Bowl II	2	0	Lease
Bob's Seafood	1	0	Lease
Marine Ways	0	0	Lease
Machine Shop	0	0	Lease
Galley Restaurant	4	0	Lease
Beachcomber Galley/Graham's Landing	6	0	Lease
Central Coast	0	2	Lease
Dunes Street Rental Slips	14	0	City
Brebe's	12	0	Private
Beach Street Rental	5	0	City
South City T-Pier	30	0	City
Sam Cunningham	1	0	Lease
Virg's Long Dock	6	0	Lease
Tiger's Folly	1	0	Lease
Virg's	6	0	Lease
Pacific Shellfish	0	4	Lease
North City T-Pier	28	0	City
M & M Refrigeration	0	2	Lease
TOTAL 366 spaces	343	23	

TOTAL CITY OWNED: 91 /CITY LEASES: 237 (23 temporary)
TOTAL PRIVATE: 15

TABLE 12

MOORING SURVEY, 1982

(NOTE: THIS TABLE IS IN THE PROCESS OF BEING UPDATED BY HARBOR OFFICE)

MOORINGS AREA	LOCATION	NUMBER OF MOORINGS
A-1	1	27
A-1	2	13
A-1	3	27
A-1	4	26
A-1	5	1
A-2	0	21
A-2	00	13

TOTAL MOORINGS	128
TOTAL CONCRETE MOORINGS	119
TOTAL STEEL MOORINGS	8
TOTAL WITH NO MOORING BUOY	1

* See Table 13 in LCP Land Use Plan (pages 153 and 154) for the specific mooring number, weight of the mooring, anchorage area by mooring number and material of mooring. Figure 36 shows mooring locations.

b. ISSUES

The major problem facing the harbor is the lack of a master plan. The latest plan (prepared in 1971) projected a slip capacity of 1,500 vessels, which may be inconsistent with the City Local Coastal Program policies. In addition, there may be conflicts between various improvements in harbor circulation and other environmental and aesthetic goals. Harbor circulation should be addressed in a master plan which balances these various considerations.

Other problems associated with harbor circulation, such as dredging of the harbor and maintenance of the breakwater, are the responsibility of the U.S. Army Corps of Engineers and are not the responsibility of the City. Therefore, direct City action in these cases is constrained.

7. PIPELINES AND UTILITY TRANSMISSION LINES

A. EXISTING CONDITIONS

In addition to the various transportation systems for the movement of goods and people, Morro Bay also has large networks of pipelines and utility transmission lines used to move water, sewage, storm drainage, fuels, electric power and communication. This section deals with these other forms of transportation.

It is definitely cheaper and often less environmentally damaging to transport goods such as water, sewage, oil and natural gas through pipelines than it is by truck. Except for the initial grading and potential for leakage, there is generally very little impact caused by pipeline transportation. As far as electrical or communication transmission is concerned, there are no currently available alternatives to replace the existing electric overhead or transmission lines.

Future technologies may bring the possibilities of widespread transport of solids through pipelines (as in the example of the use of pneumatic tubes at many bank drive-up windows). The future may also bring the common use of electromagnetic waves or laser transmissions of electrical power and telephone communication.

Maps of the oil and gas pipelines and high voltage transmission lines are contained in the Local Coastal Plan Section on Energy and Industrial Development. Maps of the major trunk lines of the water and sewer systems are contained in the Master Water and Sewer Plans and are subject to periodic updating. The detailed water and sewer networks are depicted upon plot maps in the City Engineer's office.

1. Water Distribution

The City has wells in the Chorro and Morro groundwater basins from which the City obtains its water. The water is pumped to storage tanks to provide for both domestic and fire flow needs of the City. The water is distributed throughout the City in an extensive network of pipelines which are usually located within street rights-of-way. The water system is discussed in detail within the Public Facilities section of the General Plan. The City's Water Master Plan, prepared in 1975, specifies the improvements which are necessary to ensure that all uses are adequately served.

In addition to the City's water system, the Whale Rock water main is routed through the City. Water from Whale Rock Reservoir is transmitted to the City of San Luis Obispo through this line.

2. Wastewater Collection

The City of Morro Bay jointly owns their wastewater treatment facility with the Cayucos Sanitation District. The pipeline collection system for each community is totally separate.

Sewage is collected throughout the City via pipelines generally located in the street. Sewage is treated at the City's wastewater facility located south of Atascadero Road, west of Highway 1.

The sewage system is described within the Land Use Section of this General Plan. A detailed Collection System Master Plan Study is currently being conducted. That plan, when complete, will specify the measures which will be necessary for the proper collection, of wastewater in the City of Morro Bay.

3. Oil and Gas Pipelines

There is an extensive oil pipeline network within the City of Morro Bay. Pacific Gas and Electric Company has an offshore terminal for unloading fuel oil to operate their power plant. Pipelines carry the fuel oil to storage tanks on the power plant site and to additional tanks in the county, about three miles northeast of the power plant. The section on energy facilities contained in the Land Use Element provides details on the power plant facility.

Chevron U.S.A. has an extensive tank farm located northeast of the City limits. Crude oil from the lower San Joaquin Valley and San Ardo fields is stored in the tanks and then transferred by pipeline to oil tankers at Chevron's two offshore marine terminals for shipment to Los Angeles, San Francisco and Washington. Other oil companies such as Mobil Oil Company and Texaco may also use Chevron's pipelines and marine terminal under an agreement approved by Chevron. Chevron has no plans for expansion of their pipeline system.

The U.S. Navy also has a marine terminal located between the Chevron terminals and P.G.&E's terminal. Jet fuel is transferred via a 16-inch pipeline from tanker ships moored at the terminal along Vashon Avenue through an easement across several residential lots, then along part of Whidbey Way to several storage tanks located adjacent to and east of the north

Morro Bay residential area. From there, the jet fuel is shipped via a 6-inch pipeline to the Lemoore Naval Air Station (LNAS) located in the San Joaquin Valley. The Navy has no plans for expanding their jet fuel pipeline system.

Southern California Gas Company provides natural gas to the majority of the City. This distribution system, like the water and sewer systems, is very extensive. There are natural gas lines under almost every street in the City. Pacific Gas and Electric's power generating plant is served by their own separate gas line from the northeast.

4. Utility Transmission and Communication Lines

Electrical, telephone and cable television communication lines are spread throughout the City. In most cases, these utility lines are located above ground, suspended from poles located in parkways or within easements in rear yards. Utilities are placed underground in newer developments as required by the Local Coastal Plan visual resource policies. (See Scenic Highway Element and Visual Resources Section.)

In the City of Morro Bay, three electric transmission lines begin at PG and E's power generating plant on the Embarcadero. These transmission lines are supported overhead by steel towers, designed in accordance with the applicable California Public Utilities Commission's rules and regulations. These tower lines transmit the electrical power easterly into the County of San Luis Obispo and to the southern San Joaquin Valley for transmission to much of California, as well as Oregon and Nevada. (Refer to Industrial and Energy-Related Developments section of Coastal Land Use Element portion of the General Plan).

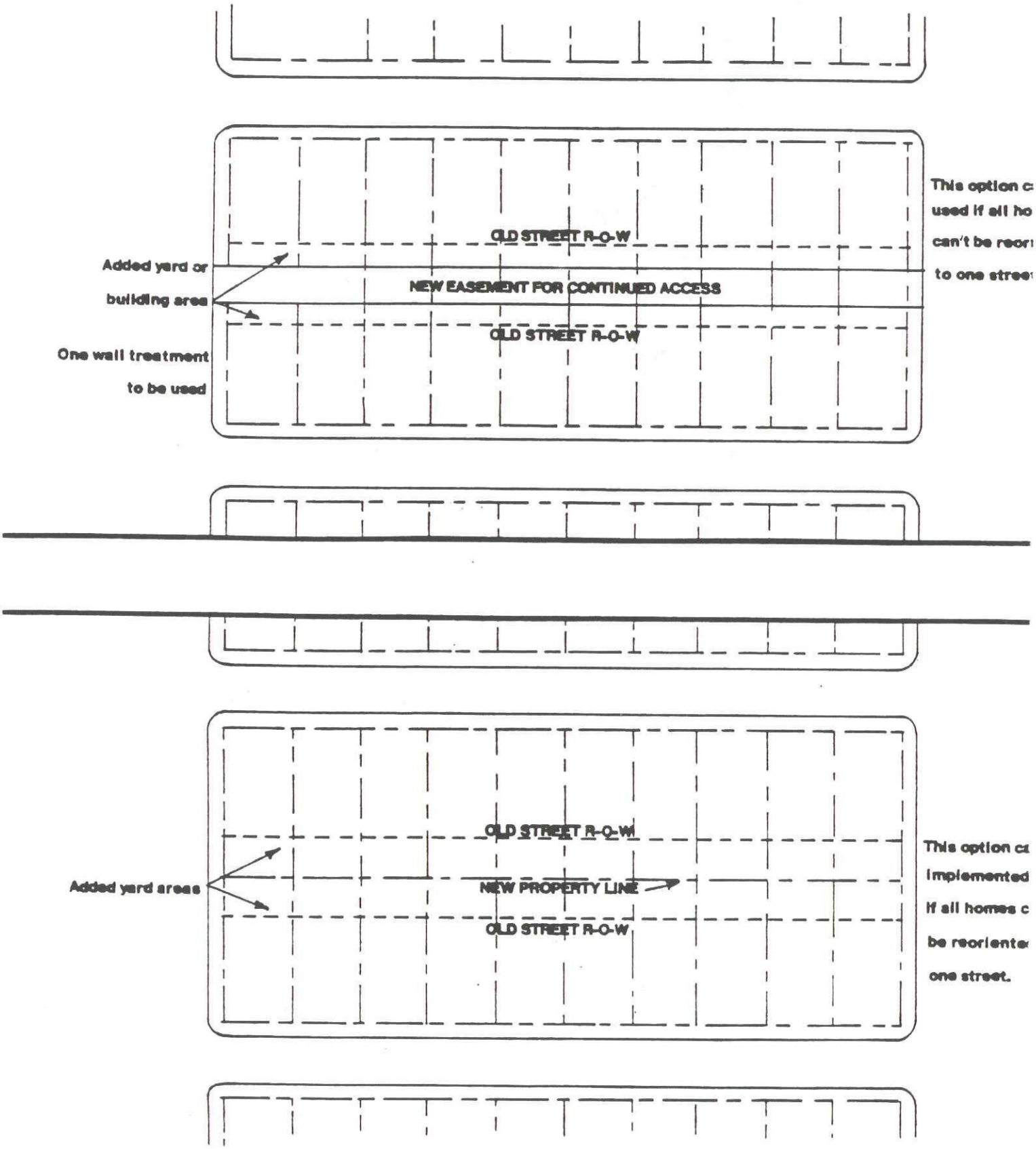
b. ISSUES

1. Water Distribution System

The water pipeline system is discussed in detail in the City's Master Water Plan. That plan describes deficiencies in the size and condition of many of the existing water lines. Many water lines are inadequate; they are too small to provide for required domestic and fire flows. The Master Water Plan describes proposed water works improvements which are to be completed in five 5-year phases. The improvements which are stated to be necessary include correction of pressure zone problems, replacement of lines where there are leakages or head losses, or where the size of the existing lines are inadequate to provide for fire flows. (See also Public Facilities Section of the General Plan.)

FIGURE 2

ALTERNATIVES FOR LOCAL STREETS HAVING DOUBLE FRONTAGE LOTS:



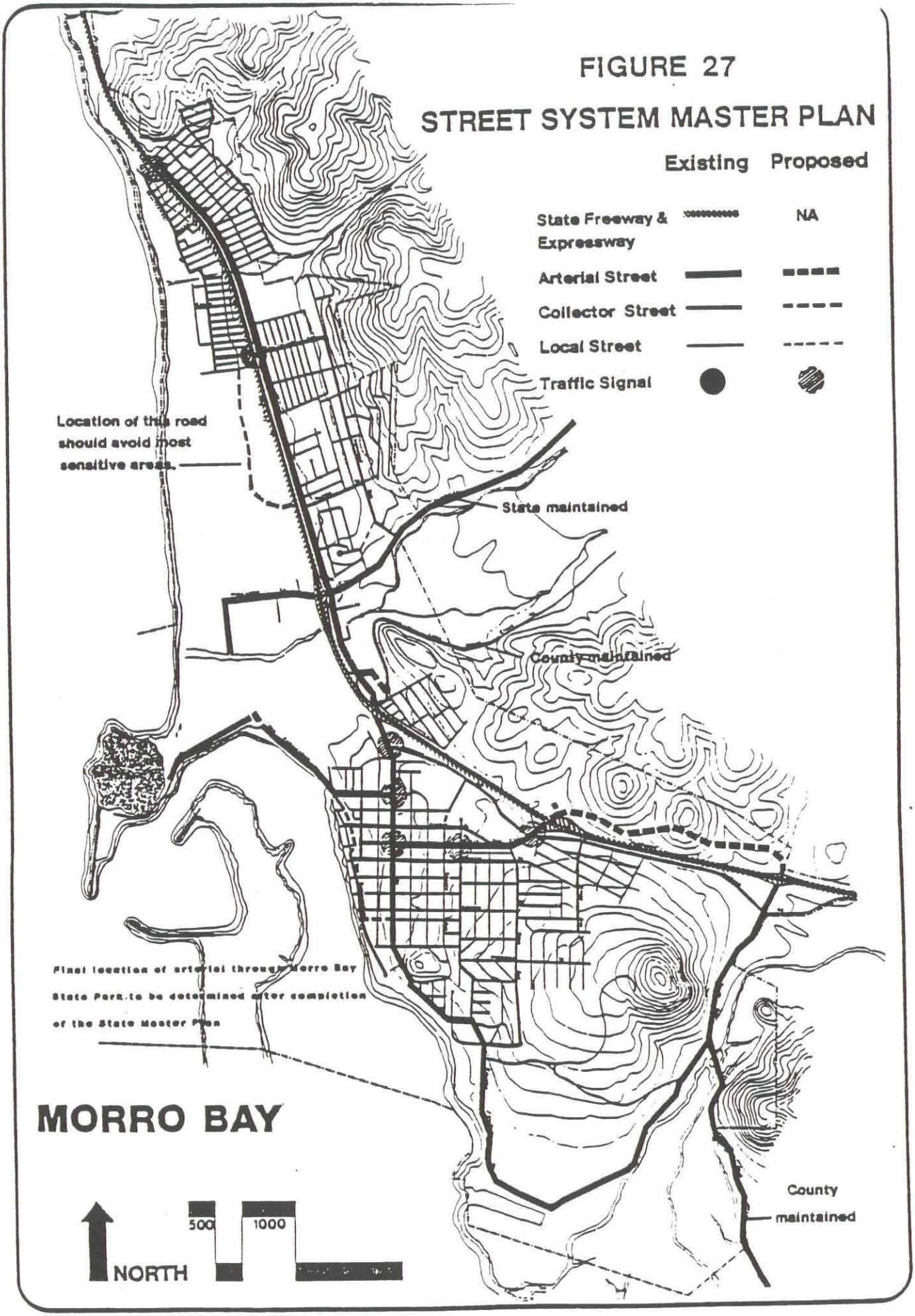


FIGURE 27
STREET SYSTEM MASTER PLAN
Existing Proposed
State Freeway & Expressway
NA
Arterial Street
Collector Street
Local Street
Traffic Signal
Location of this road should avoid most sensitive areas.
State maintained
County maintained
Final location of arterial through Morro Bay State Park to be determined after completion of the State Master Plan
MORRO BAY
County maintained
NORTH
500
1000

2. Sewage Collection System

The sewage system was studied. A new sewer master plan was adopted in early 1988. That plan will specifies the programs which will be necessary to assure adequate sewage flow capacities within the City's sewers.

3. Oil and Gas Pipelines

Once in place, there are usually very few problems associated with oil or gas pipelines. These systems are owned by entities other than the City. Therefore, the maintenance and repair of these lines are not the responsibility of the City.

The Chevron pipeline bisects only a small corner of the north part of Morro Bay. Their storage tanks are located within the County and their terminals are located within State Tidelands outside of direct City jurisdiction. The Local Coastal Plan contains policies regulating pipelines for energy facilities for such concerns as oil spills, waste disposal, expansion and pollution. The LCP policies also address mitigation measures for pipeline construction. Those measures include erosion control, revegetation and other measures intended to protect natural resources.

The Federal Department of Transportation and the California Pipeline Safety Act regulate the technical performance of oil and gas pipelines. The installation of new pipelines within the City is governed by the City of Morro Bay through the issuance of coastal development permits and grading/building permits.

Since the Chevron pipeline is remote from the rest of the community, the potential for impacts on adjacent land uses is negligible. Oil spills or fires related to the lines should only impact the immediate area of the lines unless they are not controlled quickly, in which case the impacted area will spread. Chevron has an emergency contingency plan which has been coordinated between Chevron and Morro Bay's emergency services.

Chevron has no plans for new pipelines in the City in the near future. They replaced their 12-inch crude oil pipeline in 1982. The Southern California Gas Company has an 8-inch natural gas line paralleling the crude oil pipeline to supply fuel for the Estero Terminal. There is adequate capacity in these lines to meet projected needs of Chevron.

The primary problem in the past has been third-party damage, usually during grading. Chevron regularly patrols and inspects their lines. They have a program for continually upgrading the marking of their lines. Like other oil and utility companies, they participate in the Underground Service Alert (U.S.A.) program by which a person planning excavation is required to call 800-642-2444 to determine if underground pipelines will be affected.

Another problem for oil pipelines is corrosion. In order to minimize the potential for an oil spill due to corrosion, Chevron uses coated lines and cathodic protection. If Chevron continues its programs of monitoring with regular inspections and annual tests, there is little likelihood of any problems being created by their pipelines.

Unlike Chevron's oil pipelines, the Navy's jet fuel pipelines are located within the northern residential area of the City. Fuel spills, fires or explosions could seriously impact adjacent land uses. The Department of Defense controls the maintenance and construction of these pipelines. They inspect the lines daily by line patrols and weekly by air patrols. They also conduct pressure and volume checks of their pipelines. However, the volatile nature of jet fuel and proximity to residential areas makes these pipelines potentially much more hazardous than Chevron's or P.G. & E.'s oil pipelines.

The City's LCP directs that if the Navy's lines and facilities are to be expanded, that they be relocated into the hills near the Chevron facility away from residential areas. Until that occurs, there should be measures to ensure that residential development is protected to the greatest extent possible from any potential accidents along the existing lines. The current monitoring by the Navy reduces the risk to existing residents. Signage identifying the location of the pipeline should be increased so that accidental breakage during excavation work does not occur. Meanwhile, the monitoring program conducted by the Navy should minimize the potential for spills, fire or explosion.

Pacific Gas and Electric Company's pipelines enter from their marine terminal within their power plant complex. Those lines, as well as the lines feeding their storage tanks in the County, are separated from existing residential areas. As with Chevron's pipelines, the primary concern for P.G. & E.'s pipelines is third-party damage caused by excavation. P.G. & E. has their own monitoring program to ensure that leaks or spills do not occur.

The Southern California Gas pipelines have potential for fire or explosion. These hazards occur in pipelines due to leaks caused most often by third-party excavation. To help reduce this risk, the City's current program of notifying contractors to contact Underground Service Alert will be continued. Education of all excavators is the best means to prevent breakage of natural gas and other buried pipelines.

4. Utility Transmission and Communication Lines

The construction, repair and maintenance of utility lines is the responsibility of the utility companies. With the exception of occasional power outages and interruptions in telephone or cable television services, there are very few impacts or problems associated with transmission lines. The prime concerns with transmission lines are their visual impact when installed above ground and, in the case of electrical lines, the potential for accidental electrocution. Both of these problems are markedly lessened if the utility lines are placed underground. The City's Visual Resources Section of the General Plan requires the undergrounding of on-site utilities in connection with new development or major redevelopments. As funds for undergrounding of existing off-site utility lines becomes available, priority will be given to undergrounding along the Embarcadero, within the Downtown and along the entrances of the City.

It may be appropriate to include underground utilities as part of the programs for the provision of off-street parking in both the Downtown and the Embarcadero. In this way, additional areas could be undergrounded as part of the improvement or assessment districts.

In addition to the utility lines which serve the various land uses within the City, P.G. & E. has three major electrical transmission lines which transmit power from the Morro Bay power plant to the rest of their statewide customers. These lines begin at the power plant and pass over Highway 1 on their way eastward across the County. The electrical lines carry too high a voltage to be feasibly located underground with today's technology. However, there are more aesthetically pleasing support structures now being used in other areas of the country. When possible, the existing structures should be replaced with better-designed support structures.

C. CIRCULATION ELEMENT OBJECTIVES, POLICIES AND PROGRAMS

1. PEDESTRIAN

OBJECTIVES:

* Provide a functional pathway system throughout the City.

* Ensure that the pedestrian is comfortable including provision of walkway amenities and weather protection where pedestrian traffic is heavy.

* Provide for the convenience of the pedestrian, including pathway directness, gradual grades, directional signing, directory maps and other features which make pedestrian travel easy and uncomplicated.

* Ensure the safety of the pedestrian by separation from vehicular travel.

* Provide for the security of the pedestrian by providing adequate lighting and open lines of sight.

* Provide accessibility for the handicapped.

PROGRAMS AND POLICIES

POLICY C-1: Sidewalks should be provided along existing commercial, industrial and multi-family residential streets where no sidewalks currently exist.

Program C-1.1: New developments should be required to provide side walks along all street frontages of the property except within single-family designated areas. Sidewalks may be required in single family areas if necessary to complete a discontinuous sidewalk system already in place. Major developments may be required to extend sidewalks beyond the boundaries of the site if it is determined that pedestrian linkages to other existing sidewalks are warranted.

Program C-1.2: Sidewalks should be constructed along the routes specified as highest priority as funds become available.

Program C-1.3: Improvement districts or other funding measures should be established for the Downtown, the Embarcadero the north Main Street commercial area and school areas for the construction of new sidewalks, the addition of

(minimum of 5 feet clear width). Residential sidewalk crossings of driveway aprons should be avoided when possible.

POLICY C-3: Handicap access should be provided where feasible pursuant to State Disabled Access Regulations.

Program C-3.1: All new sidewalks should include handicap ramps at the curb at intersections and other locations where accessibility is warranted.

Program C-3.2: A switch-back handicap ramp should be considered for the coastal bluff upon development of the parcels located along the bluff east of the Embarcadero.

POLICY C-4: Pedestrian access to recreational areas and schools should be provided.

Program C-4.1: Walkways, pathways and boardwalks shall be constructed in accordance with the policies and programs established in the Local Coastal Plan. The following walkways are included in this coastal access system:

a. The Embarcadero walkway along the Morro Bay Harbor.

b. Walkways between Main Street and Del Mar Park across Texaco property east of Main Street.

c. Walkways between Sandalwood Avenue and the beach over the "Cloister" parcel.

d. Lateral access walkway and three vertical access walkways over "the Keyoto-Natalie property", north of Morro Bay High School. The developer of this property should prepare a detailed public access plan for the property. (See also "Bikeway" section.)

e. Walkways to the beach north of Morro Rock and south of "the Keyoto-Natalie property".

f. Pathways and bike trails through Morro Bay State Park from Main Street to South Bay Boulevard. (See Pathway System Map, Figure 2)

h. Other pathways designated in the Local Coastal Plan.

Program C-4.2: A pathway should be improved between central Morro Bay and Morro Bay High School across the P.G. & E. property as a condition of any future development permit approvals for the power plant. The bikeway and walkway system through PG&E property may be a shared responsibility, in which PG&E will dedicate the land, and the City will provide the improvements. (See also "Bikeway" section.) Any pathway or bikeway should minimize removal of

trees, and should be designed to provide security for pedestrians and should not jeopardize security or liability requirements for PG&E.

Program C-4.3: A pathway should be improved between central Morro Elementary School and Quintana Road as a condition of approval for development of the open area located northwest of the Williams Bros. Shopping Center.

Program C-4.4: A sidewalk should be provided along Coleman Drive near the PG&E plan. (in conjunction with separate bikeway).

Program C-4.5: A stairway should be constructed at the end of Dunes Street.

Program C-4.6: Rehabilitation of the revetment along Coleman Drive by the U.S. Army Corp. of Engineers should include installation of the boardwalk required in the LCP.

POLICY C-5: Pedestrian crossings of streets shall be designed to minimize hazards to the pedestrian.

Program C-5.1: The City should provide crosswalk stripes at intersections where pedestrian traffic is heavy.

Program C-5.2: At intersection locations in the Downtown and along the Embarcadero, sidewalk extensions into the parking lane may be provided, as deemed useful and as funding becomes available, to reduce the distance across the street. These extensions will only be constructed when they do not impair drainage or vehicular traffic movement.

Program C-5.3: Alternative paving materials such as colored, stamped concrete should be considered for pedestrian crosswalks along Morro Bay Boulevard and Main Street in the Downtown and along the Embarcadero, in order to provide a theme and to show where pedestrian traffic is encouraged. Materials and design should be selected on the basis of long range safety and reduced maintenance.

Program C-5.4: Mid-block pedestrian crosswalks should be discouraged. However, mid-block crosswalks may be provided in situations where the City determines that distance between intersections is longer than the average block length.

Program C-5.5: A crosswalk should be provided at the Yerba Buena Street intersection with Highway 1 at the time that the intersection is signalized. This crosswalk and the crosswalk at San Jacinto Street and Highway 1 should be designed to be highly visible. There should be a walk-don't walk signal for pedestrians at both intersections with control buttons accessible to both pedestrians and

bicyclists. Paved raised center islands should also be provided for use of pedestrians crossing Highway 1. Cal Trans should be requested to place these improvements in the list of improvement projects for State highways.

POLICY C-6: Facilities for the pedestrian should be provided within developments.

Program C-6.1: Plazas and arcade walkways should be provided within commercial developments. Major commercial developments such as neighborhood shopping centers should include plazas within development plans. Smaller commercial developments which are unable to include outdoor plazas should be encouraged to include outdoor pedestrian spaces when feasible. (See also discussion of covered bus benches in the "Transit section.)

Program C-6.2: Walkways from parking spaces to the building should be provided within new developments as deemed appropriate and feasible by the City.

POLICY C-7: Sidewalks and plazas should include pedestrian amenities and landscaping.

Program C-7.1: Trees shall be planted along all streets as a condition of development. Generally, there should be a minimum of one 15-gallon size tree provided each 60 feet, or one per each lot, whichever is more. These trees need not be located within the right- of-way but they must be of a type and species such that: a. the roots do not affect sidewalks, curbs or gutters; b. height is compatible with overhead utilities; c. maintenance, when established, is minimized; and d. adaptable to the Morro Bay climate and soil conditions.

The Zoning and Subdivision Regulations shall be amended to provide criteria for the planting of trees as a condition of development and/or subdivision.

Program C-7.2: Along Downtown and Embarcadero sidewalks, landscaping should be increased; such landscaping could be placed in planters, tubs or window boxes.

Program C-7.3: Street furniture should be provided for the convenience and comfort of the pedestrian. Benches, trash containers and water fountains should be placed at strategic locations in the Downtown and Embarcadero (i.e. locations where there is substantial pedestrian traffic such as the theater block in the Downtown). When funding becomes available, the City should prepare a precise plan for the pedestrian areas of both the Embarcadero and the Downtown.

Program C-7.4: Alternative walkway paving textures should be encouraged. Paving materials must be durable, attractive and low in maintenance (such as stamped concrete and pavers).

Program C-7.5: Awnings and other weather protection should be provided in the heavy pedestrian traffic locations in the Downtown and the Embarcadero. Encroachment permits are necessary where awnings protrude into the public right-of-way.

Program C-7.6: Information kiosks should be placed at key pedestrian areas such as near central Downtown and along the Embarcadero. Kiosks can include boards to advertise local community events, directional maps for tourists, newspaper racks, and public telephones.

POLICY C-8: Sidewalks and walkways should be designed to be safe and secure.

Program C-8.1: Lighting should be installed along walkways. The lighting should be adequate to allow pedestrians to avoid obstructions as well as to allow proper police surveillance from adjoining areas. The amount of lighting needed for any particular walkway is dependent upon the amount of foot traffic. In areas of minimal nighttime foot traffic, such as within low-density residential areas, lighting may not be justified. Street lights in many commercial areas provide adequate lighting to meet the needs of the pedestrian walkways.

Program C-8.2: As funds become available, sidewalks should continue to be repaired or replaced when they become excessively cracked or uneven. Development should be required to repair adjacent cracked or uneven sidewalks as a condition of the permit.

Program C-8.3: Walk-don't walk signals should be included in any new street traffic signal installation.

Program C-8.4: Traffic signals should be timed to ensure that people can easily walk across the street before the light turns red.

Program C-8.5: Driveways and streets should be highly visible for the pedestrian. Buildings and landscaping should be located so as to not block the view of vehicles entering or exiting streets and driveways.

Program C-8.6: A signing program is needed coordinating pedestrian traffic between the Embarcadero and downtown areas.

2. BICYCLE

OBJECTIVE:

* Provide a safe, efficient, enjoyable and attractive bikeway system throughout the City that serves as an alternative mode of transportation for persons of all ages. The system should, to the extent feasible, serve the needs of the bicycle commuter and shopper as well as the recreational user and exercise enthusiast.

PROGRAMS AND POLICIES

POLICY C-9: The City will implement the Bikeway System Plan within legal and fiscal constraints while recognizing competing needs.

Program C-9.1: Bike paths or lanes designated on the Bikeway Plan should be provided within or adjacent to any new development or major reconstruction as a condition of the development approval. Class I separated bikeways will only be implemented where adequate right-of-way exists, such as within Morro Bay State Park and within Planned Unit Developments.

Program C-9.2: Those areas of the bikeway system not anticipated to be constructed by private development should be added as an amendment to the "Parks and Recreation Facilities Plan" Specific Yearly Plans for 1985-1990 and other future public facility plans. Improvement districts established for other circulation system improvements should include funds for bikeway system improvements within each district. The City should also actively pursue grant funds for bikeway system development.

Program C-9.3: Portions of the Bikeway System which are within public school properties should be encouraged to be developed by the San Luis Coastal Unified School District as part of their capital improvement program.

Program C-9.4: Portions of the Bikeway System which are within the state park and state owned properties should be encouraged to be developed by the State of California and should be incorporated into the State's Master Plans for these areas.

Program C-9.5: The standards for the development of bikeways shall generally be consistent with the criteria established in the California Highway Design Manual, "Bikeway Planning

POLICY C-10: The City will promote the use of bicycles in Morro Bay.

Program C-10.1: The City should request that local businesses encourage their employees to ride bicycles as an alternative to the automobile.

Program C-10.2: The Recreation and Parks Department should sponsor bike rides in the City and region.

Program C-10.3: The City should encourage motels to provide bicycles for the use of their guests.

POLICY C-11: The City should encourage the provision of secure and convenient bicycle parking areas at important bicyclist destination points.

Program C-11.1: The City should require new development anticipated to attract bicyclists to provide bike racks and bike parking areas in convenient locations as a condition of approval.

Program C-11.2: The City should encourage existing businesses and schools to install bike parking racks if adequate bike parking does not presently exist.

Program C-11.3: The City should periodically assess all existing municipal facilities and parks to determine the need for bike parking racks and install racks where needed as funding becomes available. Programs for the placement of bike parking racks should be added to the "Parks and Recreation Facilities Plan" and future capital improvement plans.

Program C-11.4: A bike rack should be installed at the end of the Embarcadero bike path as well as other high use bike way areas.

POLICY C-12: The City will continue to promote safety in the use of the bikeway system.

Program C-12.1: The City Recreation and Police Depar tments should work with the School District to continue bicycle use safety instruction for school children. This program should concentrate its efforts in the early elementary grades.

Program C-12.2: The Public Works Department should continue to monitor the street and bikeway system to ensure that bicycle hazard are prevented.

Program C-12.3: Bike paths should be separated from pedest-
rian paths for safety purposes.

and Design". For special circumstances, such as restricted right-of-way or steep slopes, the Planning Commission may grant exceptions to these standards.

Program C-9.6: Bikeway markings and signage should be clear, visible and easy to understand.

Program C-9.7: In all bikeway designs, efforts should be made to reduce conflicts between bicycles and pedestrians as well as between bicycles and motor vehicles.

Program C-9.8: Existing bikeways which may present some problems for the bicyclist as currently designed (such as portions of the bike path along south Main Street) should be redesigned pursuant to State Bike way Design Criteria, as funding becomes available.

Program C-9.9: The following bikeway system projects should be implemented:

1. A safe bike path through North Morro Bay should be provided. This could either be along North Main Street as a Class 2 bikeway, or as another alternate route as a Class 3 bikeway. (See Plan)

2. A Class 1 bike path should be provided along the east portion of the Keyoto-Natalie property near Highway One.

3. A bike path along the western edge of the Keyoto-Natalie adjacent to the dunes is inconsistent with the sensitive nature of the area, may be difficult to keep free of sand, and therefore any bike path in this area should be located to the east of the dune area.

4. A safe bike path should be provided between Highway 41 and the City's edge.

5. A bike path from Highway 41 across Morro Creek to Coleman Drive should have a low priority.

6. Bike lanes or paths should be provided within the Beach Tract.

7. A safe bike path along South Bay Boulevard should be provided to give access to and from the Los Osos area.

Program C-9.10: South Main Street could be widened if on-street bike lanes replaced the existing asphalt trail next to the curb. A narrower sidewalk for pedestrians only could be constructed in the location of the existing bike path.

3. VEHICLE TRANSPORTATION AND STREETS MASTER PLAN

OVERALL OBJECTIVE: Provide a safe, efficient, enjoyable, attractive and well-maintained street system which adequately serves the transportation needs for private vehicle, commercial and public vehicle, bus, bicycle and pedestrian travel.

SECONDARY OBJECTIVES:

* Ensure that the street system is adequate to serve the circulation needs of existing and planned land uses.

* Maintain the safety of the existing street network.

* Discourage excessive traffic from quiet, residential neighborhoods and attempt to concentrate traffic on major arterials.

* Improve the appearance of the street-scape for both new and existing streets and highways.

* Provide effective delivery and truck transportation service without causing traffic congestion in high-activity commercial areas or traffic and noise problems in residential areas.

* Obtain increased use of alternative modes of travel to optimize street system usage.

PROGRAMS AND POLICIES

POLICY C-13: The City will strive to implement the street system plan within its fiscal and legal limitations.

Program C-13.1: Streets designated on the Street System Plan should be constructed within and adjacent to any development as a condition of development approval.

Program C-13.2: In areas where needed street improvements specified in this Circulation Element are not likely to be constructed by adjacent development, in-lieu fees should be required to be paid as a condition of development within the area of general benefit. These development fees should be based upon the cost of purchase of right- of-ways, design costs, construction costs and the costs of administering the project as well as financing costs. The City should also consider establishing improvement districts when improvements are necessary and when in-lieu fees alone are deemed to be inadequate to meet the costs of the improvements. (See Appendix "B" for additional funding sources.)

Program C-13.3: The Capital Improvement Program should include phased development of any designated streets which are not expected to be constructed by private development.

Program C-13.4: Improvements of streets within Morro Bay State Park, including those to be included in the Park Master Plan, should be coordinated with the street improvements specified in the Street System Plan. An arterial should be provided through the State Park.

Program C-13.5: The City should encourage the State Department of Transportation to implement both the State's highway plan and other improvements necessary to implement this plan which are associated with the state highway system.

Program C-13.6: Changes in planned land uses and other conditions which affect the street system should be continually monitored and, where necessary, these changes should be reflected in updates of this Circulation Element.

POLICY C-14: Improvements will be made to improve the operation of the existing street system within fiscal, staffing and legal limitations.

Program C-14.1: The City should continue its ongoing programs for pavement resurfacing.

Program C-14.2: Those intersections described in Appendix "A"should be redesigned when feasible and within the suggested time frames.

Program C-14.3: Where feasible, turn-arounds should be provided at the ends of existing cul-de-sac streets as a condition of adjacent development or with the use of improvement district funds. New cul- de-sac streets shall be required to have adequate turn-arounds.

Program C-14.4: Where adequate off-street parking is provided, on- street parking on existing commercial collector streets and arterial streets should be removed near intersections and additional travel and turn lanes should be added when necessary to meet traffic needs. Examples might include the Downtown segments of Morro Bay Boulevard and Main Street as well as north Main Street.

Program C-14.5: Curbs at key intersections on major arterials should be reconstructed when funds are available to allow easier right-hand turns. High priority are the intersections of arterials and collectors with Morro Bay Boulevard or with Main Street.

Program C-14.6: On-street parking should be prohibited in close proximity to curb returns at intersections to improve visibility. (See safety/sight visibility criteria in "Parking" section.)

Program C-14.7: Traffic signals and other traffic control devices described in Appendix A should be provided when needed, and where they improve the operation and safety of the street system. Buena Vista and Highway 101/Main Street is the only location currently needing a traffic signal.

Program C-14.8: When traffic signals are added to the street system, they should be synchronized to help eliminate delays and improve traffic flow.

Program C-14.9: The City should investigate solutions to the Main Street-San Jacinto intersection and surrounding area during preparation of the North Main Street Specific Plan.

Program C-14.10: Any new development with identifiable increases in traffic generation to the complex intersection at Morro Bay Boulevard, Quintana Road and State Highway 1, shall contribute financially to geometric realignment of that intersection.

Program C-14.11: The City shall require financial contributions toward signalization of the complex intersection at Morro Bay Boulevard, Quintana Road and State Highway One, from new developments in the area which will generate significant new traffic in the vicinity. (CDP 96)

POLICY C-15: Alternative modes of travel should be encouraged.

Program C-15.1: The development of the street system will be coordinated with the needs and programs identified for bikeways, bus and other forms of transit.

Program C-15.2: On-street bike lanes and off-street bike paths specified on the Bikeway Plan should be included in re-construction and new development of City streets where feasible. (See "Bikeway" section.)

Program C-15.3: Adequate sidewalks should be provided in new developments and as part of the reconstruction of existing streets except in lower density residential areas. (See "Pedestrian" section.)

Program C-15.4: Bus loading areas should be provided when appropriate to serve current or future transit system needs. (See "Transit" section.)

POLICY C-16: New streets and reconstruction of existing streets shall incorporate measures which ensure safe and efficient operation of the traffic system.

Program C-16.1: Standards for the development of streets should be updated to reflect the guidelines recommended in this Element. Actual street configurations may differ, however, due to variables such as traffic demand, topography, restricted right-of-way, adjacent land uses and other factors.

Program C-16.2: The construction of new streets, and when feasible the reconstruction of existing streets, shall be consistent with the City standards. Exceptions may be made for special circumstances.

Program C-16.3: Directional and informational signs and street markings should be as clear and efficient as possible.

Program C-16.4 Private signs should be controlled so that they do not detract from the visual environment nor distract from the view of public street signs.

Program C-16.5: Driveways for new development should be directed away from main arterials to collector and local streets when possible. If driveway access to arterials is necessary, those accesses should be ikept to the absolute minimum possible, to limit potential vehicular conflict points. Unnecessary existing driveway accesses to main arterials should also be eliminated when possible during redevelopment of existing uses.

Program C-16.6: The Morro Bay Municipal Code limits the length of new cul-de-sacs to 450 feet. Further, cul-de-sacs should not serve large numbers of residential units (20 single-family residences maximum) or major commercial or industrial uses.

Program C-16.7: New streets should not have excessive grades (generally 15 percent maximum). Exceptions may be permitted for new streets which provide necessary access to existing development. Adequate flat vehicle stopping areas should be provided at intersections per City Engineering Standards, where possible.

Program C-16.8: Streets should be designed to permit easy and rapid emergency vehicular access.

Program C-16.9: In the design of new streets and the reconstruction of existing streets, conflicts between vehicles, pedestrians and bicycles should be reduced or eliminated when feasible.

Program C-16.10: The City should conduct a separate study f stop/yield signs within the community to determine if any changes are necessary.

POLICY C-17: The City will promote programs which will improve the visual appearance of the City's streets.

Program C-17.1: New development should be required to provide plantings, including street trees in parkway areas, within and adjacent to the development.

Program C-17.2: The City should continue to encourage the State Department of Transportation to implement comprehensive landscaping programs for Highway 1 and Highway 41.

Program C-17.3: The City should include street planting projects in the Capital Improvement Program. The City may consider the establishment of special districts to provide funds for the construction, planting and maintenance of street landscaping projects.

Program C-17.4: New utilities and, where feasible, existing utilities should be undergrounded as a condition of development in accordance with the policies in the LCP and Zoning Ordinance.

POLICY C-18: The design of the street system should be sensitive to the environment.

Program C-18.1: Environmentally sensitive areas should be avoided where feasible. Where it is necessary to construct roadways in sensitive areas in order to provide optimum circulation, measures shall be taken to reduce the impacts to the extent feasible.

Program C-18.2: Hillside streets should be designed so that grading is kept to a minimum. Except where necessary to improve the safety of existing streets, grading for roadways shall be prohibited on slopes in excess of twenty (20) percent.

Program C-18.3: The street system should be designed to encourage traffic to use arterial and collector streets through the use of signage, wider street widths and other similar measures.

POLICY C-19: The City will, when possible and where necessary, reduce traffic congestion and circulation problems that may be caused by trucks making deliveries in high-activity commercial areas.

Program C-19.1: An analysis should be made to determine if changes should be made in the number and location of commercial vehicle loading zones and make recommendations to the City Council. Effort will be made to enforce use of loading zones and to prevent double parking. The program would be evaluated on a biannual basis to determine if additional loading spaces are necessary.

Program C-19.2: A truck route system should be adopted if residential streets become used consistently for through truck traffic. The truck routes should be designated by appropriate signage to clearly indicate which streets the truck driver can use.

POLICY C-20: Land utilization for the street system should be kept to the minimum without sacrificing efficiency of the circulation system.

Program C-20.1: New subdivisions should be designed to minimize roadway construction.

Program C-20.2: A program should be instituted to eliminate existing streets which are unnecessary to provide access to properties. In particular, double frontage lots should be changed to single frontage lots where feasible by eliminating every other street using measures shown in this Plan. The City should conduct an analysis of streets with double frontage lots, exploring the physical, legal and economic feasibility of various solutions. Suggested alternative approaches are described in the previous diagrams.

Streets which should be considered for this program include: Birch Avenue, Cedar Avenue, Dogwood Avenue, Elm Avenue, and Fir Avenue.

Program C-20.3: On Downtown streets where traffic volumes are low, the City may consider modifying those streets to accommodate angled parking and reduce their use for through traffic. (See "Parking" section.)

4. PARKING

OBJECTIVES:

* Provide adequate parking to meet the needs of each land use.
* Ensure that parking is safe.
* Provide for the special needs of the handicapped.
* Avoid excessive use of land devoted to parking facilities.
* Improve the appearance of parking areas.

PROGRAMS AND POLICIES

POLICY C-21: Parking shall be provided as part of all new or expanded land uses.

Program C-21.1: New development should be required to provide parking on-site or contribute in-lieu fees to assist in the development of public parking. (See Appendix "B" for method of establishing in-lieu fees.) Minor additions or remodeling projects which do not increase the parking needs of a land use may be exempted from the requirement to provide on-site parking or pay in-lieu fees. However, the City may still require such uses to join a parking district if the City determines that the district benefits those uses. District boundaries should be established by the City Council.

Program C-21.2: The amount of parking should be based on the expected parking needs for each type of use. The amendments recommended in the "Problems and Issues" section of this chapter should be incorporated into the City's parking standards. In particular, the standards for commercial and industrial land uses should be amended as described in this element.

Prior to the adoption of these amendments of the City's parking standards, land uses which provide parking in excess of the new recommended parking requirements stated in this Circulation Element may be expanded without providing additional parking as long as the amount of existing parking satisfies the new recommended criteria.

Program C-21.3: Specific Plans for the Downtown and the Embarcadero should be prepared to establish precise

development plans for parking facilities in these two areas. These Specific Plans should provide for parking in areas shown on Figures 31 and 32.

Program C-21.4: Parking districts should be established to help provide parking for existing uses which lack adequate off-street parking. (See Appendix "B" for parking district descriptions.)

Program C-21.5: Existing vacant areas within Downtown commercial areas should be considered for improvement as off-street parking. The City should work with property owners to remove fence barriers, assemble multiple vacant areas into larger open areas and develop those areas as common parking for all commercial uses in each block. Easements for parking areas could be purchased or leased by a parking district. A combination of in-lieu parking fees and parking district could be used to finance the project. These various alternatives will be investigated by the City. (See Appendix "B".)

Program C-21.6: The City should relocate the existing City Harbor Department storage yard which is currently located northeast of Beach Street and the Embarcadero. The area should be converted to additional public parking. The City should also investigate the feasibility of leasing part of the P.G.&E. property for use as temporary public parking to serve the businesses on the Embarcadero. The lease should be financed by a parking district and/or in-lieu fee program for the Embarcadero. The parking district may also be used to provide funds for the development of other parking areas shown on Figure 32.

Program C-21.7: Employees should be discouraged from using spaces nearest businesses. If deemed necessary in the future, time limits on parking may be instituted nearest commercial uses as a measure to discourage use of those spaces by employees. However, some close-by spaces could be retained for employees on the evening or night shift if there is a safety problem for the employee.

Program C-21.8: The City should work with the local real estate industry and the local lending institutions to initiate a code compliance program which would require a City inspection to be conducted upon the sale of a residence to determine if illegal garage conversions have occurred. Where these conversions have occurred, the City will require re-conversion of the garage for automobile parking purposes or the provision of other automobile parking facilities on the property. Additional commercial mini-storage facilities should be allowed in appropriate commercial and industrial areas to reduce the need to use residential garages for storage.

Program C-21.9: Recreational Vehicle parking should be required in residential planned unit developments for the use of residents in those developments. New commercial R-V storage facilities should be allowed in industrial zones to store R-V's now being parked on residential streets and vacant lots.

Program C-21.10: The City's capital improvement program should include funds for the future expansion of the Police Department parking lot as well as additional future parking facilities to serve the needs of the City Hall and Veteran's Hall, as feasible, and depending upon priority of other competing needs.

Program C-21.11: An area(s) should be designated and signed for RV-only parking to meet the needs for the Downtown and Embarcadero areas, and in order to alleviate congestion problems in the main part of the Embarcadero.

Program C-21.12: Any parking in vicinity of Coleman Drive to be determined at the time of completion of Harbor and Morro Rock studies.

Program C-21.13: The City should negotiate with property owners to obtain parking on the Embarcadero across from their lease sites in areas indicated schematically on Figure 32.

POLICY C-22: Parking should be designed for safe and easy access.

Program C-22.1: Parking stalls and aisles should be designed to meet standards established within the City zoning regulations.

Program C-22.2: The City's parking standards should be periodically reviewed against the latest nationally recognized engineering standards.

Program C-22.3: Existing parking lots which exhibit poor geometrics, such as the shopping centers located on Quintana Road and the one supermarket located on north Main Street, should be upgraded and corrected upon redevelopment of those centers or sooner, if possible.

Program C-22.4: Parking aisles should be designed so that a vehicle can maneuver between separate parking aisles without having to enter public streets, where feasible.

Program C-22.5: On-street parking should not be allowed in close proximity to intersecting streets where it restricts the sight lines for drivers. The criteria stated in the "Parking" section text , Part 3.a.3, should be used as a guideline for the location of on-street parking spaces.

(See also "Streets" section discussion.) Where possible, compact car parking should be designated near street intersections where there is a sight distance problem.

Program C-22.6: Driveway entrances to parking areas should be designed so that drivers entering and exiting have good visibility of walkways, bikeways and streets. Parking should be separated from driveway entrances and landscaping should be maintained so that visibility is not hampered.

POLICY C-23: Accommodations should be made to meet the special needs of the disabled.

Program C-23.1: New developments and major redevelopments, where feasible, should provide handicap parking spaces near building entrances in accordance with State Law.

Program C-23.2: On-street handicap parking spaces should be provided at appropriate locations in the Downtown and the Embarcadero. Suggested locations for on-street handicap parking spaces are shown on iFigures 31 and 32. Handicap spaces should be placed near uses which are expected to be frequented by disabled persons if off-street handicap spaces are not available and not expected to be provided. These spaces should be located close to existing ramps along street curbs where possible to reduce the need for the construction of ramps.

Program C-23.3: The City should encourage existing uses to provide handicap parking where none currently exists.

POLICY C-24: Parking areas should be attractive and shall enhance adjoining land uses.

Program C-24.1: Parking areas should be paved and striped. Alternative paving materials will be encouraged.

Program C-24.2: Parking areas should have adequate drainage. Drainage plans and systems for new parking lots and reconstruction of existing lots should be submitted to and reviewed by the City Engineer and shall be able to adequately drain the parking lot during a 25-year storm.

Program C-24.3: Parking areas should be lighted for safety while preventing glare into streets and residential areas. Lighting standards and fixtures should be attractively designed. (See text of "Parking" section for suggested standards.)

Program C-24.4: Parking areas should be landscaped as required by current zoning ordinance standards. Planting materials should be chosen for appearance, durability, drought tolerance and suitability to the coastal climate.

Program C-24.5: Landscaping elements should be designed so that they do not interfere with parking or parking area maintenance.

Program C-24.6: Earth mounds, walls and fences should be incorporated into the perimeter treatment of parking lots to screen views of parked cars from streets and residential areas.

Program C-24.7: Parking areas should be continually maintained to prevent trash and potholes.

POLICY C-25: Adequate loading spaces for delivery vehicle parking for uses which have regular deliveries shall be provided where feasible.

Program C-25.1: New uses which have truck deliveries should provide on-site loading spaces or cooperate in the provision of central common loading areas.

Program C-25.2: Plans for parking districts for the Downtown and the Embarcadero should consider loading areas for each block.

POLICY C-26: Measures should be undertaken to minimize the amount of land occupied by parking.

Program C-26.1: The City's zoning regulations should include pro visions for the reduction of parking requirements when there is over lapping of parking use by separate businesses. (Refer to "Parking" section text and Tables 6 and 7 for description of overlapping by use.) The City's parking regulations should be amended to reflect shared use parking when the peak hours of businesses are different.

Program C-26.2: The parking criteria for general retail commercial and for restaurants when part of a motel should be reduced as recommended in the "Parking" section text, 3.a.1.

Program C-26.3: The City's parking standards for industrial land uses should be amended to require parking on the basis of number of employees instead of building area using the criteria suggested in section 3.a.1. when the number of employees can be accurately predicted. Otherwise, the existing regulation based on square footage may apply.

Program C-26.4: Lightly travelled roads in the Downtown should be considered for conversion to angled parking arrangements. Figure 31 indicates several potential areas

for roadway conversion to such facilities. Access to existing uses should be retained if those streets were converted to angled parking.

Program C-26.5: Due to the value of the properties located along the west side of the Embarcadero (those fronting on the harbor), these properties shall only be used for a very limited amount of parking. Parking shall be discouraged on these properties. The majority of parking to serve the needs of businesses along the Embarcadero shall be located along the east side of the street and at the extreme north and south ends of the Embarcadero. The City will work with private interests in developing parking in City rights-of-way where the Council deems private development appropriate.

Program C-26.6: An educational program that would encourage tourists to leave their cars at their motels and walk to the waterfront should be developed. (See also for transit and bicycles related to tourists).

5. TRANSIT SYSTEMS

OBJECTIVES:

* Provide a reliable and safe transit service for the City that meets the needs of City transit users.

* Provide adequate revenue sources to assure the provision of an adequate level of transit services.

* Provide a level of public awareness of public transit as an alternative to the automobile.

PROGRAMS AND POLICIES

POLICY C-27: The City should continue to support SLO-RTP transit policies that pertain to Morro Bay.

Program C-27.1: The City should continue to support the Central Coastal Transit and Runabout systems through appropriate methods (e.g., funding and contributions and participation on the governing board) as appropriate.

Program C-27.2: The City should strive to implement SLO-RTP transit policies that pertain to the City as listed in Chapter 3 of the RTP.

POLICY C-28: The TDP shall be updated periodically.

Program C-28.1: The TDP should be prepared as required by State law on a five-year basis to provide guidance for transit in the City. The City should strive to implement Policies and Programs listed in the TDP and its five-year updates.

POLICY C-29: Morro Bay transit services should continue to be responsive to changing needs.

Program C-29.1: The DAR system should continue to be evaluated as needed to determine if the system is meeting public needs, particularly in terms of frequency of use, capacity of system, hours of service, intersystem transfers and fares.

Program C-29.2: The City should continue to support the Runabout system for frail elderly and disabled persons.

Program C-29.3: In addition to the water taxi service discussed in the Harbor Section of the Circulation Element, on-land public shuttle services should also be considered for implementation, providing linkage between the Downtown, the Embarcadero and the motel commercial areas, including North Main Street, Recreational Vehicle and Camping areas.

Program C-29.4 City continue to benefit from the experience of the County Transit Coordinator, participate in regional public transit marketing efforts, and evaluate other communities experiences in their efforts to promote public awareness of public transit.

Program C-29.5: The tourist industry rather than city residents should bear the primary burden of providing limited fixed route service in the Embarcadero area during peak use times.

Program C-29.6: A Taxi service should be supported as a component of the overall transit system.

POLICY C-30: The City should attempt to maintain the highest level of transit service possible while maintaining a cost effective transit program within available funds as established by the City Council.

Program C-30.1: The City should continue to maintain a minimum 10% fare revenue to operating cost ratio. The farebox ratio should be regularly monitored, through *tri-annual performance audits and TDP updates.

Program C-30.2: The City should continue to maximize the use of all appropriate State and Federal funding sources, grants and subsidies to meet operating costs.

Program C-30-3: The City should annually evaluate the need to assist transit services from the General Fund to meet operational costs at the desired service level.

Program C-30-4: The City should initiate a computerized method of data collection that will provide better information on performance indicators user travel patterns, level of service, overhead costs, and vehicle use.

POLICY C-31: The City should continue programs to improve public awareness of available transit services.

Program C-31.1: The City should continue its ongoing public information system and marketing program to make the public more aware of the transit opportunities available to them. This information system and marketing program should continue to be at a level commensurate with available funding for this function. At a minimum, periodic newspaper articles, fliers with water bills, sticker campaigns, and other low cost marketing schemes should be used.

Program C-31.2: The City should continue to monitor DAR service hours on a regular basis to determine if operating hours meet transit needs and are cost effective.

Program C-31.3: The City should investigate the use of DAR "check- point" and "scatter-gather" systems to augment existing door-to-door services, and determine if these systems would enhance the level of service in a cost effective manner.

Program C-31.4: The City should continue to work with the County to explore establishing a connection between the Morro Bay and South Bay Dial-A-Rides.

Program C-31.5: The City should explore the possibility of limited fixed route service in the Embarcadero area during the busy summer months and holiday weekends.

POLICY C-32: The City should explore methods to improve transit stops with benches and loading areas at common stopping points in areas where use warrants and funding permits.

Program C-32.1: The following areas should be considered for transit improvements:

* Williams Brothers and Payless Shopping Centers - a parallel loading and unloading area at the entrance to the stores and a bench, covered if necessary, for waiting passengers.

* Bank of America - bench and loading area

* Harbor Street - City Park - covered bench

* Senior Center - covered bench and loading area

* Embarcadero Chess Board - covered bench and loading area

* Lucky Seven Market or Giant Food - covered bench and loading area

* Circle K - covered bench and loading area

* Residential Area at Yerba Buena - covered bench and loading area

Program C-32.2: The City should periodically review the need (as Part of TDP) for covered or uncovered benches, loading areas and other improvements for passenger protection based on frequency of stops, passenger needs and types of system routes offered.

Program C-32.3: The City should explore available funding and other mechanisms to provide covered benches and other transit stop improvements. City civic groups and the Chamber of Commerce members should be encouraged to assist in the provision of covered benches meeting City specifications.

6. HARBOR

OBJECTIVES:

* Support State and Federal Government efforts to provide safe, navigable waterways within the harbor and harbor entrance, including provision of adequate dredging to maintain depth and width of channels to meet existing and future needs.

* Provide dockage and moorage for commercial and recreational vessels consistent with proven need and environmental constraints.

PROGRAMS AND POLICIES

POLICY C-33: A harbor master plan should be developed taking into consideration future need for dockage and moorings, channel depth, and configuration and circulation patterns, balanced with environmental considerations and future harbor development.

Program C-33.1: LCP policies should be incorporated into the harbor master plan, especially those pertaining to harbor circulation moorings, dockage, channels and breakwaters.

Program C-33.2: The master plan should include investigation of a seasonal water taxi or shuttle service which would serve the waterfront and transport pedestrians from one end of the harbor to the other.

Program C-33.3: The master plan should include investigation of an overall maintenance program which would include all agencies having jurisdiction in the bay in order to provide proper maintenance of all channels in the bay.

Program C-33.4: The U.S. Army Corps of Engineers should be contacted during the preparation of the master plan so that their plan for harbor improvements are included, such as expanding the existing breakwater and to reduce sediment deposition in the harbor channels. (Refer also to LCP policies for Commercial Fishing and Recreational Boating. Also refer to suggestions for addition of a boardwalk along the revetment adjacent to Coleman Drive contained in the Pedestrian Section).

Program C-33.5: The city should contact the State of California to initiate dredging between the City limits and the State Park Marina.

Program C-33.6: A future launch ramp site should be considered for the area of the harbor along Coleman Drive north of Target Rock. User fees should be considered to pay for the improvements.

7. PIPELINES AND UTILITY TRANSMISSION LINES

OBJECTIVES:

* Optimize water supply by reduction of leaks in water pipeline system.

* Ensure adequate water flows to meet fire protection and domestic water needs.

* Reduce the potential for contamination of water supply by reducing leaks in sewer pipelines.

* Ensure that capacities of sewer pipelines meet existing and future needs.

* Ensure that hazards and spills from oil and gas lines are minimized.

* Provide measures which protect against potential adverse impacts caused by the construction of pipelines and utility transmission lines.

* Reduce the potential for hazards and negative visual impacts caused by utility transmission lines.

(Refer also to Objectives, Policies and Programs contained in the Public Facilities Section of the Land Use Element portion of the General Plan.)

PROGRAMS AND POLICIES

POLICY C-34: Conditions which may cause leaks in water lines should be eliminated.

Program C-34.1: The City's Capital Improvement Program should include funds for the phased replacement of existing pipelines which are old, under-sized and leaking.

Program C-34.2: With the exception of single-family construction and minor additions, new construction should be required to replace existing leaking water lines with new lines within and adjacent to each development.

POLICY C-35: Fire flows and domestic water flows should be adequate to meet expected needs.

Program C-35.1: Master Water Plan programs for the replacement of existing water lines to improve fire flows, zones and domestic water flows should be included in the City's Capital Improvement Program.

Program C-35.2: New developments should be required to construct new adequate water pipeline systems to serve that development and, where necessary, replace existing water mains which may be inadequate to meet the expected needs of that development.

POLICY C-36: Leakages of sewers should be minimized.

Program C-36.1: Sewer lines which are determined to be leaking by the new Sewer Master Plan Study should be replaced based on a phasing schedule to be adopted as part of the City's Capital Improvement Plan.

Program C-36.2: New developments should be required to construct new adequate sewer pipeline systems to serve that

development and, where necessary, replace existing sewers which are inadequate to meet the expected sewage production needs of that development.

POLICY C-37: Potential hazard and environmental problems caused by oil and gas pipelines should be reduced to the lowest level feasible. (See also related Land Use Element and LCP Energy Policies and Programs.)

Program C-37.1: The owners of oil and gas pipelines should be responsible for continual inspections, maintenance and replacement of their pipelines. Conditions which may lead to leaks or spills should be eliminated. Lines should be replaced when it is expected that corrosion may be sufficient to result in a leak or spill. New lines should be corrosion resistant.

Program C-37.2: Grading contractors shall be required to contact Underground Service Alert (U.S.A.) prior to beginning any excavation which might impact an existing buried pipeline.

Program C-37.3: The Navy's jet fuel pipelines and storage facilities should be relocated outside of developed residential areas in north Morro Bay.

Program C-37.4: All oil and jet fuel pipelines should have adequate signage to ensure ready identification of the pipeline route.

Program C-37.5: Pipeline routes should be selected so that grading and removal of native vegetation is minimized and that environmentally sensitive habitats are avoided.

Program C-37.6: Pipeline routes should be consolidated to the maximum extent possible.

Program C-37.7: The City should work with the County of San Luis Obispo and pipeline owners and utilities developing long-range corridor plans for proper route selection.

Program C-37.8: All new pipeline and support facilities should be constructed underground when feasible. Existing pipelines should be buried as a condition of any development permits.

POLICY C-38: Hazards and adverse visual impacts caused by utility transmission and communication lines should be minimized. (See also Visual Resources Policies and Programs.)

Program C-38.1: All new development and major redevelopment should be required to underground new utility lines and, when feasible, under ground existing utility lines on or adjacent to the project site.

Program C-38.2: Districts should be established to assist in the undergrounding of existing utilities in the Downtown and the southern part of the Embarcadero. These funds should be combined with utility company underground funding programs so that responsibility for under grounding is shared equitably.

Program C-38.3: High voltage transmission lines should be consolidated where feasible.

Program C-38.4: Any support structures for high voltage transmission lines, which are replaced in the future, should be replaced with the most aesthetically acceptable structures possible.

APPENDIX A

RECOMMENDED MAJOR STREET IMPROVEMENT PROJECTS

The following list of potential street improvement projects was prepared pursuant to the recommendations contained in the Vehicle Transportation and Streets Master Plan section and Table 3, Major Street Improvement Priorities.

[THE EMBARCADERO EXTENSION - NOT APPROVED]

(This extension is not approved at this time. It is subject to review during future City planning programs).

Present Conditions and Problems:

There are no street connections to the Embarcadero north of Beach Street, except Coleman Drive--actually an extension of The Embarcadero to Morro Rock. The dead-end street section is about 3/4 mile long. In the event of a large scale emergency in the vicinity of Morro Rock or in the two-lane section, emergency vehicle access could be hampered by other vehicles blocking the roadway. Under normal conditions, the long dead-end street causes excessive travel distances for some trips and it concentrates traffic on certain connecting streets.

Some of the traffic going to and from Coleman Drive follows The Embarcadero, Beach Street and Main Street north of Beach Street. As a result, Beach Street and Main Street sometime carry very heavy traffic volumes--the highest volumes recorded on the City's streets are on Main Street south of Highway 1. That section of Main Street is especially impacted because all traffic from the north must pass through the Main Street-Highway 1 interchange in going to the central and southern parts of the City, as well as to points east.

For traffic from the north (including North Morro Bay neighborhoods) and from the northeast, each round trip to the vicinity of Morro Rock is 1-1/2 miles longer than it would be if a direct route were available. The extension of the Embarcadero would also provide improved access to the recreational beach area located north of Morro Rock.

Possible Solution:

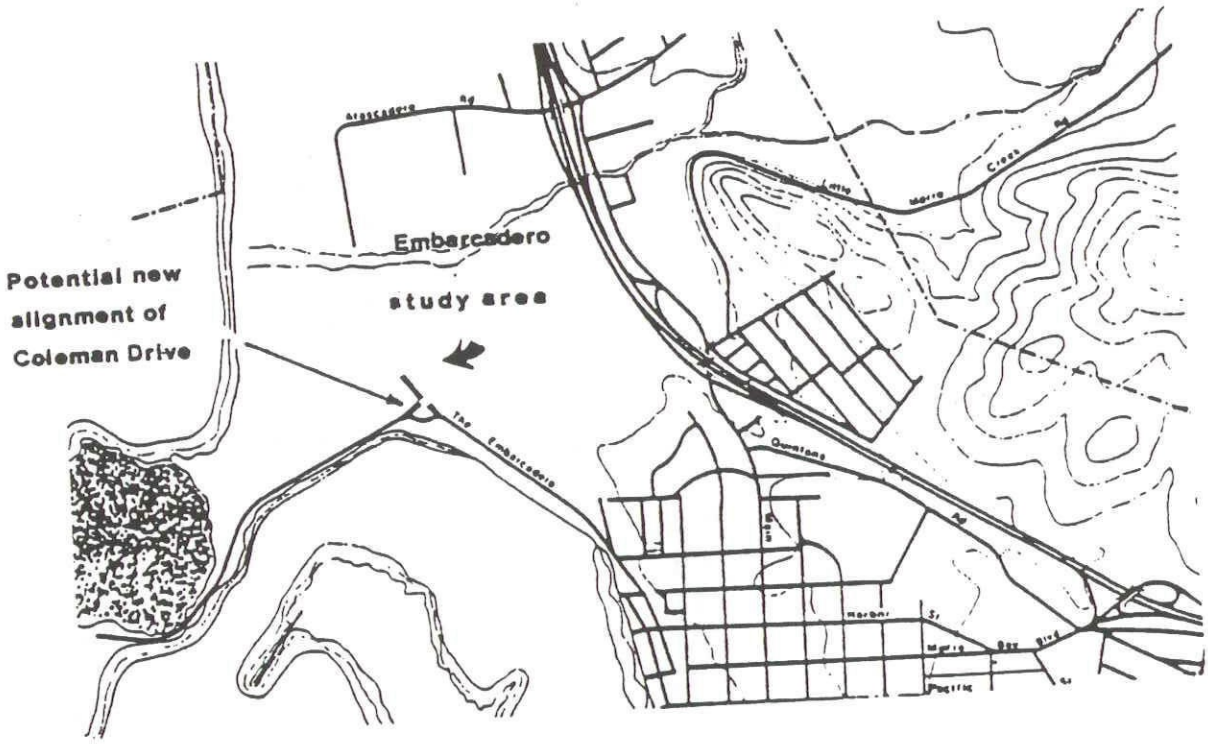
The Embarcadero would be extended to join Atascadero Road (a portion has already been constructed from Atascadero Road south about 1/4 mile). That will require a bridge across Morro

Creek and will result in a "T" or "Y" intersection at Coleman Drive. This would provide an additional route into the central part of the City from the north. As an alternative, emergency vehicle access should be considered in the vicinity over some other route.

Priority: (No priority at this time)

Design was completed in 1968 for this extension. Those plans will require revisions to meet current conditions. An environmental assessment would need to be prepared prior to final approval.

Location Map: [NOT APPROVED AT THIS TIME]



ACCESS TO SOUTH END OF THE EMBARCADERO

Present Conditions and Problems:

The south end of The Embarcadero is a dead-end street section extending about 2,000 feet south of the last through side street, Marina Street. That results in adverse travel distance for some trips (those to and from the south, primarily), possible delays for emergency vehicles, and conflict between emergency vehicles entering the area and other vehicles leaving. The potential for a serious emergency is quite high because of the large number of boats sometimes in the marina at the end of the street, and the motor vehicles in the nearby parking area. Vehicle trips within this area are also expected to increase as the vacant commercial and visitor serving area adjacent to the Embarcadero develops.

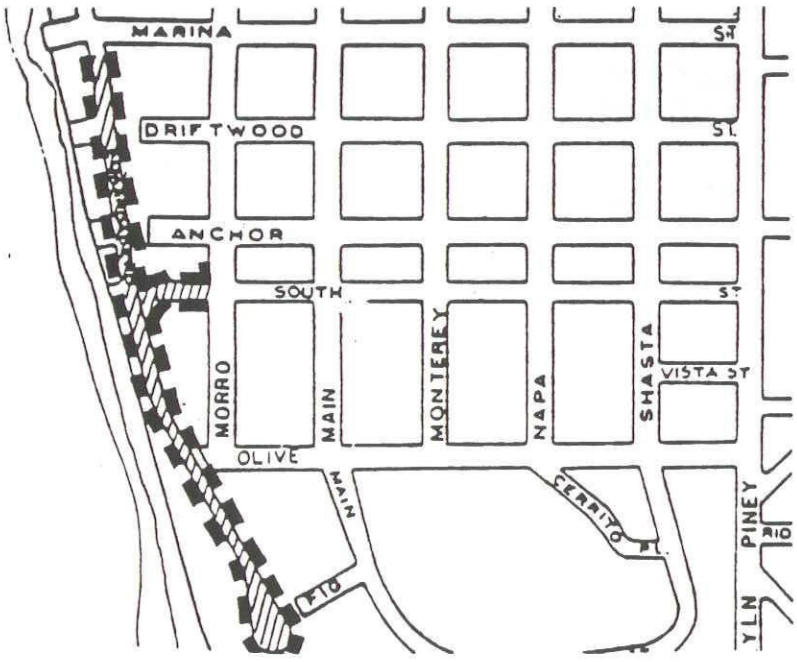
Possible Solution:

An additional east-west street connection should be constructed near the south end of the street. Appropriate locations would be an extension of South Street or Olive Street. The City should explore purchasing the property at the southern corner of Morro Avenue and Olive Street or at South Street, whichever is most feasible

Priority:

A detailed study should be made to identify the most desirable location for a new street connection. The project should be programmed for early construction (two to five years). Desirably, construction should be included with expansion of the marina and development of the City park, if those projects proceed at an earlier date.

Location Map:



EMBARCADERO, MARINA STREET TO BEACH STREET

Present Conditions and Problems:

During peak visitor periods, traffic on Embarcadero is congested with low travel speeds, close vehicle spacing and frequent disruptions by pedestrians, parking maneuvers and driveway movements. Delivery vehicles often double-park when curb space is not available, causing additional traffic interference.

Pedestrian volumes are high and present sidewalk widths are inadequate, especially on the west side of the street. There is not sufficient street space for bicycle lanes and bicyclists must operate in traffic lanes.

Embarcadero makes 90 degree turns at two locations between Harbor Street and Beach Street, following the right-of-way of Dunes Street between Embarcadero and Front Street. Turning radius is cramped for large vehicles, and sight distance is restricted at one turn.

Possible Solutions:

Because of the high land value, street widening would be costly, particularly on the west side. One possibility is to prohibit parking on the east side of the street and widen the sidewalk on the west side. This would require development of additional off-street parking.

The abrupt changes in alignment could be eased by widening on the inside of the turns. This would require acquisition of additional rights-of-way and alteration of one building.

A preferable alternative is to relocate Embarcadero, generally following Front Street from Dunes Street extended to north of Pacific Street. The area between the new street and the businesses next to the present Embarcadero could be used for parking, a pedestrian way and a bicycle path, separating those activities from street traffic.

If sufficient off-street parking can be provided, it would be possible to eliminate on-street parking in other sections of Embarcadero to provide bicycle lanes and adequate width sidewalks. Additional building setbacks of approximately three feet and provision of public easements and right-of-way dedication would be another option for widening the sidewalks. (See "Pedestrian" section for details.)

Priority:

This project will be increasingly important if the visitor serving activities in the harbor expand as expected. A Specific Plan should be prepared identifying the most feasible treatment to improve traffic service, to provide suitable parking, and to improve the facilities for pedestrians and bicyclists. Urgency of construction will depend on the pace at which land uses are intensified. Major construction should be programmed for about 1990, and should be expedited if significant development takes place prior to that time.

Location Map:

MORRO BAY BOULEVARD-QUINTANA ROAD-HIGHWAY 1 RAMPS

Present Conditions and Problems:

This is a complex of closely-spaced intersections with unusual geometric features. Street conditions are confusing to some drivers and the location is at a point where some have difficulty in adjusting from driving on the freeway to driving on local streets. Traffic volumes on Quintana Road have increased appreciably in recent years, so that there is a significant conflict level at the two intersections of Quintana Road with Morro Bay Boulevard. Furthermore, the southbound offramp of the highway is located too close to the Quintana Road intersection to allow for adequate vehicle storage if a signal were to be constructed at Morro Bay Boulevard and Quintana Road.

Possible Solutions:

Present traffic levels indicate that traffic signals should be installed in the near future on Morro Bay Boulevard and the north leg of Quintana Road. Prior to that, geometric changes should be made to increase the separation between intersections and to reduce the number of conflict points.

Several alternative solutions have been assessed. One possible treatment is to realign the south leg of Quintana Road to increase the separation between intersections, and to modify the curb lines on the north and south legs of Quintana Road to reduce the intersection area as well as to further increase intersection spacing. This would be the superior alternative because operation would be efficient with either one or both of the intersections of Morro Bay Boulevard and Quintana Road being signalized. However, this is the most costly alternative. These costs could be reduced if Cal Trans were to participate in the improvements.

Another treatment would be to eliminate the eastbound lane from Morro Bay Boulevard onto south Quintana Road while leaving the two intersections of Quintana Road and Morro Bay Boulevard in their current locations. This would improve the existing situation. However, because of the close proximity of the two legs of Quintana Road, both intersections would probably have to be signalized with a multiple phase controlling the southbound off-ramp and the two legs of Quintana Road. A high percentage of vehicles would be stopped, some for long periods resulting in inefficiencies for traffic operation. Signalizing would be more expensive than for the previous alternative while street construction would be less.

A third treatment is to extend the south leg of Quintana Road at an askew angle directly opposite the north leg of Quintana Road. This alternative would have the advantage of

direct movements between Quintana Road both north and south of Morro Bay Boulevard. However, it would have the disadvantages of complex signal phasing, long signal cycle, long pedestrian crossings and a confusing intersection. It would be difficult to signalize this type of intersection so that the driver knows just when and where to stop. As in the previous alternative, signalization would be complex and expensive. However, street construction would be somewhat less expensive than the first alternative.

Additional geometric changes might be required in the future as traffic volumes increase. One possibility is to relocate the southbound Highway 1 offramp intersection to a point farther from the intersection to be signalized. This will be desirable to reduce the possibility of ramp traffic backup extending to the freeway, as well as to obtain improved intersection spacing on Morro Bay Boulevard.

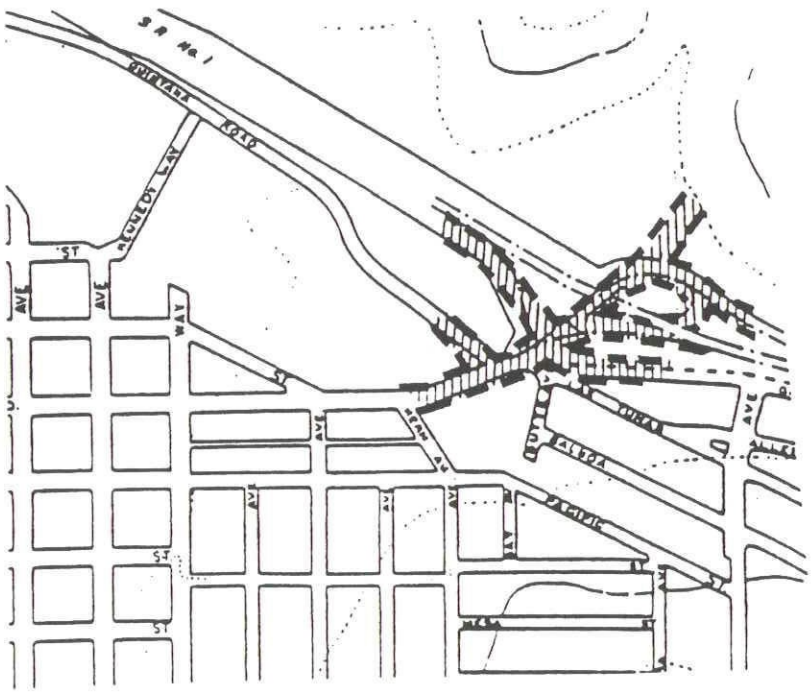
Development on the east side of the freeway may eventually necessitate the modification of both the northbound on and off-ramps as well as the southbound on-ramp. Where appropriate, current changes should be designed to accommodate these eventualities.

Priority:

Geometric revisions to permit effective traffic signal operation should be programmed for the immediate future.

The City should request Cal Trans to evaluate the possible realignment of the southbound Highway 1 off-ramp and alteration of the southbound on-ramp entrance. State participation should be requested in the cost of future roadway alterations.

Location Map:



MORRO BAY BOULEVARD, MAIN STREET TO HIGHWAY 1

Present Conditions and Problems:

Morro Bay Boulevard has one traffic lane in each direction and has parallel parking on each side. Side streets are controlled with stop signs and there is an all-way stop at Main Street, but flow is often disrupted in one direction by parking maneuvers and by left turn movements.

The free-flow operation results in a random flow pattern, sometimes with infrequent intervals between openings in the traffic stream making it difficult for side street traffic to enter or cross. This is especially true where sight distances are impaired by vehicles parked near an intersection.

The curb-to-curb width of Morro Bay Boulevard is sufficient to allow marking a separate left turn lane at all intersections (or a continuous two- way left turn lane). The safety and delay-reducing benefits of this kind of treatment have been well demonstrated, and it could be expected to eliminate the flow disruption and accidents caused by left turns from Morro Bay Boulevard. However, clearance between the traffic lanes and the curb parking lane would be reduced and the expected left turn accident reduction might be partially off-set by an increase in accidents involving parked vehicles or parking maneuvers.

Harbor Street intersects with Morro Bay Boulevard at an oblique angle. This intersection is offset a short distance from the intersection of Bernardo Avenue with Morro Bay Boulevard. These factors result in unexpected conflicts and confusion for some drivers at this location.

Possible Solutions:

The roadway could be widened by reducing the present sidewalk width. If widened approximately 3 feet on each side, a continuous two-way left turn lane of suitable width could be added, maintaining adequate separation between traffic lanes and parking lanes. The remaining sidewalk width would be liberal in comparison with most standards.

A traffic signal could be located at the corner of Piney Way and Morro Bay Boulevard. Although this will impede the free flow of traffic on Morro Bay Boulevard at this point, it will result in easier north-south flow within the Downtown. Future extensions of Piney Way-Kennedy Way will further strengthen the accessibility to the Quintana Road commercial area.

Additional off-street parking would also help relieve the need for on- street parking. (See "Parking" section.)

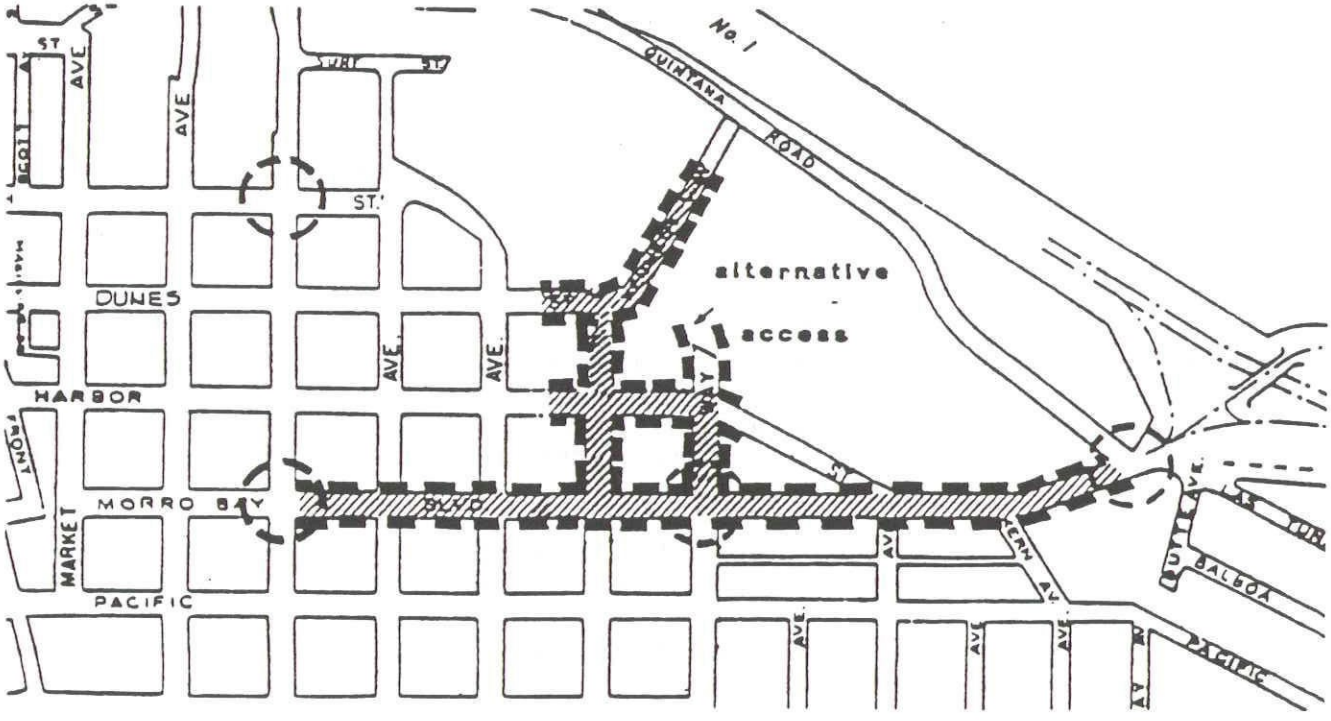
Signalizing the intersection of Piney Way and Morro Bay Boulevard would also provide a more convenient route for eastbound traffic on Harbor Street to enter Morro Bay Boulevard at Piney Way rather than at the Harbor Street-Morro Bay Boulevard intersection.

Priority:

A project for widening Morro Bay Boulevard should be programmed for the near term, 3 to 5 years, but construction will be dependent on the development of additional parking so that street parking on intersection approaches can be eliminated.

The construction should include installation of traffic signals at Main Street and at Shasta Avenue, assuming that traffic signal system control is desirable at that time. Otherwise, the work should include provision for future installation to minimize later costs and street disruption.

Location Map



KENNEDY WAY-PINEY WAY AND SHASTA AVENUE ALTERATIONS

Present Conditions and Problems:

Piney Way is now dead-ended near Harbor Street. Kennedy Way enters the Dunes Street-Shasta Avenue intersection in an unusual T-type configuration. South of Morro Bay Boulevard, Piney Way is designated a collector street, while Shasta Avenue is a local street south of Morro Bay Boulevard. A better traffic service could be provided to and from the Quintana Road commercial area if Kennedy Way connected directly with Piney Way.

Possible Solutions:

Piney Way could be extended northerly from its current dead-end to connect with Kennedy Way as a condition of development of the properties located southeast of Kennedy Way.

Priority:

The recommended street revisions can be accomplished as part of the planned land development without cost to the City. Construction is anticipated to occur within the next five years.

Location Map:

See map for Morro Bay Boulevard, Main Street to Highway 1.

MAIN STREET AND QUINTANA ROAD INTERSECTION MODIFICATION AND CONTROL

Present Conditions and Problems:

The traffic volume on Main Street north of Quintana Road is the highest recorded on any street in the City, except for portions of Highway 1. Traffic on both Main Street and on Quintana Road is increasing rapidly. Side street traffic sometimes has difficulty entering the heavier traffic stream because of long intervals between suitable openings and because of adverse geometric features.

Quintana Road is on an up-grade at the intersection, which causes a problem for some drivers. Main Street is on a less severe grade but one sufficient to influence vehicle control under some conditions, and to affect stopping distances. The hill south of the intersection impairs sight distance in that direction.

Side street traffic volumes from Quintana Road are not sufficiently high to require traffic signal control as most of the traffic makes a non- conflicting right turn from Quintana Road. Also, the grade and sight distance features indicate that accident experience would probably be poorer with traffic signal or with all-way stop control than with the present side street stop. In addition, an all-way stop control would be inefficient because of the severe imbalance in traffic volumes. However, traffic levels may soon reach a point where a change should be made.

Possible Solutions:

The desirable solution is to correct the adverse vertical profile features which affect vehicle operation and reduce sight distance. This would require extensive grade changes, which would involve high cost and severe impacts to fronting property; hence, this solution is infeasible at this time.

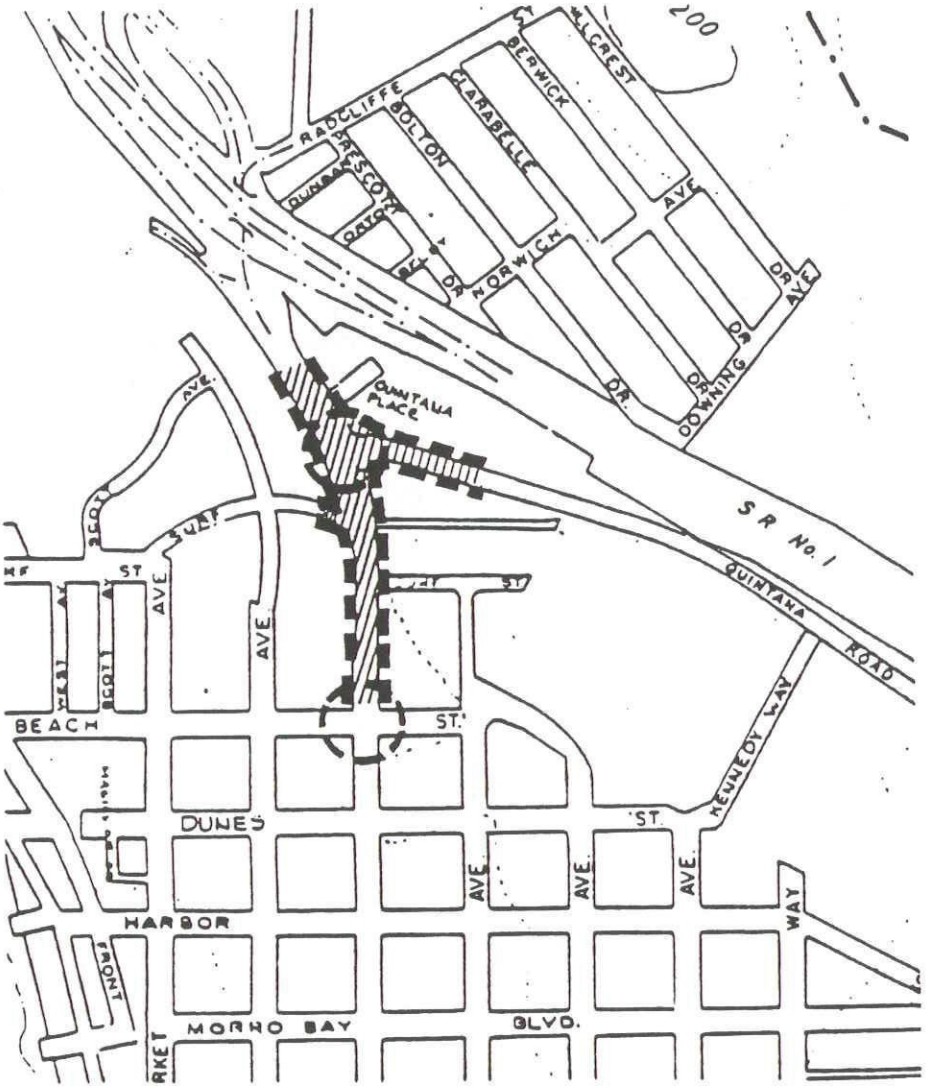
Alternately, the left turn from Quintana Road could be prohibited. A relatively minor volume would be involved, and while Kennedy Road provides a suitable alternate route from Quintana Road to the south for many users, some would incur added travel distance. Those drivers intending to make the left turn at Quintana Road and Main Street would be forced to proceed in the direction opposite that desired.

Priority:

The time at which corrective measures become necessary will depend upon traffic growth. If present trends continue, a traffic signal will probably be desirable within the next two to

five years, or it will be necessary to prohibit the left turn from Quintana Road. If traffic volume levels on Main Street can be reduced or kept to present levels by providing an alternate travel route (as by extension of the Embarcadero to Atascadero Road), the need for corrective treatment will be reduced.

Location Map:



MAIN STREET WIDENING, OLIVE STREET TO PINEY WAY

Present Conditions and Problems:

South of Olive Street, Main Street is narrow, with a temporary walkway on the west side, marked as a bike path, and with no sidewalk on the east side. There are no shoulders for parking or emergency parking. There are curves on Main Street and irregular intersections at some points. In one section, there is a series of closely-spaced intersections with side streets entering at a sharp angle. Residential construction has been permitted in the past without adequate off-street parking, even though there is no space outside the traveled way for on-street parking.

Traffic volumes are relatively low, so that the rural-type road characteristics existing along this part of Main Street have not resulted in a severe accident problem. As the City continues to grow and as property in the area is developed or redeveloped, the potential for traffic accidents will increase while traffic service levels will decline.

Where two side streets enter at or near the same point, a large inter- section area is created which makes it difficult to identify proper vehicle paths or stopping points.

Possible Solutions:

1. Main Street should be widened to provide sidewalks on both sides. There should be a shoulder area for parking or emergency stopping, and on-street bike lanes.

2. Property improvements that increase parking demand should not be permitted unless adequate off-street parking is provided for residents, visitors and/or customers and employees.

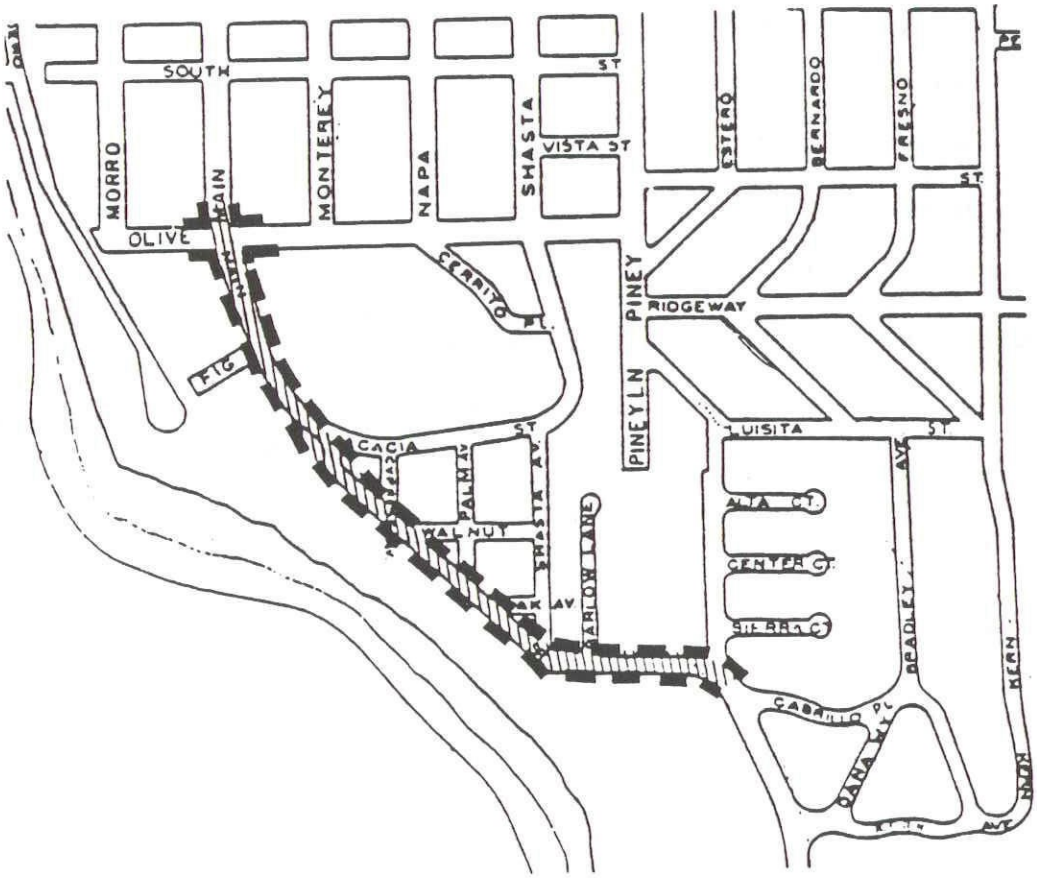
3. The alignment of Main Street should be improved at those locations where curvature results in impaired sight distances or driving quality.

4. The City should investigate the possibility of revising the location and alignment of some side streets to reduce the number of intersections, to improve the approach alignment at some points, and to reduce the intersection area at others. In some cases, right-of-way acquired for widening and realigning Main Street might extend a sufficient distance to allow closing some streets.

Priority:

Main Street widening should be programmed for the 1990-95 period. If major property development or redevelopment takes place prior to that time, the project might be advanced or portions might be accomplished in connection with private property improvements. The City should consider preparation of a Specific Plan covering this section of Main Street to identify the potential for revising side street approaches, including closing or relocating some streets, with future development.

Location Map:



MAIN STREET WIDENING, DUNES STREET TO OLIVE STREET

Present Conditions and Problems:

Traffic operation on Main Street could be improved by adding a continuous left turn lane in and near the central area. This would eliminate or reduce a cause of traffic congestion and accident potential.

If traffic volumes increase significantly in the future, additional lanes for through traffic may be necessary. However, present roadway width south of Dunes Street is not sufficient to permit adding either a left turn lane or through lanes and retain the on-street parking.

Possible Solutions:

South of Dunes Street, a continuous left turn lane could be added by widening approximately two feet on each side. This could be done within the present right-of-way by reducing the sidewalk width (generally 15 feet). The remaining width would be adequate.

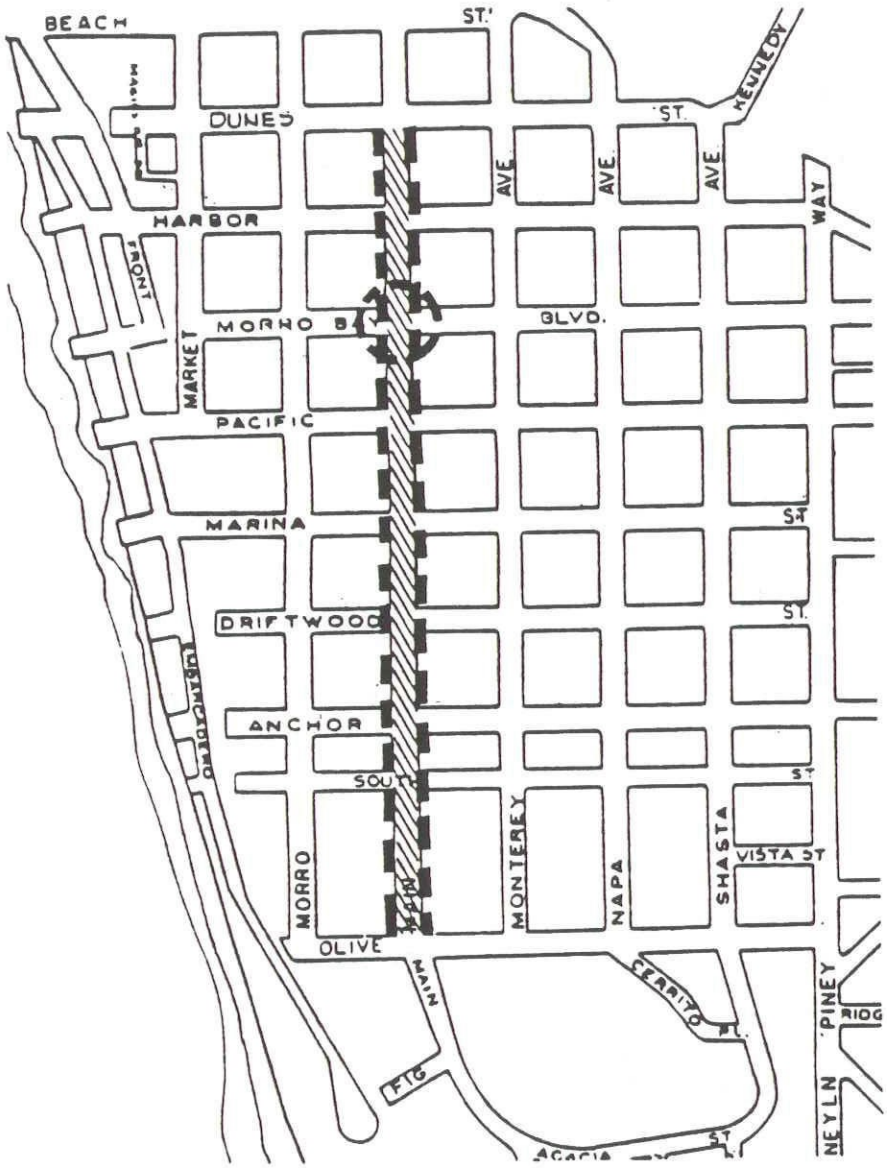
If additional traffic lanes should be necessary in the future, a more extensive widening would be required, or parking could be prohibited in some cases.

The limited widening could be done in stages, with the first stage including the Morro Bay Boulevard intersection. With that widening and with elimination of a few on-street parking spaces, separate left turn and right turn lanes could be added. This would reduce intersection delay at that point.

Priority:

This project should be programmed for construction within the next three to six years.

Location Map:



SOUTH BAY BOULEVARD, SOUTH CITY LIMIT TO HIGHWAY 1

Present Conditions and Problems:

South Bay Boulevard is generally 24 feet wide, sufficient for one traffic lane in each direction without surfaced shoulders. There is no space for disabled vehicles, for pedestrians or bicycles, or for slow moving vehicles to turn out. There is a series of curves in the southerly portion. State Park Road intersects South Bay Boulevard at a sharp angle and adjacent to a curve so that sight distance is restricted.

Traffic volume has increased rapidly in recent years, nearly doubling in a three-year period. The combination of high traffic volume and poor geometric conditions make it difficult to enter South Bay Boulevard from State Park Road, a location of repeated traffic accidents. Pedestrian and bicycle accidents have been reported in the section between State Park Road and the City limits.

The City should oppose any proposed closures of State Park Road by the State Department of Parks and Recreation because such action would severely limit access to the southern portion of the City.

Possible Solutions:

South Bay Boulevard should be widened to include surfaced shoulders, with additional widening for a left turn lane at State Park Road. The State Park Road intersection should be modified to correct the sharp approach angle. South Bay Boulevard should be re-aligned between the City limits and State Park Road to improve sight distance and to provide more liberal curve radius on the sharp curves.

Because of the rapid traffic growth, the City should plan to widen South Bay Boulevard to four lanes in the future.

Similar improvements will be required in the County section. Re- alignment will probably require reconstruction in both City and County portions in one project. Twin Bridges will be reconstructed by the County with City financial participation. The new bridge design should be consistent with the future cross-section requirements.

A separate bike path and walkway should be included in the widening of South Bay Boulevard.

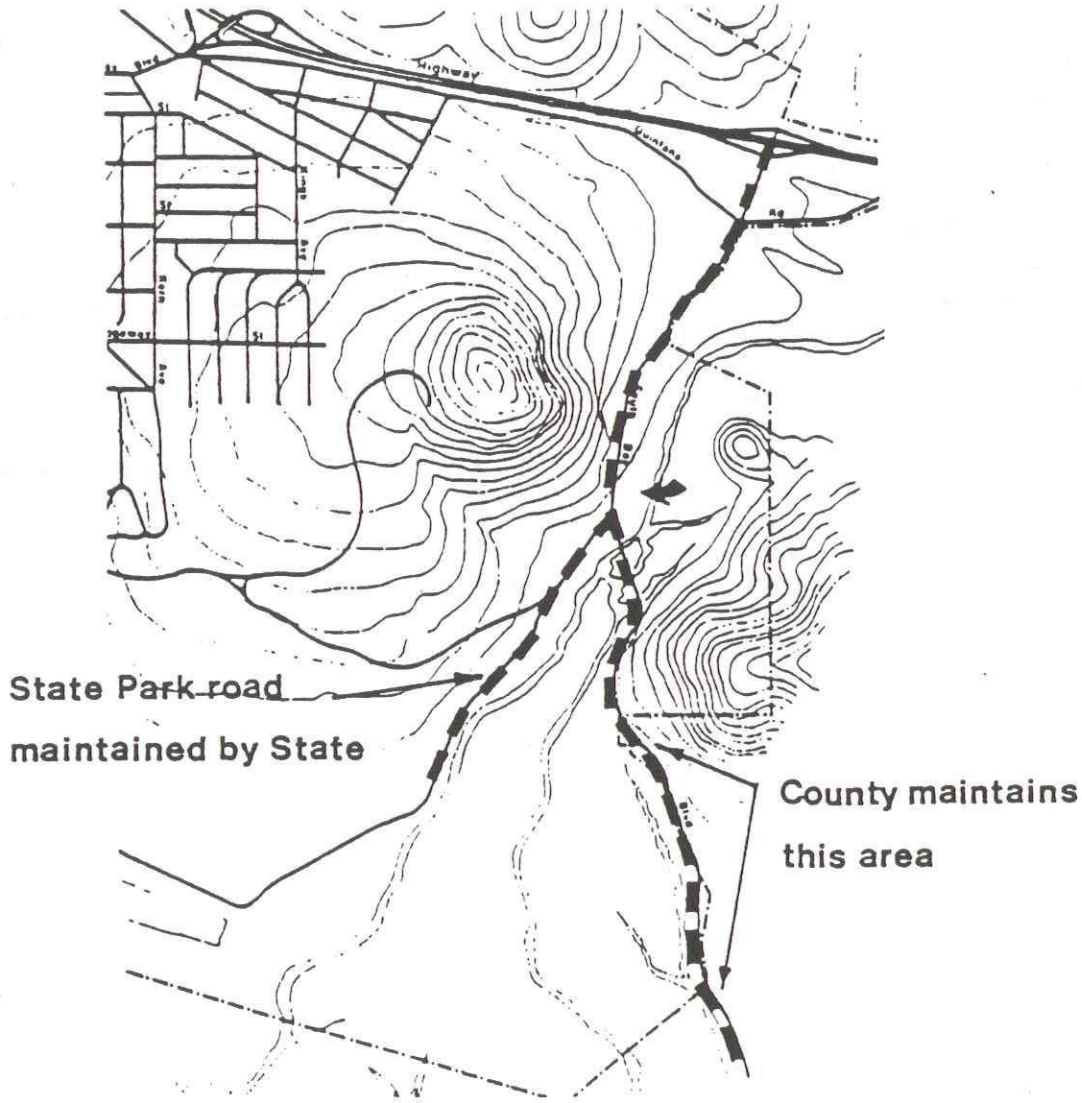
Priority:

An interim safety improvement to provide surfaced shoulders should be programmed for early construction (3 to 5 years). Negotiations are underway with the County for financing and

construction of improvements south of Twin Bridges.

The time at which the need to add traffic lanes becomes critical will depend upon the future traffic growth rate. The present high growth rate may be reduced by the planned widening of Los Osos Valley Road in the County. A major widening project should be programmed for the 1990-95 period, but traffic volumes should be monitored on an annual or more frequent basis.

Location Map:



ACCESS TO THE WEST AND EAST SIDES OF HIGHWAY 1 NORTH OF ATASCADERO ROAD

Present Conditions and Problems:

All access to the residential area west of Highway 1 requires entering or crossing Highway 1 at one of four at-grade intersections, where traffic to and from the residential area is in conflict with through traffic on the limited- access, divided highway. This results in delay in entering the highway and the accident potential at expressway intersections is quite high. One of the four intersections is signalized, and the accident experience there is the poorest of any intersection in the City.

All trips between the residential area west of Highway 1 and the central and southern parts of the City must funnel through the Highway 1-Main Street interchange, a point that could be blocked in a disaster and a point where the City street carries a very high traffic volume.

The critical nature of Main Street and Highway 1 was made evident during the 1985 Las Pilitas fire when traffic was detoured from Highway 101 to Highway 1. Delays up to three hours occurred during that disaster.

Possible Solutions:

1. Traffic signals should be installed in the future at Highway 1 and Yerba Buena Street if crossing volumes increase significantly. (based upon Cal Trans criteria)

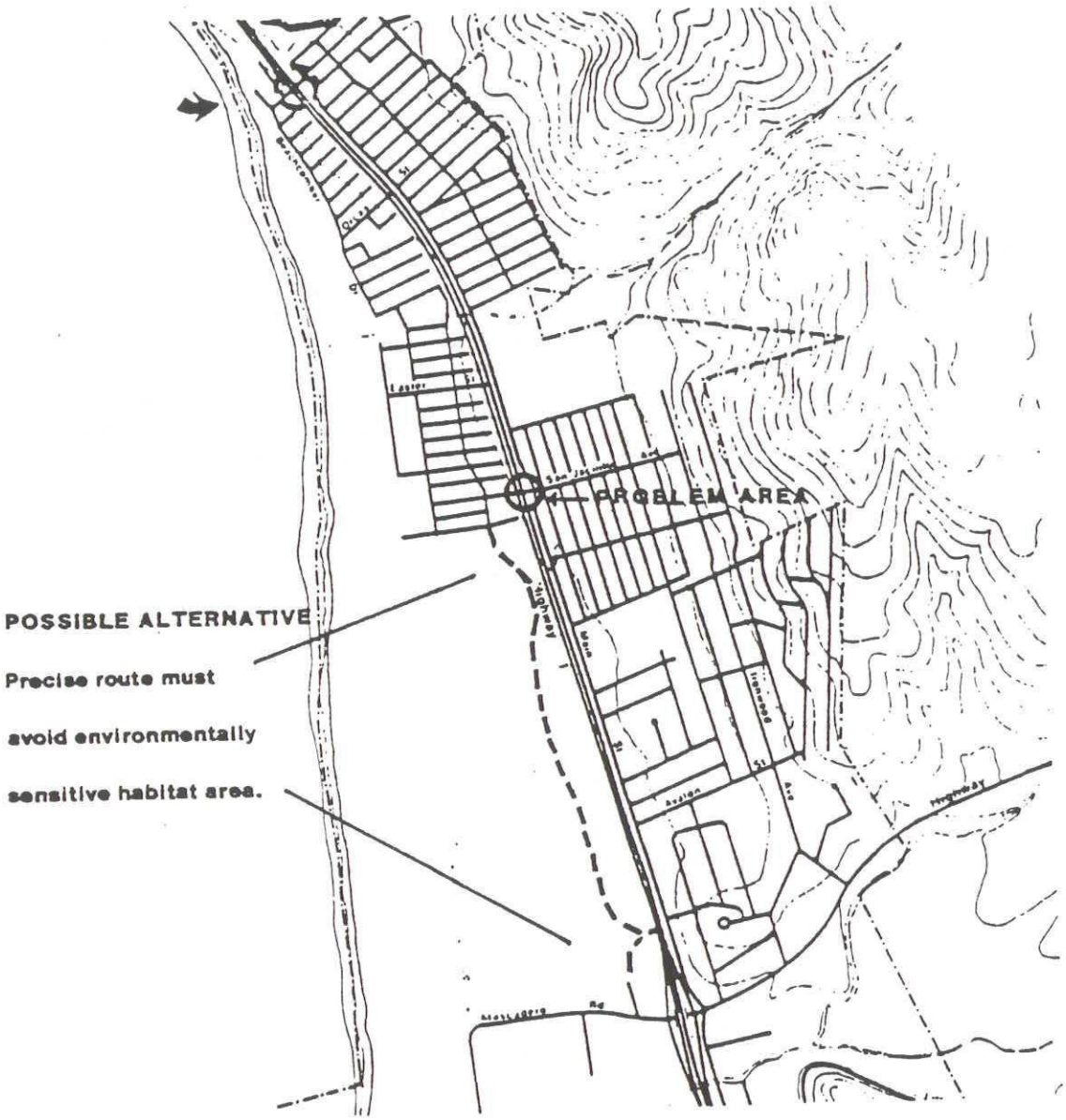
2. The City should plan for eventual grade-separation of San Jacinto Avenue and Yerba Buena Street at Highway 1, or for a single grade separation at a more central location. The at-grade intersections should then be closed.

3. A frontage road should be constructed on the west side of Highway 1 from 54th Street to Azure Street. That will provide an alternate to Highway 1 and Main Street for access to the residential area and for access to the High School from the residential area. Accessibility would be improved for residents and visitors and for emergency vehicles. If The Embarcadero is extended to Atascadero Road, that will provide a more direct travel route between the residential area west of Highway 1 and the area served by The Embarcadero.

Priority:

These solutions are long term, not likely to be feasible prior to 1995. Highest priority should be given to construction of the west side frontage road.

Location Map:



ADDITIONAL CIRCULATION EAST OF HIGHWAY 1 AND

MAIN STREET-RADCLIFF STREET INTERSECTION MODIFICATION

Present Conditions and Problems:

There is no through street on the east side of Highway 1 between Morro Bay Boulevard and South Bay Boulevard. Any future development in that area would have inadequate circulation and access unless a through route is provided.

At present, all traffic between the north portion of the City and the central south portion must pass through the Highway 1-Main Street interchange. This results in excessive traffic loading on the City street at that point and in event of a disaster blocking the interchange, accessibility of major areas of the City could be hampered.

Radcliff Street carries traffic from Little Morro Creek Road and from the residential subdivision south of Radcliff Street and east of Highway 1. It enters Main Street adjacent to the Main Street undercrossing of Highway 1 at a point where roadway width and sight distances are constrained by the positioning of the structure abutments. Traffic volumes have increased significantly on Main Street in recent years. If traffic continues to increase, the present two-lane road will be inadequate. Also, Radcliff Street intersection with Main provides less than desirable visibility of traffic coming northbound on Main Street due to the curve and freeway bridge abutments.

Possible Solutions:

1. Except for infill development in the Harbor front Tract, no further development should be permitted east of Highway 1 and south of Harbor Front Tract unless accompanied or preceded by construction of a through route on that side of the highway. The new street should have connections to Morro Bay Boulevard and South Bay Boulevard.

2. Radcliff Street should be re-aligned to enter Main Street at a point farther from the undercrossing. Main Street should be widened to provide an adequate-length left turn lane at Radcliff Street. Possibly, Main Street can be re-aligned in the vicinity of the intersection to increase the curve radius.

3. At some time in the future, the highway undercrossing structure might be modified to permit widening Main Street and to improve the alignment of Main Street on either side of the structure. The California Department of

Transportation should be requested to include modification of the grade separation structure in their long-range planning program.

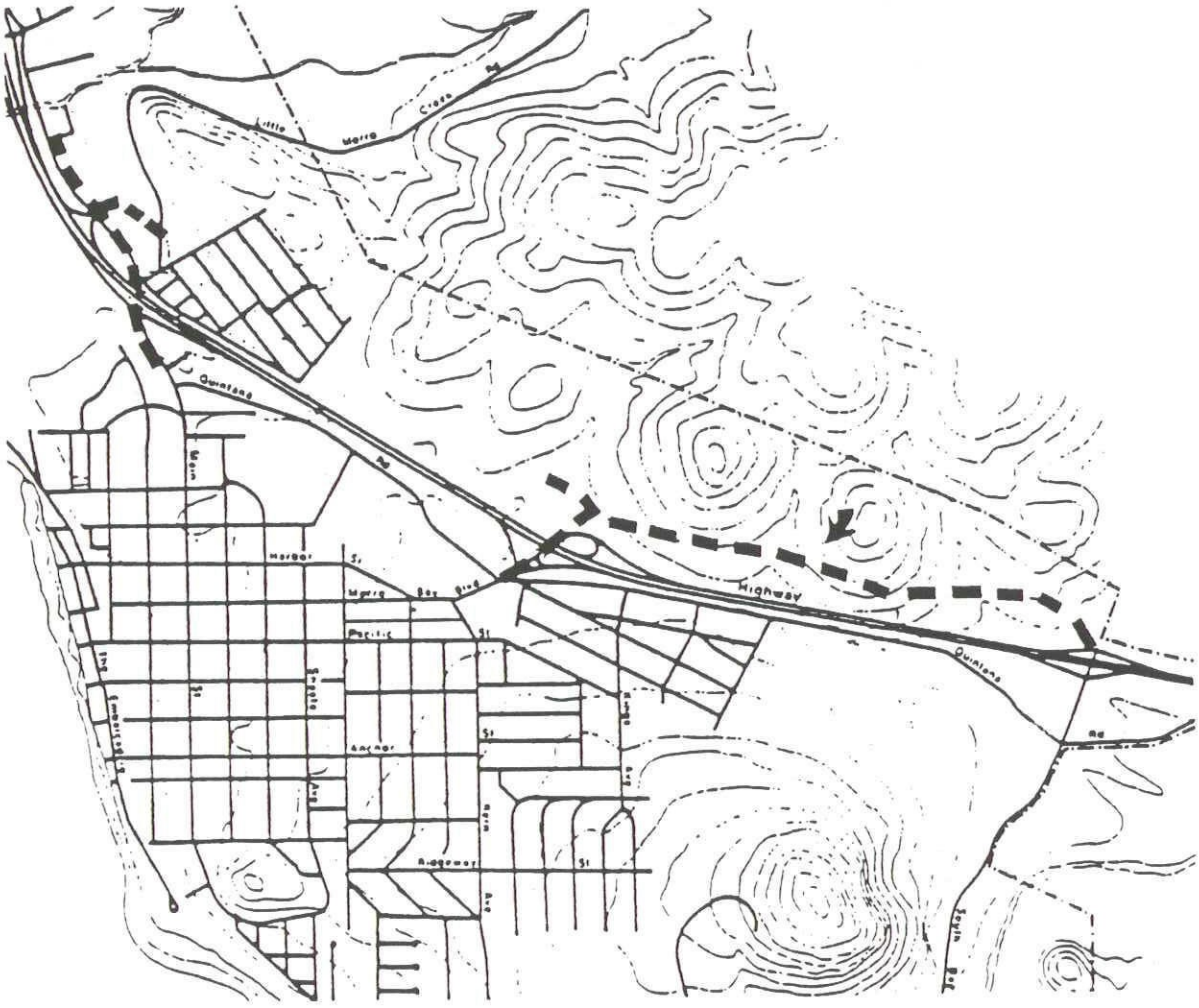
4. The City should study the future potential of extending Kennedy Way over Highway 1 to tie into a future road system on the east side of the freeway.

Priority:

Construction of adequate circulation facilities should be a condition of any future development and City funding need not be programmed. Realignment of Radcliff Street and alteration of the Highway 1 underpass are long-term projects that might be coordinated with future east side development.

The widening of Main Street at Radcliff Street should be programmed within the next five years. Realignment of Radcliff Street may be feasible at that time.

Location Map:



ATASCADERO ROAD-MAIN STREET INTERSECTION MODIFICATION

Present Conditions and Problems:

The intersection of Atascadero Road (State Highway 41) and Main Street is controlled with 4-way stop signs. That is suitable control for present volume levels. If traffic increases to a point when accidents occur frequently, the 4-way stop control will not be adequate and it will be necessary to install traffic signals.

The intersection is immediately adjacent to the northbound Highway 1 ramps and will not operate well with traffic signal control. Traffic waiting on the west leg of Atascadero Road would block the offramp and could block the southbound onramp, as well. That might result in a backup into the signalized intersection, with the other freeway ramps blocked.

Possible Solutions:

For satisfactory operation with traffic signals, the intersection should be relocated away from the freeway ramps. That will require realigning the Main Street approaches, in turn necessitating acquisition of right-of-way on the east side. While considered essential for traffic signal operation, the intersection modification would result in better operation with 4-way stop control, as well. Intersection modification might be done as the first of a two-stage improvement program.

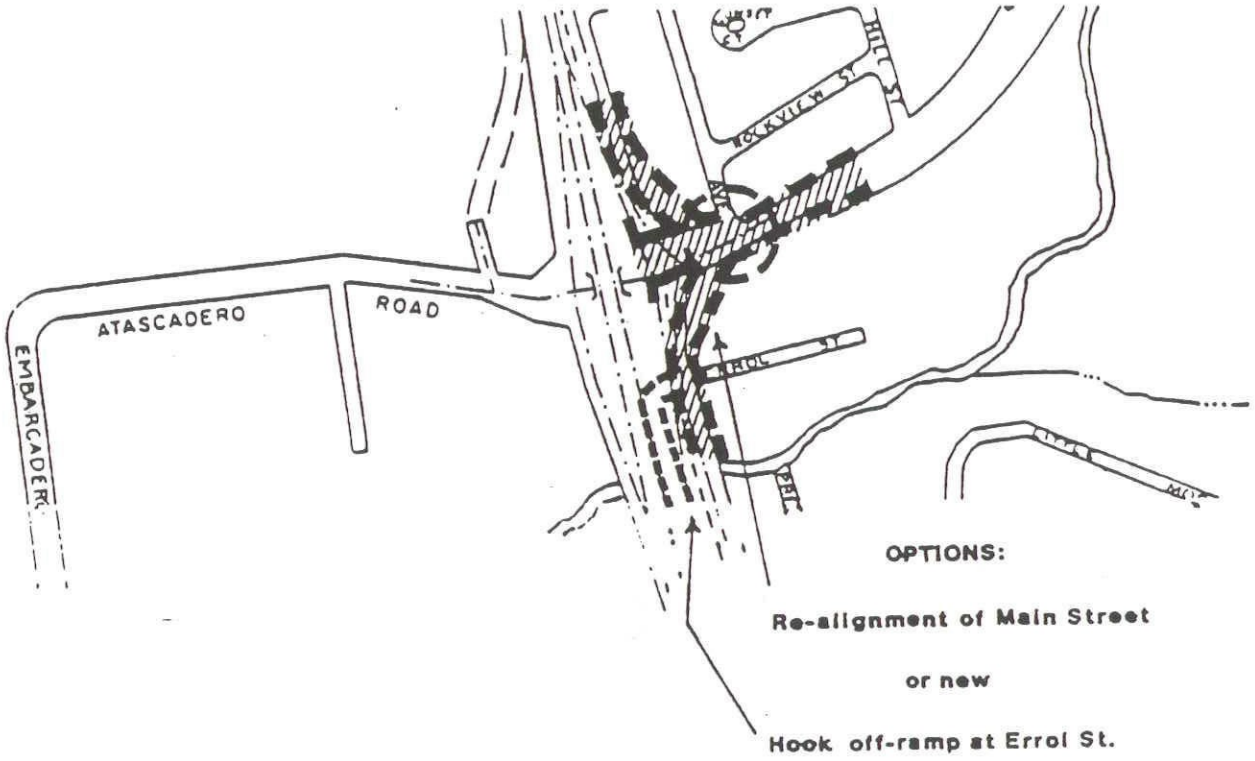
Less expensive alternatives would be either the elimination of the northbound off-ramp at Atascadero Road and use of the existing hook-ramps south on Main Street as the access to both Main Street and Atascadero Road or construction of a new hook off-ramp eliminating the existing hood on-ramp. These alternatives would eliminate the need for realignment of the Main Street-Atascadero Road intersection. They would also remove the existing weaving lane between the Main Street northbound on-ramp and the Atascadero Road northbound off-ramp, thereby improving the freeway geometrics and traffic flow.

Priority:

Traffic growth on Atascadero Road has slowed appreciably, making it difficult to project the point at which conflicting volumes might be sufficient to require a change in traffic control. The City should program street revisions and traffic signal installation for the 1990-95 period.

If either of the alternatives are chosen, the traffic signal installation might be delayed and the re-alignment of Main Street would not be necessary.

Location Map:



GENERAL TRAFFIC OPERATIONS IMPROVEMENTS:

In many cases, a need for street construction or widening might be deferred or eliminated by traffic operational improvements on existing streets. The City will make operational improvements when appropriate within its fiscal and legal limitations. Among specific programs are:

1. Traffic Signal Installations

The street system plan shows locations where traffic signals might be installed in the future to reduce or equalize delays and to clarify right-of-way assignments. The City does not now have traffic signals on City streets, except for one State highway location. The installation and maintenance of traffic signals will represent an additional financing burden, and the City should program the necessary funding.

2. Intersection Sight Distance Improvements

Delays and accident potential can be reduced in high-activity areas by correcting sight distance obstructions, such as those caused by parked vehicles. In many cases, a significant improvement can be made by eliminating one or more parking spaces on the approach to an intersection. Where sidewalks are narrow, the City should consider establishing building setback lines, either continuously along the street or at corners, to prevent sight obstructions from future building improvements.

3. Off-street Parking

In concert with the removal of on-street parking near intersections, adequate off-street parking should be provided. This can be accomplished by a combination of appropriate off-street parking requirements for new development and establishment of parking districts for the Embarcadero and Downtown area. However, if off-street parking cannot be provided, this should not affect the program for removal of on-street spaces where they pose a hazard or sight problem.

On-street parking on arterials and commercial collectors should be discouraged and where feasible, prohibited. (See "Parking" section.)

4. Left Turn Lanes

Where roadway width permits, a major cause of traffic delay and traffic accidents can be eliminated by painting left turn lanes. In some cases, this might require eliminating parking near an intersection or along a street section.

A street where this treatment would be beneficial is on Morro Bay Boulevard, where a continuous two-way left turn lane can be added without eliminating parking. As it would result in reduced clearance between parked and moving vehicles, it would be desirable to eliminate parking in areas where the driving task is most severe--that is, at intersections. Another location for early treatment is on Main Street at Morro Bay Boulevard. In this case, parking would have to be eliminated on the intersection approach.

5. Curb Reconstruction At Key Intersections

Turning movements at intersections in the central area could be eased by increasing the radius of curb returns. A top candidate is the Main Street-Morro Bay Boulevard intersection where three of the four corners require sharp turns.

6. Reduction of Traffic Conflict Points

New driveway accesses should be prohibited onto major arterials except when no other option is available. Driveways should be directed to local and collector streets rather than arterials.

7. Consistent Traffic Control Devices

The City should continue to periodically review the City street system to ensure that traffic control devices and pavement markings are in accordance with the Manual on Uniform Traffic Control Devices for Streets and Highways. (Published by the Federal Highway Administration)

8. Roadway Re-alignments

The City should include the re-alignment of roadways to improve existing curve radii and other problems associated with poor street geometrics where feasible.

9. Monitoring Traffic Conditions

The City now has limited facilities for measuring traffic movement. Provision should be made for collecting and analyzing traffic flow data on a sufficiently continuous basis that informed judgments can be made on the magnitude and trends of travel on the more important streets. Additional staff may be necessary to conduct these studies.

The County should be requested to establish a periodic traffic count program on South Bay Boulevard similar to that conducted for Main Street near Highway 1.

APPENDIX B

IMPLEMENTATION AND FINANCING

1. CONDITION OF APPROVAL

New development places heavier loads on the existing circulation system. Therefore, the developer should be made responsible for circulation system improvements and, where necessary, land dedication for right-of-way. Since developments often impact the circulation system well beyond the site boundaries, the responsibility for off-site improvements should be expanded on the basis of each development's impact.

When the responsibility for improvements is shared by several developments, in-lieu fees should be established. These are fees required in lieu of land dedication and construction of public improvements. These fees should be based upon the costs which are attributable to the impact of the development. Such fees can be established for public parking facilities which benefit several businesses and for major circulation improvements such as traffic signals and bridges. These fees can also be used to match City, State or Federal moneys for circulation improvements.

The in-lieu fee is established by first determining the cost of the project. The cost should include the following:

1. The cost of the land if right-of-way or easements must be purchased.
2. The cost of design.
3. The cost of the improvements.
4. The administrative costs.

Second, the City should determine the pro-rata share for each of the developments which are expected to be impacting the affected facility. For streets, a common method is to assess fees on the basis of trip generation.

The following table gives generalized expected trip generation by land use type. These figures can be used to determine the share of the in-lieu fees by each development for street improvements:

TABLE B-1: TRAFFIC GENERATION BY LAND USE TYPE

Residential	Vehicle trip-ends/ dwelling unit Range	Typical
Low density (single-family homes)	7-12	9
Medium density (patio houses, duplexes, townhouses)	5- 8	7
High density (apartments)	3- 7	5

Commercial--Retail	Vehicle trip-ends/ 1,000 sq.ft. floor area Range	Typical
Neighborhood retail (supermarket)	70-240	130
Community retail (junior department store)	60-140	80
Regional retail (regional shopping center)	30- 50	40
Central area retail	10- 50	40
Highway-oriented commercial (motels, service stations)	4- 12	10

Commercial--Offices	Vehicle trip-ends/ 1,000 sq.ft. floor area Range	Typical
(All Types)	6-60	14

Industrial	Vehicle trip-ends/ 1,000 sq.ft. floor area Range	Typical
Highly automated industry; low employee density (warehouse)	0.2-1.0	0.6
Light service industry; single lot industry (lumberyard)	0.4-1.2	0.8

Industrial (Con't)	Vehicle trip-ends/ 1,000 sq.ft. floor area Range	Typical
Industrial tract (five acres) (machinery factory)	0.6-4.0	2.0
Office, campus; research & development (research industry)	3-8	4

Public and Semi-Public Uses	Vehicle trip-ends/ Range	Typical
Schools and colleges	0.4- 1.0 Veh. trip-ends/student	0.8
Places of public assembly (theater, stadium, convention center)	Stadia: 2 veh. trip-ends/4 seats	
Administration facilities (city hall, state offices, postoffices)	10-60 Veh.trip-ends/1,000 Sq.ft. floor area	20
Recreation facilities (park, zoo, beach, golf course)	Golf Course: 2-10 Veh. trip-ends/acre	8
Hospitals	6-16 person trip-ends/bed	10

Source: Traffic Circulation Planning for Communities, Gruen Associates 1974

In-lieu fees for parking facilities should be based upon the parking needs of each use as contained in the City's parking regulations. The cost of the parking facility should include:

1. The land costs.
2. The cost of design.
3. The cost of the improvements.
4. The administrative costs.

A survey was conducted by the City of San Luis Obispo to determine in- lieu parking charges by other cities. They found that the rates ranged from $2,500 to $12,000 per space.

In-lieu fees are an effective method of procuring funds for necessary circulation system improvements. One drawback, however, is the fact that money is only collected if development occurs. That means that improvements which are needed immediately or within the near future can only be constructed iif the City advances the money. The City would be reimbursed over an extended period of time as development occurs. If the City borrows the money for the circulation system improvements, the cost of the loan should also be added to the in-lieu fee. If development is slow to occur, the City could be saddled with a very long pay-back period. An escalator factor should be built into any in-lieu fee schedule since the costs of the public project increase over the pay-back time period.

2. PUBLIC IMPROVEMENT DISTRICTS

A satisfactory method of financing circulation system improvements is to establish local assessment districts in already developed areas. Such districts can be established for a number of purposes and can provide a realistic means of constructing needed public improvements in an already built-up area. Special districts can also be established to provide for sewer and water improvements as well as other public facilities.

There are a variety of state laws providing for the establishment of parking districts. The Vehicle Parking District Law of 1943 is a district act under which the cost of acquiring and improving parking lots is assessed upon the real property in the district which receives benefits from the parking improvements. This law is popular because people feel that it is equitable since it places the cost burden upon the business properties which will be benefited. An important element in this district law is that the cost is financed by assessment of property rather than upon future revenues which means that free parking or parking at very low rates can be provided. This is important to the Downtown and the Embarcadero which have to compete with shopping centers which provide large amounts of free parking to customers.

The Parking Law of 1949 provides for the financing of parking facilities and land acquisition by the issuance of bonds payable from revenues of parking facilities and from parking meter revenues. No taxes or assessments are levied when this act is used. A parking authority is established by a resolution of the City Council. The revenue bonds require voter approval (There are some exceptions).

The Vehicle Parking District Law of 1951 combines the revenue and assessment features of the 1943 and the 1949 Acts. The parking lots are first financed by parking lot and parking meter revenues. Under the basic provisions of this act, parking lot charges are fixed. If the costs of maintenance, principal and interest on the bonds exceed the revenue received from the

parking charges, the property owners may consent to an advalorem assessment to be levied to pay the difference. This act is attractive in situations where property owners are unwilling to assume an assessment for the full cost of the parking facilities. On the other hand, this act creates a disadvantage for the parking district if it loses business to competing shopping centers which provide free parking.

The Parking and Business Improvement Area Law of 1965 provides a method where the City may levy an additional business license tax upon businesses within a limited area of the City which will receive special benefit from public projects in their area. This law requires a public hearing to establish the boundaries of the improvement area. The proceeds from this tax may be used for the acquisition, construction and maintenance of parking facilities and other public facilities for the benefit of the improvement area. This law could also be used to finance improvements to Downtown and Embarcadero pedestrian areas.

3. OTHER FINANCING SOURCES

General Obligation Bonds: The City may issue general obligation bonds for any municipal improvements including streets, sidewalks, parking, transit and bikeways. However, since general obligation bonds require at least two-thirds vote of the electors, these bonds will be difficult to obtain.

Revenue Bond Law of 1941: This law allows Morro Bay to issue revenue bonds to finance public projects of all kinds. The law requires that the public facilities financed by the bond produce the revenue to pay back the bond holders.

State Motor Vehicle Taxes: The revenues from motor vehicles can be used for street and, to a limited extent, bikeway improvements.

SB 325: These state funds are used by cities for roads and transit systems.

Special Grants: There are limited State and Federal funds which are made available from time to time for circulation system improvements. In order to qualify for most grants, the City must be able to respond quickly with specific public project proposals to submit for consideration. The disadvantage of many grants is that the funding is often based upon the size of the city which means that Morro Bay would lose-out to the larger cities in the San Francisco and Los Angeles area.

User Taxes: Public facilities such as the sewer and water systems are paid for by the users of these systems in the form of periodic user fees. In the same way, parking facilities, transit and the proposed water taxi can be totally or partially

self-supporting by the imposition of user fees. In order to keep the City Dial-a-Ride system affordable, the fares must be subsidized. As mentioned previously, some parking districts require the institution of paid parking.

Private Enterprise: It is possible that some forms of circulation should be handled by private enterprise. For example, it may be better for the City to offer a franchise to operate the water taxi service than to incur those costs by the City since a private operator may be able to provide the service more efficiently than the City.

Combination of Financing Sources: Many circulation system projects may require a combination of two or more of the methods listed above.

4. CAPITAL IMPROVEMENT PROGRAM

The City should prepare a long-range capital program for funding needed to implement circulation projects. The Capital Improvement Program could be used to better define available funding resources. It would also present a structured plan for the orderly improvement of the circulation system and allow the City Council to better assess future budget needs.