UMTA-CA-06-0126-84-1

U.S. Department of Transportation

Urban Mass Transportation Administration

A Preferential Parking Demonstration in Hermosa Beach, CA

UMTA/TSC Evaluation Series

Final Report
February 1985

UMTA Technical Assistance Program

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Technical Report Documentation Page

1. Report No.	2. Government Accession No.	3. Recipient's Catalog No.
UMTA-CA-06-0126-84-1		

4. Title and Subtitle
A PREFERENTIAL PARKING DEMONSTRATION IN HERMOSA BEACH, CA

5. Report Date
February 1985

6. Performing Organization Code
DTS-64

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8. Performing Organization Report No.
DOT-TSC-UMTA-85-1

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10. Work Unit No. (TRAIS)
UM527/R5631

11. Contract or Grant No.
DOT-TSC-1755

13. Type of Report and Period Covered
Final Report
August 1980 - Sept. 1983

12. Sponsoring Agency Name and Address
U.S. Department of Transportation
Urban Mass Transportation Administration
Office of Technical Assistance
Washington, DC 20590

14. Sponsoring Agency Code
URT-30

15. Supplementary Notes
*Under contract to: U.S. Department of Transportation
Research and Special Programs Administration
Transportation Systems Center
Cambridge MA 02142

16. Abstract

This report presents the results of a parking demonstration operated by the City of Hermosa Beach, California, and funded by the Urban Mass Transportation Administration. Under the project, long-term on-street parking in the residential areas near the city's popular beach required a permit. Area residents were able to purchase permits for their own vehicles or guest use at a nominal price. Non-residents could purchase daily permits at a higher price or park at meters near the beach. As an alternative, a free park-and-ride system was provided from lots on the edge of the zone. The purpose of the program was to reduce the problems residents faced in trying to find on-street parking and alleviate the safety problems caused by the traffic congestion in the residential areas.

This report assesses the demand for each of the project elements and effect of the project on local parking and traffic conditions. It also assesses the costs of and revenues from the project and its ability to be financially self-sufficient. Finally, it gives conclusions derived from this project that may be applicable to similar programs implemented elsewhere.

This report is similar to one evaluating a companion demonstration conducted in Santa Cruz County, California, although there are numerous differences in the characteristics of the sites and the specific programs which were implemented.

17. Key Words	18. Distribution Statement
Parking, Preferential Parking, Park-And-Ride, Shuttle Bus, Parking Congestion, Parking Permits, Parking Enforcement, Traffic Congestion, Parking Fees	Document is available to the public through the National Technical Information Service, Springfield VA 22161

19. Security Classif. (of this report)	20. Security Classif. (of this page)	21. No. of Pages	22. Price
Unclassified	Unclassified	164	

PREFACE

This report is part of the TSC Evaluation series for the UMTA Service and Methods Demonstration Program, U. S. Department of Transportation.

This report was prepared by Crain & Associates, Inc. at the request of the Transportation Systems Center under Contract DOT-TSC-1755. The City of Hermosa Beach provided the data for the report and conducted the surveys. The purpose of the project was to demonstrate the use of preferential parking to relieve traffic congestion and residents' parking difficulties near recreational areas.

The TSC project manager was Larry Doxsey. The project manager for UMTA was Stewart McKeown. The project manager for Crain & Associates was George Rhyner. He was assisted by Rencie Eteeyan and Juliette McNally. The report was reviewed by David Koffman and Susan Plautz, and typed by Molly Hughes, Ana Chou, Madeleine St. Pierre, and Barbara Crain.

Much of the data and analysis for the first several years of this project was taken from work done on this project by Systan, Inc. Debra Newman was project manager for Systan and also continued to provide much assistance once Crain & Associates began work on the project.

The entire staff of the City of Hermosa Beach were also very helpful. Especially helpful were Judy Harper and Kim Reardon-Crites who were the final two in a long series of project managers. Also Joan Noon, the director of the General Services Department, and Pam Sapetto, the Director of the Planning Department, provided help not only in gathering the necessary data but also in providing insight into the day-to-day workings of the project.

METRIC CONVERSION FACTORS

Approximate Conversions to Metric Measures

Symbol	When You Know	Multiply by	To Find	Symbol
	LENGTH			
in	inches	2.5	centimeters	cm
ft	feet	30	centimeters	cm
yd	yards	0.9	meters	m
mi	miles	1.6	kilometers	km
	AREA			
in^2	square inches	6.5	square centimeters	cm^2
ft^2	square feet	0.09	square meters	m^2
yd^2	square yards	0.8	square meters	m^2
mi^2	square miles	2.6	square kilometers	km^2
	acres	0.4	hectares	ha
	MASS (weight)			
oz	ounces	28	grams	g
lb	pounds	0.45	kilograms	kg
	short tons (2000 lb)	0.9	tonnes	t
	VOLUME			
tsp	teaspoons	5	milliliters	ml
Tbsp	tablespoons	15	milliliters	ml
fl oz	fluid ounces	30	milliliters	ml
c	cups	0.24	liters	l
pt	pints	0.47	liters	l
qt	quarts	0.95	liters	l
gal	gallons	3.8	liters	l
ft^3	cubic feet	0.03	cubic meters	m^3
yd^3	cubic yards	0.76	cubic meters	m^3
	TEMPERATURE (exact)			
°F	Fahrenheit temperature	5/9 (after subtracting 32)	Celsius temperature	°C

Approximate Conversions from Metric Measures

Symbol	When You Know	Multiply by	To Find	Symbol
	LENGTH			
mm	millimeters	0.04	inches	in
cm	centimeters	0.4	inches	in
m	meters	3.3	feet	ft
m	meters	1.1	yards	yd
km	kilometers	0.6	miles	mi
	AREA			
cm^2	square centimeters	0.16	square inches	in^2
m^2	square meters	1.2	square yards	yd^2
km^2	square kilometers	0.4	square miles	mi^2
ha	hectares (10,000 m^2)	2.5	acres	
	MASS (weight)			
g	grams	0.035	ounces	oz
kg	kilograms	2.2	pounds	lb
t	tonnes (1000 kg)	1.1	short tons	
	VOLUME			
ml	milliliters	0.03	fluid ounces	fl oz
l	liters	2.1	pints	pt
l	liters	1.06	quarts	qt
l	liters	0.26	gallons	gal
m^3	cubic meters	35	cubic feet	ft^3
m^3	cubic meters	1.3	cubic yards	yd^3
	TEMPERATURE (exact)			
°C	Celsius temperature	9/5 (then add 32)	Fahrenheit temperature	°F

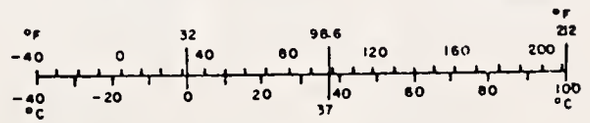

TABLE OF CONTENTS

TABLE OF CONTENTS (cont.)

LIST OF ILLUSTRATIONS

LIST OF TABLES

EXECUTIVE SUMMARY

Demonstration Setting

The City of Hermosa Beach is a small, suburban community located in southwest Los Angeles County, California. It has a population of just 18,070 and an area of 1.3 square miles. It has a popular beach, however, that attracts persons from a wide area. Most of the persons coming to the beach from outside the city come by auto. This has caused long-standing parking problems and traffic congestion in the area surrounding the beach.

The area surrounding the beach, except for a small downtown section, is a densely-developed residential area. In order to alleviate congestion in this area, a program was put into place which required permits for long-term non-metered parking.

The residential area within two blocks of the beach have "yellow meters" at all parking spaces with a two-hour time limit. The residential areas further back from the beach, however, had no time limit on parking prior to the program. Many beach users parked in this area to avoid using the meters, or, especially on weekends, because they were unable to find any spaces closer to the beach. In addition, area residents have many more vehicles than can be accommodated in off-street parking spaces. This caused major problems for residents who were dependent on street parking but were unable to find a space near their home. Also, with many beach users and residents driving through the area searching for a space, there was a safety problem from having large traffic volumes on the narrow residential streets.

Program Description

In order to alleviate the parking and traffic problems, the city applied for and received an Urban Mass Transportation

Administration (UMTA) demonstration grant to implement a preferential parking program. In addition to relieving the problems in the area, the program also had the explicitly-stated goals of not reducing beach access to nonresidents and of being financially self-sustaining.

The program used three major elements to accomplish these goals: sales of permits to residents at a nominal price; sales of permits to nonresidents at a higher price which allowed them to park on the street for longer than a one-hour limit imposed on all cars without a permit; provision of a high level of enforcement in the zone to assure that the time limit was adhered to; and provision of a free park-and-ride system to nonresident beach users. It was expected that the revenue from permit sales and citations would pay for the project's costs.

The program was implemented in August 1980, following a long and cumbersome planning process with numerous delays. Most of the delays were caused by political controversy which surrounded the program. The controversy, which continued even after the program was implemented, centered on the effect of the program on area businesses and the setting of boundaries for the permit zone. The latter issue was especially problematic since no resident wanted to be left outside the zone and thus be unable to use a permit to park near the beach. On the other hand, the zone had to be a limited size, not only to make the program effective and cost-efficient, but also because of legal restrictions which allow this type of zone only in areas which can be shown to have significant impacts.

The program configuration decided upon for implementation in 1980 included the following parameters:

- Extending a zone from the edge of the yellow-metered area (about two blocks from the beach) to Loma Street/Morningside Drive (about five blocks from the beach). Within this zone, only vehicles with permits could legally be parked for more than one hour.

- Issuing up to two free permanently affixed permits to each household in the zone for vehicles registered to residents, who were required to show proof of vehicle registration and residence and to file an application to obtain the permits. Additional permanently-affixed permits cost $10 each.

- Issuing a single transferable permit per household, after receipt of proof of residence and an application. These permits were intended to be used by guests of zone residents and were free of charge.

- Selling daily permits to nonresidents for $4 each. These permits were sold at city hall and at booths located on the major thoroughfares leading to the beach.

- Increasing the frequency of a local bus service which continued to serve the entire city as it had prior to the program. A second mini-bus was added to the service, decreasing headways to half an hour on each of three routes. These buses were used as part of the park-and-ride system with two of the routes going from parking lots near city hall to the pier area.

Except for a reduction in the price of daily permits to $2 in August 1981, these parameters were essentially unchanged through 1981. During 1982, however, the City Council attempted to implement several changes in the program. Legal injunctions issued against the program, however, forced the city to revert back to the 1981 program for the remainder of 1982 (beginning in May) and to obtain a California Coastal Commission permit to operate the program. To obtain this permit, they were required to make several changes prior to operating the program in 1983. The program implemented in 1983 differed in several ways from the original program, including:

- The one-hour parking limit was enforced only between May 15 and September 15 rather than during the entire year.

- The permit zone was expanded to include the yellow-metered area. Previously, this area had annual permits available to all city residents at a price of $15 which allowed them to essentially ignore the yellow meters. A single type of permanent and transferable permit was issued for the combined zone, all of which were sold for $10 and were available only to residents of the zone.

- One of the two mini-buses was used exclusively to provide shuttle service from the park-and-ride lots to the beach. The other mini-bus continued to provide loop service throughout the city, including service from parking lots to the pier and beach areas.

- Large banners were erected across the major thoroughfares leading to the beach area to publicize the program. In addition, signs containing information about daily permits and the shuttle bus were posted throughout the zone.

- An additional type of permit was sold which allowed residents to block their own driveway. This had the effect of increasing the available supply of on-street spaces in the zone.

Program Sales and Usage

In 1981, when permits were issued free to households in the zone, a total of 4518 permanent permits were issued. This represents approximately 1.5 permits per household. In 1983, when there was a charge for all permits, the number of permanent permits issued decreased to 4076 despite an increase in the size of the zone. There was an average of 0.8 permits per household issued during this year. This lower number of permits issued is much closer to the need for on-street parking spaces indicated by surveys conducted of area residents. The surveys also indicated that between 1979 and 1981 there was a significant increase in the percent of area residents who reported parking their own vehicles on the street all or most of the time or sometimes.

The number of transferable permits issued exhibited a similar decrease upon implementation of a charge for them. In 1981 a total of 3156 transferable permits were issued, or an average of 1.0 per household. In 1983 only 2762 were issued, or an average of 0.6 permits per household. Even the nominal charge of $10 for an annual permit had a major impact on the number issued. The decrease in the number issued had two beneficial effects; it reduced the workload, and thus expense, of the city for administering the program; and it reduced the

number of residents who could use on-street spaces when they also had off-street spaces available.

Daily permit sales were much lower than expected, especially prior to August 1981, when they cost $4 each. A total of only 89 were sold from August 1980 through July 1981. Once the price was decreased to $2 and more publicity was utilized, the sales increased dramatically. From May 15 through September 15, 1983, 3,533 daily permits were sold. This level of sales is still below that projected in the planning phase of the program. The main restriction on the number of daily permits sold seems to be a continually poor level of awareness of the program. Only 39% of the non-residents surveyed on the beach in 1983 were aware of the program.

The ridership on the shuttle bus also appears to have suffered from the low level of awareness among nonresidents. The majority of persons using both the shuttle and loop buses were local residents. Nonresidents parking in the zone were largely unaware of the bus and thus, this element had little impact on parking in the residential areas.

Ridership for loop bus service during the summer of 1981 totalled 14,663. Surveys indicate that 63 percent of these trips were made to or from the beach, for a total of approximately 9,200 trips during the summer. During the summer of 1983 a total of just 9,219 trips were made on the loop and shuttle bus with 40 percent of the loop bus trips and 80 percent of the shuttle bus trips going to or from the beach. An estimated total of 5,600 trips were made to or from the beach during 1983. Most of these trips, however, were not made as part of a park-and-ride service. Less than 8 percent of the persons surveyed riding the loop bus in both 1981 and 1983 and under one-third of those riding the shuttle bus in 1983 had used an auto to get to or from the bus.

Changes in Parking and Traffic

The program had only limited impact on parking in the original permit zone and the yellow meter area. Surveys of area residents and beach users and counts of cars in the area revealed:

- The occupancy ratio* in the original permit zone dropped significantly on weekdays between 1979 and 1981 and exhibited little change between 1981 and 1983. The attitudes of area residents reflected this with significantly fewer finding parking difficult.

- Parking on weekends in the original permit changed very little over the three years and the occupancy ratio remained at .96, extremely high for a residential area. Although area residents were less likely to feel parking was very difficult when the program was in effect than in 1979, over 70 percent of those surveyed gave this response in both 1981 and 1983.

- The occupancy ratio in the yellow meter area dropped on weekdays between 1979 and 1981. This decrease appears to have come from the increase in meter prices from $.25 to $.50 per hour that accompanied the start of the program.

- On weekends the occupancy ratio in the yellow meter area was over 1.0 (due to parking in illegal spaces) prior to the program. It continued to be over 1.0 throughout the program.

- Nonresidents driving to the beach reported taking a significantly longer time to find a space on both weekdays and weekends in both the yellow meter area and the original permit zone. This increase may be from time spent looking for a legal, free, long-term parking space before settling on either a meter or a one-hour space.

- The program does not appear to have had any significant effect on the mode choice of beach users. Both in 1979 and 1983, 73 percent of the nonresidents surveyed reached the beach by auto. In fact, the number of autos competing for parking spaces may have increased since

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*The occupancy ratio is the ratio of occupied spaces at a given time to the number of legal spaces.

the average passengers per vehicle decreased over this period.

- Nonresidents did, however, change the pattern of their parking. More nonresidents parked in the yellow meter area and fewer in the original permit zone in 1981 and 1983 than in 1979.

Surveys of local residents indicated that there was less traffic congestion. There was not a significant decrease, however, in the number of cars counted on side streets in the residential areas. Reduction of the traffic in residential areas was a major goal of the program.

Project Costs and Revenues

A major goal of the project was to make the program financially self-sustaining. The project was able to accomplish this during 1983. In fact, in 1983 the program collected over $225,000 while spending approximately $180,000, yielding a surplus of $45,000.

Among the individual activities, enforcement was responsible for the largest share of the total costs, accounting for almost half. It was also responsible, however, for two-thirds of the revenue and generated a surplus of nearly $70,000 (equivalent to 46 percent of citation revenue). The only other activity to generate a surplus was annual permit sales. Approximately 35 percent of the costs and 30 percent of the revenues were generated by this activity which yielded a surplus of approximately $4,000. This surplus was less than 6 percent of revenues.

The remaining 3 percent of the revenue was collected from daily permit sales. The cost of selling these permits was more than twice as high as the revenue, however, with daily permit sales posting a deficit of approximately $9,000. The remaining costs were for the park-and-ride system and publicity; these accounted for ten and two percent of the costs, respectively. Neither of these items generated any revenue.

Costs were also disaggregated into another set of categories. These show that 59 percent of the costs were for labor. An additional 15 percent was for operating supplies and services, 10 percent was spent for general overhead and also for non-building capital depreciation. The remaining 6 percent was split between bus maintenance and charges to depreciate the cities' buildings.

Implications for Other Areas

Many of the conclusions from this demonstration are dependent on site specific characteristics of Hermosa Beach. However, there are several broad conclusions about this type of program which can be drawn from the combined experience of the Hermosa Beach demonstration and the companion demonstration in Santa Cruz. These include:

- A major problem in dissuading nonresidents from parking in the residential areas appears to be in making them aware of the alternatives. Even extensive signing of the area failed to produce a reasonable level of awareness. Some of the problem may, in fact, be a result of nonresidents not being interested in such a service and thus virtually ignoring any publicity that is generated.

- Charging a nominal fee for annual resident permits has several potential benefits. It reduces the number of permits in circulation and, thus, the amount of on-street parking by residents who have off-street alternatives. It reduces the total cost of distributing permits if the alternative is having residents file applications but pay no fees. Directly mailing each household a limited number of permits without having them fill out an application, as was done in Santa Cruz, has an even lower cost, although the fees collected in Hermosa Beach more than paid for the distribution costs.

- Permits allowing persons to block their own driveways are an easy way to increase the available parking spaces in a zone.

- Provisions are necessary for all persons who might need to park in the permit area including local business persons and employees, service vehicles and part-year residents.

- Diverting persons from their cars to other modes is not easily accomplished. Even with strict enforcement, high prices, and convenient alternatives, most persons choose to continue using their auto for the entire trip.

- Preferential parking-permit programs can be financially self-sufficient but must rely mainly on citations to generate revenue.

1. INTRODUCTION

1.1 BACKGROUND ON RESIDENTIAL PARKING PERMIT PROGRAMS[1]

The parking permit program constitutes the most widely used technique for restricting nonresident long-term parking in order to provide more spaces for residents. There are several types of parking restrictions that can be used: nonresidents may be prohibited from parking during certain hours, nonresidents may be prohibited from parking altogether, nonresidents may be allowed to park for limited time periods, or nonresidents may be required to purchase a parking permit. Some combination of these can also be used. Parking permits are generally distributed to residents free or at a nominal charge to offset administrative costs. The permits are displayed in the window or pasted to the bumper of the vehicle. Enforcement costs are offset by revenues from violations, and in some cases, from sales of day-use permits to nonresidents. The parking permit program may be combined with one or more other techniques for reducing nonresident parking, e.g., provision of off-street parking and a transit alternative to the automobile, such as a shuttle bus or van. In theory, these elements in combination provide incentives for most nonresidents to utilize alternatives to auto travel and parking within the restricted area.

Problems with permit programs may arise over program boundaries; for example, spillover effects to the areas adjacent to the permit area may create problems for residents of these adjacent areas. In addition, the issue of visitor

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[1]Much of the background material which follows is drawn from The Restraint of the Automobile in American Residential Neighborhoods, Simkowitz, Heder and Barber, UMTA/TSC Project Evaluation Series, May 1978. For a more detailed examination of residential parking permit programs, the reader is referred to this document.

permits is often problematic. Parking privileges must be accorded to non-residents visiting the permit area for business (doctors, repair people) or pleasure (guests) via a system which is variable, yet which does not invite widespread abuse. Despite such problems, residential parking permit programs have generally proved successful in reducing nonresident traffic and increasing the supply of parking available to residents of permit areas.

1.2 PROJECT OBJECTIVES

Originally the major objectives of this demonstration project were to reduce traffic and parking congestion attributable to summer beach users who are not residents of the permit zone. The project also aimed to maintain access to the beach for nonresidents by providing a park-and-ride system originating just outside the permit zone. An additional demonstration objective was to create a financially self-supporting system through the sale of parking permits to nonresidents.

1.3 DEMONSTRATION INNOVATIONS

To achieve the demonstration objectives, several innovative strategies were implemented as part of the project. These included:

- Provision of annual preferential permits to allow on-street parking for local residents and guests;
- Provision of higher-cost daily permits to allow on-street parking for visitors;
- Provision of driveway permits to allow residents to block their own driveways;
- Installation of free park-and-ride lots on the periphery of the residential area;

- Operation of frequent shuttle transit services to beach areas; and
- Increased enforcement and penalties for violations of parking permit regulations.

In addition, the City of Hermosa Beach installed short-term parking meters in commercial areas to encourage convenient but rapid parking turnover, and increased parking meter rates.

1.4 ORGANIZATIONAL ROLES

The Urban Mass Transportation Administration (UMTA) awarded the demonstration grant to the City of Hermosa Beach; UMTA approved and monitored project contracts and expenditures.

The City of Hermosa Beach, as grant recipient, was responsible for administration and budgetary control of the project. The grantee was also responsible for providing the evaluation contractor with the data required to evaluate the project.

The Urban Institute, under contract to UMTA, provided technical assistance and support to the city.

The Transportation Systems Center (TSC), of the U.S. Department of Transportation, was responsible for evaluation of the project. TSC specified the desired form, scope and budget of the evaluation; provided technical supervision to the evaluation contractor; and reviewed evaluation products.

Systan, Inc., as evaluation contractor to TSC, from 1979 through 1982, was responsible for preparing an Evaluation Plan, specifying data collection requirements, developing a schedule of data collection efforts and evaluation tasks within a budget established by TSC, and for the first three years of the project, monitoring and reviewing data collection, designing and performing preliminary data analysis, and preparing interim evaluation reports.

Crain & Associates, Inc., as evaluation contractor to TSC during 1983 and 1984, was responsible for designing, monitoring and reviewing the final year's data collection charts, designing and performing data analysis, and preparing the final evaluation report.

1.5 EVALUATION FRAMEWORK

This section explains the evaluation framework for the program. It describes the potential program impacts that were anticipated and the variables which were used to measure these impacts. The framework is presented schematically in Figure 1-1.

The parking permit program was introduced to change characteristics of the parking space supply within the demonstration area so that persons who typically used area parking spaces would alter their parking and travel behavior. It was hypothesized that as a result of these changes in parking, there would be changes in the aggregate nonresident demand for parking spaces, auto trips, and transit trips within the demonstration area. It was anticipated that the demand for beach usage would not be significantly affected.

The evaluation aims to measure changes in demand that took place after the permit program was introduced through the use of "before" and "after" data. Concurrent exogenous changes were also examined as potential explanations for observed changes.

The parking permit program innovations discussed in Section 1.3 directly charged various characteristics of the on-street parking supply. It increased the price of legal long-term parking for nonresidents (persons not eligible for annual permits) in the demonstration permit area. Before the demonstration, nonresidents parked for free in the area which became the demonstration permit zone. After the program started, nonresidents had to purchase permits in order to park

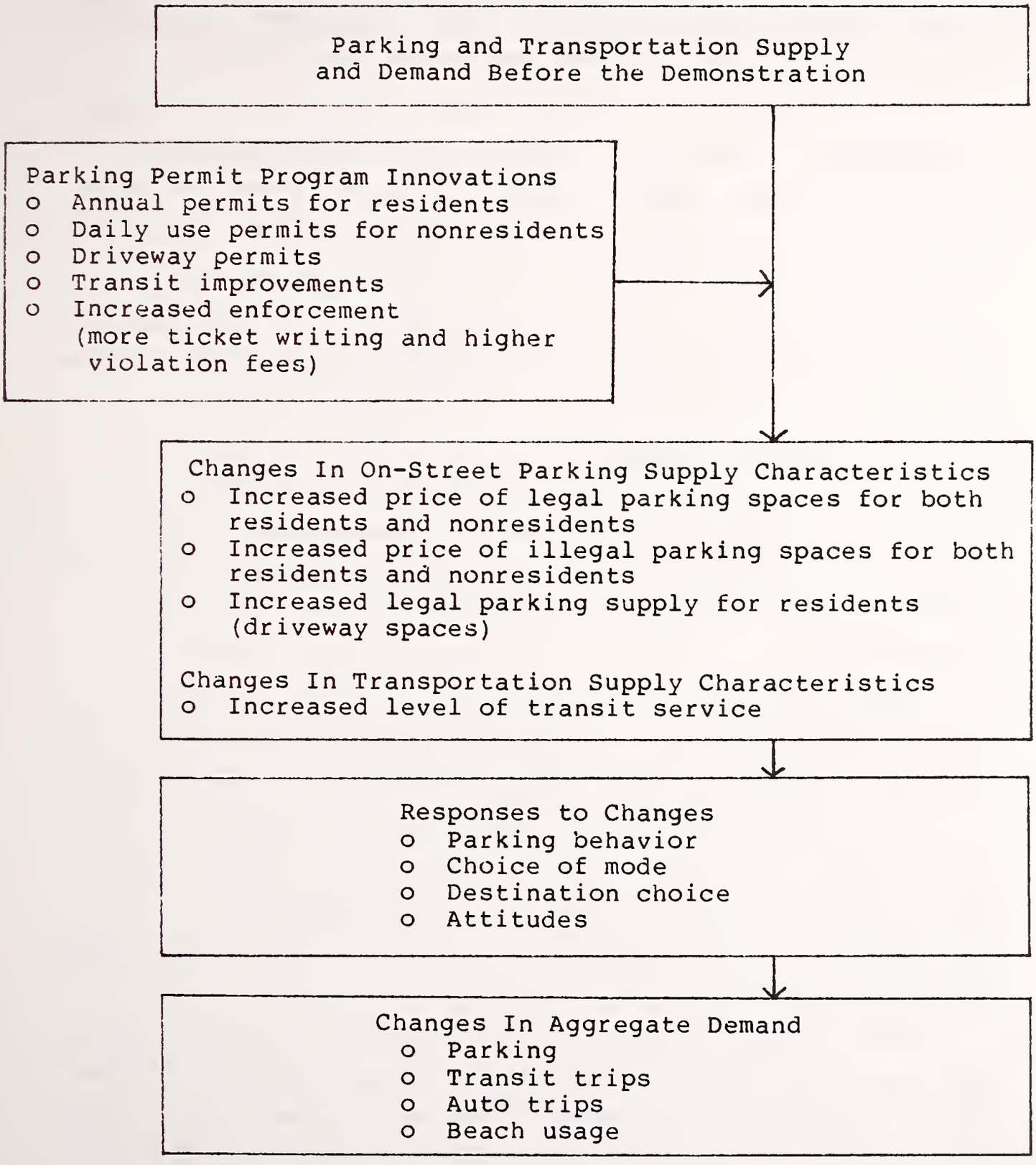

FIGURE 1-1. EVALUATION FRAMEWORK

there legally for more than one hour. The price of illegal parking also rose because enforcement of parking regulations was increased as part of the program--the chances of getting a citation and the penalty fees were both increased.

The program also increased the price of on-street parking for residents, who had to obtain annual permits in order to park on the street legally for more than one hour. As with nonresidents, increased enforcement had the effect of raising the price of illegal parking.

Another change was that the parking supply increased for residents because of the addition of driveway permits. These permits allowed residents to block their own driveways.

The program increased the level of transit service by reducing headways for trips between a park-and-ride lot and the beach. This change was intended to increase the convenience of taking transit to the beach at the same time that driving and parking became less convenient and more costly for nonresidents.

Individuals were expected to change their behavior in various ways as a result of the increased parking prices and increased transit service. Some nonresidents were expected to avoid the cost of the day-use permit by parking outside of the permit zone. For short-term parking, some of these persons were expected to prefer to park at the yellow meters or to "spillover" into the area adjacent to the demonstration permit zone that was farther from the beach.

Some of the nonresidents were expected to travel to the beach by a mode other than driving and parking close to the beach. Because of the improved transit service between the park-and-ride lot and the beach, transit was expected to be chosen over driving by some nonresidents. Other possible mode choices included walking and biking.

When the program first started, many residents and nonresidents were expected to park illegally. However, as they

became aware that enforcement had increased, fewer and fewer parking violations were expected, until a new level of violations was reached. Over time, it was anticipated that increased enforcement would make obtaining permits more desirable, as well as the other possible responses outlined above.

Attitudes and perceptions about parking space availability and congestion were also expected to change as a result of the program. Simply knowing that a permit program exists can cause people to perceive less congestion. On the other hand, the inconvenience of obtaining the annual resident permit could be expected to cause some residents to see modest improvements in parking space availability as "not worth it."

The combination of the various responses to the parking and transit supply changes was expected to result in changes in the aggregate demand for parking spaces, transit trips, and auto trips within the demonstration permit zone. Aggregate demand for on-street parking and auto trips within this zone was expected to decline, mainly because of decreased demand among nonresidents. Even though some residents were expected to start using off-street spaces, resident demand for on-street spaces was not expected to decrease because more residents were expected to utilize on-street parking, at least occasionally, than before the demonstration. Nonresidents were expected to get to the beach less often by driving and parking near the beach, instead choosing to use the expanded transit service. Thus, aggregate demand for transit trips in the permit zone was expected to increase. Aggregate demand for beach usage was not expected to be affected by the program since transit was being provided as a convenient, low cost alternative to driving.

1.6 EVALUATION ISSUES

Using the above framework, the evaluation investigated the extent to which the parking permit program succeeded in

achieving its goals. The primary goal was to reduce parking and traffic congestion in residential neighborhoods within the permit zone. This would have been a relatively simple goal to achieve if it were the only goal. A substantial fee for parking in the target area or even an outright ban on nonresident parking would all but eliminate congestion. However, two related project goals necessitated a more carefully structured program.

The first of these was to reduce congestion without discouraging beach use. The shuttle bus system from nearby park-and-ride lots was expected to play an important role in achieving this goal. It was hoped that a substantial portion of the non-residents of the permit zone would shift their mode of reaching the beach (at least at the end of the trip) to the park-and-ride system. Several other long term options available to the non-residents were also recognized during the planning phase of this project. These included parking in the unmetered portion of the permit zone and either paying the day-use fee or running the risk of being fined for parking illegally, feeding the meters, or going to other beaches. The impacts of nonresidents exercising each of these options are addressed in this evaluation.

The second related project goal was to make the program financially self-sufficient. Once the project elements were determined, this became essentially a pricing issue, involving setting annual permit prices, day-use permit prices,and parking citation fines at the point at which permit sales would produce sufficient revenue. To a certain extent, this goal conflicts with the other two as financial self-sufficiency requires that some nonresidents continue to park in the permit zone. This "trade-off" was an important issue in planning the project.

A parking permit program such as the one being evaluated here or the companion demonstration in Santa Cruz may reduce congestion in one area at the expense of increasing it in another. It was therefore important to determine whether or

not any spillover effects took place at the perimeter of the permit zone. There was also the possibility that congestion on the residential streets bordering the beaches would not decrease significantly, since these were the most desirable parking areas for beach users, especially nonresidents purchasing day-use permits.

Finally, the issue of perceptions must be addressed. In contrast to actual changes in traffic congestion, residents' perceptions (which presumably inspired the demonstration originally) may be quite different. Simply having a permit program may have caused people to perceive less congestion. On the other hand, the inconvenience of obtaining resident and guest permits may have caused a modest reduction in congestion to be interpreted as "not worth it," leading to perceptions of no change at all. This issue was also treated in the evaluation.

2. DEMONSTRATION SETTING

2.1 DEMOGRAPHIC CHARACTERISTICS*

The Los Angeles metropolitan area, the second largest in the country, is highly decentralized and has a heavily automobile-dominated transportation system compared to other metropolitan areas. Although demographic data indicates that other metropolitan areas are characterized by greater decentralization and automobile dependence, none of these other areas approach Los Angeles in size. Los Angeles County, which comprises the Los Angeles Standard Metropolitan Statistical Area contains approximately seven and one half million people. In 1973, there were over 3.7 million automobiles in Los Angeles County, or one car for every 1.84 persons. Nationally, there was one car per 2.06 persons in 1970.

Hermosa Beach is a 1.3 square mile community stretched along the Pacific Ocean in the southwest corner of Los Angeles County (see Figure 2.1). The city's population, according to the 1980 census, was 18,070. It is one of the more densely populated cities in California. A relatively large share of the population in Hermosa Beach is comprised of young, single adults (see Table 2.1). The residents of the city also have much higher incomes, a higher level of education, and are more likely to have recently moved into their current residence than the residents of Los Angeles County as a whole.

The residents of Hermosa Beach have a rate of automobile availability and usage that is high even for southern California. As shown in Table 2-2, a lower percentage of Hermosa Beach housing units have no vehicles available and a higher percentage have one or two vehicles available than Los

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*Unless otherwise noted, the data in this section is taken from the 1980 U.S. Census.

FIGURE 2-1. HERMOSA BEACH AND VICINITY

TABLE 2-1. DEMOGRAPHIC CHARACTERISTICS

	Hermosa Beach	Los Angeles County
County		
Population	18,070	7,477,503
Households	9,184	2,735,091
Percent Households with Married Couple	28.7%	51.3%
Non-Family Household	60.5	33.3
Single Householder with Children	5.4	8.7
Single Householder without children	5.4	6.7
Year Household moved into Structure		
1979-March 1980	36.3%	25.4%
1975-1978	36.0	32.1
1970-1974	11.5	15.8
1969 or earlier	16.2	26.7
Income		
Per Capita	$13,360	$8,237
Median Household	$22,432	$17,563
Persons 18 Years and over, years of school completed		
High School 3 years or less	9.0	30.1
High School 4 years	26.6	31.3
College 1-3 years	32.2	22.3
College 4 years	17.7	8.0
College 5+ years	14.5	8.1

TABLE 2-1 DEMOGRAPHIC CHARACTERISTICS (cont.)

	Hermosa Beach	Los Angeles County
Age Groups		
Under 20	16.0	30.8
20-29	34.6	19.6
30-39	24.2	14.8
40-59	16.7	20.6
60+	8.6	14.1

TABLE 2-2. AUTOMOBILE AVAILABILITY AND USAGE

Number of Vehicles Available	Percentage of Housing Units	
	Hermosa Beach	Los Angeles County
0	4.7%	12.7%
1	42.0	38.7
2	35.6	30.9
3+	17.7	17.7
Mode to Work		
Drive Alone	75.2%	68.7%
Carpool	13.7	16.8
Public Transit	3.0	7.0
Walk	2.9	3.7
Other	3.7	2.4
Work at Home	1.6	1.5

Angeles County housing units as a whole. However, vehicle availability in Hermosa Beach is even higher than the figures in Table 2-2 suggest, if vehicle availability per capita (rather than per housing unit) is considered. Hermosa Beach averages 2.0 persons per housing unit, as compared to 2.7 persons per housing unit in the county as a whole. Table 2-2 also shows that a higher percentage of Hermosa Beach residents drive alone to work, as compared to Los Angeles County residents as a whole.

The high vehicle ownership, combined with the relative scarcity of off-street parking spaces in the areas nearest the beach, contributed to the parking problems.

2.2 TRANSPORTATION CHARACTERISTICS

Hermosa Beach is well served by several major highways. The Pacific Coast Highway (Route 1) bisects Hermosa Beach, providing convenient local north-south access. The Artesia Freeway (Route 91) provides direct east-west access to downtown and the beach. The San Diego Freeway (Route 405), the Harbor Freeway (Route 11), and Hawthorne Boulevard (Route 107) provide an easy regional commute to Hermosa Beach (see Figure 2-1).

The mild climate, geographical configuration, and the parking problems, make it pleasant and convenient for local residents to walk, bicycle, or skate for many of their local trips. Almost three-quarters of the local residents reported walking to the beach. Approximately equal numbers of local residents reported their beach access mode as automobile (13.5%) and bicycle or skate (11.6%).

The City of Hermosa Beach also operated free transit service both before and after the demonstration project was implemented. Before the demonstration project, and during the its first year, 1980, a mini-bus operated over two loop routes. One bus operated on a one-hour headway from 9:00 AM to 1:00 PM and 2:00 PM to 5:00 PM and offered transit access to all areas of the city. In 1981 and 1982, an additional bus and

loop route were added to the service and headways were reduced to 30 minutes. During the final year of the project, 1983, one of the buses was used to provide direct shuttle service from park-and-ride lots to the beach, while the other bus continued to provide loop service throughout the city.

Additional transit service was provided by the Southern California Regional Transit District (SCRTD). Although this service was quite limited in terms of serving the residents of Hermosa Beach, the SCRTD bus routes did interface with the city's loop routes and provided service from the rest of the county to the beach area. This service was not used extensively, however, as only four percent (4%) of nonresidents' trips to the beach were made via transit.

There is little congestion on most city streets. These streets would provide an adequate on-street parking supply for residents if there were not a large number of nonresident visitors.

Near the beach, nearly all streets have well defined parallel parking spaces along each side. Hermosa Avenue, a major thoroughfare near the beach, has parking along both sides of a center median, in addition to parking along each side. The majority of the streets are level, but many of the east-west streets near the beach have a fairly steep grade which makes parking difficult. Also, the number of available parking spaces is reduced by closely spaced driveways resulting from the high housing density near the beach.

3. PROJECT DEVELOPMENT AND OPERATIONS

3.1 PROJECT EVOLUTION

Although the population of Hermosa Beach is only about 18,070, many times that number of persons use its beaches on summer weekends. Prior to the demonstration, most visitors drove to the beach and parked in nearby residential neighborhoods. Unfortunately, demand for parking severely outstripped the area's limited parking supply. Residents of the neighborhoods near the beach often had difficulty finding on-street parking spaces near their homes. Also, there was often traffic congestion in these neighborhoods as a result of drivers "cruising" streets for parking spaces.

On November 4, 1978, the Hermosa Beach City Council, responding to local community needs, unanimously adopted a resolution to consider a preferential parking permit program and complementary transit service program. It subsequently applied for, and received, an UMTA grant to conduct a demonstration program.

The program was originally scheduled to be implemented during the summer of 1979 and the evaluation was scheduled to end following the summer of 1980. Numerous delays were encountered and many changes were made to the program once it had started. These were due in large part to the political controversiality of the program. Project implementation was postponed until late August 1980 and the evaluation phase was extended through 1983. The following is a chronology of the program concentrating mainly on the causes of the delays and changes (see Table 3-1 for a summary).

Planning for the project began in late 1979. One lot designated for park-and-ride service was completed during May 1979. Tentative plans were set to phase in the program, beginning on July 15 with a section about ten square blocks on

Table 3-1. SUMMARY OF PROJECT SCHEDULE

Project Milestones

Event	Scheduled Date	Comments
"Before" data collection	8/79	
Grant award	11/79	
Permit ordinances adopted	5/80	Several versions of ordinances & resolutions had been drafted.
Resident & guest permits available	7/80	
Project begins	8/80	Visitor permits available, enforcement increases.
"After" data collection for summer I	9/80	
End of summer I	10/80	
Summer II begins	5/81	Permit booths open; transit service increases; enforcement increases.
"After" data collection for summer II	8/81	
End of summer II	9/81	Permit booths open weekend only; transit service and enforcement reduced.
City adopts new permit resolutions	12/81	
New resident & guest permits issued	2/82	Project permits combined with yellow meter permits.

Table 3-1. SUMMARY OF PROJECT SCHEDULE (cont.)

PROJECT MILESTONES

Event	Date	Comments
Project suspended	3/82	Lawsuit and injunction filed.
City adopts new permit and enforcement resolution	5/82	
Summer III begins		Permit booths open; transit service and enforcement increases.
"After" data collection - III	8/82	
Summer III ends	9/82	
Project changes	11/82	New signs and banners installed.
City adopts new permit	1/83	One permit zone; only impacted area residents may purchase.
Summer IV begins	5/83	Permit booths open; shuttle bus starts; enforcement begins in impact area.
Summer IV ends	9/15/83	UMTA's participation in the project completed.

the north end of town and continuing southward until the entire permit zone was included by the end of summer. These plans were presented at public meetings held during the week of June 4. The outcome of these meetings was generally positive with the main concern being possible unforeseen strings being attached to using federal funding.

The City Council was expected to finalize plans for the parking permits and shuttle service at a meeting held in July 1979. Instead, at this meeting Council members postponed the decision until after a workshop session. Following the session the Council directed the planning staff to develop alternative project proposals for the summer of 1980, rejecting the proposal to phase in the program during the winter.

The planning staff and consultants (The Urban Institute) continued to hold public meetings during August 1979 while identifying each separate program parameter (e.g., enforcement times, permit prices and zone size) and developing staff recommendations. Development of the appropriate ordinances and regulations continued through the fall of 1979. Meanwhile, delays were encountered in obtaining UMTA approval for a contingency clause allowing the city to cancel the program at any time with no payback responsibility after giving 30 days notice.

The Hermosa Beach City Council continued to postpone making a decision on the program. On December 18, they held a second workshop to decide on the program parameters. Following this workshop, the planning staff developed an enabling ordinance to provide authorization for the program and three resolutions to set its parameters. The City Council was scheduled to consider these measures at their February 12, 1980 meeting. At that meeting, however, members of the Board of Zoning Adjustments (BZA) asked to review the demonstration's Environmental Impact report. During February the Hermosa Beach planning staff reviewed, updated, and resubmitted the report. The BZA approved the project on March 3.

During March, brochures were distributed to all residents to highlight the major elements of the project, publicize the installation of a hotline to answer questions and announce another public meeting to be held March 31. As a result of this meeting, the City Council asked for further revisions to the program. One of these changes was to move the eastern boundary of the zone to Pacific Coast Highway. Due to the results of recent court decisions, the city's Legal Counsel advised against this change. The City Council then adopted a broad enabling ordinance, but delayed action on the resolutions to establish the demonstration permit zone boundaries.

On May 27, the City Council held a public hearing on the plan as part of the regular council meeting. The hearing was extensively publicized and attracted a large number of residents, most of whom spoke in favor of the plan. During the meeting, the City Council unanimously approved creation of two Recreational Parking Areas. Also, the size of the demonstration permit area was reduced.

During June and July 1980, the city prepared to implement the program. Signs were erected in the areas, warnings were put on cars in the areas, additional enforcement officers were hired, and applications for annual permits were received. The city also purchased a second mini-bus to serve as a back-up vehicle but did not increase the loop bus service. In August a series of problems were encountered which included:

- Delays between the time residents applied for and received their permits;
- No permit provisions were made for business or employees in project area;
- State vehicle registration, used to verify local residency, allowed owners to indicate any change of address and allowed registration to post office boxes.
- Several residents leased or used company cars that were registered to non-Hermosa Beach addresses.

Resolution of the problems delayed the start-up of enforcement of the program until August 20, 1980. At that time, there were still no provisions for employees of local businesses. During September the City Council agreed to provide a limited number of free employee parking permits to area businesses.

During the fall and winter, Hermosa Beach continued to modify the program. The city reduced the number of enforcement officers in Area II from six to three because the number of citations being issued was considerably below the number anticipated. Only 750 citations were issued in Area II during September, although nearly 2,000 citations per month had been expected. In January, the City Council adopted the following changes:

- The extension of the validity of the residential parking permits until February 1982.
- Three booths for the sale of day permits and the distribution of information to be placed at major intersections leading to the beach area.
- The day permits be honored at the yellow-posted meters as well as in the demonstration project area.
- The adoption of the revised UMTA budget and extension of the city's participation in the demonstration grant program. The revised budget reflected the elimination of the park-and-ride element of the programs.

The daily permit sales booths were opened on May 8. Previously, the permits had been available at City Hall but none had been sold. Transit services were increased by introducing the back-up mini-bus into regular service.

In August, the price of the daily permits was reduced from $4 to $2 to increase sales. Only 89 of the permits had been sold by the end of July.

Also, during August the city began issuing driveway parking permits. These permits which cost $10 per year allowed residents to block their own driveways.

On September 15, parking enforcement levels and transit services were reduced, and the permit and information booths were operated on weekends only.

In October 1981, the demonstration project manager resigned. The planning aspects of his duties were assumed by an intern in the Planning Department, and the day-to-day operations were placed under the General Services Department. In January 1982, the project underwent another change in leadership with a new planning intern taking over responsibility for project planning.

Also, during October 1981, the City Planning Staff conducted a short mailback household survey to determine if local residents 1) wanted to continue the program, 2) wanted the yellow-meter permits combined with the Area II resident permits, and 3) were willing to pay an annual fee to purchase these permits. Based on the results of this survey, the City Council voted in December 1981, to combine the permits and charge for all permits.

In mid-March 1982, a local businessman filed a lawsuit which resulted in an injunction that forced the city to return to the previous year's program within Area II until they obtained a California Coastal Commission (CCC) operating permit. The CCC agreed to issue a permit if Hermosa Beach 1) improved the permit sign and public information program, 2) identified and advertised the free parking lots, and 3) operated a shuttle service whenever the permit parking was enforced.

In late May 1982, the City Council adopted a new resolution that reduced the price of resident permits to $10 and allowed them to be sold city-wide. It also restricted enforcement in Area II to the summer.

A second injunction against the program was issued in July that restricted sales of the permits to residents of the combined zone. As a result of these injunctions, the city had to go through its records to determine which permits had been

sold to nonresidents of the zone, refund the purchaser, and invalidate the permit. They also had to issue two free permits to all Area II residents, refund Area II residents who had purchased permits, and give partial refunds reflecting the lower prices to Area I (the yellow meter area) residents. This proved to be a time consuming and costly process.

On January 11, 1983 the Hermosa Beach City Council decided to continue the preferential permit project for another year. It adopted the following staff recommendations:

Project Boundaries	One permit area, to include the previous year's yellow meter permit and residential permit areas;
Permit Price	Each permanent or transferable permit to be sold for $10;
Eligibility	Any city resident with a registered vehicle in Hermosa Beach and one guest permit per household within the project boundaries.

On January 25, the City Council changed the eligibility criteria to limit the sale of permits only to residents of the impacted area.

On March 18, the Superior Court of California, County of Los Angeles, threw out another lawsuit against the program alleging Coastal Commission and Civil Rights Violations. It ruled that the parking program was consistent with the state Vehicle Code in defining "adjacent impacted areas" as areas beyond those immediately or continuously adjacent.

On May 15, the city began enforcement of the program in Area II, sales of daily permits, and operation of the shuttle. On September 15, 1983, operation of these program elements ceased. This concluded UMTA's participation in the program. The city is, however, planning to continue the program into future years.

3.2 PROJECT ELEMENTS

This section describes each of the major elements of the program. Table 3-2 gives a summary of these and related elements as they existed during each year.

3.2.1 Administration

Responsibility for the administration of the project was divided between the Planning Department and the General Services Director. The Planning Department drafted new ordinances and resolutions to be presented to the City Council. The actual day-to-day operation of the enforcement, bus service, and permit sales were under the direction of the General Services Director.

Several other organizations were also responsible for designing, revising, and administering the program. The Hermosa Beach City Council took a very active role in devising and changing the program parameters. The court system issued several injunctions which resulted in program alterations. The California Coastal Commission required several changes in the program prior to issuing a permit. UMTA approved all major program changes. Local residents and media also exerted a strong influence on the program.

In the final year, program administration became well integrated into the city's government. The loop and shuttle buses were operated by the same set of drivers. Enforcement in the demonstration area integrated with the parking enforcement program for the rest of the city. Annual permit sales, citation processing, and records processing were all handled by General Services clerks. The planning duties and collection of data became only one of several tasks assigned to a planning intern.

TABLE 3-2. YEARLY STATUS OF HERMOSA BEACH PARKING FEATURES

ELEMENT	1979 (Pre-implementation	1980 (Beginning on August 1)	1981	1982	1983 (Projected)
Yellow Meter Permits (Area #1)	$15 permanent $17 transferrable Available to all Hermosa Beach City Residents	$15 permanent $17 transferable Available to all city residents. Limit of 1 transferable permit per household.	$15 permanent $17 transferable Available to all city residents. Limit of 1 transferable permit per household.	Permits combined $15 permanent $17 transferable Available to all city residents. Limit of 1 transferable permit per household.*	$10 permanent $10 transferable Available to zone residents only. Limit of 1 transferable permit per household.
Impacted Zone Resident Permits (Area #2)	N/A	2 free permanent 1 free transferable Available to permit zone residents only. Limit of 1 transferable per household. 1 free hour in zone without permit.	2 free permanent 1 free transferable Available to permit zone residents only. Limit of 1 transferable per household. 1 free hour in zone without permit.		
Day Use Permits	N/A	$4.00 None were sold Good for Area 2 only.	$4.00 until August $2.00 thereafter Good in both Area 1 and Area 2.	$2.00 Good in both Area 1 and Area 2.	$2.00 Good in both Area 1 and Area 2.
Fixed Route Bus	1 bus 2 routes 1 hr. headway	1 bus 2 routes 1 hr. headway	2 buses 3 loop routes 30 min. headway	2 buses 3 loop routes 30 min. headway	2 buses 3 loop and 1 shuttle route 3o min. headway
Vehicle Parking District and Yellow Meters	1-2 hr. meters 25¢ per hour	1-2 hr. meters 50¢ per hour Some "Tic-Fak" machines in downtown lots.	1-2 hr. meters 50¢ per hour Some "Tic-Fak" machines in downtown lots.	1-2 hr. meters 50¢ per hour Some "Tic-Fak" machines in downtown lots.	1-2 hr. meters 50¢/hr. (25¢ in VPD) All meters run by city. Validation available at local businesses for lots.
Driveway	N/A	N/A	Available starting in August, $10.00 Only can be used in front of owner's driveway	$10.00 Only can be used in front of owner's driveway	$10.00 Only can be used in front of owner's driveway

*Due to various injunctions, the distribution of the permits changed several times over the course of the year. This represents the distribution system at the beginning of the year. The changes which took place are enumerated in the text.

3.2.2 Permit Zone

The size of the proposed permit zone varied considerably during the planning phases of the project. Prior to the start of the program, there was a permit zone in the residential area closest to the beach. This zone, the Yellow Meter Zone (Area I), extended back to, but did not include, Palm Drive. It had long term meters at all of the parking spaces.

Once the program began, a second zone was established between Palm Drive and Loma Drive (inclusive). The boundaries of this zone were not changed once the program began. Figure 3-1 displays the Yellow Meter Permit Zone (Area I) and the Demonstration Permit Zone (Area II).

The decision to use a relatively small zone for the demonstration was made largely due to the landmark Arlington, Virginia Supreme Court decision of 1980. The jist of this decision was that programs such as this had to be limited to a residential area that could be shown to be impacted by nonresident parking. If not for this precedent, the city might have selected a much larger area.

Area II appears to have contained the most severely impacted streets. There was little, if any, pressure to increase the area of enforcement during the operation of the program.

3.2.3 Permits

The City of Hermosa Beach offered a wide variety of permits over the course of the project. A summary of the available permits appears in Table 3-2. With the sole exception of the daily permit, none of these permits was offered in all of the years that the program operated.

Before the start of the demonstration project, the city operated a long standing program in which any Hermosa Beach resident could purchase an annual $15 nontransferable (permanent) permit in order to park for free at the yellow

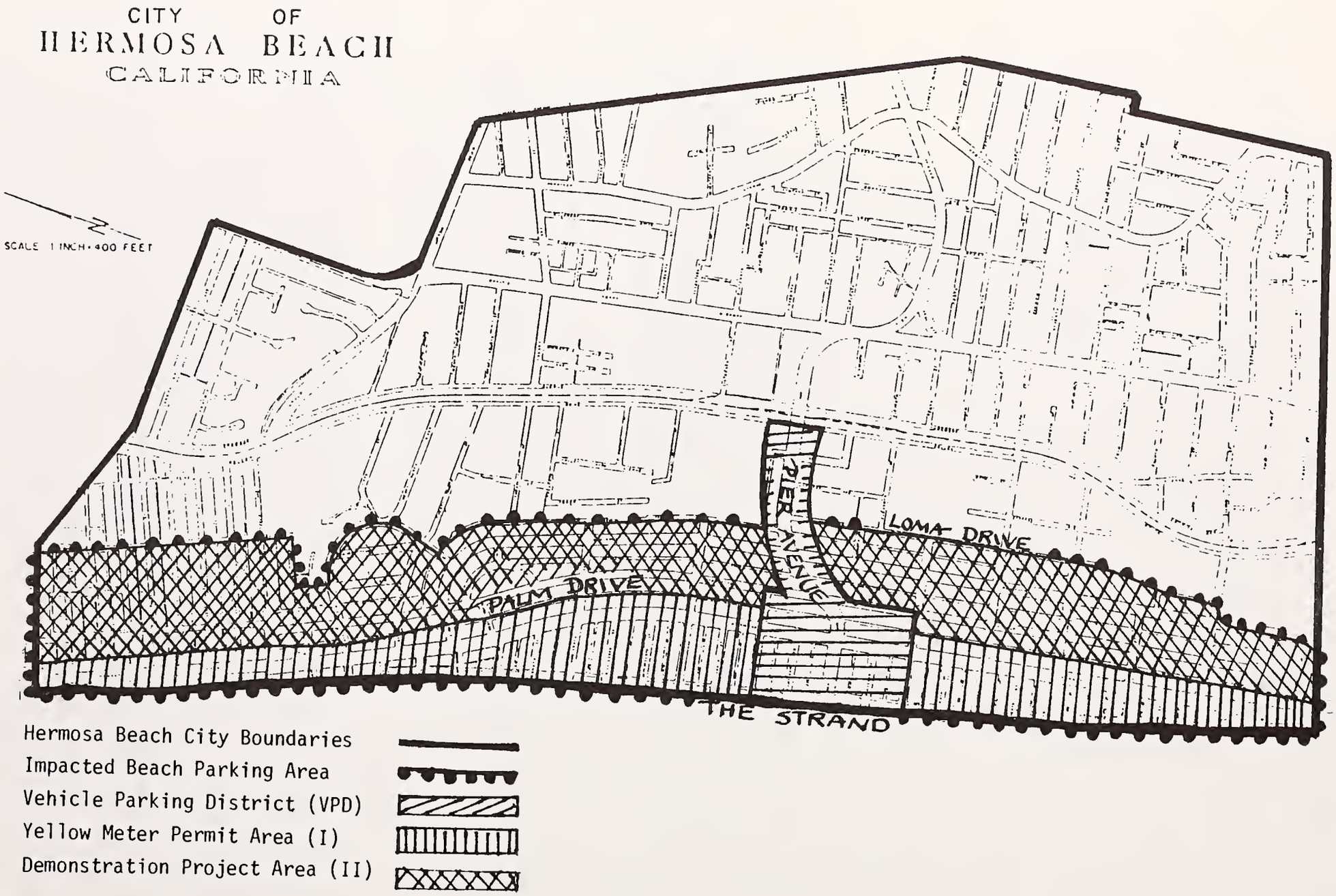


FIGURE 3-1. PARKING AND PERMIT AREAS

meters along Hermosa Avenue, the major artery running parallel to the beach (see Figure 3-1). In addition, any Hermosa Beach resident could purchase an annual transferable (guest) permit for $17. Without a permit, one hour of parking in the yellow metered zone costs 25 cents. Therefore, all nonresidents and residents who did not purchase permits had to feed the meters in order to park in the yellow metered area.

These permits were obtained by filing an application at City Hall. The nontransferable permit was affixed to the lower right-hand corner of the windshield. The transferable permit was hung from the rearview mirror. The permits are displayed in Figure 3-2.

Although this permit program allowed residents to park for extended periods of time without inserting coins in the meters, it did not give permit holders any preferences for spaces. Especially on weekends, many of the spaces in this area were taken up by persons without permits who happened to get there first.

Before the demonstration, the rest of the residential neighborhoods in Hermosa Beach had designated free, on-street, curb parking. Almost all day on summer weekends, many of these parking spaces were taken up by the influx of beach visitors.

This yellow permit program continued essentially unchanged in 1980 and 1981, the first two years of the demonstration. However, meter prices were raised from 25 to 50 cents per hour in 1980 as part of the program.

When the demonstration started in 1980, annual residential permits became available for use in a zone adjacent to the yellow meter area. These permits were similar to the yellow meter permits. There were two types of these permits--transferable and nontransferable. Unlike the yellow meter permits, during 1980 and 1981, the first two project years, the Area II permits were free and were only available to Area II residents. Figure 3-3 displays the annual Area II permits.

FIGURE 3-2. ANNUAL YELLOW METER AND COMBINED PARKING PERMITS

FIGURE 3-3. ANNUAL PROJECT PERMITS

FIGURE 3-3. ANNUAL PROJECT PERMITS (cont.)

They resembled the yellow meter permits, but the nontransferable type was stuck to the vehicle's bumper rather than the windshield.

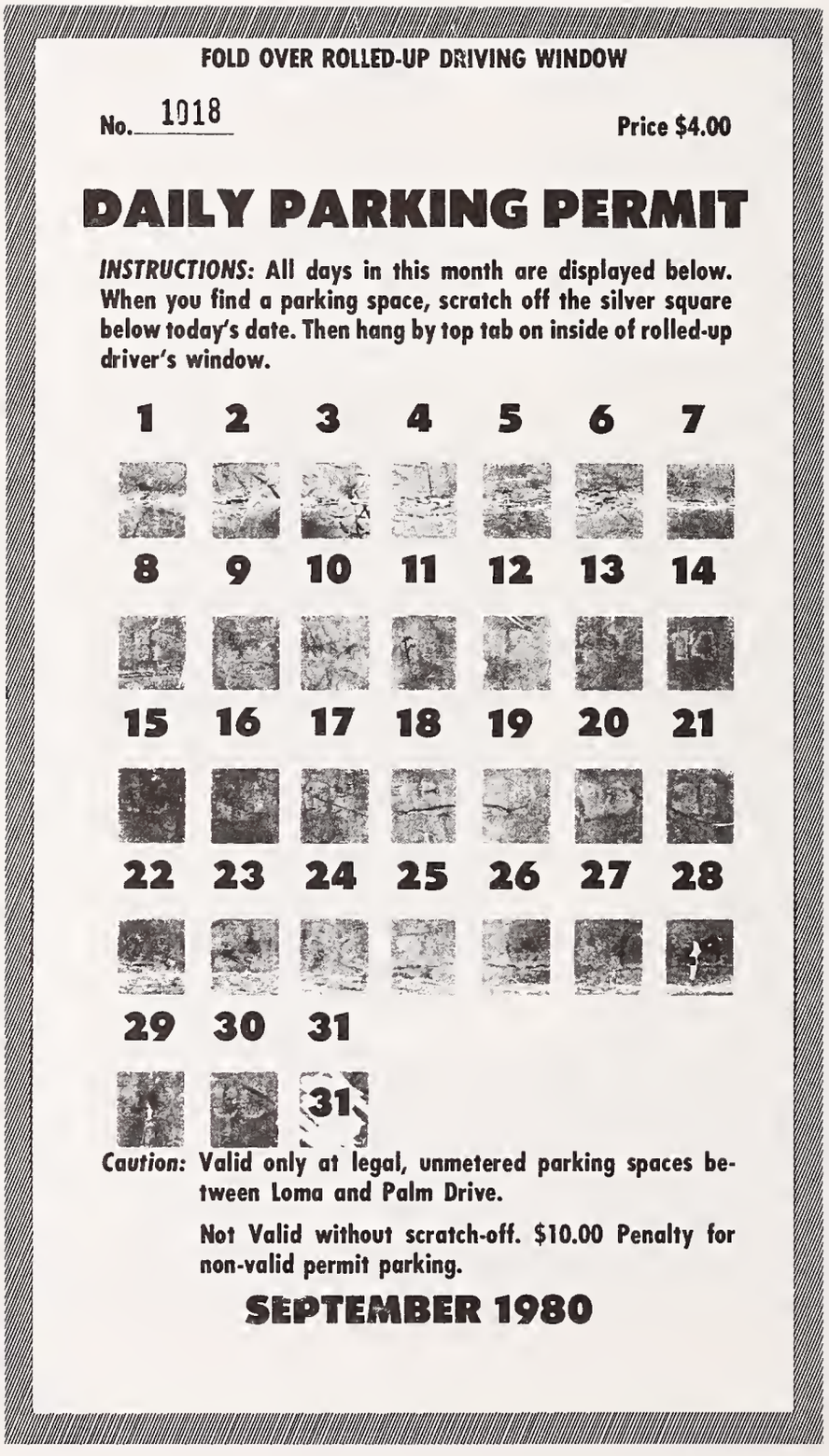
Starting in 1982, the yellow meter permit program was combined with the demonstration permit program. Transferable and nontransferable permits were issued that were valid in both areas. The eligibility for, and cost of, these permits varied throughout 1982. In 1983 the permits cost $10 for either type and were available only to residents of the affected areas. There was still a limit of one transferable permit per household.

The other type of permit issued by the program was a daily permit for nonresident beach-users. These permits originally cost $4, but after no permits were sold during 1980 and very few were sold through July 1981, the price was dropped to $2. In 1980, the permits were available only at City Hall. Starting in 1981 they could also be obtained at permit booths located along the major thoroughfares leading into the beach area. The permits were self-validating (see Figure 3-4), allowing them to be purchased in advance of the day they were used and were good for only one day.

Another parking permit issued by the city which had an impact on beach parking was the driveway permit. These permits became available in 1981 and allowed a resident to block his own driveway. Thus, they effectively increased the supply of legal parking spaces available in the impacted area. The address of the owner was printed on the permit to facilitate enforcement. The annual permits cost $10 each and like the other permits required the resident to file an application at City Hall.

3.2.4 Enforcement

Area II had its own set of parking enforcement personnel whenever the program was operating. During each of the summers, five officers were employed to patrol the area in small



FOLD OVER ROLLED-UP DRIVING WINDOW

No. 1918 Price $4.00

DAILY PARKING PERMIT

INSTRUCTIONS: All days in this month are displayed below. When you find a parking space, scratch off the silver square below today's date. Then hang by top tab on inside of rolled-up driver's window.

1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

31

Caution: Valid only at legal, unmetered parking spaces between Loma and Palm Drive.

Not Valid without scratch-off. $10.00 Penalty for non-valid permit parking.

SEPTEMBER 1980

FIGURE 3-4. NON-RESIDENT PERMIT

electric vehicles (see Figure 3-5). From October 13, 1980 through May 8, 1981 and from September 15, 1981 through May 15, 1982, three officers enforced the parking regulations in Area II. Between September 15, 1982 and May 15, 1983 and since September 15, 1983, the area had been patrolled by regular city enforcement officers (the one-hour parking limit was not in effect during these time periods).

Each summer, additional enforcement officers were hired. The main function of the officers was enforcing the one-hour parking limit in Area II for cars without permits. They were the only parking enforcement officers in Area II when the program was operating, however, and they also enforced all other city parking and animal control regulations.

3.2.5 Park-and-Ride Service

The City of Hermosa Beach had loop bus service prior to the demonstration and during 1980. This service was operated by a single mini-bus (see Figure 3-6) over two loop routes on one hour headways. The bus operated from 8:00 AM to 4:00 PM. Surveys conducted on the buses indicate that the beach was the destination or origin of many of the passengers on the loop bus.

During the summer of 1981 and 1982, a second mini-bus was added to the loop service. This decreased headways to 30 minutes and added an express route (see Figure 3-7). This service continued to provide residents with local transportation both for trips to and from the beach and for trips to other destinations. The routes also ran past the parking lots located at City Hall. As such, the buses were available for use as shuttle buses by non-residents.

During 1983, only one bus was used to provide loop bus service and on July 1 its hours of operation were reduced to four hours (8:30 to 10:30 AM and 1:00 to 3:00 PM) rather than the eight hours it had operated previously (8:00 AM to 4:00 PM). The other bus was operated as a beach shuttle from

FIGURE 3-5. PROJECT ENFORCEMENT VEHICLE

FIGURE 3-6. PROJECT MINI-BUS

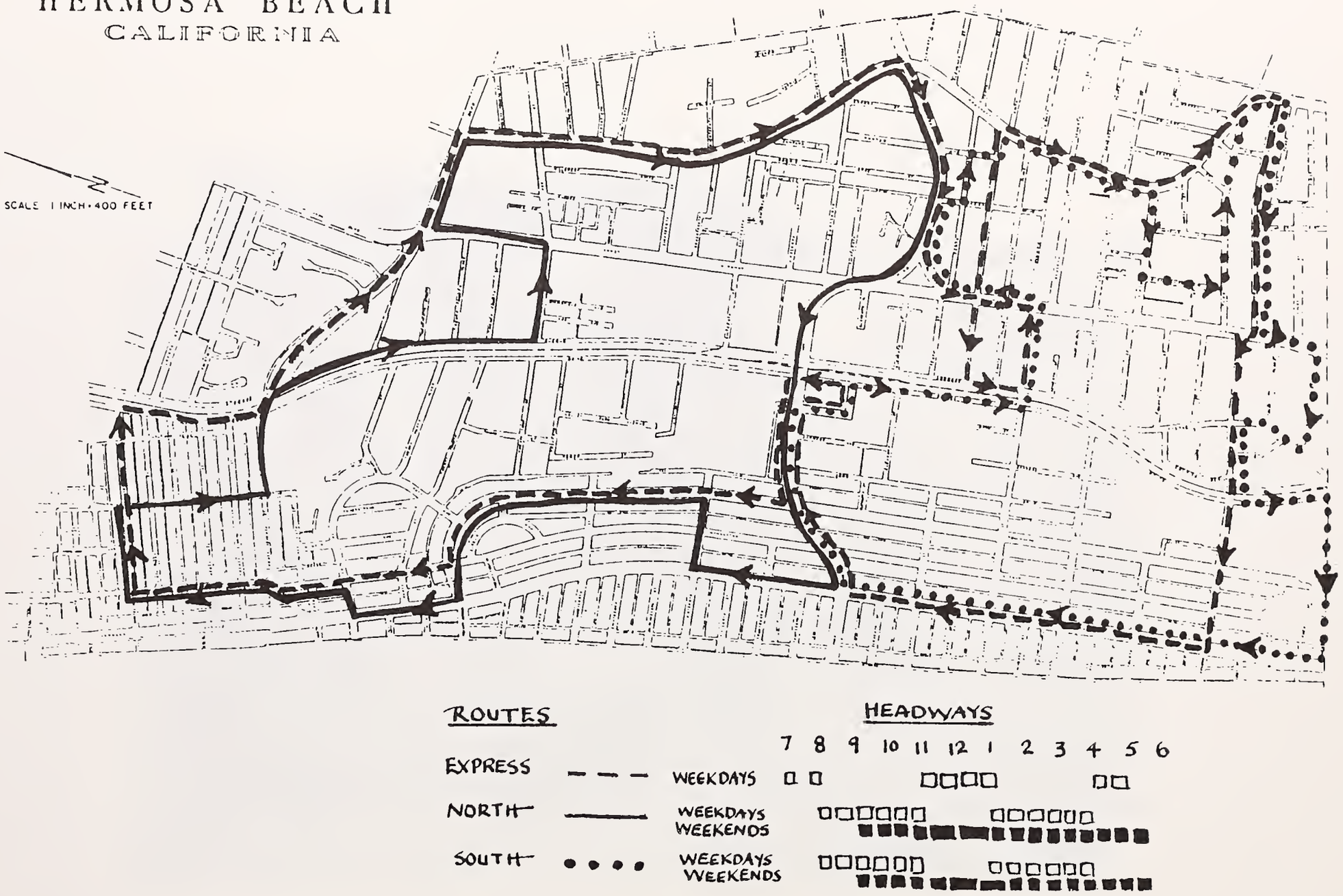


FIGURE 3-7. HERMOSA BEACH LOOP BUS
1981-82 ROUTES AND SCHEDULES

9:00 AM to 5:00 PM, going from the lots near City Hall directly to the municipal pier, running along Hermosa Avenue and then returning to the lot (see Figure 3-8). The shuttle had two separate routes, one going north along the beach and one going south. While it took the bus 30 minutes to complete both routes, it did stop at the park-and-ride lots and travel down to the pier every 15 minutes. Also, the loop bus routes served an overlapping area and could be used to get to the beach area from the parking lots. In addition, the City Hall lots were only 1/2 mile from the beach and many persons chose to walk rather than ride the buses.

3.2.6 Project Publicity

During the planning phases of the project, the city distributed numerous flyers and brochures to publicize the project. Public meetings were held to discuss the project and a hotline was opened to provide information. In addition, there were numerous reports in the local media concerning the project both before and during its operation. Appendix A contains a sample of these reports. Also, the enforcement officers distributed warnings to cars in the zone prior to the start of enforcement. These measures were directed mainly at those residents who regularly parked in the zone.

While changing the parking behavior of nonresidents was the primary purpose of the program, little effort was made to reach them. Until 1983, a few signs were posted in the zone which emphasized the parking restrictions rather than the shuttle bus and daily permit alternatives. The only other sources of information for nonresidents were word of mouth, signs on the buses or booths, and newspaper articles. These sources of publicity did not provide a reliable method for contacting most nonresident beach users.

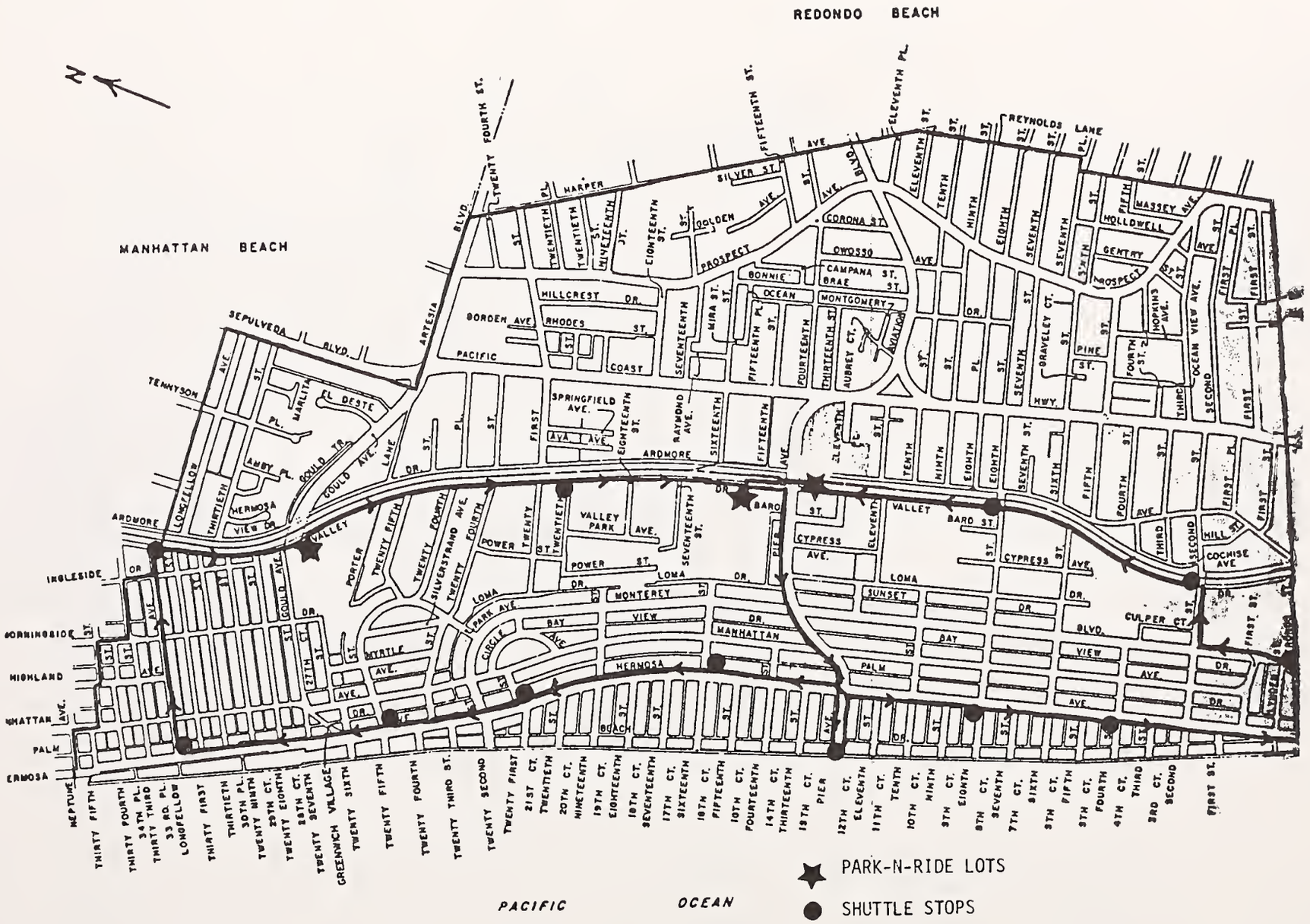


FIGURE 3-8. SHUTTLE BUS ROUTES

Between the summers of 1982 and 1983, the level of publicity was increased in response to the requirements of the Coastal Commission. Large banners were erected on the main thoroughfares leading to the beach.

4. LEVEL OF SERVICE

4.1 SHUTTLE BUS SYSTEM

As part of the demonstration, a shuttle bus system was combined with an existing 'loop' bus service within the city during 1980, 1981, and 1982. During the final year, one bus was used solely as a shuttle bus from the parking lots to the beach, while the other bus provided service on loops throughout the entire city. During this final year, only 33 percent of the persons surveyed on-board the shuttle bus were using the bus as part of a park-and-ride system. About 41 percent of those surveyed on the loop bus were going to or coming from the beach. Thus, throughout the demonstration both buses continued to provide local service for residents while providing an alternative to parking near the beach for both nonresidents and residents.

This combined system provided a high level of service for most of its users. The headway for the shuttle buses was just 15 minutes and the average time spent on board was approximately 10 minutes. The average on-board time for all beach users (both those on the shuttle bus and the loop bus) was just 13 minutes.

While the bus provided good service, it was not effective in attracting persons away from parking near the beach. Only 8 percent of the persons going to or from the beach on the bus reported that they would drive or be driven if the bus was not available (82 percent answered that they would have walked).

One reason for the low level of shuttle bus utilization was lack of knowledge about the service. In 1981, 75 percent of the beach users surveyed who were nonresidents of Hermosa Beach were unaware that any preferential parking program existed. Even after large banners were installed on main thoroughfares leading to the beach in 1983, both the permit program and the bus system had problems with a lack of

nonresident awareness. About 61 percent of the nonresidents on the beach were unaware of the preferential permit system and 83 percent of the nonresidents who had come to the beach by auto were unaware that there was a shuttle bus system.

While additional publicity may have had some effect on the level of awareness, there were definite barriers to ever reaching a large proportion of the potential users of the system. The nonresidents were spread out over a large area and were hard to reach. Attempts to provide information at the beach, the easiest place to contact all beach users, did not prove effective. There is no reason to believe that more extensive use of the media would prove much more fruitful.

Among those nonresidents who knew about the bus in 1983 but chose not to use it, the only specific reasons given for not using the bus were not knowing the stop locations or schedule (given by 8 percent and 4 percent, respectively, of those listing reasons). The other reasons were much more general such as; taking the shuttle bus isn't necessary (40 percent); they didn't want to leave their car that far from the beach (28 percent), or they thought using the shuttle bus would be inconvenient (8 percent). These general complaints seem to be directed against the use of a shuttle bus in general, rather than the particular service provided.

4.2 PERMIT DISTRIBUTION SYSTEM

4.2.1 Resident Permits

Annual yellow meter permits were available at city hall and were issued upon presentation of proof of residence, valid automobile registration and the permit fee. In 1980, proof of residence required certification of a legal housing unit, while in subsequent years, only a utility bill or lease was required. Also available were transferable permit cards which could be used on different vehicles at different times. These

permits were limited to one per household and could be obtained from city hall upon presentation of proof of residence and payment of a $17 fee.

A second set of similar annual permits were issued for Parking Area II during 1980 and 1981. Transferable and permanent permits were issued for this area by a process very similar to that for the yellow meter area. The requirements for proof of residence and valid automobile registration and the limit of one transferable permit per household were also applied to this area. The major differences between the way the two sets of permits were distributed were that the permits for Area II, unlike those for the yellow meter area, were free and available only to residents of that zone.

Prior to the 1982 season, the City Council approved a resolution combining the two permit areas and allowing sales of the combined permit city-wide. Subsequent injunctions and council decisions required the project staff to 1) issue free permits to impacted area residents and refund the payment for any permit bought by these residents prior to the injunction, 2) refund overpayments for any permits purchased prior to the price reduction (by city residents living outside Area II), and 3) check the project records to find all permits which had been purchased by nonresidents of the permit areas, refund the purchaser and invalidate those permits. This entire process was extremely time consuming and confusing for both city employees and permit purchasers.

The problems encountered in 1982 did not recur in 1983. The Coastal Commission permit was obtained prior to the start of the year allowing the two areas to once again be combined and sales of the combined permit were restricted to residents of the yellow meter and impacted areas. The actual method of distribution for the permits did not change (the same paperwork was still required to be filed at city hall), although 1983 was the first year in which the residents of the impacted zone had to pay for permits. This did not cause any large problems.

The resident permit distribution system presented little problem to the majority of residents. The complaints received by the project staff were mostly about the length of time required to get the certification from the Housing Department during 1980. In a telephone survey of permit area residents taken in 1981, only 13 percent of those opposed to the program based their opposition on the difficulty of obtaining permits (13 percent of the area residents surveyed opposed the program). In a similar survey taken in 1983, only six percent of those opposed to the program gave this reason (in this year also 13 percent of the permit area residents surveyed opposed the program).

One minor problem which did exist, especially in 1980 and 1981, is the lack of awareness of the program among some area residents. While this problem was not as severe among residents as nonresidents, the telephone survey indicated only 83 percent of local residents were aware of the program with 8 percent having learned about the program by receiving a ticket. Of those who were aware of the program, word of mouth was the most common means of first hearing about the program, followed by newspapers (see Table 4-1). The methods actively used by project personnel such as leaflets, warning tickets, and street signs reached only a small percentage of the community.

Given the volatility of the issue of the parking program in Hermosa Beach, the efforts made by staff to publicize the program, and the level of enforcement (see Sections 3.2), it is likely that most of the persons who were unaware of the program seldom, if ever, used on-street parking. By being unaware of the program, however, they were precluded from using the guest (transferable) permits. Also, having residents learn about the program by receiving a ticket is likely to diminish local support for the program.

TABLE 4-1. AWARENESS OF THE PERMIT PROGRAM AMONG PERMIT AREA RESIDENTS

	1981	1983
Percent Unaware of the Permit Program	17%	12%
Of those who were aware, percent who first learned of the program		
By word of mouth	35%	51%
From newspapers	32	15
From a leaflet	14	4
By receiving a ticket	11	11
From signs on the street	2	10
By receiving a warning	1	*
Other	6	6
Information booth	*	3

* Not given as a category in this year.

4.2.2 Daily Permits

From August 1980 through April 1981, daily permits were available only at city hall. No permits were actually sold during this time. This appears to be the result of several factors including the relatively high price of $4 (equivalent to 8 hours at the yellow meters), and the low level of awareness (68 percent of the nonresident beach users surveyed in 1980 were unaware of the program). It may also have resulted in part from the poor level of service provided by having only two sales locations, one of which was inside city hall. Despite the extra effort that would have been required of nonresidents to obtain a daily permit, this appears to have been a minor cause of the lack of sales compared to the high price and low level of awareness. Only 15 percent of the nonresidents surveyed on the beach in 1980 were both aware of the program and opposed to it. Of those opposed, only 15 percent felt that the program was inconvenient or that the permits were hard to get. About 50 percent of those opposed listed that it was unfair or that they disliked having to pay as the reason.

With the opening of the sales kiosks/information booths in May 1981, the level of service improved. Even with this improvement, however, only 89 permits were sold through July of that year. Even when prices were halved from $4 to $2, sales in August only picked up slightly, totalling just 100 for August and September. The inability of the program to generate a higher level of awareness continues to overshadow any concerns with the level of service provided by the kiosks as 61 percent of the nonresidents surveyed on the beach in 1983 were still unaware of the program. Of the 5 percent of the nonresidents who were both aware of the program and opposed to it in 1983, 30 percent listed the program being inconvenient or the permits being hard to get as a reason, while 100 percent reported the program was discriminating or they disliked having to pay.

It is hard to draw any conclusions about the level of service being provided by the daily permit distribution system. As with the shuttle bus system, the low level of awareness among nonresidents overshadows any level of service effects on demand. Difficulty in obtaining these permits once the kiosks were opened was not a major problem for nonresidents.

5. PERMIT SALES AND USAGE

5.1 PERMIT SALES AND USAGE

This section will examine the demand for permits and for on-street parking spaces by each of the various groups that park in the project area: residents, guests of residents, and nonresident visitors. The distinction between demand for permits and demand for on-street spaces is an important one. While the majority of the daily permits sold on a given day are likely to be used at the peak parking hours on that day, many of the resident and guest permits were only used infrequently, especially those issued free of charge. Although the aggregate demand for parking spaces will be examined in Chapter 6, some estimate of the frequency of use for each type of permit has been made in order to assess the impact of the group using these permits on the aggregate parking demand. Also included in the appropriate subsections, is an estimate of the need for on-street parking spaces by each of the groups as a means of determining the fixed demand. "Need" is used here to mean the number of on-street spaces used by the group for which no practical alternative (such as off-street spaces) exists. Thus, any demand for the convenience of multiple alternatives is excluded from the analysis that follows.

5.1.1 Permanent Permits*

Prior to the start of the 1980 and 1981 enforcement, permit zone residents upon filing an application could receive one permanent permit for each car which was registered in the zone. From August 1980, when the program began, through February 1981, when the first set of annual permits expired, a

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*Due to the many changes made in the program during 1982 no attempt has been made to assess demand for either type of annual permit during this year.

total of 4,179 resident permits were issued. From March 1981 through February 1982, a total of 4,518 of these permits were issued. This appears to be substantially more than were actually needed. The telephone surveys of area residents conducted in 1979 and 1981 indicate an average of 1.8 (± 0.1) and 2.0 (±0.1) vehicles per household, respectively, and an average number of off-street spaces per house of 1.1 (±.1) in both years. This leaves a deficit of between 0.7 and 0.9 spaces per household. The exact number of households in Area II is not known, but it is approximately 3,100. Thus, approximately 1.3 permanent permits per household were issued in 1980, and 1.5 permits per household were issued in 1981, so the deficit was exceeded by about .6 in both years.

In 1983, the Area II permits were combined with those from the yellow meter area and were made available to residents of both areas. In addition, the permits were sold for $10 each rather than being free of charge as they previously had been. During 1983, a total of 4,076 permits were issued for the combined areas. In these areas, there are approximately 4,900 households. The average number of permanent permits issued per household during 1983 was approximately 0.8, substantially lower than the average in 1980 and 1981. In a survey conducted in 1983, similar to those conducted in 1980 and 1981, the respondents from within the combined zone indicated that they had 0.7 (±.1) permanent permits per household. This survey also indicated that the number of vehicles per household in the combined area was 2.0 (± .1), and the average number of available off-street parking spaces was 1.3 (± 0.2) indicating that approximately the same number of on-street spaces per household were required for the combined zone as were required in previous years for Area II.

The data indicates that when the permits were issued without charge, substantially more were issued than there were needed to offset the deficit in off-street spaces. Once there was even a nominal charge for the permits the sales fell,

despite substantially more households being included in the combined zone. The lower level of sales appears to be much nearer the number of vehicles registered in the zone which did not have an off-street space available to them.

The household surveys also asked those local residents who were the principal operators of a vehicle how often they parked on the street. The results for the residents of Area II are shown in Table 5-1. There was a statistically significant decrease ($t = 1.96$) between 1979 and 1981 in the percent of respondents who reported never parking on the street or, in other words, an increase in the number of persons who at least occasionally parked on the street. There were no statistically significant differences in the responses to this question between 1981 and 1983.

TABLE 5-1. RESIDENT PARKING IN AREA II

	1979	1981	1983
Frequency of On-Street Parking	(n=154)	(n=184)	(n=140)
All or Most of the Time	33.8	42.4	39.4
Sometimes	7.8	10.9	11.4
Occasionally	10.4	9.2	19.7
Never	48.1	37.5	29.6
Current Location of Car*	(n=152)	(n=176)	(n=140)
Never Park On-Street	48.1%	37.5%	29.6%
Currently Off-Street	13.1	22.5	26.5
Off-Street Subtotal	61.2	60.0	56.1
In Front of Driveway	**	1.7	9.0
Yellow Meter	3.3	3.6	6.3
Silver Meter	0.0	0.0	0.0
Area II Curb	28.8***	21.6	18.1
Other Curb		9.6	2.1
On-Street Subtotal	32.1	36.5	35.5
Other	6.7	3.6	7.0

*During surveys which were conducted on Sunday-Thursday evenings.
**Not yet legal this year.
***Area boundaries were not yet defined.

Those who responded that at least occasionally they parked on the street were asked where their car was currently parked. The responses to this question show that there was no significant change in the percent of Area II residents who were parked in on-street spaces at the time the survey was conducted (Sunday and weekday evenings). There was, however, a significant decrease in the number of persons parked at unmetered curbs (Area II or other curb). This decrease appears to have been generated mainly by the use of driveway permits as an alternative to curb spaces.

The apparent discrepancy between the responses to the two questions (more persons parking on-street at least occasionally but no significant change in the number currently parked on-street) appears to be a function of the time of day the survey was conducted compared to the time of day those who responded sometimes or occasionally were most likely to use on-street parking. During the evenings, when the survey was conducted, most persons are likely to remain parked in their space in the evenings. Those with off-street spaces would be most likely to be using them at that time. Those who use on-street parking occasionally would be more likely to use these spaces for short-term parking during the day or on weekends to allow guests to use their off-street spaces.

5.1.2 Transferable Permits

During 1980 and 1981 the transferable permits were issued free of charge upon filing an application with the General Services Department. These permits were intended primarily to be used as guest permits and there was a limit of one permit per household. In these years a total of 2,012 and 3,156 transferable permits, respectively, were issued. This represents approximately 0.6 and 1.0 permits per household. That such a high percentage of the households applied for and received permits is not surprising given that there is a

deficit of off-street parking relative to vehicles registered in the zone and there was no charge for the permits.

In 1983, a charge of $10 each was placed on these permits. Sales during this year totalled 2,762 transferable permits, a decrease from 1981 despite the addition of Area I to the zone. Approximately 4,900 households were in the combined zone, so average sales of these permits per household was about 0.6.

These permits appear to have been used mostly for guest parking, as they were intended to. In the household surveys conducted in 1981 and 1983, 2.6% (±10.8) and 8.0% (±10.6) of the residents currently using parking permits for their own vehicles were using transferable permits at the time they were being surveyed. Total usage of the permits was much higher, however. In the 1983 license plate survey, 23.5% (± 1.5) of the cars parked in the zone on weekends and 20.0% (± 0.1) of the cars parking on weekdays were using transferable permits. (Forty-three percent (± 0.4) and 39.2% (± 0.4) respectively, of the vehicles in the zone were using permanent permits). The transferable permits were used mostly for nonresident vehicles.

A major difference between the two sources of data is that the household survey was conducted after 6 PM on Sunday and week nights while the license plate survey was conducted between 10 AM and 4 PM, on both weekdays and weekends. Although there is reason to expect the usage of transferable permits by guests to be higher during the day than in the evening, there is no reason to expect the ratio of residents using transferable permits for their own cars to residents using permanent permits to change substantially between day and evening.

5.1.3 Daily Permits

The daily parking permits went on sale beginning in August 1980. Until May 8, 1981, they were available only from City Hall. No permits were actually sold during this time, however.

As shown in Table 5-2, even after two permit booths were opened, sales remained very light. Through the end of July 1981, a total of only 89 permits were sold. This appears to be in part due to their high cost of $4 each. This price was equivalent to 8 hours parking at the yellow meters. The main incentive to use the permits was to avoid the inconvenience of having to put coins in the meters every two hours. However, even after the price was reduced to $2 in August 1981, sales increased by only a small amount, and totalled just 100 for all of August and September. Lack of knowledge about the permits was a major reason for the continued poor sales. Thirty-four percent of the Hermosa Beach residents not living in the permit zone and 76% of the nonresidents of Hermosa Beach surveyed at the beach in August 1981 were unaware that there was a permit program.

TABLE 5-2. AVERAGE DAILY PERMIT SALES

	1981		1983	
	Weekend	Weekday	Weekend	Weekday
May 15-31	0.7	0.6	23.7	9.8
June	1.5	0.3	24.7	8.3
July	4.6	0.6	82.2	21.7
August	6.2	1.3	71.0	17.1
Sept. 1-15	1.3	0.5	81.3	16.6
Summer	3.1	0.7	58.6	17.4
Sept. 16 - May 14	1.8	NA	NA	NA

Between the summers of 1982 and 1982, the permit booth was operated on weekends only. During this entire time, only 101 additional permits were sold. Operation of the sales booths during the off-season was not continued in later years due to the low sales. When signs and large banners were

erected to publicize the program, awareness of the program increased, although 61% of the nonresidents and 20% of the Hermosa Beach residents from outside the permit zone who were surveyed on the beach in August 1983 were still unaware of the program. Despite this limitation, 3,533 daily permits were sold between May 15 and September 15 during 1983.

Table 5-3 shows a comparison between the demographic data from surveys of persons buying permits, those riding the shuttle bus, and those persons surveyed on the beach. The profile of those persons buying permits does not show any statistically significant differences from the profile of all those persons using the beach.

TABLE 5-3. PERMIT BUYER AND BUS PASSENGER DEMOGRAPHIC CHARACTERISTICS

	Permit Buyers	Bus* Passengers	Persons on the Beach
	1982	1983	1983
Sex	(n=48)	(n=52)	(n=877)
Male	64.6	71.2	56.1
Female	35.4	28.9	43.9
Annual Income**	(n=48)	(n=35)	(n=773)
Under $5,000	8.3	25.7	5.7
$5,000 - $15,000	22.9	31.4	18.5
$15,000 - $35,000	43.8	40.0	51.7
Over $35,000	20.8	2.9	24.1
Age	(n=51)	(n=53)	(n=887)
Under 18	5.9	41.5	9.5
18 to 24	27.5	30.2	27.7
25 to 34	43.1	18.9	36.7
35 to 44	17.6	7.6	14.9
45 to 64	5.9	1.9	9.0
Over 65	0.0	0.0	2.1

*Includes those nonresidents riding to or from the beach on the shuttle or loop bus.
**1979 categories, adjusted annually to account for inflation.

As shown in Table 5-3, those nonresidents surveyed using the bus to get to the beach had significantly different demographic characteristics than those persons as a whole on the beach. They were more likely to be male (t=2.14), to have

annual household incomes under $10,000, and to be under the age of 25 (t=5.00). Those persons riding the bus, as would be expected, were the less affluent and may have been less able to afford the alternatives of purchasing a daily permit or putting coins in a meter. However, a major factor determining bus usage may have been the lack of availability of an auto, as only 35.5% of the bus riders had an auto available. While this question was not asked of all persons on the beach, availability was obviously higher, as 53% of all users and 64% of the nonresidents used an auto to get to the beach.

5.2 SHUTTLE BUS RIDERSHIP

Average daily ridership for the two loop buses operating in 1981 and 1982 on the single loop bus and additional shuttle bus operating in 1983 are shown in Table 5-4. Total ridership was 14,663 for 1981, 14,370 for 1982, and 9,219 for 1983. The decrease in total ridership comes in part from a decrease in hours of operation, but also in part from a loss of local ridership due to one less bus being used for loop service ridership in order to provide a separate shuttle service.

The decrease in ridership would have been even higher in 1983 if there was not the exceptionally high ridership over Memorial Day weekend and during an arts festival held annually in September. Surveys taken of passengers on the loop and shuttle buses in 1981 and 1983 show that in 1981, 63 percent (±9) of the trips made on the loop bus were to or from the beach. In 1983, only 40 percent (±13) of the trips on the loop bus were to or from the beach but 90 percent (±10) of those made on the shuttle had the beach as a trip end. A higher fraction of passengers on the shuttle were going to the beach than the fraction making beach trips on the loop bus in 1982. Despite this, the two buses serving on loop routes in 1981 served more beach trips (approximately 9,200) than having a shuttle and only one loop bus operating part of the day (approximately 5,600).

TABLE 5.4 BUS RIDERSHIP

Average Daily Ridership Per Bus

	1981		1982		1983			
					Shuttle		Loop	
	Weekend	Weekday	Weekend	Weekday	Weekend	Weekday	Weekend	Weekday
May 15-31	75.3	48.4	61.9	45.2	148.6	12.6	30.6	58.8
June	61.4	51.7	36.6	52.8	22.4	15.3	36.4	52.7
July	62.7	57.6	51.8	60.9	27.8	24.8	20.4**	27.8**
August	69.75	65.4	71.5	69.1	32.1	33.7	21.9**	24.0
September 1-15*	43.5	66.9	72.5	62.0	186.6	38.4	29.7	58.7
Entire Summer	63.5	57.9	57.7	59.5	67.6	24.8	26.9	40.7

Average Ridership Per Hour Per Bus

May 15-31	9.4	6.1	7.7	5.7	21.2	1.8	3.8	7.4
June	7.7	6.5	4.6	6.6	3.2	2.2	4.6	6.6
July	7.8	7.2	6.5	7.6	4.0	3.5	5.3	7.0
August	8.7	8.2	8.9	8.6	4.6	4.8	5.5	6.0
September 1-15*	5.4	8.4	9.1	7.8	26.7	5.5	7.4	14.7
Entire Summer	7.9	7.2	7.2	7.4	9.7	3.5	6.7	10.2

*Includes riders for annual arts festival.
**Hours of operation reduced from 8 hours per day to 4 hours.

The shuttle bus did attract more riders who had used an auto to get either to or from the bus than the loop bus. During the 1981 survey, 7.8% of the persons riding the loop bus had used an auto to get to the bus stop, while 7.1% of the persons on the loop bus and 32% of the persons on the shuttle during the 1983 survey had used an auto. In that the shuttle bus was successful at attracting park-and-ride users, it was a success. The degree to which it reduced parking demand in the permit zone was limited, however, as only 3.4% of those riding the loop bus and 5.7% of those on the shuttle bus said that they would have driven if the bus was not available.

5.3 BEACH USAGE

Two different methods were used to measure beach usage before and during the project. In 1979, 1980, and 1981, aerial photographs were taken of Hermosa Beach and portions of adjoining beaches. Due to the high cost of this method, photos were only taken on several days each year. This small number of counts did not provide a statistically valid evaluation of the year-to-year changes, even though each individual count was fairly accurate. These counts were not conducted in 1982 or 1983.

The other measure of beach usage available was daily estimates of the number of beach users made by lifeguards at each beach throughout Los Angeles County. The counts for the period of the program (May 15 through September 15) for the years 1979, 1980, 1981 and 1983 were collected and tabulated (see Table 5-5). It was hoped that while any individual count may be inaccurate, averages over the entire season would be reasonably accurate. These counts, however, proved too unreliable to be used, even when aggregated. Thus, neither method of directly counting beach attendance can be considered conclusive.

There is an indication that some groups using the beach prior to the demonstration comprised a smaller fraction of the

TABLE 5-5. CHARACTERISTICS OF BEACH USERS

	IN THE PERMIT ZONE			IN HERMOSA BEACH, OUTSIDE THE PERMIT ZONE			OUTSIDE OF HERMOSA BEACH		
	1979	1981	1983	1979	1981	1983	1979	1981	1983
INCOME*	(n=133)	(n=134)	(n=205)	(n=25)	(n=53)	(n=60)	(n=380)	(n=375)	(n=501)
Less than $5,000	9.0	6.0	2.0	12.0	3.8	10.0	11.6	6.9	6.8
$5,000-$15,000	26.3	28.4	17.6	20.0	24.5	18.3	24.7	30.0	18.4
$15,001-$35,000	44.4	39.6	56.6	32.0	45.3	51.7	43.4	46.1	50.0
More than $35,000	20.3	26.1	23.9	36.0	26.4	20.0	20.2	17.3	24.8
AGE	(n=164)	(n=154)	(n=225)	(n=31)	(n=55)	(n=66)	(n=453)	(n=458)	(n=588)
Under 18	12.2	3.2	4.4	29.0	14.5	9.1	24.1	13.1	11.4
18-24	29.9	26.0	27.6	19.4	21.8	19.7	33.3	41.5	28.4
25-34	42.1	41.6	49.3	32.3	34.5	47.0	22.5	32.1	31.1
35-44	9.8	13.6	12.0	9.7	14.5	18.2	9.9	7.2	15.0
45-64	3.7	11.0	4.9	6.5	14.5	4.6	8.6	4.8	11.1
65+	2.4	4.5	1.8	3.2	0.0	1.5	1.5	1.3	2.4
EMPLOYMENT STATUS	(n=169)	(n=155)	(n=222)	(n=31)	(n=56)	(n=65)	(n=451)	(n=458)	(n=588)
Employed	57.4	69.0	70.7	64.5	66.1	69.2	53.0	60.0	64.5
Student	21.3	9.0	8.6	22.6	17.9	18.5	32.6	26.0	20.7
Homemaker	5.3	4.5	5.4	0.0	3.6	4.6	4.7	2.8	3.9
Retired	4.7	5.8	4.1	6.5	3.6	1.5	2.0	1.3	4.6
Not currently employed	9.5	5.2	11.3	6.5	5.4	6.2	6.4	8.3	6.1
Other	1.8	6.5	0.0	0.0	3.6	0.0	1.3	1.5	0.2
Mean Frequency of Beach Usage (Uses per month)									
Hermosa Beach	21.9	20.7	19.0	17.5	18.3	16.4	10.0	9.1	7.7
Other Beaches	2.5	1.8	3.0	2.1	3.7	3.3	3.4	3.5	3.8
All Beaches	24.4	22.5	22.0	19.6	22.0	19.7	13.4	12.6	11.5

*The limits of these categories were adjusted to $6,000; $17,500; and $41,000 in 1981 and $6,500; $19,000 and $45,000 in 1983 to account for inflation.

persons using the beach during the demonstration. In a survey conducted of persons on the beach in 1979, 11% reported having annual household incomes under $5,000. Only 6% of the persons in a similar survey conducted in 1981 and 1983 reported household incomes in the lowest category (the income category's limit was adjusted to $6,000 in 1981 and $6,500 in 1983 to account for inflation). Changes were also noted in the distributions of age and employment status (see Table 5-5.) These changes would be consistent with persons of lower socio-economic status choosing to use other area beaches. However, since these changes occurred both within the sub-population of beach users with residences in the permit zone as well as those from outside of the zone, the changes may reflect actual demographic changes in the area. Telephone surveys conducted within Hermosa Beach during each of these years exhibited similar shifts in income and age (see Table 5-6). Thus, while there was a decrease in the fraction of persons on Hermosa's beach with low economic status, this shift appears to have come from changes within the entire population of local residents or error in adjusting the income categories, rather than merely the fraction of any group choosing to use the beach or more importantly, the fraction choosing not to use the beach because of increased parking costs.

TABLE 5-6. DEMOGRAPHIC CHARACTERISTICS OF HERMOSA BEACH RESIDENTS

	Year		
	1979	1981	1983
Income*	(n=294)	(n=265)	(n=304)
Less than $5,000	4.4	2.6	4.3
$5,000-$15,000	25.5	17.0	11.2
$15,001-$35,000	45.6	50.2	52.6
More than $35,000	24.5	30.2	31.9
Age	(n=330)	(n=311)	(n=350)
16-18	2.1	1.0	0.6
18-24	19.1	13.5	13.4
25-34	44.2	46.9	45.7
35-44	14.8	19.3	18.3
45-64	12.4	13.8	13.4
65+	7.2	5.4	8.6
Employment Status	(n=332)	(n=313)	(n=352)
Employed	77.1	74.8	72.2
Student	5.4	7.0	6.3
Homemaker	6.3	6.7	4.5
Retired	6.9	7.3	10.2
Not Currently Employed	2.7	2.6	3.1
Other	1.5	1.6	3.7

*The limits of those categories were adjusted to account for inflation by the same amount as the other project surveys.

6. CHANGES IN PARKING AND TRAFFIC

6.1 PARKING SPACE AVAILABILITY

This section examines the effect of the project on reducing congestion in the permit zone and the project's effects on the surrounding areas. Two data sources are used to evaluate these impacts. The first is the license plate studies that were conducted in 1979, 1981, and 1983. These are used to provide hard data on the changes in parking space availability. The conclusions that can be drawn from these data are somewhat limited as these data were taken over only three weekdays and four weekend days each year. The data are quite susceptible to exogenous influences, especially the effects of weather. To the extent possible, many of these influences have been controlled for by comparing changes that occurred within Area I to those which occurred in Area II.

The second source of data concerning parking congestion is the beach user and household surveys, which were also conducted in 1979, 1981, and 1983. These surveys are used to provide the opinions of beach users and area residents about conditions near the beach. In a sense, this is the most important measure of the success of this program as the main purpose of the program was to relieve the problems faced by those trying to park near the beach.

This section has been broken down into two subsections. The first subsection examines the changes which occurred in Area II, in which there was free parking with no time limit prior to the demonstration. The next subsections cover Area I, which had metered parking and an existing permit program prior to the start of the project.

6.1.1 Area II Parking

Table 6-1 shows the results of the license plate study. These occupancy ratios are used as an indication of the

TABLE 6-1. AVERAGE OCCUPANCY RATIO*

Street	Block	Direction	Weekday				Weekend			
			Pre-Imple. 1979	Post-Imple. 1981	Post-Imple. 1983		Pre-Imple. 1979	Post-2nd yr. 1981	Post-Imple. 1983	
					With cars parked across driveways	Without cars parked across driveways			With cars parked across driveways	Without cars parked across driveways
Area II										
Manhattan Ave	16th-19th	NB	.84	.56	.46	.46	.93	.93	.97	.94
		SB	.78	.54	.49	.44	.97	.93	.99	.94
	6th-10th	NB	.96	.61	.61	.61	1.08	.99	.93	.93
		SB	.72	.63	.75	.75	.84	1.02	1.06	1.04
Second Street	Hermosa-Monterey	WB	.75	.50	.72	.70	.93	.95	1.02	.98
Overall Average			.81	.57	.59	.58	.95	.96	.99	.96
Area I										
Hermosa Ave.	16th-19th	NB	.61	.71	.63	.54	1.28	1.10	1.31	1.18
		SB	.66	.65	.79	.79	.85	1.03	.99	.98
Second Street	Hermosa-Monterey	EB	.86	.83	.42	.42	1.03	1.01	.93	.93
Overall Average			.71	.73	.62	.60	1.05	1.05	1.06	1.02
Other:										
City Hall Parking Lot			.56	.78	.75	NA	.25	.41	.30	NA

* Ratio of total parked cars to legal spaces

difficulty in finding an unoccupied parking space. In general, the occupancy ratios in Area II decreased on weekdays between 1979 and 1981 and remained fairly constant on weekends. For 1983, two sets of figures are shown. The first set includes those cars using driveway permits. These figures can be used to show the relative changes between years in the total number of cars parked on the street in the area. The cars using driveway permits, while being legally parked in 1983, were parked in spaces which would not have been legal in the previous years. The second set of figures in Table 6-1 excludes these cars and is a better indication of the difficulty in finding an unoccupied legal space in the area. The ratios for 1983 which exclude the cars legally parked in front of driveways are very similar to those for 1981.

Decreases in occupancy occurred only on the weekdays when the problems for residents were smaller than those experienced on the weekends. The occupancy ratio fell from .81 in 1979 to .57 and .58 in 1981 and 1983, respectively.

The average occupancy ratio remained very high on weekends. It was .95 in 1979 and .96 during both 1981 and 1983. The household surveys reflect this fact (see Table 6-2.) The respondents from Area II were significantly less likely to say that finding a parking space was very difficult in 1981 and 1983 than in 1979 for both weekdays ($t=2.35$ and 2.93, respectively) and weekends ($t=2.85$ and 1.74, respectively). The differences between 1981 and 1983 were not significant. However, despite feeling the parking situation was better, over 70% of the persons surveyed from this area in both 1981 and 1983 found parking very difficult on weekends. Most of the shift from 1979 was from the "very difficult" category to the "fairly difficult" category.

Unexpectedly, it was more difficult for beach users to find parking spaces in Area II in 1981 than in 1979 (see Tables 6-3 and 6-4). For both weekdays and weekends, a significantly higher percentage of the beach users who parked

in Area II said finding a parking space was a major problem (t=2.8 and 2.3, respectively). Also, a higher percentage of those parking in Area II on weekends reported taking more than five minutes to find an open space (t=2.74). (The differences between 1979 and 1983 were not statistically significant.) This result is surprising since the residents found it easier to park. It is doubtful that nonresidents overestimated their time to park due to a dislike for the program since 76.5% were unaware of the program in 1981 and only 25% of those who knew of the program opposed it.

One possible explanation for the increase in time spent looking for a space is that nonresidents who were unaware of the program spent much of their time searching Area II for a parking space in which they could legally park for free for the entire day. After several minutes it is likely that they gave up and either parked outside the zone or in the zone, ignoring the time limit or periodically moving their car.

TABLE 6-2. AREA II RESIDENTS' OPINION OF THE EASE OF PARKING

	Weekdays		
	1979	1981	1983
(n)	(85)	(111)	(91)
Very Difficult	40.0%	24.3%	19.8%
Fairly Difficult	29.4	23.4	30.8
Fairly Easy	23.5	35.1	35.2
Very Easy	7.1	17.1	14.3
	Weekends		
(n)	(83)	(110)	(91)
Very Difficult	88.0%	70.9%	78.0%
Fairly Difficult	6.0	17.3	16.5
Fairly Easy	1.2	4.6	4.4
Very Easy	4.8	7.2	1.1

TABLE 6-3. EASE OF PARKING RESPONSES FROM BEACH USERS WHO PARKED IN AREA II

Parking near the beach on weekdays is:		1979	1981	1983
	(n)	(99)	(40)	(29)
A major problem		19.2%	42.5%	27.6%
A minor problem		46.5	32.5	44.8
No problem		34.3	25.0	27.6
Parking near the beach on weekends is:				
	(n)	(109)	(44)	(33)
A major problem		80.7%	95.5%	90.9%
A minor problem		10.1	4.5	9.1
Not a problem		9.2	0.0	0.0

TABLE 6-4. TIME TO FIND A PARKING SPACE FOR BEACH USERS PARKING IN AREA II

		1979	1981	1983
Weekdays	(n)	(39)	(21)	(16)
Immediately		51.3%	33.3%	50.0%
1-5 minutes		35.9	42.9	18.8
6-10 minutes		12.8	19.1	25.0
11-15 minutes		0.0	0.0	6.3
16-30 minutes		0.0	4.8	0.0
Over 30 minutes		0.0	0.0	0.0
Weekends	(n)	(73)	(25)	(19)
Immediately		45.2%	24.0%	36.8%
1-5 minutes		28.8	20.0	21.1
6-10 minutes		13.7	8.0	26.3
11-15 minutes		5.5	40.0	10.5
16-30 minutes		4.1	4.0	0.0
Over 30 minutes		2.7	4.0	5.3

6.1.2 Area I Parking

This area had even higher occupancy ratios than did Area II. It was expected that this area might experience higher occupancy ratios during the program once parking in the adjacent Area II was no longer free. This was a much greater possibility on weekdays when there were still some available spaces which could have been filled, than it was on weekends when a substantial number of cars were already parking in illegal spaces (e.g., red zones).

Unexpectedly, the occupancy ratio in this area declined on weekdays and remained constant on weekends. The decrease may have been due in part to the doubling in meter prices in this area (from $.25 to $.50 per hour) which took place as part of the program during 1980.

The responses by residents of Area I to the household survey indicate they felt that the parking situation was better in 1981 and 1983 than in 1979 (see Table 6-5). Residents of this area were less likely to respond that parking was fairly difficult or very difficult on weekdays in 1981 and 1983 than they were in 1979 ($t=2.75$ and 2.29, respectively). In 1981, residents were much less likely to respond that weekend parking was very difficult than in 1979. The responses regarding weekend parking in 1983 did not have any statistically significant differences from those in 1979.

One reason that the residents of both areas may have felt that parking was better in 1981 than in 1979 is simply that they were happy that someone was at least working on the problem. This may explain why residents in 1983, who were used to the program, were more likely to feel that parking was very difficult. As shown in Table 6-6, the respondents to the beach user survey who were parking in Area I at the yellow meters had very different opinions of the parking situation than the Area I residents. They were significantly more likely to feel that parking was at least a minor problem on weekdays in 1981 than in 1979 ($t=2.48$) and that parking was a major problem on

TABLE 6-5. AREA I RESIDENTS' OPINION OF THE EASE OF PARKING

		1979	1981	1983
Weekdays	(n)	(60)	(26)	(74)
Very difficult		38.3%	19.2%	25.7%
Fairly difficult		35.0	23.1	28.4
Fairly easy		23.3	38.5	39.2
Very easy		3.3	19.2	6.8
Weekends	(n)	(59)	(24)	(77)
Very difficult		89.8%	54.2%	83.1%
Fairly difficult		6.8	33.3	11.7
Fairly easy		1.7	4.2	5.2
Very easy		1.7	8.3	0.0

TABLE 6-6. EASE OF PARKING BEACH USERS WHO PARKED IN AREA I

	1979	1981	1983	
Parking near the beach on weekdays is:	(n)	(34)	(80)	(86)
A major problem	26.5%	33.8%	18.6%	
A minor problem	29.4	45.0	37.2	
No problem	44.1	21.3	44.2	
Parking near the beach on weekends is:	(n)	(44)	(86)	(97)
A major problem	72.7%	97.7%	87.6%	
A minor problem	9.1	1.2	7.2	
No problem	18.2	1.2	5.2	

weekends in both 1981 and 1983 than it had been in 1979 (t=4.35 and 21.8, respectively). As shown in Table 6-7, they also reported taking longer to find a parking space once the program began. There was no significant change on weekdays, but on weekends, in 1979, nearly everyone found a space within five minutes, while in 1981 and 1983 over one-third of the respondents required more than five minutes (t=3.74 and 3.36).

TABLE 6-7. TIME TO FIND A PARKING SPACE FOR BEACH USERS WHO PARKED IN AREA I

		1979	1981	1983
Weekdays	(n)	(66)	(47)	(47)
Immediately		62.5%	48.9%	55.3%
1-5 minutes		12.5	38.3	34.0
6-10 minutes		12.5	10.6	8.5
11-15 minutes		6.3	2.1	0.0
16-30 minutes		0.0	0.0	2.1
Over 30 minutes		6.3	0.0	0.0
Weekends	(n)	(30)	(45)	(55)
Immediately		73.3%	31.1%	38.2%
1-5 minutes		23.3	26.7	25.5
6-10 minutes		3.3	15.6	21.8
11-15 minutes		0.0	8.9	9.1
16-30 minutes		0.0	15.6	5.5
Over 30 minutes		0.0	2.2	0.0

As with the responses for the beach users parking in Area II, the increase in the reported time it took to find a space is hard to explain. The license plate survey, which shows no increase in the occupancy ratio, was conducted on the same days as the beach user survey. The differences in the beach user survey may in part be perceptual rather than real with the increased prices making the entire process seem more burdensome and time consuming. Alternatively, since this area had over 100 percent occupancy in all years, this may reflect that more cars are searching for an open space at any given time.

Part of the explanation may also be that many persons started searching for a legal, all-day space in Area II before giving up and moving to the yellow meter area. This would increase their total search time even if the time spent looking in the yellow meter area did not increase.

6.2 CHANGES IN BEACH USERS' CHOICE OF ACCESS MODE

The program was intended to dissuade some of the non-resident beach users from parking in Area II and have them use the park-and-ride system instead. The program was partially successful in achieving the first half of this goal in that it reduced residents' perceived level of parking problems on both weekdays and weekends (at least in 1981) and had a measurable impact on the weekday occupancy ratio in the zone. The second half of the goal does not appear to have been achieved.

The loop buses in 1981 and the combination of a shuttle bus and loop bus in 1983 did carry a reasonable number of passengers for that type of a system (see Section 5.2). However, only 38 percent of the nonresidents surveyed on the bus who were going to or from the beach bus indicated in a survey that they had driven to or from the bus. Only 7.5% of the nonresidents on the bus who were going to or from the beach indicated that they would have driven if the bus was not available. There was a small but statistically significant ($t=1.82$) decrease in the percentage of the nonresidents using autos or motorcycles to get to the beach between 1979 and 1981. While there was no significant increase in bus usage, there was significant increase in nonresidents who walked, biked, or skated to the beach ($t = 2.06$).

In the 1983 survey, however, the only significant changes from 1979 were an increase in the number of auto drivers and a decrease in the number of passengers. This corresponds to a decrease in the average number of passengers per vehicle.

Although not directly related to the project, this change increased the number of vehicles per beach user that needed parking.

The major change the nonresident beach users made was to shift their choice of parking location (see Table 6-8). The distribution of parking locations varies greatly between the three years. There was a reduction in both 1981 and 1983 in the number of nonresident vehicles parking in Area II or other unmetered street curb spaces. There was also an increase in the fraction of nonresident vehicles parking at the yellow meters.

TABLE 6-8. TRAVEL CHARACTERISTICS OF NONRESIDENT BEACH USERS

	1979	1981	1983
(n)	(454)	(459)	(593)
Mode to Beach			
Drove auto	53.1%	52.3%	58.7%
Auto pass	19.6	15.3	14.3
Motorcycle	0.7	1.5	1.0
Bus	3.1	3.9	4.0
Bicycle/skate	10.3	12.6	12.5
Walk	10.4	13.9	9.1
Other	2.9	0.4	0.3
Group size			
Mean	3.42	2.87	2.57
(Std. Dev.)	(3.99)	(3.09)	(2.62)
Number of vehicles used			
Mean	1.19	1.21	1.14
(Std. Dev.)	(0.77)	(0.71)	(0.78)
Type of Parking Space			
(n)	(312)	(312)	(423)
Yellow meter (Area I)	13.1%	28.3%	22.0%
Street curb Area II	33.7*	14.2	7.6
Other street curb	-	7.4	4.3
Downtown Silver Meter or lot	48.1	29.5	57.2
Illegal space	3.8	3.2	1.7
Other (private lot, friends driveway)	1.3	17.3	7.3

*Since the permit zone boundary was not yet established, these two categories were not separated in 1979.

The project may have reduced traffic congestion. Table 6-9 shows the traffic counts taken at seven different locations in Hermosa Beach in 1979, 1980, and 1981. These counts were not available for 1983. Five of these locations are in the permit area. Vandalism or accidents involving the counting machines made it necessary to exclude a small portion of data collected on Gould/Manhattan and on Manhattan/8th in 1981.

TABLE 6-9. TRAFFIC COUNTS
Average # of vehicles per day (figures in 00s)

Location	Weekday			Weekend		
	1979	1980	1981	1979	1980	1981
Pier/Bayview*	73	51	50	61	52	51
Gould/Manhattan*	40	30	30	41	34	24
Monterey/19th**	16	29	16	18	26	13
Hermosa/10th*	107	77	84	111	93	99
Monterey/8th**	17	NA	15	13	NA	13
Manhattan/8th**	10	6	8	11	7	6

*Major thoroughfare leading to beach.
**Side street. See map in Appendix B for exact locations.

Results from the traffic counts include:

- There was an overall reduction of 21 percent in traffic volumes between 1979 and 1981. Of the six locations surveyed, five showed a significant decline in volume (statistically significant at .05 level). However, the percentage of vehicles going to the beach is not known.

- The decrease in traffic was slightly higher on weekdays than on weekend days (22.8 percent vs. 19.2 percent). This finding is consistent with the lower level of parking occupancy in the permit area in 1981. A significant decrease in traffic volumes on weekends did not occur between 1980 and 1981. This is surprising since the 1980 counts were taken in September, after Labor Day, while the 1981 counts were taken in mid-August, usually the peak summer congestion period. The traffic count data are inconclusive as to the impacts resulting from the demonstration.

- The decreases were largest on weekdays on the major thoroughfares leading to the beach. The vehicles counted on major thoroughfares decreased by 25.3 percent on weekends and 18.4 percent on weekdays between 1979 and 1981 while on side streets there was a 9.3 percent decrease on weekdays and a 23.8 percent decrease on weekends.

Table 6-10 contains data from the household surveys concerning residents' perceptions of traffic problems. Over half of the Area I residents and nearly as many Area II residents felt that traffic congestion was a major problem prior to the start of the program. The percent of residents giving this response decreased significantly in Area I between 1979 and 1981 and in both areas between 1981 and 1983.

TABLE 6-10. PERCEPTION OF TRAFFIC CONGESTION

Area II Residents

		1979	1981	1983
Traffic Congestion is:	(n)	(163)	(197)	(141)
A major problem		49.9%	44.2%	12.8%
A minor problem		32.5	38.1	44.7
Not a problem		19.6	17.8	42.6

Area I Residents

		1979	1981	1983
Traffic Congestion is:	(n)	(114)	(40)	(100)
A major problem		57.0%	37.5%	17.0%
A minor problem		28.1	35.0	36.0
Not a problem		14.9	27.5	47.0

7. PROJECT COSTS AND REVENUES

7.1 MAJOR COST CATEGORIES

The costs of the Hermosa Beach parking permit program have been disaggregated in two ways. First, they were broken down into three distinct categories: capital costs, planning and start-up costs, and operating expenses. Secondly, they were broken down according to project element.

The capital costs include physical items used by the program over several years, even though some of these items were not used solely by the program. Capital items which were also used for other purposes (e.g., the shuttle buses) have had their costs prorated between the uses. The capital costs have been calculated using an estimated useful life and replacement costs.

The planning and start-up category includes the cost of developing and revising the program. These expenses are expected to occur only once at the beginning of the project or only when major changes are made at infrequent intervals.

The operating costs are those costs which are expected to recur annually if the project continues at the same level. In cases where these costs could not easily be separated from the "one time" costs (planning and start-up and revision), such as the salary for city personnel, those costs which were incurred when the program was actually in operation were included under the operating cost headings. Table 7-1 contains a complete listing of all costs. In this table, the operating costs are those for fiscal 1982-1983 (August 1982 through July 1983).

Operating expenses have been calculated by estimating the amount of time each person (or group of persons in a given job category) spent performing each of their various duties. This figure was then applied to their salaries and the cost of their

TABLE 7-1. SUMMARY OF PROJECT COSTS

	CAPITAL			OPERATING		TOTAL
	Total Replacement Value	Prorated* Share	Depreciation	Total	Prorated* Share	Annual Costs
1. Anuual Permit Sales						
a. Salaries* application processing					40,247	40,247
b. Building occupancy charges					2,770	2,770
c. General overhead					8,132	8,132
d. Operating supplies and services					11,338	11,338
e. Fixed Assets	162,389	18,475	1,914			1,914
Subtotal	162,389	8,475	1,914		62,487	64,401
2. Daily Permit Sales						
a. Permit sales, Clerk salaries*					9,485	9,485
b. Building occupancy charges					633	633
c. General overhead					1,525	1,525
d. Operating supplies and services					2,592	2,592
e. Permit booths	13,038	13,038	1,304			1,304
f. Other fixed assets	162,389	4,224	438			483
Subtotal	175,427	17,262	1,742		14,235	15,977
3. Planning & Publicity						
a. Signs	14,641	14,641	1,830			1,830
b. Banners	9,263	9,263	1,157			1,157
c. Brochures						850
d. Planning meetings, etc.						507
Subtotal	23,904	23,904	2,987			4,344

* This column contains an estimate of the portion of the costs for the appropriate departments that were used for the project. The total column is for the department as a whole.

TABLE 7-1. SUMMARY OF PROJECT COSTS (cont.)

	CAPITAL			OPERATING		TOTAL
	Total Replacement Value	Prorated Share	Depreciation	Total	Prorated Share	Annual Costs
4. Enforcement						
a. Enforcement officers' salaries*				180,008	31,627	31,627
b. Ticket processing salaries*				34,648	6,088	6,088
c. Admin. & Supervisory salaries*				89,734	15,766	15,766
d. Building occupancy charges				16,198	2,846	2,846
e. General overhead				46,426	8,157	8,157
f. Operating supplies & services				66,296	11,648	11,648
g. Enforcement-vehicles and radios	109,110	15,603	3,121			3,121
h. Office equipment, furniture	22,706	2,659	334			334
i. Computer system	139,683	16,357	2,048			2,045
Subtotal	271,499	34,619	5,500	433,310	76,132	81,632
5. Park-and-Ride System						
a. Driver salaries*				11,768	2,942	2,942
b. Admin. salaries*				2,232	558	558
c. Building occupancy charges				63	16	16
d. General overhead				4,425	1,106	1,106
e. Fuel, maintenance & garbage service				15,929	3,982	3,982
f. Other operating supplies & services				6,874	1,719	1,719
g. Buses and radios	62,300	31,150	6,230			6,230
Subtotal	62,300	31,150	6,230	41,291	10,323	16,553
TOTALS			18,373		163,177	182,907

*includes benefits

benefits. These figures are grouped by labor category in Table 7-1. The percent of total General Services Department salaries expended on annual and daily permit sales and enforcement was also used to prorate costs for supplies, utilities, building occupancy charges, and general overhead since these were aggregated by department in the city's records.

Fixed asset charges for shared assets were prorated by the same percentages that were used for operating expenses. Capital items which were used by one project element, such as the enforcement vehicles, were charged only to that element. Annual capital costs were calculated by depreciating the replacement cost over the useful life of the item using straight line depreciation. Useful life estimates were provided by the City of Hermosa Beach. No salvage values were used since it is likely that the major capital items (e.g., the enforcement vehicles and the signs) would have no alternative use after their useful life within the project, and a negligible or nonexistent scrap value. The useful life varies between five years for the enforcement vehicles and ten years for the ticket processing computer.

7.2 COST BY PROGRAM ELEMENT

Costs were disaggregated by the following project elements: annual permit sales, daily permit sales, publicity, enforcement, and park-and-ride service. The cost of each of these elements is discussed in detail in the following subsections. Table 7-1 is also arranged such that costs by element can be identified separately.

7.2.1 Annual Permit Sales

Annual permit sales, the second largest category of cost after enforcement, accounted for 35 percent of the total costs. Almost all of the costs for this element of the program

were operating costs. The largest operating cost item was the salary for the applications processing personnel. It comprised 73 percent of the operating expenses. An additional 15 percent of the expenses were for supplies and utilities. As described earlier, these charges were prorated from the larger category within the General Services' budget, based on the estimated percent. The remaining charges, general overhead, building occupancy charges and fixed asset charges, have also been prorated but from the city budget as a whole.

The application processing personnel were responsible for distributing the applications, providing information, collecting the applications and fees, checking for outstanding violations, laminating the transferable permits and issuing them to the residents. If any outstanding citations were found, or if the applications were filled out incorrectly, they then followed through to correct the problem. Also, they had to update the project records at the end of each day, accounting for permits sold and revenues collected. All of this amounted to a time consuming process with three technical aides devoting approximately one-quarter of their time to this activity.

Some of the time spent on application processing was spent checking for outstanding citations. In the first year of the project a much greater amount of time was spent checking to make sure that there was a legal housing unit (i.e., had the proper permits filed with the Housing Department). Both of these activities were not so much for determining permit eligibility as for enforcing other city ordinances. Since the check on legal unit certification was discontinued before fiscal 1982-83, it does not affect the costs reported here. (However, other localities should be aware that use of a similar program for such purposes could result in a substantial increase in costs.) The time spent at the citation check has been included here rather than under enforcement since it is likely to be a part of the application process in most localities.

Selling the annual permits cost the city approximately $9.39 per permit.* This is slightly less than the revenue ($10 per permit) from the permit fees. Since the technical aides processing applications also perform other duties, the city is able to assign labor to this task only when it is needed. Therefore, labor costs should remain fairly constant on a per permit basis. The other costs, in general, are allocated by the city according to labor costs. This appears to be a realistic method as printing costs, utilities and other operating expenses (the second largest cost category) exhibit only small economies of scale within the range of variation for permit sales. These costs should vary closely with sales and thus, given the closeness between costs and revenues, future changes in sales should have little effect on the project's financial self-sufficiency.

7.2.2 Daily Permit Sales

While daily permit sales accounted for only a small fraction (9 percent) of the total project costs, these were larger than the revenue generated from daily permit sales. The costs remained higher than revenues even during the final summer when sales increased tremendously from those in previous years. Salaries comprised the largest fraction (59%) of these costs as they did with annual permit sales. The salaries were for operating two permit sales booths seven days a week. Operating supplies and services cost is a prorated proportion of the total General Services costs and includes utilities, printing, and operating expenses for department autos. The building occupancy charges and general overhead are proportioned from the city costs as a whole. The major portion of fixed asset charges is comprised of capital costs for the two sales booths. The full purchase cost of $13,038 has been

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*Based on sales of 6858 annual permits (4076 permanent and 2762 transferable) during 1983.

charged to this element and has been depreciated over ten years.

The permit sales clerks, in addition to selling the daily permit, provided information on the shuttle bus and other program elements. The entire cost of operating the sales booths has been charged to sales, however, as this was their primary function. Even with the additional duty of providing information, the sales clerks were far from busy. The most permits sold by a booth on one day was 80 while an average of only 13.3 permits per day per booth were sold.

Currently the cost of selling daily permits is $4.52 per permit compared to the $2 collected for each permit sold. While sales will probably increase in the future, an increase in sales staff will probably not be necessary. But, even with vast increases in the amount of publicity, it is unlikely that sales will increase by the 126% necessary for the permit booths to pay for themselves.

7.2.3 Publicity and Planning

Costs for these items are the smallest of all the project element costs. Publicity costs are either for capital items or for planning and other start-up activities. Most of the capital costs are for signs and banners required to obtain a Coastal Commission permit to operate the program. These signs and banners were depreciated over eight years.

The brochures were used at the beginning of the project to inform the residents of the project and to publicize the community meetings. The planning costs were for gathering public input into the project and studying its viability. Only a small portion of these costs, which do not appear directly in Table 7-1, were directly charged to the project. Those costs total only $13,568, and include costs for numerous fliers and brochures distributed to local residents to gain their input during the planning phase. They do not include, however, the labor costs for time spent by the planning, personnel, and

general services departments and the city council during the start up phase. The city charges the cost of this time to general overhead. For this reason, general overhead has been added to each cost category to account for planning costs. Also included in this overhead, however, are the ongoing costs for departments such as personnel and the city council. Thus, general overhead should be higher than the annualized cost of planning.

The city has no plans to increase its levels of publicity in the future and the Coastal Commission appears to be satisfied with their current level. However, with the low level of program awareness among nonresidents, further expenditures for publicity could be justified. The amount of money allocated to publicity, and how the money is spent may influence the effectiveness of the program to a large extent. The large increases in daily permits sales that accompanied the increase in publicity between 1982 and 1983 are evidence of this. Using more media advertising may not be effective, however, since the program has already had a lot of media coverage due to the numerous lawsuits and the poor results obtained by the companion project in Santa Cruz. More direct measures to contact persons at the beach, such as windshield fliers, have not been tried. The effectiveness of these measures should be evaluated.

7.2.4 Enforcement

This is the largest category of costs, comprising 45% of the total project costs. All of these costs were obtained by dividing the citywide enforcement costs by the number of tickets issued citywide for all offenses and multiplying by the estimated number of citations issued for project related offenses. The General Services Department's citation records indicate that 16.8 percent of the tickets issued citywide each year are issued during the project in the impacted area. An estimate of tickets issued in the impacted area for parking

more than the one hour without a permit was obtained from the license plate study conducted in August 1983. This gives a total of approximately 14 percent of the tickets issued citywide being project related. This factor was used to estimate both enforcement costs and revenue from citations.

Salaries for enforcement personnel were the largest single cost and accounted for 39 percent of the total. Salaries for administration, supervision, and ticket processing personnel accounted for an additional 23 percent of the total enforcement costs. A total of 22 members of the General Services Department are involved in enforcement in one way or another. This large staff was needed partly because the city collected the fines from citations paid within 30 days rather than referring them directly to the court system.

The city maintains that this system increases the revenue to the city (since court fees are not deducted from the fines) by more than the increase in costs. In order to keep track of the citations the city has a full-time Citations Records Supervisor and six technical aides who devote approximately one-third of their time to processing the citations. The city also has a part-time Hearing Officer who holds informal hearings two days a week and has the power to dismiss citations.

While only a small portion of the annual enforcement costs are capital costs, there is a substantial investment involved. The Cushman enforcement vehicles have an estimated replacement cost of over $100,000. The computer system which is needed to process the citations was purchased for over $130,000.

Government units that conduct large-scale parking programs can justify capital expenditures at this level, and obtain savings by processing their own tickets. A city that is administering an enforcement program in a small area, such as the impacted area in Santa Cruz, probably could not justify these capital expenditures.

Project enforcement provided a large excess of revenues which, at least in part, was needed to subsidize the other project elements. The total cost for enforcement was $9.28 per citation issued, while $14.61 in revenue was generated for each citation issued. Of the $9.28, approximately $7.16 was for issuing the citation and $2.12 was for processing it.

7.2.5 Park-and-Ride Shuttle System

When the project was implemented a second bus was added to the existing loop routes during the summer and in 1983 was used as a shuttle running from the parking lots near City Hall to the beach. One-fourth of the operating costs for the city's buses was charged to the project since approximately one-fourth of the system's operating hours were for the shuttle bus operations added as part of the program. One half of the capital costs for buses and radios were charged to the project since an additional bus was purchased specifically for the program. The capital cost for the bus and radio were calculated using a five-year useful life. This was the largest single item accounting for 38 percent of the total annual costs. An additional 24 percent went for fuel, maintenance, and garage service, and 18 percent went for driver salaries.

Hermosa Beach has discontinued its loop bus service, substituted a dial-a-ride system, and decided to continue to operate the shuttle in future summers. These changes should not affect the costs for shuttle operation. It is unlikely that more than one shuttle bus will be necessary given the low ridership the bus currently has. The cost per passenger, which was $3.59 last summer, may decrease if ridership increases.

One cost that is conspicuous by its absence is the cost of providing a parking lot. The main lot used was across Valley Drive from City Hall in a railroad right-of-way. This lot had only a nominal rental price ($1 a year) and it was decided it was not necessary to resurface the area. The lack of a cost for the parking lot greatly reduced the total costs for the

service. In the Santa Cruz project, there was an annual $4,300 rental on one lot and a one time $49,000 cost for resurfacing another lot.

7.3 TOTAL COSTS AND REVENUES

As shown in Table 7-2, over half of the costs for the project were salaries and benefits for project personnel. These salaries did not include many other persons who worked on the project such as members of the City Council, the planning staff, the Personnel Department, and the Accounting Department. These costs were charged to the General overhead category, which accounts for more than 10% of the costs. It should be noted, however, that because much of their time is spent during the planning and start-up phases of new programs, these costs represent not only operating costs but also those for planning and start-up. The other two large categories of expenses are operating supplies and services and capital depreciation. As stated previously, the operating supplies and services include the items used for day-to-day operations, which could not easiy be charged directly to one activity within the department such as utilities, telephones, fuel and maintenance for vehicles other than the enforcement vehicles and buses, conference costs, and general office supplies. The capital costs included a wide variety of items with the shuttle bus accounting for 34 percent, enforcement vehicles and radios accounting for 17 percent, and signs and banners accounting for 16 percent.

Two-thirds of the revenues for the project were generated by fines from citations. These revenues were calculated in the same manner as the costs for enforcement. The total revenue from fines for the entire city was divided into the total citations issued and multiplied by an estimate of the number of citations that were project related (those for parking more than one hour without a permit in the impacted area). Annual

TABLE 7-2. ANNUAL PROJECT COSTS BY CATEGORY

Category	Amount	% of Total
Salaries and benefits	$106,713	58.7%
Operating supplies and services	27,297	15.0
General overhead	18,920	10.4
Capital depreciation	18,373	10.1
Building occupancy charges	6,265	3.5
Bus maintenance	3,982	2.2
Total	$181,550	100.0

TABLE 7-3. PROJECT REVENUE AND COST SUMMARY

Source	Revenue		Cost		Surplus (subsidy)
	Amount	% of Total	Amount	% of Total	
Annual Permit Sales	$68,380	30.2%	$64,401	35.5	$3,979
Daily Permit Sales	7,066	3.1	15,977	8.8	(8,911)
Planning and Publicity	N/A	---	2,987	1.6	(2,987)
Enforcement	151,187	66.7	81,632	44.9	69,555
Park-and-Ride System	N/A	---	16,553	9.1	(16,553)
Project Total	$226,633	100.0	$181,550	100.0	$43,726

permits generated nearly all of the rest of the revenue and daily permit sales accounted for only 3 percent of the revenues (see Table 7-3.)

The project as a whole had 24 percent higher revenues than costs. This was due almost entirely to the 85 percent surplus of citation revenues over enforcement costs. The combining of the project enforcement with the citywide parking enforcement gave the city an efficient and low cost means of issuing the citations and collecting the fines. Other localities which can combine enforcement of a similar project within a larger program should have similar results.

There was also a slight (7 percent) surplus of funds generated by the sales of annual permits. The combined revenue of citations and annual permit sales should remain steady while the sales of daily permits is expected to continue to increase. In the future, the program should continue to generate surplus funds for the city.

8. SUMMARY AND CONCLUSIONS

This final chapter is intended to provide an overview of the Hermosa Beach demonstration and draw conclusions which may be of interest to other areas considering implementing a preferential parking program.

8.1 PLANNING AND IMPLEMENTATION

The planning process included reasonable opportunities for public input. Due to the controversiality of issues concerning parking within Hermosa Beach, implementation of the program was delayed for over a year. Similar problems also occurred with the Santa Cruz Demonstration, which delayed that program for over a year. Both of the projects also underwent substantial revision after their first full year of operation. The possibility of such delays should be taken into account during the planning phases of any such program. Other conclusions about the planning and implementation process include:

- The fact that Hermosa Beach had a long-standing bus service and permit program helped in the implementation of the program.
- Including public input to a permit program can help provide good service to most of the residents and non-residents. Some persons are likely to feel that the program is not in their best interests. This will often lead to lengthy political fights and may even, as in the case of Hermosa Beach, lead to law suits.
- Because parking permit programs involve many separate elements, they are under the jurisdiction of numerous local, state, and federal agencies. This makes coordination of program planning both cumbersome and time consuming.
- Establishing the boundaries of the permit program area is likely to be problematic. No resident wants to be just outside of the permit program area, where "spillover" effects may occur.

8.2 PARK-AND-RIDE SHUTTLE BUS SERVICE

The bus system in Hermosa Beach transported a reasonable number of passengers. It did not, however, succeed in inducing nonresidents to take the bus to the beach rather than driving and parking in the residential areas. Specific conclusions about the service include:

- A much higher level of awareness among nonresident beach users would be necessary if the shuttle bus system is to provide an effective alternative to on-street parking. However, there may be a limit to how effective any publicity campaign will be. Even after a major effort to publicize the project by erecting signs throughout the residential areas, more than 80% of the nonresidents were unaware that the shuttle bus even existed. This lack of knowledge may indicate that nonresidents were not interested in finding alternatives.

- The shuttle system worked well for those persons who used it. It had relatively short headways and travel times between the park-and-ride lots and the beach.

- Using minibuses rather than larger transit vehicles reduced costs. With the exception of a few days each September, when an arts festival drew large numbers of persons, the minibuses had plenty of capacity for the number of passengers it served.

- Locating the park-and-ride lots relatively near the beach allowed persons to park for free and walk to the beach. Having the lots immediately adjacent to the permit zone reduced any chance of spillover of vehicles into the residential neighborhoods just outside the zone.

8.3 PERMITS AND PERMIT DISTRIBUTION

The annual permit system had few operational problems, especially in 1983 when the Area II permits were combined with the Area I permits and the driveway permits were added. The daily permits suffered from a general lack of awareness of the program. Detailed conclusions about the permit system include:

- Attempts to use the permit application process as a means of checking for illegal housing units was time consuming for both the city and the applicant. This

process was responsible for some of the delay in starting the program in 1980.

- Charging a nominal fee for annual resident permits greatly reduced the number distributed from the years in which no fee was charged. This may have eliminated some discretionary on-street parking by residents. In addition, it allowed the city to recoup the cost of distributing the permits.

- The driveway permits provided an easy way to increase available spaces in the zone. Another advantage of these permits is that they, unlike the other resident permits, guaranteed the owner a parking space.

- Reduced prices and increased publicity did increase sales of the daily parking permits. Even at the increased levels of sales, however, the cost to sell the permits was higher than the revenue that was generated by them. The low sales volume appears to have been caused mainly by a lack of knowledge of them by nonresidents. This problem also existed in the companion project in Santa Cruz and no solution has been found.

- It is important to make provisions for local business owners and employees, landlords and part-year residents, and service vehicles during the planning stages. These problems were not addressed until the project was scheduled to begin, necessitating delays in the starting date.

8.4 PARKING AND TRAFFIC

The program did have an impact on the parking patterns within the demonstration area. These impacts, however, were limited and occurred mainly on weekdays. On weekends, parking space occupancy rates remained very close to one. However, residents did perceive an improvement in conditions from those that existed prior to the program. This was true for both weekdays and weekends. Parking for nonresidents, however, was reported to take longer during the program than prior to it. Nonresidents may have spent more time looking for a legal, long-term parking space which was free before eventually settling for a metered space or a one-hour space.

Specific conclusions include:

- The residents perceived larger improvements between 1979 and 1981 than could be demonstrated by means of objective data. It is very possible that just knowing that the program existed produced some satisfaction for local residents.

- Weekday improvements in parking space availability between 1979 and 1981 occurred not only in Area II, where they were expected, but also in the yellow meter area, where the program could have caused adverse impacts An increase in occupancy ratio in this area appears to have been prevented by the doubling of the meter prices.

- The program was not able to substantially increase the availability of parking spaces on weekends. This may indicate an increase in resident usage of on-street spaces as it appears that nonresident beach users were less likely to use Area II parking spaces.

- The program did little, if anything, to change the mode persons took to the beach.

8.5 PROJECT COSTS AND REVENUES

One of the major reasons for this demonstration was to determine whether or not a preferential permit program could be financially self-sufficient. This program met this goal and also generated a surplus of approximately $45,000 during the project's final year (1983). Several factors affected the program costs and revenues, such as:

- Citations were able to generate nearly twice as much revenue as the costs for enforcement. The other activities generated a $25,000 combined deficit. Without a high incidence of illegally parked vehicles, which reduced parking space availability for residents, this program may not have been self-sufficient.

- Charging a nominal price for annual permits made it possible to recoup the cost of distributing them. This amounted to nearly $70,000, without which the program would have not been able to pay for itself. Collection of the small fee also reduced costs by reducing the number of permit applications processed.

- Daily permit sales were much smaller than expected. Rather than generating a surplus, as was originally expected, the cost of selling these permits was over twice the revenue generated by them. If more and better publicity is utilized in future years, and sales increase, however, this deficit may eventually be eliminated.

- This project was very labor intensive with almost 60 percent of the total costs used for salaries and benefits. Operating supplies and services accounted for 15 percent of the costs and general overhead and capital depreciation each accounted for 10 percent of the costs. Had the city not been able to spread the cost of the computer system, which was used to process permit applications and citations, over a variety of items, capital depreciation costs would have been much higher.

8.6 IMPLICATIONS FOR OTHER AREAS

Many of the conclusions from this demonstration are dependent on site specific characteristics of Hermosa Beach. However, there are several broad conclusions about this type of program which can be drawn from the combined experience of the Hermosa Beach demonstration and the companion demonstration in Santa Cruz. These include:

- The largest problem in attracting nonresidents away from parking in the residential areas appears to be in making them aware of the alternatives. Even extensive signing of the area failed to produce a reasonable level of awareness.

- Charging a nominal fee for annual resident permits has several potential benefits. It reduces the number of permits in circulation and, thus, the amount of on-street parking by residents who have off-street alternatives. It reduces the total cost of distributing permits if the alternative is having residents file applications but pay no fees. Directly mailing each household a limited number of permits without having them fill out an application, as was done in Santa Cruz, has an even lower cost, although the fees collected in Hermosa Beach more than paid for the distribution costs.

- Permits allowing persons to block their own driveways increases the available parking spaces in a zone.

- Diverting persons from their cars to other modes is not easily accomplished. Even with strict enforcement, high prices, and convenient alternatives, most persons continued to use their auto for the entire trip.

- Provisions are necessary for all persons who might need to park in the permit area including local businessmen and employees, service vehicles, and part-year residents.

- Preferential parking-permit programs can be financially self-sufficient but have had to rely mainly on citations to generate revenue.

APPENDIX A

PROJECT PUBLICITY

This appendix contains only a sample of the variety of fliers, handouts and brochures used to publicize the project. Also included are some of the numerous articles written about the program.

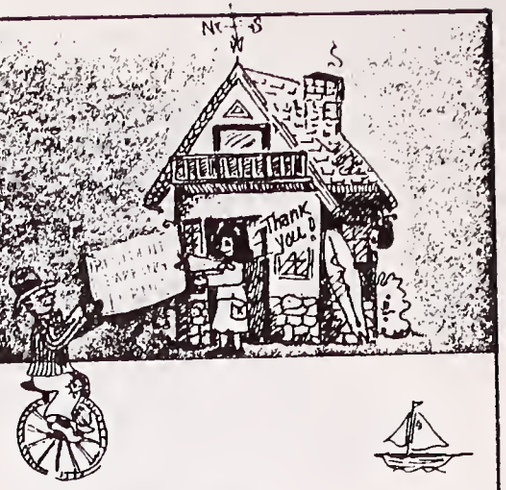
BROCHURE MAILED TO CITY RESIDENTS

Here's a three point city plan to help... beginning this summer!

2

Street Parking Permits
(and guest permits)

For residents close to the beach... Permits would be required for street parking over one hour. Permits will be required only during program hours. The permit zone will be from the Strand to Valley Drive.

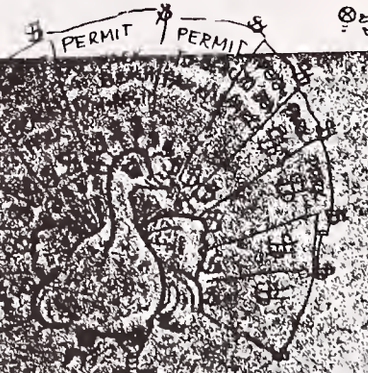


3

Free Shuttle Buses from outlying lots and neighborhoods to the beach.

Buses will run every 15 minutes. They are intended to encourage beach visitors to park and ride instead of parking on the congested residential streets.

For Beach Visitors, Higher Parking Meter Rates and Priced Permits for parking close to the beach... Day permits will be available priced comparably to meters for parking in the permit zone (including meters).



Time for action...

The city has received a Federal Grant to test the three part program this summer. Here are some important dates:

First public meeting
March 31, 1980, 7:30 pm
in City Hall Council Chambers

April 1980:

Public hearing on ordinance to start program.

May 1980:

Zone permits available to neighborhoods close to the beach.

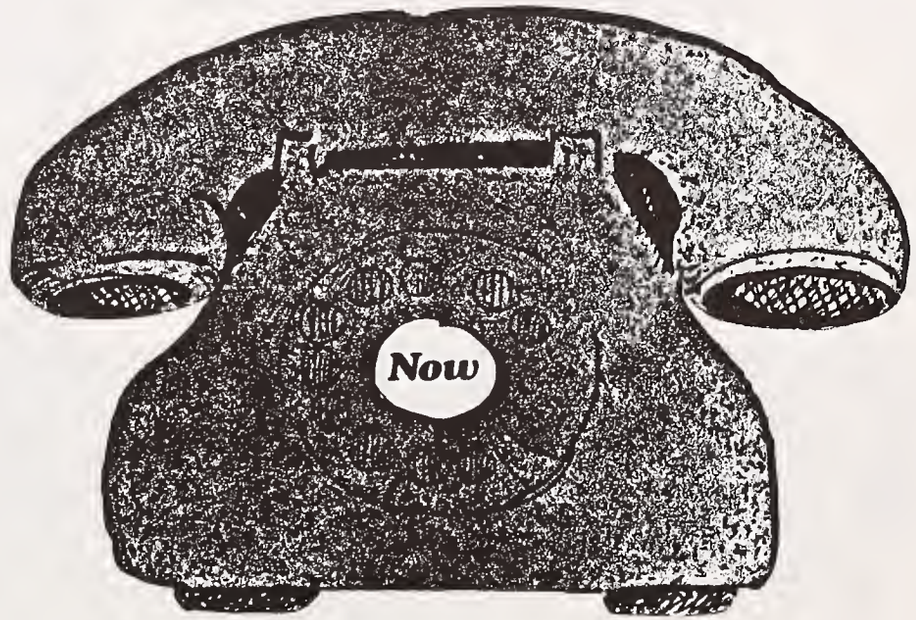
June 1980:

Start program.

Now it's your turn

Call the Hotline with any questions which you want answered.

372-2939



WARNING NOTICE PLACED ON CARS
PRIOR TO THE START OF ENFORCEMENT

NOTICE

You are presently parked in Recreational Parking Area #2. This area will soon be posted ONE HOUR PARKING from 8:00 am to 5:00 pm according to Resolution Number 80-4371 adopted by the City Council on May 27, 1980.

Residents may obtain an annual permit upon submitting proof of residence such as a current utility bill or lease agreement and proof of current vehicle registration with the residence address must be provided. These permits are not yet available but applications are now being accepted at City Hall, 1315 Valley Drive, basement floor. You must provide the City with copies of your vehicle registration and documentation of current residence.

When the program is started, there will be daily non-resident permits for sale at $4.00 per day. The location for purchasing these permits will be advertised before the program is ready to begin.

ALSO in area #2, there shall be no parking on-street except with resident or resident guest parking sticker from 2:00 am to 6:00 am.

For further information you may call:

HOT LINE
372-2939

Hermosa drops financial boom on visiting beachgoers

by Sam Enríquez

Hermosa's summer parking crunch that sends residents blocks out of their way to find a parking space may subside a bit because of a new recreational parking program starting this week. The city is attempting to curb beachgoer parking demand by restricting non-residents to one hour parking in residential areas between Palm Drive to the west and Loma/Morningside to the east.

The rush to city hall by residents applying for the resident permits and a delay in the delivery of day permits produced a few first-week wrinkles in the new program. The program restricts non-resident parking to one hour between 8 a.m. and 5 p.m., and does not allow on-street parking in the impacted area between 2 a.m. and 6 a.m. daily, except for residents. Parking permits for non-residents will be available at the police station for $4 a day. Residents must bring to city hall copies of valid vehicle registration and a current utility bill or lease arrangement showing an address in the impacted zone. Qualfied residents will receive two free resident permits and one visitor pass.

Much of the confusion at city hall this week centered around residents whose cars are not registered at a Hermosa Beach address. According to Joan Noone, Hermosa's general services coordinator, there is a conflict between the city's resolution establishing the parking program and Department of Motor Vehicles policy.

"Section 5 of the resolution requires residents to furnish copies of current vehicle registration with an address in the program area," said Noone. "We've called the DMV and they say they won't send out new registration cards just to suit our program."

Noone is advising residents to ink out the old address, write in the new address, and initial the form to comply with the city's requirement. Some other unresolved questions in the current resolution include provisions for merchants, building contractors working in residential areas, and teachers at North School, said Noone. A list of administrative adjustments necessary to keep the program alive will be presented to the city council for approval.

Although 1200 resident and visitor permits have been issued, Noone does not expect ticketing to begin for at least another week. Only a fourth of the signs restricting on-street parking in the recreational parking area have been erected. Noone believes the program's goal of reducing visitor parking in the impacted residential areas will depend on city enforcement of the new resolution. Six additional employees have been hired by the city and two Cushman vehicles are on order. A four-man crew will be necessary to mark tires and patrol the area for hourly violators, said Noone.

One angry Hermosa resident said his car was almost towed away because of a clerical error in the issuance of a visitor permit.

"On Saturday afternoon I just happened to look outside and the parking meter people were getting ready to tow my car away," said Bill Payne. "The parking guy told me if I didn't show him my receipt, he was going to tow my car away because he said I had a stolen visitor pass. The police finally came and straightened it out, but it was pretty embarrassing."

Applications for resident permits are available at city hall from 8 a.m. to 12 noon and between 1 p.m. and 5 p.m. In addition, applications are also available at the Hermosa Beach fire station 24 hours a day.

Hermosa still split on $300,000 park-and-ride

by Sam Enriquez

The final public hearing on the Park and Ride program in Hermosa Beach resulted in the city council introducing an ordinance allowing the city to set up the program by resolution. The council vote was 3 to 2 with councilpersons Mary Tyson and Edie MacFaden voting against the program. Final council discussion and possible action on the program is scheduled for the May 13 city council meeting.

According to planning director Rod Merl, the city council's delay in its decision on the Park and Ride program would make it impossible to start the program before the end of June.

The Park and Ride program in conjunction with a preferential residential parking plan is designed to help solve summer parking problems west of Pacific Coast Highway. A preferential parking program would only affect residential areas and allow only one- or two-hour parking without the purchase of day permits or the use of guest permits. Residents living west of Pacific Coast Highway would be issued two parking permits per household. Hermosa residents living east of the Highway charge that this amounts to disenfranchisement for them.

"I live about as far away from the beach as possible and still live in Hermosa Beach. I'm opposed to the program because there should be no exclusions for resident access to parking by the beach," said Richard Halliburton.

Approximately 250 parking spaces will be made available in the city hall parking lot and by paving an area adjacent to the railroad tracks on Valley Drive. The Park and Ride program hopes to encourage beach visitors to park their cars there and ride a shuttle bus, scheduled to run every fifteen minutes to the beach and downtown areas.

The federal government is allocating $300,000 for the program because they want to learn if heavily impacted parking problems can be solved by restricting on-street parking and providing public transportation. Although the cost of the program over two years is projected at $900,000, Tom Higgins, Urban Mass Transportation Administration (UMPTA) consultant, estimates the city will receive $600,000 through the sale of day and guest permits and the collection of fines. Higgins noted that even in the worst case situation, i.e., if no one bought any permits, the city would not have to pay out any monies because the program could be cancelled at any time on 30-days' notice.

The Park and Ride program has been under study for two years. According to Merl, public expectations of alleviating parking problems has been raised by the plan. He urged that the council make its position on the program publicly known.

"The program would be self-sufficient and start-up costs are met by the federal government. The concept is to spread the costs of coming to Hermosa Beach to non-residents who must purchase the day stickers," Merl said.

Most of the dissent at the public hearing came from residents not living in the impacted parking zone west of Pacific Coast Highway. They asked why they should not be given the free permits as well. City attorney Chip Post noted that it would have to be proved that the areas east of Pacific Coast Highway are impacted areas and studies show that this is not the case.

"I live three houses on the other side of Pacific Coast Highway and I don't want to see the city legalize my disenfranchisement from going to the goddamn beach," argued Steve Walters.

Resident Kathy Bergstrom predicted a lawsuit on the grounds of a 14th Amendment violation if the program is initiated. "There is a problem and there are solutions, but this project is a most fallacious use of public money when sacrifices in federal spending are needed," said Bergstrom.

Hot Line for Hermosa Beach Parking Plan

Questions about plans for a new Permit Parking and Shuttle Bus Program should be directed to 372-2939 from 8:00 a.m. to 12:00 p.m., Monday through Friday.

Hermosa's parking space game: few prizes, lots of penalties

First place—public interest

by Jim Rosenberger

Welcome to Hermosa Beach. You are hereby cordially invited to play the "Parking Space Game." Everyone with an auto and a desire to park it at the beach is automatically a player. This fun, little, municipal game is played daily. Parking spaces are the only prizes; parking tickets, beautiful amber ones suitable for paying, are the penalties. Both are donated by the city of Hermosa Beach.

In truth, this is a game of chance. The odds, which are not clearly stated, are stacked heavily against you. The croupiers dress as meter maids and drive around in about a dozen three-wheeled vehicles enforcing some house rules that don't make any sense, and others that are simply contradictory.

As a new player, you should know the rules. Try to learn all of them, but don't expect to comprehend them. This way you'll at least think you have a fighting chance here on the "Parking Space Game."

We'll commence play with a warning. Park at you own risk, expect neither fair play nor logic to be on your side. Godspeed!

Rule 1. Enter H.B. from the east and try to find the signs which indicate the location of parking permit booths Hint: be alert, they're not conveniently located. These signs meet only the minimal legal requirement (i.e. they exist).

Rule 2. Signs. Now try to read one of the above mentioned signs without violating some section of the vehicle code. Be prepared for a real challenge. These signs consist of four lines of less than 2" type.

One is placed approximately sixty feet from a "Stop" sign where you'll first spot it. Stopping past the "Stop" sign not permitted.

Another, you'll notice just as you shift into third gear on a downhill grade.

The third sign (there are only three) you'll have to find yourself. Warning: permit booths are not always occupied even if you should find one. Park without a permit, though, and you risk a ticket. Penalty $10.

Rule 3. Park. Obtain parking permit ($4) and look for parking space. Note: Permit does not entitle you to a space, only to the legal opportunity to look for one. Money-back guarantee to those who find themselves more frustrated than situated.

Rule 3 Alternative. Forego permit and play sign/meter game instead.

Sample sign game exercise: Sign says 2 Hour Parking 10 to 6. Curb, however, is painted green or white.

DMV says these are limited time areas, usually ten to thirty min. You determine which law is operative. Penalty for wrong decision $5.

Rule 4: Meters. Park at a meter. Meters come in two municipal colors, yellow and silver and can be found close to the beach. Reminder: All meters enforced twenty-four hours daily. Meters mostly eat quarters, roughly one every half-hour. A few will lower themselves and digest nickles and dimes. Two reportedly still exist which will even take pennies. (Attempts to find these two meters constitutes a separate game. Write in for pertinent rules.)

Meter strategies:

1. Tend your meter well (i.e. feed it regularly). Abused meters will expire. Penalty $10.
2. Shop around for best meter values. Coin slot options and prices can vary from meter to meter. Remember, your only prize in this game is a parking space, so don't pay more than you have to. Besides, money saved now will be needed later. (See Downtown rule).

Rule 5. Residential Parking Permits. This rule is irrelevant for the day visitor. While these permits exist, the information is posted nowhere. Word of mouth or a ticket ($10) is the way new residents learn of this rule.

Permit distinctions:

Red Permits: These cost $15 annually, or one and a half tickets. This permit allows you to violate meters with impunity.

Blue Permits: These are free, but they all expired six months ago. They're still good, however. This confusion is intentional, logic is irrelevant. This permit allows you to violate all curbs with impunity. While a birth certificate is not required to obtain this permit, other proof of legal existence is. Call city hall for further details.

Rule 6. Streetcleaning. Also known as the "sleeper rule," since that is when most of the streetcleaning takes place. This rule supersedes *all* above rules. Pay close attention to pertinent signs as days, streets and times of enforcement vary. Penalty for inattention $10.

Rule 7. Downtown. This is a mandatory rule consisting of two parts.

Part A. TicFak. This wonder of technological confusion is the "Space Invaders" of the "Parking Space Game." These machines function like, and in place of, parking meters. Bonus points will be credited to anyone who is able to walk away from these machines without mumbling, cursing or threatening to sue the city.

There are two types of TicFaks, and both must be played for at least one and a half hours each. Note: Any money lost on these machines will not be counted against you for overall scoring purposes. Tickets will be counted however. Penalty $10.

Part B. Signs. Complete this part of the rule and you will have finished the game. Just follow the instructions on all the various signs posted in the area.

To prepare you for this task, a sampler of some of these signs appears below. Time limit minimun, 2 hours. Penalty for violation $10.

- One Vehicle or Motorcycle per Stall.
- No Motorcycle Parking Anytime
- No Parking 4 to 6 a.m.
- One Hour Parking 9 a.m. to 9 p.m.
- No Parking Friday 7 to 8 a.m.
- Compact Cars Only
- Parking in Marked Stalls Only
- No Parking in Alley
- No Parking Anytime

Note: A free brochure is available at the chamber of commerce to assist you with the downtown rule. No penalty for using this or any other outside help on this rule.

Congratulations, you've now completed the "Parking Space Game," the city game that proves that there's still one born every minute.

To determine your score, count up the money spent on all meters and permits (exclude TicFak monies and credits), add in all tickets acquired (each ticket counts as one) and multiply this number by the time spent looking for spaces and attempting to make sense of all confusing and conflicting city rules. The number that results constitutes your achieved frustration level. This number is extremely helpful in determining minimal aspirin dosages.

So there, you've both won and lost at the same time.

You're welcome to come back and play again, anytime day or night. Be sure to tell a friend, after all, there are a lot of unsuspecting innocent souls out there who deserve their chance to play the "Parking Space Game"

APPENDIX B

DATA COLLECTIONS

TRAFFIC COUNTS

The purpose of the traffic counts was to calibrate the hourly distribution of traffic volumes in and adjacent to the permit zone before and after implementation of the permit program, in order to determine potential impacts of the program on traffic congestion in the permit zone. We have one year of pre-implementation and two years of post-implementation traffic count data.

The City of Hermosa Beach conducted traffic counts in one direction at the three access points and four circulation points in the beach area. All counts were conducted in August as follows: 1981--3rd through 9th; 1980--4th through 10th; and 1979--18th through 24th. Counters were placed at all seven points within the permit zone:

1) Pier Avenue at Bayview Drive
2) Gould Avenue at Manhattan Avenue
3) Second Street at Bayview Drive
4) Monterey Blvd. at 19th Street
5) Hermosa Avenue at 10th Street
6) Monterey Blvd. at 8th Street
7) Manhattan Avenue at 8th Street

These locations are shown on Figure B-1.

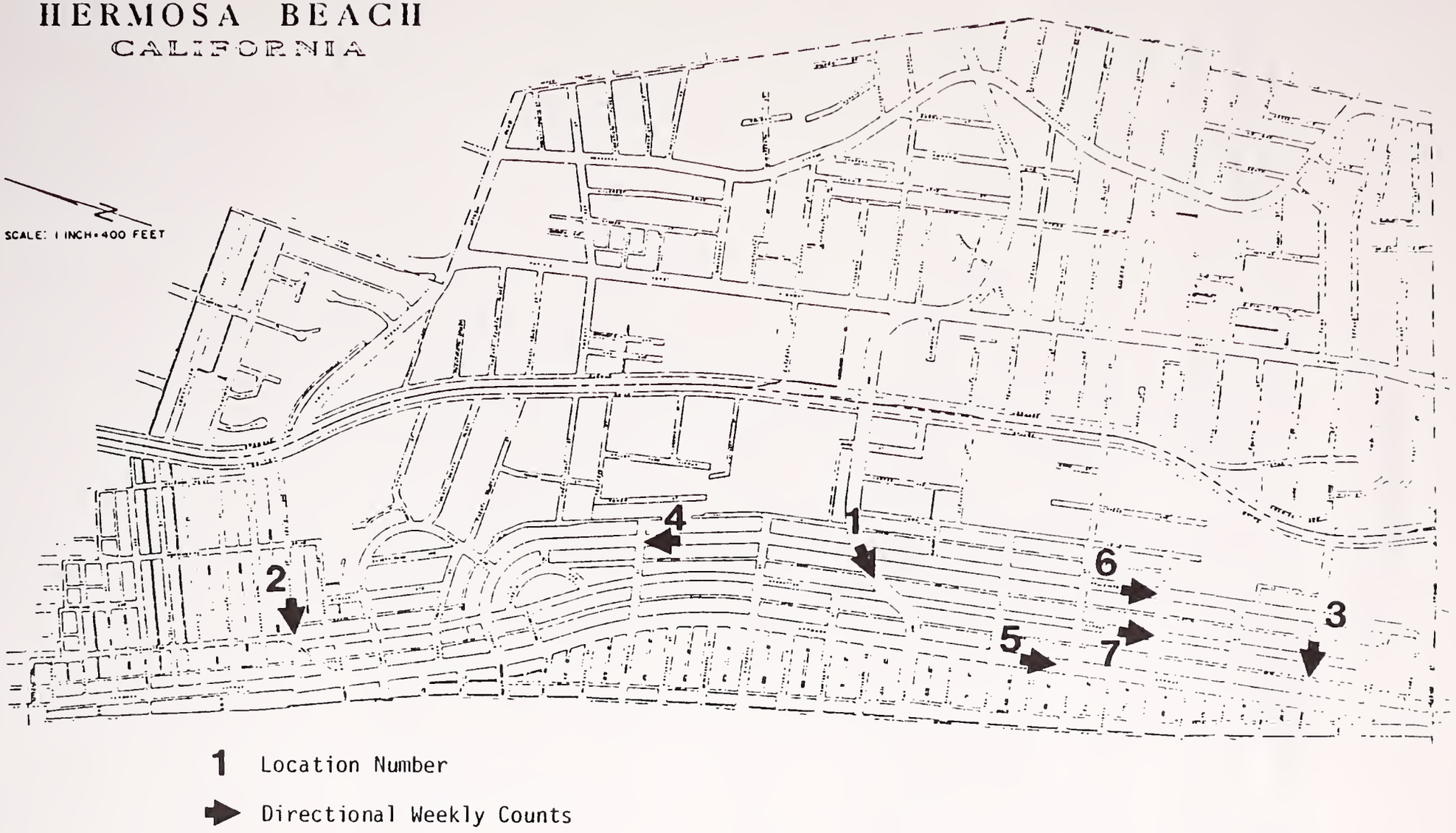


FIGURE B-1. TRAFFIC COUNT LOCATIONS

BUS SURVEYS

The purposes of the 1981 shuttlebus survey were to determine origins and destinations of riders, impressions about the shuttlebus service, and brief demographic profiles of users.

The survey was conducted on two weekdays and four weekend days in 1979, 1980, 1981 and 1982. During each of these days, survey workers rode all buses throughout the day. Questionnaires were distributed to all riders except those standing (infrequent) and young children, and collected as riders left the bus. Total usable questionnaires collected each year varied between 36 and 131.

LICENSE PLATE STUDIES

The purposes of the 1979, 1980, 1981, and 1983 license plate studies were to obtain pre- and post-implementation data on the supply of parking in the permit zone by time of day, the relative proportions of resident and nonresident automobiles parked in the permit zone by time of day, parking duration, and violation rates in the permit zone.

The studies were performed on three weekdays and four weekend days in August 1979, 1981 and 1983 and September 1980. Five study assignments, distributed relatively evenly within the project area, were selected as a representative sample of streets and parking areas from which to collect license plate data. Surveyors at all five sample sites did hourly "sweeps" of their assigned streets and lots from 10 AM to 4 PM each day except in 1979 when two hour intervals were used between 8 AM and 6 PM.

The license plate study areas were divided into those which were inside the project permit area, those which were in the yellow meter area and the park-and-ride lot near City Hall. In one case this meant an area was subdivided into two sections as it crossed over zone boundaries. Straightforward counts were then used in order to determine occupancy rates, violation rates and percent of resident and nonresident vehicles.

BEACH USER SURVEYS

The purpose of the beach user surveys was to obtain pre- and post-implementation data on the characteristics of the beach user population, their transportation mode and parking behavior, their frequency of use of beaches in the permit zone, and related variables.

Surveys were conducted each year between 1979 and 1983 over three or four weekend days and three weekdays.

The survey was conducted by having two surveyors follow a zig zag pattern across the beach and two surveyors walk along the strand. They would then interview the person over 16 years old who was farthest to their right in every sixth group they passed. These surveys were conducted between 9:00 AM and 4:00 PM. Over 650 surveys were completed each year.

HOUSEHOLD TELEPHONE SURVEYS

The purpose of the 1979, 1981, 1982 and 1983 household telephone surveys of City of Hermosa Beach residents was to obtain pre- and post-implementation information on residents' beach usage, auto ownership, and attitudes toward the parking and traffic situations in their neighborhoods and related issues. The surveys were conducted each year throughout the city at the same time as the beach user. The samples for the surveys were drawn from a criss-cross telephone directory, allowing separate samples to be drawn from Parking Areas I and II and the rest of the city. Each number in the sample was called several times on different nights to reduce the nonresponse rate.

In the 1982 household survey two separate types of samples were drawn. 252 interviews were completed using new numbers drawn from the criss-cross phone directory. An additional 141 surveys were completed by following up on surveys completed in previous years. This second set of data is not usable, however, as is it shows significant biases.

TABLE B-1

OVERVIEW OF MAJOR EVALUATION DATA COLLECTION

	1979	1980	1981
Traffic volume counts	• August 11-19 • Continuously for 5 weekdays and 2 weekend days • 7 locations	• September 10-15 • Continuously for 3 weekdays and 2 weekend days • 6 locations	• August 10-23 • Continuously for 10 weekdays and 4 weekend days • 7 locations
License plate surveys	• August 11-26 • 2-hour intervals on 2 weekdays and 6 weekend days between 8 AM and 6 PM • 4 streets & 1 parking lot	• September 6-14 • 1-hour intervals on 3 weekdays and 4 weekend days between 10 AM and 5 PM • 4 streets	• August 8-16 • 1-hour intervals on 3 weekdays and 4 weekend days between 10 AM and 5 PM • 4 streets & 1 parking lot
Aerial photos	• August 12-26 • 1 weekday, 2 flights, and 3 weekend days, 2-3 flights per day	• September 11-14 • 1 weekday, 1 flight; and 1 weekend day, 1 flight	• August 10-22 • 2 weekdays, 1-2 flights and 2 weekend days, 1-2 flights
Beach user surveys	• August 11-19 • 3 weekdays and 3 weekend days • N = 655	• September 6-14 • 3 weekdays and 4 weekend days • N = 688	• August 8-16 • 3 weekdays and 4 weekend days • N = 674
Loop bus surveys	• August 12-19 • 3 weekdays and 2 weekend days, 9 AM - 5 PM • N = 83	• September 9-22 • Varying weekdays and weekend days, 9AM-5PM • N = 36	• August 9-15 • 3 weekdays and 2 weekend days, 8 AM - 5 PM • N = 123
Household surveys	• August 13-19 • 5 PM - 9 PM weekdays • N = 333	Not conducted	• August 10-21 • 5:30-9PM weekdays; 10AM-4PM weekend days • N = 316

TABLE B-1 (cont.)

OVERVIEW OF MAJOR EVALUATION DATA COLLECTION

	1982	1983
Traffic Volume Counts	Not conducted	• Not conducted
License Plate Surveys parking	Not conducted	• August 20-28 • 1-hour intervals on 3 weekdays and 4 weekend days between 10 AM and 5 PM • 4 streets and 1 lot
Aerial Photos	Not conducted	
Beach User Surveys	• August 13-22 • 3 weekdays and 4 weekend days • N = 873	• August 20-28 • 3 weekdays and 4 weekend days • N = 897
Loop Bus Surveys	Not conducted	• August 20-28 • 3 weekdays and 2 weekend days 8 AM to 5 PM • N = 131
Household Surveys	• August 15-19 • 5-9 PM weekdays • 4-9 PM Sunday • N = 252 new and 191 follow up (not used)	• August 21-25 • 5-9 PM weekdays • 4-9 PM Sunday • N = 356
Permit	• August 14-18 • 9 AM to 5 PM • N = 51	Not conducted

APPENDIX C

SURVEY INSTRUMENTS

The following are copies of the survey instruments used in 1983. In other years, similar forms were used but the differences were, in general, quite minor. Not all questions from these instruments were asked in all years, however, and additional questions were asked some years.

A complete set of survey instruments and frequencies of the responses are available from:

U.S. Department of Transportation
Research and Special Programs Administration
Transportation Systems Center
55 Kendall Square
Cambridge, MA 02141

Also available are complete data sets for all surveys except the license plate surveys.

HERMOSA BEACH LICENSE PLATE SURVEY

DATE: 8/15/81 STREET/DIRECTION: Second Street, WB

START TIME: 10 AM BEGINNING X-STREET: Monterey SURVEYOR: MARY SMITH

END TIME: 4:05 PM ENDING X-STREET: Hermosa # LEGAL SPACES: 16 / 19

START TIME	10:00 AM/PM			11:05 AM/PM			12:04 AM/PM			1:05 AM/PM			2:00 AM/PM			3:03 AM/PM			# CARS PARKED					
TYPE OF SPACE	ROUND #1 LICENSE #	Permit	Violatn	ROUND #2 LICENSE #	Permit	Violatn	ROUND #3 LICENSE #	Permit	Violatn	ROUND #4 LICENSE #	Permit	Violatn	ROUND #5 LICENSE #	Permit	Violatn	ROUND #6 LICENSE #	Permit	Violatn	# PERIODS 1	2	3	4	5	6
C-1	391 NQU	R		391 NQU	R		391 NQU	R		391 NQU	R		391 NQU	R		391 NQU	R							1
C-1	XRA 227	No		XRA 227	No	T	XRA 227	No	T	839 XHP	No								1		1			
C-1	TMF 150	Y		TMF 150	Y	T	510 EQU	No		510 EQU	No									2				
C-1	LWK 712	No		368 ZCO	No		394 RC1	No		1AQ1040	R		486 MPA	R		847 FUB	R		6					
C-1																								
XXX	BAYVIEW	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
C-1																								
C-1																								
C-1																								
Driveway	567 XQU	No	I	567 XQU	No	I	246 BBC	R	DW	246 BBC	R	DW	246 BBC	R	DW	246 BBC	R	DW		1		1		
XXX	MANHATTAN	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
C-1																								
C-1																								
C-1	5940PQ	D		5940PQ	D															1				
C-1																								
C-1																								
XXXX	PALM X X	X		X X X	X		X X X	X		X X X X	X		X X X X	X		X X X X	X		X	X	X	X	X	X
Y	789 YZX	Y		789 YZX	Y															1				
Driveway				ABC 123	No	D	ABC 123	No	D	ABC 123	No	D										1		
Y	478 PQU	No	E	478 PQU	No	E	478 PQU	No	E	MNO 246	No		MNO 246	No		MNO 246	No				2			
TOTAL = CARS																								

assume meter expired — assume meter did not expire

1 "Expired meter" violation.
1 "Expired meter" citation

C-2

SUMMARY:

Actual # Cars: _____

Actual # Violations:

Permit Related ___ (demo only)

Other _____

Actual # Citations:

Permit Related _____

Other

Actual # Permits:

Residential (Blue) _____

Residential Guest (Blue) _____

Yellow Meter (Red) _____

Yellow Meter Guest (Red) _____

Daily Visitor (Grey)

Comments:

HERMOSA BEACH LICENSE PLATE SURVEY

DATE: 8/15/81 STREET/DIRECTION:

START TIME: 10 AM BEGINNING X-STREET: SURVEYOR:

END TIME: 4:05 PM ENDING X-STREET: # LEGAL SPACES:

START TIME / TYPE OF SPACE	ROUND #1 LICENSE #	AM/PM Permit	AM/PM Violatn	ROUND #2 LICENSE #	AM/PM Permit	AM/PM Violatn	ROUND #3 LICENSE #	AM/PM Permit	AM/PM Violatn	ROUND #4 LICENSE #	AM/PM Permit	AM/PM Violatn	ROUND #5 LICENSE #	AM/PM Permit	AM/PM Violatn	ROUND #6 LICENSE	AM/PM Permit	AM/PM Violatn	# CARS PARKED # PERIODS 1	2	3	4	5	6
Y	1A682QL	Y		1A682QL	Y															1				
Red Curb	NOQ975	Y	R	NOQ975	Y	R	NOQ975	Y	R	NOQ975	Y	R	NOQ975	Y	R	NOQ975	Y	R						1
X X X	HERMOSA	X	X	X X X	X	X	X X X	X	X	X X	X	X	X X X	X	X	X X X	X	X	X	X	X	X	X	X
TOTAL # CARS	10	6	3	11	6	6	8	4	4	8	5	3	5	5	1	5	5	1	7	6	4	1	0	2

SAMPLE

SUMMARY:

Actual # Cars: 20
Actual # Violations:
Permit Related 4
Other 3
Actual # Citations:
Permit Related 3
... 2

Actual # Permits:
Residential (Blue) 5
Residential Guest (Blue) 0
Yellow Meter (Red) 4
Yellow Meter Guest (Red) 0
Daily Visitor (Gray) 1

Comments:

HERMOSA BEACH LICENSE PLATE SURVEY (1983)

Purpose

The purpose of the survey is to identify parking use, availability, and violations in Hermosa Beach.

General Procedures

Each surveyor will be responsible for walking along designated streets and recording information on the type of parking space, the license plate number, the use of parking permits, and any parking violations and citations on the survey form (see attached).

Each surveyor must wear a watch, as you will need to begin each shift on the hour and accurately record times. Comfortable walking shoes, light clothing, and possibly a hat should be worn since you will be outside, walking during most of the survey period. Also, carry some change, and if you have any questions while conducting the survey, or if any problems arise, please call 376-6984 and ask to speak to Debra Newman or George Rhyner.

You will also be given a letter explaining this survey's purpose. If anyone approaches you, briefly explain the survey, show the letter and continue your work. For detailed explanations or questions, please refer them to Debra Newman or George Rhyner at 376-6984.

No specific time has been set aside for lunch or breaks, and you will not be reimbursed for your personal expenses. However, all surveyors should be able to complete each round in less than the allotted hour. After completing each round, this "leftover" time may be used for breaks. (There are several take-out or quick food stores in the immediate area for restroom facilities and food; alternatively, some surveyors may prefer to "brown bag" their lunches from home.)

> Important Reminder: You must be at the starting point for the next round on the hour, and no breaks should be taken in the middle of a round.

Survey Form Instructions (Refer to attached form)

1. Before starting your shift, fill in the date, start time, and your name on the top of the sheet. When you arrive on the assigned site, double check the street name, direction, and beginning cross-street before you start.

2. Survey every hour. Be sure to fill in the start time for every round made and circle the AM or PM. You will start Round #1 at 10 AM. Round #2 should then take place at 11 AM, Round #3 at 12 noon, Round #4 at 1 PM, Round #5 at 2 PM and Round #6 at 3 PM. You should be able to make one round within the allotted one-hour period. No more than six rounds should be made each day. When you have completed Round #6, please return to the office with your completed forms.

3. Each parking space on the street should correspond to one box under the "TYPE OF SPACE" columnn. Cross-streets are indicated by "XXX" markings across the page. Record the license plate number of each parked car in the appropriate box under "LICENSE #". If no car is parked in a space, just leave it blank. Working down the form, be sure to skip the appropriate number of spaces to correspond to the spaces on the sheet.

   The codes for the different types of parking spaces are as follows:

   C-1 Residential curb, 1-hour limit
   (Any car can park there for up to one hour without any permit. Cars with residential, residential guest, or daily visitor permit can park there for an unlimited period of time except during street-sweeping hours.)

   Y Yellow meter
   (Cars with residential or residential guest permits can park there free. Any other cars have to pay to park there.)

   D Curb in front of driveway
   (Owner of the house with driveway permit can park there. Otherwise, it is considered illegal.)

   Red Red curb
   (Any car parked, with the wheel extending onto the red curb, is illegal.)

   Red curb
   (These spaces are generally not large enough for a car to park in--you may want to use these as a guide to where you are on the street.)

   S Silver meter
   (Everybody has to pay to park there.)

4. If a car is parked in a space, indicate whether the car has a Hermosa Beach parking permit under the "Permit" column. The codes for various types of parking permits are as follows:

   No No permit

   R Residential permit

   RG Residential guest permit

   D Daily visitor permit

   DW Driveway permit

   This "Permit" column must be filled in, if a car is parked in this space. Leave it blank if the parking space is not taken.

5. Under the "Violation" column, note whether the car is legally parked. The codes for violations are as follows:

   R Parked at red curb

   DW Blocked driveway
   (Parked at curb in front of driveway without a driveway license)

   SW Blocked sidewalk

   SS Street-sweeping
   (Parked during the posted street-sweeping hours; this violation should not apply in this survey)

   E Expired meter
   (In a yellow-meter zone, a violation is when the meter expires and no permit is spotted. In a silver-meter zone, it is always a violation when the meter expires.)

   T Over posted time
   (In a residential 1-hour curb area. When a car without a residential, residential guest, or daily visitor permit is spotted at the same parking space two or more times consecutively, it is considered a "T" violation. There is no time limit for cars with the appropriate parking permits.)

   When a violation is spotted, note if the car is ticketed or not. Where a ticket has been issued, circle the violation; where more than one ticket, indicate number if:

   E 2 2 tickets for expired meter

   T One ticket for over posted time

   SS One ticket for parking during street-sweeping hours

6. After each complete round, check your form to make sure it is legible and correct. It will be much easier to make corrections when that round is fresh in your mind, rather than at the end of the day. "TOTAL up the NUMBER OF CARS", Permits, and Violations at the bottom of each column, after you complete each round.

ID Number ___ ___ ___ 1-3

HERMOSA BEACH USER SURVEY (1983)

Refusals before interview 1 ( ) 2 ( ) 3 ( ) 4 ( ) __ 4

Date:_____ Time:_____ __ 5 __ __6-7

Location_____ Respondent's sex: M F __ 8 __ 9

(BEACH OR STRAND & CLOSEST CROSS STREET) (CIRCLE ONE)

Hello, my name is _____ and I'm working with the City of Hermosa Beach. We are conducting a survey of beach users on the problems of parking and access to the beach. May I have a few minutes of your time to ask you a few questions? Your help will be greatly appreciated. __ 10

Has anyone else from the City interviewed you within the last week?
(IF YES, THANK THE RESPONDENT AND TERMINATE THE INTERVIEW)

1. What time did you arrive at the beach today?_____ __ __ __ __
(RECORD CLOSEST HOUR & AM OR PM) 11 14

2. About what time do you think you will leave the beach today)
_____ __ __ __ __
(RECORD CLOSEST HOUR & AM OR PM) 15 18

3. Are you a Hermosa Beach resident? 1 ( ) Yes 2 ( ) No __ 19

   A. (IF YES) What are the nearest cross-streets to your home?

   _____ and _____ __ 20

   B. (IF NO) Where are you from?_____ __ 21
   (CITY, STATE)

4. A. Would you say that finding a parking space near the beach on weekdays is: (READ CHOICES)

   1 ( ) A major problem 3 ( ) Not a problem __ 22
   2 ( ) A minor problem 4 ( ) (Don't know)

   B. How about on weekends? (READ CHOICES)

   1 ( ) A major problem 3 ( ) Not a problem __ 23
   2 ( ) A minor problem 4 ( ) (Don't know)

5. How many people are in your group, including yourself?_____ __ __ 24-25

6. How did you get to the beach today?

1 ( ) Drove auto yourself
2 ( ) Auto passenger—were you dropped off at the beach? 1 ( ) Yes 2 ( ) No
3 ( ) Motorcycle
4 ( ) Bus
5 ( ) Bicycled/rollerskated
6 ( ) Walked
7 ( ) Other:_____ __ 26 __ 27

(IF ANSWER IS 5-7 (OTHER THAN MOTOR VEHICLE) SKIP TO QUESTION #14)
(IF ANSWER IS 4 (BUS) SKIP TO QUESTION #15)

7. (ONLY ASK GROUPS OF 2 OR MORE): How many vehicles did your group use to get to the beach today?_____ __ 28

8. How long did it take you to find a place to park:

1 ( ) Found a space immediately
2 ( ) 1-5 minutes
3 ( ) 6-10 minutes
4 ( ) 11-15 minutes
5 ( ) 16-30 minutes
6 ( ) Over 30 minutes
7 ( ) (Don't know) __ 29

9. How many blocks away did you park? (HAVE RESPONDENT USE MAP TO INDICATE LOCATION)

1 ( ) Less than 1 block
2 ( ) 1-2 blocks
3 ( ) 3-5 blocks
4 ( ) 6 blocks to 1 mile
5 ( ) Over 1 mile
6 ( ) (Don't know) __ 30

10. What type of parking space was it? (HAVE RESPONDENT IDENTIFY TYPE OF SPACE, THEN CONFIRM WITH MAP)

1 ( ) Yellow meter
2 ( ) Street curb between Loma and Palm
(IF ANSWERS 1 OR 2, ASK:) Are you using a parking permit? (IF YES) What kind?
1 ( ) Yes, a permanent (resident) permit
2 ( ) Yes, a transferable (guest) permit
3 ( ) Yes, a driveway permit
4 ( ) Yes, a daily user permit
5 ( ) No
__ 31 __ 32
3 ( ) Silver meter
4 ( ) Street curb beyond Loma
5 ( ) Parking lot — Did you take a shuttle bus to the beach? 1 ( ) Yes 2 ( ) No __ 33
6 ( ) Friend's garage or driveway
7 ( ) Illegal parking space (e.g., red curb, driveway, alley, etc.)
8 ( ) Other, specify_____ __ 34

11. Why did you park there?

1 ( ) Closest to beach
2 ( ) Cost
3 ( ) No time restrictions
4 ( ) First available space
5 ( ) Other:_____ __ 35

12. How much will it cost to park there today? $_____ __ __ __ 36 39

13. (IF THEY DID NOT RIDE THE SHUTTLE BUS) Do you know about the free shuttle bus system?

1 ( ) No 2 ( ) Yes. Why did you choose not to use it? __ 40
_____ __ 41
_____

14. (IF NOT USING A DAILY PERMIT) Do you know about the $2 daily visitor permit?

1 ( ) Yes 2 ( ) No __ 42

15. How many days during the past four weeks have you come to this beach?
_____ days/month __ __ 43-44

16. How many days during the past four weeks have you gone to other beaches in this area? _____ days/month __ __ 45-46

17. Do you usually go to the beach on: (READ RESPONSES)

1 ( ) Weekdays only
2 ( ) Weekends only
3 ( ) Weekdays and weekends
4 ( ) Rarely go to the beach __ 47

18. Why did you choose this beach over other beaches?_____ __ __ 48-49
_____

19. During your stay in Hermosa Beach today, how much money do you expect to spend, in addition to what you spend for parking?

1 ( ) $0
2 ( ) $.01-$1.00
3 ( ) $1.01-$5.00
4 ( ) $5.01-$10.00
5 ( ) $10.01-$20.00
6 ( ) Over $20.00 __ 50

20. During the past month, have you received any parking citations in Hermosa Beach?

1 ( ) Yes 2 ( ) No 3 ( ) (Not applicable) __ 51

A. (IF YES) How many of each of the following type of citations did you receive? (INDICATE NUMBER OF EACH)

____No permit/1-hour parking ____Parking in red zone/ fire hydrant __ 52 __ 56

____Overtime meter parking __ 53

____Blocking driveway ____Street sweeping __ 54 __ 57

____Parking in alley ____Other: Specify_____ __ 65 __ 58

21. Do you think local parking enforcement should be: (READ CHOICES)

1 ( ) Increased 3 ( ) Kept the same __ 59
2 ( ) Decreased 4 ( ) (Don't know or no opinion)

22. How do you feel about the resident/guest and visitor parking permit program enforced between Hermosa Ave. and Loma Drive? (READ CHOICES)

1 ( ) Totally in favor of it 4 ( ) Oppose it __ 60
2 ( ) Favor it 5 ( ) Totally oppose it
3 ( ) (No preference or opinion) 6 ( ) (Unaware of parking program)

(IF ANSWERED 3 "No preference" OR 6 "Unaware" SKIP TO QUESTION 25)

(IF ANSWERED 1 OR 2 "Favor program"):

A. Why are you in favor of the program? (MULTIPLE RESPONSES ACCEPTED)

( ) Free parking available for residents/guests __ 61
( ) Reduce number of people using beach __ 62
( ) Brings in money __ 63
( ) Good idea, but needs better implementation/more guest permits __ 64
( ) Reduces traffic congestion __ 65
( ) Other, explain_____ __ 66
_____

(IF ANSWERED 4 OR 5 "Oppose program"):

B. Why are you opposed to the program? (MULTIPLE RESPONSES ACCEPTED)

( ) Discriminates against non-residents __ 67
( ) Inconvenient/can't park on streets __ 68
( ) Time limit on parking __ 69
( ) Hard to get permits __ 70
( ) Have to pay for parking __ 71
( ) Not enough guest permits __ 72
( ) Needs better implementation __ 73
( ) Other, explain_____ __ 74
_____

23. Has the resident/guest and visitor parking permit program made it easier or harder for you to park? (READ CHOICES)

( ) Made it easier to park __ 75
( ) Made it harder to park
( ) No effect
( ) (Not applicable)

24. How did you first hear about the program?

1 ( ) Signs or banners on streets
2 ( ) Received warning citation
3 ( ) Received ticket
4 ( ) Local newspaper or radio
5 ( ) Word of mouth
6 ( ) Mail/leaflet
7 ( ) Other_____ __ 76

25. What is your current employment status?

1 ( ) Employed
2 ( ) Student-also employed
3 ( ) Student-not also employed
4 ( ) Homemaker
5 ( ) Retired
6 ( ) Not currently employed
7 ( ) Other_____ __ 77

26. Which of these categories includes your age? (SHOW INTERVIEWEE CATEGORIES)

1 ( )A Under 18
2 ( )B 18-24
3 ( )C 25-34
4 ( )D 35-44
5 ( )E 45-64
6 ( )F 65 or older
7 ( )G (Refused) __ 78

27. Would you say the total annual income of your household before taxes was: (READ EACH)

1 ( ) Less than $6,500 a year
2 ( ) Between $6,500-$19,000
3 ( ) Between $19,000-$45,000
4 ( ) Over $45,000
5 ( ) (Don't know or refused) __ 79

Other comments?_____ __ __ 80-81

_____ __ __ 82-83

_____

_____

Thank you for your help on this survey.

HERMOSA BEACH PARKING LOT SURVEY (1983) ___ 1-3

To be completed by surveyor: Date:_____ Lot:_____ ____ 4-7 ___ 8

Time:_____ AM PM ___ 9-10

We are conducting a parking survey in Hermosa Beach. We would appreciate it if you could take a few minutes to complete this questionnaire and return it to the surveyors (wearing a badge and hat) in the parking lot <u>now</u>. They have pencils available. Thank you for your assistance.

1. What time do you plan to leave?_____ AM PM ___ 11-12
(closest hour)

2. Where will you go while you car is parked here? ___ 13

1 ( ) Work
2 ( ) Beach
3 ( ) Shopping
4 ( ) City Hall/library/citic center
5 ( ) Home
6 ( ) Medical/dental appointment
7 ( ) Visiting
8 ( ) Other recreational activity
9 ( ) Other

3. How will you get there from the parking lot? ___ 14

1 ( ) Walk
2 ( ) Bicycle/rollerskate
3 ( ) Free bus
4 ( ) Driven by someone
5 ( ) Other. How?_____ ___ 15

A. (If you will use the free bus) How did you hear about the bus system?

1 ( ) local newspaper or media
2 ( ) Signs or banners on the street
3 ( ) Information booth
4 ( ) Word of mouth
5 ( ) Used previous year
6 ( ) Other. How?_____ ___ 16 ___ 17

4. What city are you from:_____ ___ 18

5. How many people came in your vehicle, including yourself?_____ ___ 19-20

6. Are you 1 ( ) Female 2 ( ) Male ___ 21

7. Which of the following categories includes your age? ___ 22

1 ( ) Under 18
2 ( ) 18 to 24
3 ( ) 25 to 34
4 ( ) 35 to 44
5 ( ) 45 to 64
6 ( ) 65 and over

8. Which of the following categories includes the total annual income of your household before taxes? ___ 23

1 ( ) Less than $6,500
2 ( ) Between $6,500 and $19,000
3 ( ) Between $19,001 and $45,00
4 ( ) Over $45,000

___ ___ ___ 1-3

HERMOSA BEACH PERMIT SALES SURVEY (1983)

To be completed by booth operator:
Date:_____ Time:_____ AM PM ___ ___ ___ ___ 4-7 ___ ___ ___ ___ 8-11
Location:_____ Permit(s) purchased:_____ __ 12 __ 13

We are conducting a survey in Hermosa Beach on parking, permits and transit services. We would appreciate it if you would take a few minutes to complete this questionnaire and return it to the booth operator. Thank you for your assistance.

1. Where are you from?_____ __ 14
(City, State)

2. Are you buying this permit for your own use?
1 ( ) Yes 2 ( ) No, Skip to Question #10 __ 15

3. During this summer, how many days a month have you come to Hermosa Beach?
_____ days/month ___ ___ 16-17

4. During this summer, how many days a month have you gone to other beaches in this area?
_____ days/month ___ ___ 18-19

5. What time do you plan to leave Hermosa Beach today?_____ AM PM ___ ___ ___ ___ 20-23

6. How many people are in your group, including yourself?_____ ___ ___ 24-25

7. During the past month, have you received any parking tickets in Hermosa Beach for parking without a valid permit? __ 26
1 ( ) Yes. How many?_____ ___ ___ 27-28
2 ( ) No. For other parking violations? 1 ( ) Yes. How many?_____ __ 29
2 ( ) No. ___ ___ 30-31

8. Would you say that finding a parking space near the beach on weekdays and weekends is:

	Weekdays	Weekends	
A major problem	1 ( )	1 ( )	__ 32
A minor problem	2 ( )	2 ( )	__ 33
Not a problem	3 ( )	3 ( )	
Don't know	4 ( )	4 ( )	

CONTINUE ON OTHER SIDE

9. Have you purchased a daily parking permit before today?

1 ( ) No __ 34

2 ( ) Yes. How many times this summer? _____ __ 35-36

10. How did you hear about the daily parking permits?

( ) Information booths __ 37
( ) Signs or banners on the street __ 38
( ) Received parking ticket __ 39
( ) Local newspaper or media __ 40
( ) Word of mouth __ 41
( ) Other. How?_____ __ __ 42-43

11. Do you know about the free shuttle system?

1 ( ) No 2 ( ) Yes. Why did you choose to buy a permit instead of using this system? __ 44

( ) Bus doesn't run often enough __ 45
( ) Bus doesn't go where I want to __ 46
( ) Too hard to carry equipment on bus __ 47
( ) Too hard to return to car __ 48
( ) Unsure of route or schedule __ 49
( ) Other_____ __ 50
_____ __ 51

12. Are you: 1 ( ) Female 2 ( ) Male __ 52

13. Which of the following categories includes your age?

1 ( ) Under 18 2 ( ) 18 to 24 3 ( ) 25 to 34 __ 53
4 ( ) 35 to 44 5 ( ) 45 to 64 6 ( ) 65 and over

14. Which of the following categories includes the total annual income of your household, before taxes?

1 ( ) Less than $6,500 __ 54
2 ( ) Between $6,500 and $19,000
3 ( ) Between $19,000 and $45,000
4 ( ) Over $45,000
5 ( ) Don't know

15. Have you filled out this questionnaire before?

1 ( ) Yes 2 ( ) No __ 55

16. Other comments?_____ __ __ 56-57

_____ __ __ 58-59

_____

HERMOSA BEACH HOUSEHOLD TELEPHONE SURVEY (1983)

Address:_____ __ 1

Telephone Number_____ __ __ __ 2-4

Hello, my name is _____(SURVEYOR), with the City of Hermosa Beach. We are doing a survey in Hermosa Beach. May I have a few minutes of your time to ask you a few questions? __ __ 5-6

First, is this?_____ (IF NO, THANK PERSON AND END INTERVIEW)
(READ ADDRESS)

Now, I need to determine which person in your household I should speak with.

1. How many automobiles, motorcycles or other vehicles are owned or operated by members of this residence?_____cars _____motorcycles _____other (if 0, skip to #12) __ 7 __ 8 __ 9

2. Do you have off-street parking available? 1 ( ) No 2 ( ) Yes. How many vehicles can park in there?_____ vehicles __ 10 __ 11

3. Are you the principal operator of one of the vehicles owned by members of this household? 1 ( ) Yes 2 ( ) No (SKIP TO #12) __ 12

4. How frequently do you have to park on the street near your house? (READ CHOICES)

1 ( ) All or most of the time
2 ( ) Sometimes
3 ( ) Occasionally
4 ( ) Never (SKIP TO QUESTION #9) __ 13

5. Would you say that during this past summer finding a parking place on the street near your house is: (READ CHOICES)

	A. Weekdays	B. Weekends	
Very difficult	1 ( )	1 ( )	__ 14
Fairly difficult	2 ( )	2 ( )	__ 15
Fairly easy	3 ( )	3 ( )	
Very easy	4 ( )	4 ( )	
(Don't know)	5 ( )	5 ( )	

6. How long does it usually take you to find a parking place near your house?

1 ( ) Find space immediately
2 ( ) 1-5 minutes
3 ( ) 6-10 minutes
4 ( ) 11-15 minutes
5 ( ) 16-30 minutes
6 ( ) Over 30 minutes
7 ( ) (Don't know) __ 16

7. Right now, how far from your house is your car parked?

1 ( ) In the garage or driveway (SKIP TO QUESTION #9)
2 ( ) In front of the driveway
3 ( ) Less than 1 block away
4 ( ) 1-2 blocks
5 ( ) 3-5 blocks
6 ( ) 6 blocks to 1 mile
7 ( ) Over 1 mile away
8 ( ) Not parked __ 17

8. What type of space is it?

1 ( ) Yellow meter
2 ( ) Street curb between Loma and Palm
3 ( ) Silver meter
4 ( ) Street curb beyond Loma
5 ( ) Illegal space (e.g., red curb, driveway, alley, etc.)
6 ( ) Other. Specify_____ __ 18 __ 19 __ 20

(IF 1 OR 2) Are you using a parking permit?
1 ( ) Yes, a permanent (resident) permit
2 ( ) Yes, a transferable (guest) permit
3 ( ) Yes, a driveway permit
4 ( ) No

9. A. During the past month, have you received any parking citations in Hermosa Beach?
1 ( ) Yes 2 ( ) No __ 21

B. If yes, how many of each of the following type of ciations did you receive? (INDICATE NUMBER OF EACH)

_____No permit/1-hour parking area __ 22
_____Overtime meter parking __ 22
_____Blocking driveway __ 23
_____Parking in alley __ 25
_____Parking in red zone/fire hydrant __ 26
_____Street sweeping __ 27
_____Other. Specify_____ __ 28

10. What type of parking permit(s) do you and the other persons in this household have? (INDICATE NUMBER OF EACH, INCLUDE ANY MENTIONED IN QUESTION #8)

_____Permanent (resident) permits __ 29
_____Transferable (guest) permits __ 30
_____Driveway permits __ 31
_____Other. What?_____ __ 32
_____None __ 33

(IF RESIDENT HAS A TRANSFERABLE PERMIT):

A. How often do you use your transferable permit?

1 ( ) 4 or more times per week __ 34
2 ( ) 1 to 3 times per week
3 ( ) Less than once a week
4 ( ) Rarely use it
5 ( ) Never used it
6 ( ) (Don't know)

11. Do you think local parking enforcement should be: (READ CHOICES)

1 ( ) Increased 2 ( ) Decreased 3 ( ) Kept the same __ 35

12. During the summer, would you say that traffic congestion in your neighborhood on weekdays is: (READ LIST) How about on weekends?

A major problem	1 ( )	1 ( )	__ 36
A minor problem	2 ( )	2 ( )	__ 37
Not a problem	3 ( )	3 ( )	
(Don't know)	4 ( )	4 ( )	

13. During the summer, at what time of day is traffic the heaviest in your neighborhood?

	A. Weekdays	B. Weekends	
7 AM - 9 AM	1 ( )	1 ( )	__ __ 38-39
9 AM - 11 AM	2 ( )	2 ( )	__ __ 40-41
11 AM - 2 PM	3 ( )	3 ( )	
2 PM - 4 PM	4 ( )	4 ( )	
4 PM - 6 PM	5 ( )	5 ( )	
After 6 PM	6 ( )	6 ( )	
All day	7 ( )	7 ( )	
Varies each day	8 ( )	8 ( )	
(Don't know)	9 ( )	9 ( )	

14. Are you aware that $2 daily visitor parking permits are available?

1 ( ) Yes 2 ( ) No __ 42

15. Are you aware that free shuttle buses to and from the beach are available?

1 ( ) Yes 2 ( ) No __ 43

16. How do you feel about the resident/guest and visitor parking permit program in effect between Hermosa Ave. and Loma Drive? (READ RESPONSES)

1 ( ) Totally in favor of it
2 ( ) Favor it
3 ( ) (No preference or opinion)
4 ( ) Oppose it
5 ( ) Totally oppose it
6 ( ) (Unaware of parking program)

__ 44

(IF ANSWERED 3 OR 6 "No preference or Unaware", SKIP TO QUESTION 20)

(IF 1 OR 2 "Favor program"):

A. Why are you in favor of the program? (MULTIPLE RESPONSES ACCEPTED)

Low cost parking available for residents/guests __ 45
Reduces number of people using beach __ 46
Brings in money __ 47
Good idea, but needs better implementation (e.g., more guest permits) __ 48
Reduces traffic congestion __ 49
Other:_____ __ 50
__ 51

(IF ANSWERED 4 OR 5 "Oppose program"):

B. Why are you opposed to the program? (MULTIPLE RESPONSES ACCEPTED)

Discriminates against non-residents __ 52
Inconvenient/can't park on streets __ 53
Time limit on parking __ 54
Hard to get permits __ 55
Have to pay for parking __ 56
Not enough guest permits __ 57
Needs better implementation __ 58
Other. Explain_____ __ 59
__ 60

17. Has the resident/guest and visitor parking permit program made it easier or harder for you to park? (READ RESPONSES)

1 ( ) Made it easier to park
2 ( ) Made it harder to park
3 ( ) No effect
4 ( ) (Not applicable)

__ 61

18. How did you first hear about the program?

1 ( ) Signs or banners on the street __ 62
2 ( ) Information booths
3 ( ) Received ticket
4 ( ) Local newspaper or media
5 ( ) Word of mouth
6 ( ) Mail/leaflet
7 ( ) Other_____ __ 63

19. Have you made any special arrangements for guest parking as a result of the permit program?

1 ( ) No 2 ( ) Yes. Please explain_____ __ 64

_____ __ 65

_____

20. About how many days during the past month did you go to Hermosas' beaches? _____ days/month __ __ 66-67

21. Do you usually go to the beach on: (READ RESPONSES)

1 ( ) Weekdays only __ 68
2 ( ) Weekends only
3 ( ) Weekdays and weekends
4 ( ) (Rarely go to the beach)

22. How do you usually get there?

1 ( ) Drive auto myself 5 ( ) Bicycle/rollerskate __ 69
2 ( ) Auto passenger 6 ( ) Walk
3 ( ) Motorcycle 7 ( ) Other:_____ __ 70
4 ( ) Bus

23. What kind of new commercial development do you think should be encouraged in Hermosa Beach? (MULTIPLE RESPONSES ACCEPTED)

( ) Department store __ 71
( ) Office/professional __ 72
( ) Drug store/convenience market __ 73
( ) General retail __ 74
( ) Restaurants __ 75
( ) Other, specify_____ __ 76 __ 77
( ) None at all __ 78
( ) Don't know/don't care __ 79

24. Would you say that you have a preference for the type of development that should occur at the Biltmore site?

1 ( ) No 2 ( ) Yes — (IF YES) What do you prefer? (ONLY ONE RESPONSE ALLOWED, READ RESPONSES) __ 80

1 ( ) Hotel __ 81
2 ( ) Apartments
3 ( ) Condominiums
4 ( ) Parking structure
5 ( ) Retail commercial
6 ( ) OIffice/professional
7 ( ) Park/open space
8 ( ) Other, specify

_____ __ 82

25. Are you a: (READ CHOICES)

1 ( ) Permanent resident? (SKIP TO QUESTION 27) __ 83
2 ( ) Summer resident?
3 ( ) Visitor to Hermosa Beach?

26. Where is your permanent residence?_____ __ 84
(CITY, STATE)

27. Do you own or rent your Hermosa Beach residence? 1 ( ) Own 2 ( ) Rent __ 85

28. Which of the following categories best applies to you? (READ CHOICES)

1 ( ) Employed 5 ( ) Retired __ 86
2 ( ) Student—Also employed 6 ( ) Not currently employed
3 ( ) Student—Not also employed 7 ( ) Other:_____ __ 87
4 ( ) Homemaker _____

29. Which of the following categories includes your age? (READ CHOICES)

1 ( ) Under 18 __ 88
2 ( ) 18 to 24
3 ( ) 25 to 34
4 ( ) 35 to 44
5 ( ) 45 to 64
6 ( ) 65 and over
7 ( ) (Refused)

30. Would you say the total annual income of your household before taxes was: (READ CHOICES)

1 ( ) Less than $6,500? __ 89
2 ( ) Between $6,500 and $19,000?
3 ( ) Between $19,000 and $45,000?
4 ( ) Over $45,000?
5 ( ) (Don't know)
6 ( ) (Refused)

31. Finally, do you have any additional comments about the parking, traffic, or enforcement situation in Hermosa Beach?

_____ __ __ 90-91

_____ __ __ 92-93

_____

_____

_____

Thank you very much for your help on this survey. The City of Hermosa Beach appreciates your assistance and time.

Good-bye.

___ ___ ___ 1-3
___ 4

HERMOSA BEACH FREE BUS SURVEY (1983)

To be filled in by surveyor: Type of bus: 1 Loop 2 Shuttle ___ ___ ___ ___ 5-8

Date:_____ ___ ___ ___ ___ 9-12

Time on:_____ Boarding location:_____ ___ ___ 13-14

Time off:_____ Drop-off location:_____ ___ ___ ___ 15-18

___ ___ 19-20

We are conducting a survey on transit services in Hermosa Beach. We would appreciate it if you would take a few minutes to complete this questionnaire and return it to the surveyor before leaving the bus. Thank you for your assistance.

1. Where are you coming from on this trip:		2. Where are you going to on this trip?	
1 ( )	Work	1 ( )	___ 21
2 ( )	Home	2 ( )	___ 22
3 ( )	Store/shopping area	3 ( )	
4 ( )	Beach	4 ( )	
5 ( )	Other recreational activity	5 ( )	
6 ( )	Visiting	6 ( )	
7 ( )	Medical/dental appointment	7 ( )	
8 ( )	Other, _____	8 ( )	___ 23

3. If the Hermosa Beach Free Bus Service was not available, how would you have made this trip?

( ) Would not have made the trip	( ) Bicycle	___ 24 ___ 28
( ) Driven myself	( ) RTD bus	___ 25 ___ 29
( ) Driven by someone	( ) Other. How?_____	___ 26 ___ 30
( ) Walked	_____	___ 27

4. How did you get to this bus from where you started?		5. How will you get to your destination from this bus?	
1 ( )	Walk	1 ( )	___ 31
2 ( )	Bicycle/rollerskate	2 ( )	___ 32
3 ( )	Drive	3 ( )	
4 ( )	Driven by someone	4 ( )	
5 ( )	Transfer from/to an RTD bus	5 ( )	
6 ( )	Other, _____	6 ( )	___ 33

6. How often have you used the Hermosa Beach Bus Service in the last month?

1 ( ) 4-6 days each week
2 ( ) 1-3 days each week
3 ( ) 1-3 days a month
4 ( ) This is first time

__ 34

7. How did you hear about the bus service?

1 ( ) Local newspaper or media
2 ( ) Signs or banners on the street
3 ( ) Information booth
4 ( ) Word of mouth
5 ( ) Used previous year
6 ( ) Other. How?_____

__ 35
__ 36

8. Do you generally have an automobile for your use?

1 ( ) Yes 2 ( ) No

__ 37

A. (If you have an automobile available) Do you have any Hermosa Beach parking permits? (check as many as apply)

( ) Yes, a PERMANENT (residential) permit
( ) Yes, a TRANSFERABLE (guest) permit
( ) Yes, a DRIVEWAY permit
( ) No

__ 38
__ 39
__ 40
__ 41

8. Are you a resident of Hermosa Beach?

1 ( ) Yes 2 ( ) No. What city are you from?_____

__ 42
__ 43

9. Are you: 1 ( ) Female 2 ( ) Male

__ 44

10. Which of the following categories includes your age?

1 ( ) Under 18 2 ( ) 18 to 24 3 ( ) 25 to 34
4 ( ) 35 to 44 5 ( ) 45 to 64 6 ( ) 65 and over

__ 45

11. Are you: 1 ( ) A student 2 ( ) A homemaker 3 ( ) Retired
4 ( ) Employed 5 ( ) Not currently employed

__ 46

12. Which of the following categories includes the total annual income of your household before taxes?

1 ( ) Less than $6,500
2 ( ) Between $6,500 and $19,000
3 ( ) Between $19,001 and $45,000
4 ( ) Over $45,000

__ 47

THANK YOU. Please indicate below any comments or suggestions you have have concerning Hermosa Beach's Transit Service. COMMENTS:_____ __ __ 48-49

_____ __ __ 50-51

_____

APPENDIX D

SURVEY INSTRUCTIONS

PARKING LOT SURVEY INSTRUCTIONS

Objective

We are conducting an evaluation of the Hermosa Beach permit, parking, and transit demonstration project. As part of the project, we would like to know more about who uses parking lots and why. We would appreciate your full cooperation in conducting this survey.

Survey Procedures

You will need a watch to accurately record arrival times. Each assigned morning you will report to City Hall to pick up your survey materials, and each evening you will also return the completed and unused forms to City Hall.

As each driver gets out of their car, ask if they have filled out a questionnaire in the parking lot during the past week. If they have already completed one parking lot survey, thank them for their cooperation. Do not give them another survey to complete. (You should note that we will be conducting several different types of surveys in Hermosa Beach this week So, if someone has received another survey—on the beach, at an information booth, or by telephone—they should still be asked to complete a parking lot questionnaire.)

If the respondent has not received a parking lot survey this past week, hand them a survey and a pencil. Ask them, politely, if they would fill out the questionnaire and return it to you before they leave.

You should fill in the "Date", "Time", and "Lot Location" on the top of the form, before handing the questionnaire to the passenger.

Most passengers will be able to complete the survey in a few minutes. If passengers need assistance in completing the questionnaire, try to help them. If any major questions arise, check with George Rhyner or Debra Newman in the Planning Department at City Hall.

TRANSIT SURVEY INSTRUCTIONS

Objective

We are conducting an evaluation of the Hermosa Beach permit, parking, and transit demonstration project. As part of the project, we would like to know more about who uses and why people ride the Hermosa Beach Free Bus. We would appreciate your full cooperation in conducting this survey.

Survey Procedures

You will need a watch to accurately record bus times. Each assigned morning you will report to City Hall to pick up your survey materials, and each evening you will also return the completed and unused forms to City Hall.

As each rider boards the bus, ask them if they have filled out a questionnaire on-board the bus during the past week. If they have already completed one transit survey, thank them for their cooperation. Do not give them another survey to complete. (You should note that we will be conducting several different types of surveys in Hermosa Beach this week. So if someone has received another survey--on the beach, at an information booth, or by telephone—they should still be asked to complete a transit questionnaire.)

If the respondent has not received a transit survey this past week, hand them a survey and a pencil. Ask them, politely, if they would fill out the questionnaire on-board the bus and return it to you before they leave.

You should fill in the "Date", "Time On", and "Boarding Location" on the top of the form, before handing the questionnaire to the passenger. After they return it, you should note their "Time Off" and "Drop-off Location". Use the attached sheet for determining the "Boarding" and "Drop-off" locations.

Most passengers will be able to complete the survey in a few minutes. If passengers need assistance in completing the questionnaire, try to help them.

DAILY PERMIT SALES OPERATOR INSTRUCTIONS (1983)

Objective:

We are conducting an evaluation of the Hermosa Beach permit, parking and transit demonstration project. As part of the project, we would like to know about those people who purchase the daily visitor parking permits. We would appreciate your assistance in conducting this survey.

Survey Procedures:

After you have sold a daily permit, ask that person if they could take a few minutes to complete a survey for you (keep a couple of extra pencils for respondents to fill in survey). Only ask those persons who purchase a permit to complete the questionnaire. We are not interested in surveying everyone who comes up to the booth or window, this year.

Before giving the survey to the person, please fill in the "Date", "Location", "Time" (include AM or PM), and the number of "Permits Purchased" in the box at the top of the survey. If the respondent does not understand a question or has trouble completing the survey, please try to be helpful, but do not answer the questions for them. When respondent is finished, have the respondent return the completed questionnaire to you.

Record Procedures

After each person or group leaves, please complete the Permit Sales Operator Record sheet. Fill in the date, time (AM or PM), the number of persons in the group, the number of permits sold, other information (e.g., request information, gave brochure, directions to bus, beach, etc.) and if they completed the survey (if they did not, please indicate why not). The top of this form shows three examples.

1983 HOUSEHOLD TELEPHONE SURVEY INSTRUCTIONS

Introduction

We are conducting an evaluation of the Hermosa Beach demonstration project. As part of the evaluation we would like to know how current Hermosa Beach residents feel about the project. These household telephone results will be compared with previous household surveys conducted in Hermosa Beach in previous years. We would appreciate your full cooperation in conducting this survey.

Survey Procedures

Call all households listed on your CALL RECORD SHEET. Each time you place a call you must write a symbol in one of the five consecutive columns, to indicate what happened:

NR Non-resident	Your first question should be an address and telephone check (Is your number_____?) If you have incorrectly dialed or reached an incorrect address, politely terminate interview and redial. Record as a non-resident.
B Busy	When you get a busy signal, note the time on the sheet and try again in 5 to 15 minutes. A busy signal indicates someone is home, so try to reach that number that evening. If you are unsuccessful, try again the following night.
NA No Answer	When no one answers after 7 rings, note the time on the sheet and try again in one hour. If no one answers on the second call, try again the following night. Repeat this procedure each night trying to reach households at different times of the night on different days.
CB Callback	When the person you need to interview, as indicated by the selection key, is not available, you should set up an interview time, note it on the questionnaire and Call Record Sheet and return the call at that time. If the only time we can reach this person is during the day, refer call to supervisor
D Disconnected	If you receive any phone company recordings (number changed, unable to complete call, number not in service, etc.) hang up immediately and proceed to next call. Don't waste time listening to the full recording.
Ref Refused	Some people will refuse to cooperate. If they appear hesitant or initially refuse, tell them the survey will take only a few minutes and the City is very interested in receiving this information. If they still refuse, note as "Ref".
CQ Completed Questionnaire	This indicates a completed questionnaire.

The comments column is to record any unusual situations and to indicate time and date for any call backs.

To ensure that we obtain a random sample of households and residents, you must use the questionnaires in the order that they are given to you. Read the introduction on the questionnaire, as it is printed. Offer additional information only as needed. The more time you spend talking about why we are doing the survey, how the results are going to be used, etc., the fewer phone calls you will complete.

Some Helpful Hints

Our past experience shows that if we can give people good reasons for giving us the information we need, most people will do so. Therefore, it is very important that we answer any questions a person may pose about the validity of the survey, what our purposes are, why we need the information to specific questions, etc. Here are some suggestions for encouraging them to participate:

I only need a few minutes of your time.

I'd be happy to call back in 1/2 hour if it's more convenient.

Your household is part of a random sample chosen to represent all households in Hermosa Beach. That's why it's particularly important that we interview this household.

All the information we gather is for statistical purposes only and will be confidential. Your answers will be tallied along with all the other households we contact and only be given as a percentage.

If a person questions the validity of the survey, you may refer him or her to your supervisor.

We want you to complete as many interviews as possible during the evening, so do not get involved in long drawn-out conversations with people. If they want to go on at length about their concerns, politely tell them 1) you must get on with your phoning as you are expected to complete a certain number of calls per evening, or 2) you were just hired to do this survey and are not really aware of all the ramifications of the problem.

U. S. GOVERNMENT PRINTING OFFICE: 1985--501-131--680

400 copies