



CENTRAL CITY

# PARKING STUDY

CENTRAL CITY

*Wilbur Smith and Associates*



contact: Walter King  
CA DOT

**Los Angeles Central City  
Parking Study**

**Prepared for  
City of Los Angeles  
Department Of Transportation**

By  
*Wilbur Smith and Associates*  
October 1981

# Wilbur Smith and Associates

CABLE WILSMITH  
TELEX 87-3439

5900 WILSHIRE BOULEVARD  
SUITE 800

Los Angeles, Calif. 90036

PHONE (213) 938-2188

October 26, 1981

Mr. Donald R. Howery  
General Manager  
Department of Transportation  
City of Los Angeles  
Room 1200, City Hall  
Los Angeles, California 90012

Dear Mr. Howery:

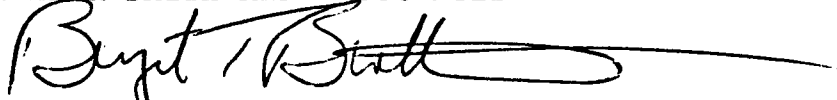
We are pleased to submit our report, Los Angeles Central City Parking Study. This report has been prepared in accordance with the Scope of Services for "Phase II - Downtown Parking Inventory and Demands," of our agreement.

The parking analysis indicated that there was a total parking deficiency of about 5,700 spaces in the Central City at the time of our 1979 parking surveys. Given the forecast development levels and a continuation of current travel characteristics, a parking deficiency of 23,800 is anticipated for the Central City in 1990. Major transportation programs anticipated by 1990 -- the SCRTD Starter Line, the City Parking Management Program, and an additional busway or rail project serving the Central City -- would reduce this parking deficiency to approximately 11,000 spaces.

Additional transportation programs and projects are needed to address this anticipated parking deficiency. These programs should encompass: 1) improved circulation within the Central City to enhance access to parking deficient areas; 2) provision of additional parking facilities; and 3) continued implementation of programs to reduce automobile use for Central City trips. Identification of funding mechanisms will be the central determinant of the feasibility of such potential programs.

We hope these findings will be helpful in addressing Central City parking needs.

Respectfully submitted,  
WILBUR SMITH AND ASSOCIATES

  
Bryant T. Brothers  
Associate

BTB:ebm



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## EXECUTIVE SUMMARY

The Central City area of Los Angeles is the major activity and employment center of the Nation's second largest metropolitan area. The Central City contains dynamic and growing financial, governmental, cultural, and retail areas, as well as increasing residential development. The continuing strength of growth in the Central City is evidenced by present high building and parking occupancy rates, by the acceptance of increased per unit building and parking leasing costs, and by the extensive on-going development activity.

The accessibility of the Central City has been an important factor in its growth. However, the construction of roadway, busway and parking facilities in recent years, as well as increases in bus services, have not kept pace with the increases in Central City activity. Several potential transportation programs, principally the Wilshire Boulevard rapid transit starter line and the regional busways and/or light rail lines, could provide significant assistance in maintaining accessibility. Central City automobile travel and parking could also have been affected by the Downtown People Mover, for which Federal funding support was withdrawn after the herein described parking analysis was completed.



However, even with the increased use of non-automobile modes which may be encouraged by these programs, the Central City will continue to depend on the mobility provided by the private automobile for the foreseeable future. To reflect this continuing importance of the automobile, any comprehensive transportation program to improve area accessibility must address the automobile parking needs required to sustain economic growth and redevelopment in the Central City.

#### PURPOSE AND SCOPE OF THE STUDY

Previous studies of parking for the Central City of Los Angeles were conducted by Wilbur Smith and Associates in 1967 and 1972, and addressed parking needs of the area through 1980. Further assistance with parking analysis was provided to the Community Redevelopment Agency (CRA) of the City of Los Angeles to update parking analyses during 1975 and 1978.

Given the changed intensity and location of development projects and redevelopment plans since those studies, a comprehensive review and reassessment of downtown parking needs was required to provide a continuing program responsive to changed development trends and conditions. This analysis of future parking needs also must address the potential effects upon parking needs of such transportation programs as the parking waiver elements of the Los Angeles Parking Management Program, the Downtown People Mover, and future improved rapid transit service into Downtown Los Angeles.

The work program for this study encompassed the collection, analysis, and evaluation of parking data to identify present and future (1990) parking conditions and deficiencies within the Central City, and to identify those areas where additional parking is necessary. The analysis of future parking conditions was structured to permit an assessment of future parking needs both with and without the principal proposed transportation programs which would affect parking requirements.

Specific study tasks included the following:

1. Update the Central City curb and off-street parking inventory;
2. Estimate present (1979) parking demands, and project parking demands for the development level anticipated for 1990 within each Central City analysis zone;
3. Conduct a supply-demand analysis of 1979 to 1990 parking conditions to determine the areas and magnitudes of parking surpluses and deficiencies, and assess the need for additional future parking;
4. Evaluate the impact of Parking Management Program space-waiver provisions, Downtown People Mover, and improved rapid transit on future Central City parking needs.
5. Evaluate locations, costs, financing mechanisms, operating approaches, and feasibility of parking facilities to serve identified parking deficient areas.

The Central City parking study area encompasses a 268-city block area, generally bounded by the Harbor and Santa Monica Freeways, Sunset Boulevard/Macy Street, and Alameda and San Pedro Streets. The study area was divided into 12 subareas; consisting of 100 analysis zones, as depicted in Figure 2 (Chapter 1). The 100-zone system, generally conforming to the Community Redevelopment Agency (CRA) zone system, and was used as the basis for projections and analysis.



## INVENTORY OF PARKING SUPPLY

The parking supply of the study area, as surveyed in the Summer of 1979, was 111,124 spaces. Of this total, 5,888 spaces, or 5 per cent, were located at the curb with the remaining 105,236 spaces located in private and public off-street parking lots and garages. Since 852 curb spaces are restricted to loading purposes only, a net total of 110,272 spaces are available for parking. A complete tabulation of parking supply by City block can be found in Appendix A.

### Curb Parking

Slightly over 44 per cent of the available curb spaces are metered, amounting to 2,616 of the total 5,888 spaces. Of the remaining 3,272 spaces, 852 are loading areas, 1,470 have posted time restrictions (predominantly one-hour parking limits), and 950 are unrestricted as to parking duration. The core area of the Central City, generally from First to Ninth Street, and from Figueroa Street to Los Angeles Street, has little or no curb parking. Metered parking is located predominantly south of Ninth Street and in the Civic Center-Little Tokyo area. Unmetered stalls are available on the fringes of the study area, generally to the south and to the east.

### Off-Street Parking

A total of 974 off-street parking facilities provide 105,236 spaces in the Central City study area. Of the total, 64 per cent are classed as public parking, that is, those which are available to the general public regardless of their trip purpose or destination. The public parking is located in 373 public facilities (lots and garages) containing 66,748 spaces. The user-restricted (employee, customer and company vehicle) parking consists of 601 private surface lot or garage facilities containing 38,488 spaces.



About 54 per cent of the off-street spaces are now in garages, while 46 per cent are in open lots. The 76 public garages average 510 spaces per facility, while the 297 public lots average 93 spaces per lot. In the 57 private garages, an average of 315 spaces exists per facility, compared with an average of 38 spaces per facility in the 544 private lots.

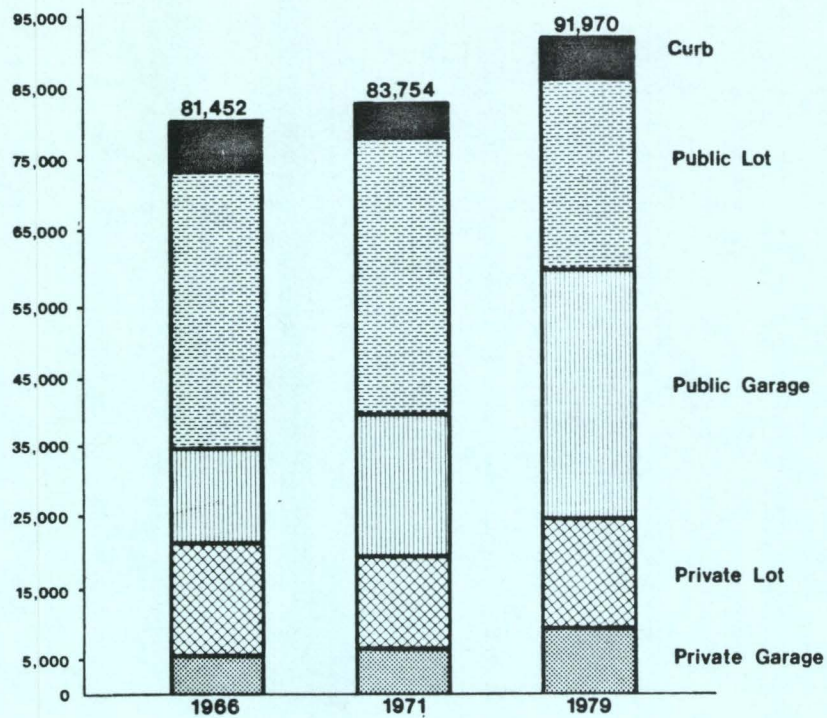
The majority of public off-street parking is privately owned and/or operated. Over 40 parking operators manage parking facilities in the study area. Approximately 11 per cent of public off-street parking spaces are operated by government agencies. Conversely, some 52 per cent of the 38,488 private off-street spaces are in government-related facilities, almost all of which are located in the Civic Center area.

#### Inventory Comparison: 1966 to 1979

Between 1966 and 1979, the number of parking spaces in the study area south of First Street increased by 11,318 spaces, for an increase of approximately 14 per cent. There has been an increase of 8,100 public spaces, or 15 per cent, with the increase occurring entirely within public garages. The available spaces in public lots dropped by 12,882 spaces, or 33 per cent, and curb spaces dropped by 1,144 spaces, or 19 per cent. The reduction of public lot spaces has paralleled the period of new downtown construction, which utilized land formerly occupied by surface parking lots. The changes over the 1966 to 1979 period are depicted in the graph on the following page.

#### EXISTING PARKING USAGE AND DEMAND

The demand for parking in the Central City has increased more rapidly in recent years than the increases in the number of parking spaces. This has resulted in a higher usage level of



CENTRAL CITY PARKING SPACES  
South Of First Street

available parking spaces, and increasing areas of local parking deficiencies. These trends and areas of deficiencies were confirmed through a survey conducted in October, 1979, which identified peak occupancy levels of parking spaces for a typical weekday.

#### Parker Accumulation

The peak accumulation of parked vehicles generally occurs at approximately 2:00 P.M. in the various areas of the Central City. Near-peak accumulation of parkers are present throughout the 11:00 A.M. to 4:00 P.M. period. The October, 1979, survey found a peak of 92,188 parked vehicles present in the Central City study area, which represents an occupancy of 84 per cent of all available parking spaces.

Highest parking space occupancy levels were found in the areas adjacent to and south of Seventh Street from Hill Street westward, in the Civic Center area, in the Bunker Hill area, and



in the areas along South Broadway. Parker accumulation and parking space occupancy levels are presented in Figure 8 and Table 10 in Chapter 3.

#### Trend of Parking Space Usage

While both parking supply and usage have increased considerably since 1966, the growth in the demand for spaces has outpaced the provision of additional parking in the Central City. The table below summarizes the changes for the portion of the study area south of First Street.

	<u>1966</u>	<u>ANNUAL PER CENT INCREASE</u>	<u>1971</u>	<u>ANNUAL PER CENT INCREASE</u>	<u>1979</u>
Parking Spaces	81,452	0.6	83,754	1.3	92,770
Peak Parker Accumulation	60,500	1.4	64,756	2.2	76,002
Portion of Spaces Occupied	74%	-	77%	-	82%

This increased utilization of parking spaces results largely from the displacement of surface parking lots by new Central City developments. While these developments may be providing sufficient parking to meet internal demand, the projects result in a net negative effect of parking due to the displacement of the surface parking spaces.

The increasing occupancy rates of area parking facilities is now approaching levels representing the practical capacity of Central City facilities. This is evident in the rapid escalation of parking fees and the increasing perception of local parking deficiencies in most areas of the Central City.

#### 1979 Parking Demand

The location of parked vehicles during the peak is not necessarily a reliable indicator of parking requirements and

conditions in an area on a block or zone basis. Central City employees and visitors may park several blocks from their actual destination, because of either the unavailability of a parking space or the cost of parking at their actual destination.

The parking actually required by the activities within a block and/or zone, referred to as parking demand, was estimated through the application of parking demand rates to the land use data for that block and/or zone. These parking demand rates were determined through interviews of parkers to identify their actual destinations. The rates were initially determined in the earlier Central City parking studies and were updated by the parker interviews and other data available from this study.

The 1979 Central City parking demands were developed based upon an estimated total gross floor area of 70 million square feet, and total employment of 182,800 persons. The land use information and resultant parking demands are presented for each zone in Chapter 3 and Appendix C.

Total peak parking demand in 1979 is for 92,390 spaces, consisting of a parking demand for 13,730 short-term spaces (less than four hours) and 78,660 long-term spaces. The short-term demand, as a proportion of total demand, has decreased since previous studies, reflecting increased development of employee-intensive office and manufacturing space, relative to visitor-oriented retail activity.

#### 1979 Parking Space Usage Surpluses and Deficiencies

In order to assess the existing parking needs, a comparison was made of parking demand to the actual supply of parking spaces for each study area block and/or zone. For analysis zones with parking space deficiencies, the deficiency was reduced to the extent possible by any "surplus" parking spaces within an acceptable walking distance of the deficient zone (three blocks



for long-term parkers, one block for short-term parkers). Those deficiencies which cannot be offset through this process represent additional parking needs.

Using the above procedure, 11 of 100 analysis zones were identified as having insufficient parking to meet 1979 parking demands. The total deficiency amounts to 5,454 long-term and 245 short-term spaces. The areas needing additional parking in 1979 are identified in Figure 12, Chapter 3, and include the east Civic Center, several areas along mid-Spring and mid-Broadway, Wilshire-Sixth area, and the mid-Olive Street area.

#### 1990 PARKING NEEDS BASED UPON CURRENT TRENDS

The estimation of 1990 parking demands and needs for the Central City study area was based upon forecasts of floor area and employment by land use type. Where identified, individual planned or proposed development projects were incorporated into the analysis procedure. The development of Bunker Hill, the rehabilitation of portions of Spring Street, and the maintenance of significant retail activity in the Olive-Hill area are the key assumptions of the forecast.

The "Current Trend" projection of parking demands is based upon a continuation of current travel mode and parking characteristics through 1990. This portion of the analysis also assumes no implementation of the SCRTD Rapid Transit Starter Line, the Downtown People Mover, City Parking Management Programs, nor any busway or light rail line. The possible impacts of each of these programs upon Central City parking needs are addressed separately in a following section.

#### 1990 Parking Demand

The 1990 parking demand was estimated for each analysis zone in a manner consistent with the 1979 demand estimation

procedures. The peak parking demand is estimated as 103,610 long-term parked vehicles and 19,950 short-term parked vehicles.

#### 1990 Parking Surpluses and Deficiencies - Current Trend

The increases in Central City activity and parking demand will not necessarily be accompanied by a proportionate increase in parking supply. This results from two factors: 1) much of the new development, while meeting internal parking needs, will displace and not replace present surface parking lots which presently serve adjacent land uses; and 2) significant increases in usage of older buildings, which were constructed with little or no parking, is expected to occur. Central City parking is estimated to total 119,000 spaces in 1990.

Given the projected land uses and a continuation of current travel characteristics, a 1990 parking deficiency of 23,800 spaces would be expected for the Central City. The principal areas and magnitude of the projected deficiency as follows:

<u>AREA</u>	<u>PARKING SPACES DEFICIENT IN 1990</u>
Garment District	1,400
Olive-Hill-Seventh	2,800
Fifth-Broadway Spring	900*
Sixth-Flower	2,600
Bunker Hill	9,600
Los Angeles County-Los Angeles Times	900
Main-Spring-First	5,600*
	<hr/>
	23,800

\* Please read below for impact of revised State Building plans.

Note that the parking deficiencies summarized above would be greatly changed by the recent plans to locate the planned State Office Building on the block bounded by Spring, Fourth, Broadway, and Fifth Streets, rather than at the previously



proposed First and Main Street location which was used in this parking analysis. The 5,600-space deficiency indicated for the Main-Spring-First Street area largely resulted from the proposed State Building, which was to provide no employee parking. Relocation would reduce the Main-Spring-First Street deficiency by over 3,000 spaces. Conversely, the State Building location in the 5th-Broadway-Spring Street area would increase the 900-space deficiency indicated for that area to a revised total deficiency of approximately 2,800 spaces. The total 23,800-space deficiency would be reduced by approximately 1,000 spaces by this change.

#### PARKING IMPACTS OF PROPOSED TRANSPORTATION PROGRAMS

The 23,800-space Central City parking deficiency indicated above for 1990 reflected a continuation of present travel modes and characteristics. As evidenced during the 1970's, travel characteristics can be significantly affected for short periods of time by fuel availability and, to a lesser extent, fuel prices. Such future energy impacts cannot be reasonably forecast, and thus are not considered herein.

However, four transportation programs which could potentially affect Central City parking needs by 1990 were identified for consideration in this parking study. The programs evaluated were:

- The Southern California Rapid Transit District (SCRTD) Starter Line (also referred to as the Wilshire or Metro Rail project);
- The Downtown People Mover;
- City of Los Angeles Parking Management Program;
- and

- Freeway Transit (Busway or Light Rail).

Federal funding support was withdrawn from the Los Angeles Downtown People Mover Program since the parking analysis documented herein. However, the parking impacts of this program are presented herein for information purposes.

#### SCRTD Starter Line

The proposed Wilshire-North Hollywood Starter Line subway will have four stations in the study area, located at Seventh and Flower Street, Fifth and Broadway, First and Broadway, and Union Station. Based on the findings of the 1979 SCRTD Alternatives Analysis for the rail project, operation of the Starter Line could potentially reduce the peak parking demand in the Central City study area by 9,880 vehicles.

The four Starter Line stations would affect parking requirements for 47 Central City zones, with 18 of those zones expected to have a 1990 parking deficiency. The parking deficiency in these zones is estimated to total 14,027 spaces. Location of the stations relative to these parking-deficient areas would permit effective use of the full parking demand reductions. This would reduce the net deficiency in these areas to 4,147 spaces in 1990, and would result in a significant 41 per cent reduction of 1990 parking needs for the Central City, from 23,826 spaces to 13,946 spaces. Location of the parking deficiencies which could be reduced by the Starter Line is identified in Table 15 (Chapter 5).

#### Downtown People Mover

The Los Angeles Downtown People Mover (DPM) was planned as a circulation/distribution system for the central business district. It would run approximately three miles through the north and west sides of the Central City, from Union Station on



the north to the Convention Center on the south. The DPM was planned as a grade-separated facility with automated vehicles providing service to 13 stations along the proposed route.

The DPM was planned to provide a capacity of 2,000 parking spaces at Union Station and 1,750 at the Convention Center. Application of a 90 per cent factor to reflect efficiency of use, would yield a total of 3,375 peak parkers which could be accommodated at the intercepts in lieu of parking at individual downtown destinations.

To assess the potential impact of the DPM on Central City parking needs, the 3,375 parking supply at the intercepts was allocated to each DPM station area. The parking supply was apportioned to each DPM station destinations based upon the magnitude of the projected 1990 parking deficiencies in the blocks surrounding each station. This analysis indicated that an average of 16 per cent of the unmet parking needs within two blocks of a DPM station could be accommodated by the DPM intercept station parking facilities. Table 16, in Chapter 5, indicates the location and magnitude of these potential reductions in parking deficiencies.

Given the status of the DPM project at the time of this report, its potential parking impacts were not included in the analysis of the overall, cumulative affects of the various programs on Central City parking needs.

#### Parking Management Program-Parking Space Waiver Element

Over the past several years, the City of Los Angeles has been developing a parking management program to identify positive incentives for employers to encourage their employees to use more efficient travel modes or remote parking, and thereby reduce parking construction and operating costs. A demonstration of the concept has been funded by the U.S. Department of Transportation. Under these programs, the City would permit



developers and existing building owners to save capital and operating costs by providing below-code parking in return for legal assurances of increased ridesharing by employees, subsidized employee bus passes, covenants for lower-cost remote parking substitution, and preferential parking for high-occupancy carpool and vanpool vehicles.

The innovative nature of this program, and the fact that its impacts have not been simulated in detail, makes the program's impacts on parking difficult to quantify. The City estimates that the program could reduce parking demands from 65 to 1,308 parking spaces, with a medium estimate of 327 spaces saved. Review of the results of other programs indicate that the 1,300-space demand reduction appears reasonable. A reduction of this magnitude would equal only 5.5 per cent of the 1990 parking deficiency. This reduction would have minimal effect on individual areas of parking deficiency, as presented in Table 17 (Chapter 5).

#### Freeway Transit Program

Busways and rail lines are currently being planned and evaluated by the California Department of Transportation for implementation within or paralleling freeway rights-of-ways. Implementation of a transit facility in one corridor, possibly the Harbor Freeway Corridor, is anticipated prior to 1990. The Los Angeles County Transportation Commission is also preparing a study in the use of an existing railroad right-of-way for rail transit use within this general corridor between Los Angeles and Long Beach.

Implementation of a busway or rail line could potentially reduce 1990 Central City parking demands by as many as 3,100 parking spaces. The location of these reductions in Central City parking demands would depend upon which one of the several different corridor modal and downtown alignment alternatives is



selected for implementation. For purposes of this analysis, as summarized in Table 18 (Chapter 5), it was assumed that a rail line would be implemented and that it would follow the proposed DPM alignment through the Central City area.

#### Cumulative Program Impacts on Parking

The collective parking impacts of the three programs expected by 1990 -- the SCRTD Starter Line, the Los Angeles Parking Management Program, and a transit line in the Harbor Freeway Corridor -- would be slightly less than the total of the individual impacts. Collectively, the programs are estimated to reduce 1990 parking demands by 12,287 spaces, versus individual impacts totalling 14,280 spaces. The individual and cumulative impact on parking demands and deficiencies is summarized in Table A.

With implementation of all these programs by 1990, a parking deficiency amounting to 11,149 spaces is expected for the Central City. The areas where these deficiencies are anticipated include Bunker Hill, the Spring-Broadway-Fifth area (largely due to the effects of the proposed State Office Building), the Olive-Hill Street area, Flower-Sixth Street area and the California Mart-Garment District. Location of the parking deficient areas is depicted in Figure 19 (Chapter 5).

#### PRINCIPAL FINDINGS AND CONCLUSIONS

The study findings indicate that parking availability is and will continue to be a key concern in the efforts to enhance the attractiveness of the Central City to potential new development and particularly for the revitalization of the older areas, which are at present a greatly underutilized resource. Significant efforts will be needed in the future by both public and private interests to both promote increased usage of alternatives to the single-occupant automobile, and to increase the available parking supply.

Table A

1990 PARKING DEFICIENCY WITH AND WITHOUT TRANSPORTATION PROGRAMS  
Los Angeles Central City Parking Study

AREA	1990 PARKING DEFICIENCY	ESTIMATED REDUCTION IF PARKING DEMAND AS RESULT OF INDIVIDUAL PROGRAMS				REMAINING 1990 PARKING NEEDS
		Starter Line	Freeway Transit (b)	Parking Management	All Programs	
		A-Civic Center	3,310 <sup>(a)</sup>	1,390	520	
B-Bunker Hill-North	10,582	230	1,550	590	2,370	7,292
C-North Broadway-Spring	2,678	2,230	410	150	2,790	625
E-Wilshire	3,962	2,960	580	220	3,760	55
F-East Sixth	240	400	40	10	450	0
G-West Eighth	0	390	0	0	390	(390) surplus
H-South Park	227	2,280	0	10	2,290	(1,890) surplus
I-Garment District	400	0	0	20	20	380
L-South Broadway-Spring	2,037	0	0	110	110	1,587
TOTAL	23,436 <sup>(a)</sup>	9,880	3,100	1,300	14,280	
					TOTAL REMAINING DEFICIENCY	11,149
					NET REDUCTION OF 1990 PARKING NEEDS BY PROGRAMS	12,287

(a) Excludes deficiency of 390 short-term spaces.

(b) Reflects Busway or Rail Line in Harbor Freeway Corridor.



## Principal Study Findings

The analyses and surveys conducted by this study indicate that the availability of parking is a current problem in many areas and is expected to become more so in the future. This is despite the past and anticipated continuing future increases in public transit and ridesharing use by Central City employees and visitors. Study findings include:

1. In 1979, there were 110,272 parking spaces within the Central City. The trend is towards a reduction in on-street parking, and the displacement of off-street public lots. Public garages represent most of the increases in the parking supply.
2. Since the 1966 parking study, parking needs have increased at a greater rate than the increases in the number of parking spaces. This has resulted in increased high levels of parking space occupancy and increased perceptions of a "parking shortage."
3. In 1979, there were a number of parking deficient areas, with the deficiency totalling 5,700 spaces. These general areas include:
  - East Civic Center
  - Olive-Sixth Streets area
  - Wilshire-Sixth Street area
  - Broadway-Spring Street areas between  
Fourth and Eighth Streets
  - Garment District.
4. If the current Central City travel and parking characteristics continue, the Central City parking deficiency will increase to approximately 23,800 spaces by 1990.

5. A number of transportation programs are planned which could meaningfully affect Central City parking needs by 1990. These are the SCRTD Regional Core Starter Line (Metro Rail Project), the City of Los Angeles Parking Management Program, and the addition of a busway or rail line into the Central City, potentially in the Harbor Freeway Corridor. The estimated cumulative affect of these three programs would be a reduction in Central City 1990 parking needs by about 12,300 spaces.
6. Even with implementation of all three of these programs by 1990, the Central City would continue to experience a parking deficiency of about 11,100 spaces, approximately twice that of 1979.

#### Conclusions and Recommendations

Given the anticipated effects on Central City parking deficiencies, it is recommended that the City of Los Angeles should continue to support the above-mentioned projects and to promote private business support and participation in these programs.

The implication of this parking analysis is that although these programs would greatly reduce the parking deficiencies that would otherwise be present in the Central City, further efforts would still be required to achieve a level of parking availability reasonable to support growth of Central City activities. Such efforts should be threefold, with progress in all three necessary to eliminate the anticipated future parking deficiencies:

1. Provision of improved means of circulation within the Central City, either by expanded minibus-type services



and/or by development and alignment of a future regional rail line or DPM-type system through the Central City to accomplish a circulation function. An improved and expanded circulation system is needed to improve access to parking deficient areas from future transit stations/lines and parking surplus facilities, and to reduce the need for automobile use between Central City destinations.

2. Provision of additional parking facilities in the parking deficient areas, particularly for those areas where older buildings are being renovated and reoccupied by office and retail uses.
3. Promotion and support of further transportation management and facility development programs which would change travel mode usage for trips to the Central City.

#### IN PROSPECT

Parking will continue to be a principal consideration in assuring the proper economic development of high-potential areas, revitalizing obsolescent areas, and enhancing the competitive position of Central City businesses. Continuing efforts by both the City of Los Angeles and private businesses are necessary to ensure that parking availability and demands are kept in reasonable balance.

The present critical needs are: 1) the identification and evaluation of potential improvements to the Central City circulation system, provided principally by the minibus routes, to better serve parking deficient areas; and 2) the investigation of the locations, and available development and operating mechanisms with which additional parking could be provided to areas of chronic parking deficiency.

Identification of adequate financial sources and mechanisms will be the central determinant of the feasibility of the above efforts. The City of Los Angeles should assess the potential for new or increased funding sources, which may include any or all of the following:

- Expansion of metered areas and increased rates for on-street parking.
- Increased minibus fares.
- Development of improvement assessment districts for the areas receiving benefits.
- Fees applicable to offset parking/travel effects of new or renovated developments.
- Joint development revenues (parking structures).

Resolution of these program and financing needs is likely only through a cooperative association of both the public and private interests which are responsible for and affected by the provision of adequate Central City access.



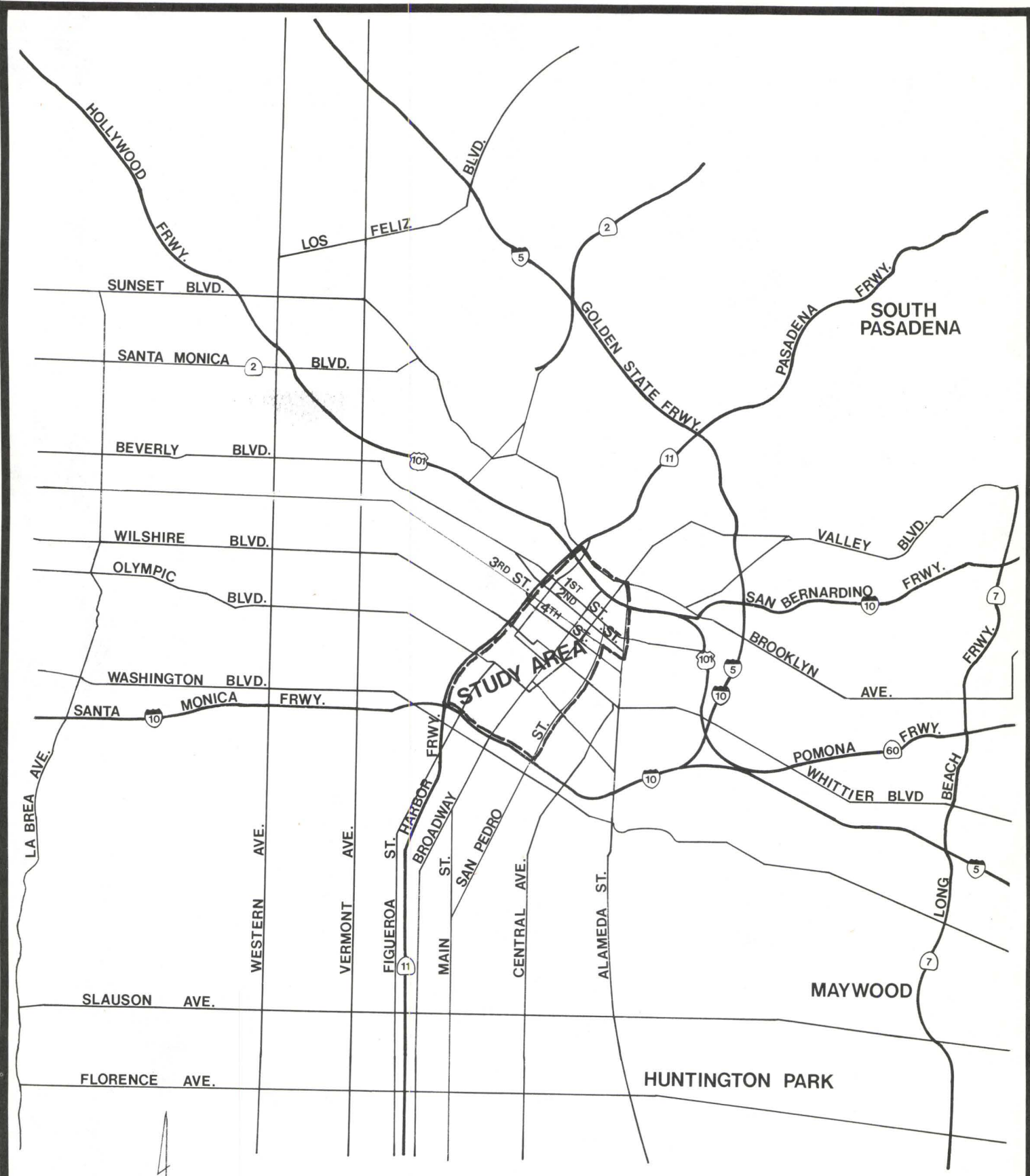
# Chapter 1

## INTRODUCTION

The City of Los Angeles provides the nucleus of the Nation's second largest metropolitan area. Its Central City area is the largest single activity and employment center of this metropolitan area and is increasingly being acknowledged as the financial center of the West, the largest government center west of the Mississippi River, and an internationally-recognized cultural center. It is located at the center of an extensive freeway network, and is the primary destination of an expanding network of express and local transit services. Figure 1 illustrates the location of the study area, which has been expanded beyond that area addressed in previous Central City parking studies.

### Background

The continuing strength of Central City commercial growth is evidenced by present high building and parking occupancy rates, by rapid increases in leasing and parking rates, and by the extensive ongoing development activity. At present, several multi-million square foot office towers and mixed-use developments are under construction or committed. Developer bidding for remaining parcels in the Bunker Hill redevelopment area has been intense.



**LOCATION MAP**

**LOS ANGELES CENTRAL CITY PARKING STUDY**

The accessibility of the Central City has been an important factor in its growth. However, construction of new freeways, busways, and parking facilities in the past several years have not kept pace with increases in Central City activity. A number of potential transportation projects, such as the Wilshire Boulevard rapid transit starter line, and new regional busways and/or light rail lines, could provide significant assistance in maintaining accessibility for the Central City during an era of energy constraints. Automobile travel and parking could be affected also by proposed parking management programs and the Downtown People Mover, for which Federal funding support has been withdrawn since the analyses presented herein.

However, even with the increased use of non automobile travel modes encouraged by these programs, the Central City will continue to depend for the foreseeable future on the mobility provided by the private automobile as the principal access mode for area workers, shoppers, and businessmen. To reflect this continuing importance of the automobile, any comprehensive transportation program to improve multimodal accessibility must address the level of parking needs required to sustain economic growth and redevelopment in the Central City.

#### Previous Studies

Previous studies of parking for the Central City of Los Angeles were conducted by Wilbur Smith and Associates in 1967 and 1972, and addressed parking needs of the area through 1980. The 1972 study resulted in recommendations for a peripheral parking program with access to the Central City Core via automated people mover vehicles. Further assistance with parking analysis was provided to the Community Redevelopment Agency (CRA) of the City of Los Angeles to update parking needs during the 1975 and 1978 studies for the Downtown People Mover (DPM) Program which provides for parking "intercepts" at both terminals.



## Purpose and Scope of Study

Given the changed intensity and location of development projects and redevelopment plans since those studies, a comprehensive review and reassessment of downtown parking needs was required to provide a continuing program responsive to changed development trends and conditions. Determination of future parking needs was also needed to address the potential effects of such transportation programs as the parking waiver elements of the Los Angeles Parking Management Program, the Downtown People Mover, and future improved rapid transit service into Downtown Los Angeles. Evaluation of such effects was both locational and incremental to facilitate development of implementation guidelines and City negotiations with developers.

The work program encompassed the collection, analysis, and evaluation of parking data to identify specific locations of parking surpluses and deficiencies and to identify specific impacts at those locations from other transportation programs.

Specific study tasks included the following:

- Update curb and off-street parking inventory;
- Update parking demands for currently projected development levels within each downtown analysis zone;
- Conduct a supply-demand analysis to determine areas and magnitude of surpluses and deficiencies, both for present and 1990 development levels; and
- Evaluate impacts of Parking Management Program space-waiver provisions, the Downtown People Mover, Freeway Transit, and the Wilshire rapid transit system on future Downtown parking needs.

It is suggested that following the review of this report, detailed parking structure site selection and financial feasibility studies will be carried out for all Central City zones or groups of zones that are shown to have significant parking deficiencies.

### Study Area

A detailed map of the study area with the parking analysis areas and zones, is shown in Figure 2. The boundary of the previous study areas followed San Pedro Street, Santa Monica Freeway, Harbor Freeway, and First Street. For this expanded 268-city block study area, the First Street boundary has been relocated northward to Sunset Boulevard, Alameda Street and a short connecting section of Third Street. This added area is primarily in Analysis Area A. The analysis areas used in this study ( A through L) are coincident with the zones used in the 1975 Southern California Rapid Transit District (SCRTD) Central Area Employee Surveys. The correlation of the 1972 and 1980 parking analysis areas is tabulated on the following page.

The numerically-identified zone system is that generally used by the CRA, and which was also used for the 1978 and 1990 employment and floor area forecasts prepared by Wilbur Smith and Associates in 1978 for the CRA. There are several minor zone identification differences between the parking analysis zones (Figure 2) and the standard CRA zones. These variances occur adjacent to the Hollywood and Santa Monica Freeways, and involve inclusion of areas not included in the CRA zones. Zone 83 is used to identify the four-level interchange area; in the CRA zones, Zone 83 is the area along the north side of Macy Street. Parking Analysis Zone 97 is that portion of CRA Zone 97 that lies north of Third Street. Parking Analysis Zones 98, 99, and 100 are used to represent the area along the Santa Monica Freeway, which is not included within the CRA zones.







**STUDY AREA**  
**LOS ANGELES CENTRAL CITY PARKING STUDY**

*Wilbur Smith & Associates*

Figure 2





THIS REPORT  
AND 1975  
SCRTD SURVEY

1972  
REPORT

GENERAL  
DESCRIPTION

A	NOT INCLUDED	Civic Center Government Offices
B	1	Bunker Hill Redevelopment Area
C	2	Bunker Hill East/Broadway
D	3 (Excluded Block 97)	Little Tokyo Area
E	4	Core Area/Financial District
F	5	Core Area-Spring and Sixth Streets
G	6	Residential Hotel Area
H	7	Core Area - Eighth and Grand Streets
I	9	Garment District
J	10	Convention Center Area
K	11	South Park/Institutions
L	8	South Broadway/California Mart

Field Data Collection Procedures

In order to update the 1967 and 1971 surveys, it was necessary to identify every off-street parking facility in the 268-city block survey area, classify each facility as to its usage; and make an inventory of available spaces. The inventory was completed in July of 1979, but due to summer vacations and a transit strike, the surveys of accumulation, turnover, and trip generation characteristics were delayed until October, 1979.

The accumulation counts of vehicles parked were made on weekdays between the hours of 11:00 a.m. and 3:00 p.m. - at which period the largest concentration of parked cars is observed. Curb parking availability and peak period usage on weekdays was similarly sampled in the field, including turnover counts, in which license plates

were recorded once every half hour to determine how long each vehicle remained in a space. Trip generation counts and trip purpose and mode interviews were conducted at all entrances of selected retail and office buildings in the Central City.

Field checks and interviews with CRA staff were made to update floor area, employment, and parking space data for recent building projects, as well as committed or planned new developments.

### Order of Presentation

The report begins with a summary of the results of the 1979 parking space inventory in Chapter 2. Present characteristics of parking accumulation, employment and floor area, demand, and parking space surpluses and deficiencies are identified in Chapter 3. Future demand and parking space surpluses and deficiencies are estimated in Chapter 4, based upon a continuation of present travel and parking characteristics. Assessments of the impact upon Central City parking needs resulting from the implementation of the proposed parking management space waiver program, the Downtown People Mover, or improved rapid transit by rail and bus are presented in Chapter 5. Finally, the Appendices contain the principal tabulations of the inventory and analysis data for each of the 100 parking analysis zones.

## Chapter 2

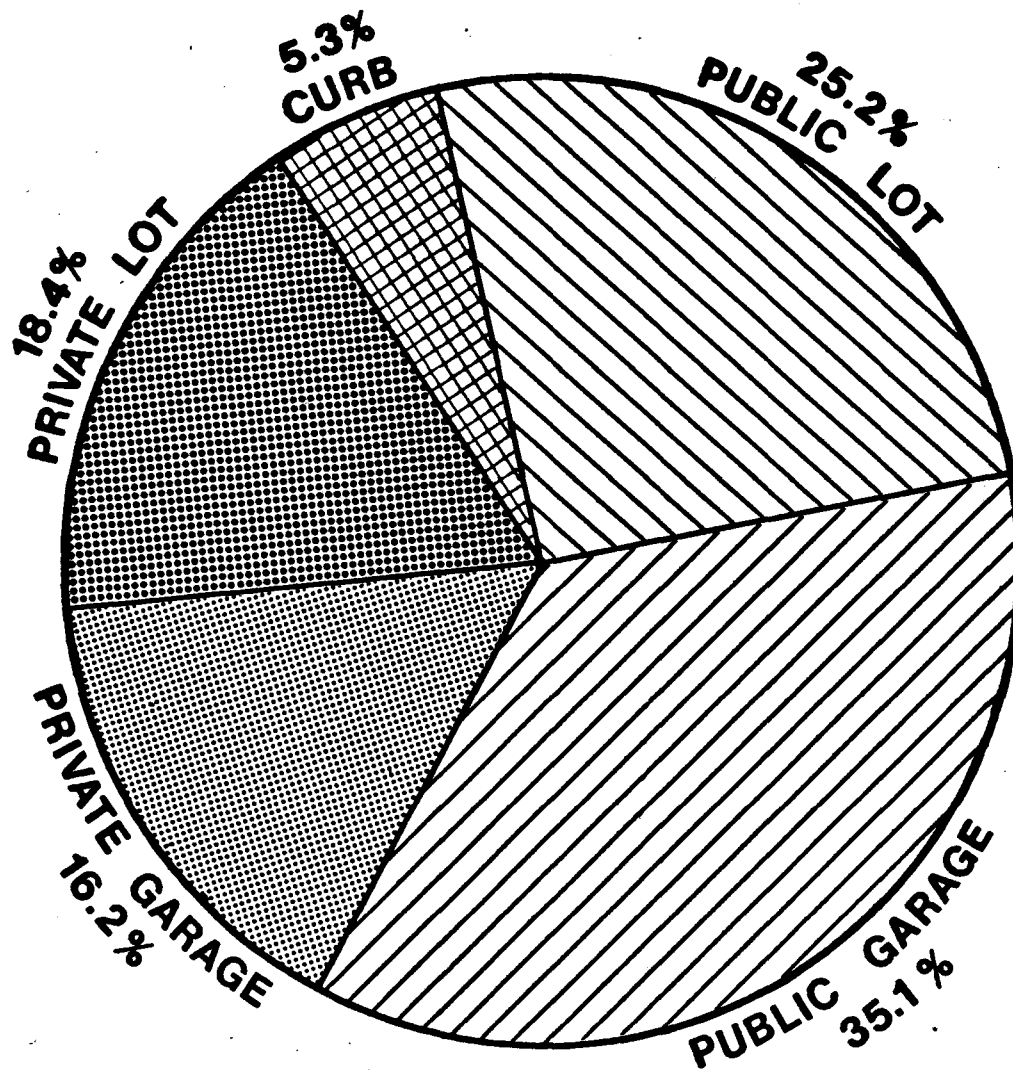
# INVENTORY OF PARKING SUPPLY

In order to determine Central City areas of parking space surpluses and deficiencies that would warrant development of parking improvements, it is necessary to identify the demand for and supply of parking spaces at present, and to forecast changes in the future. Therefore, a careful field survey of parking space supply has been conducted, identifying and mapping all on-street parking and loading spaces, as well as all public and private (primarily employer) parking lots and garages.

This chapter presents the inventory of parking spaces available within the expanded Los Angeles Central City study area, as surveyed in the summer of 1979. The total number of parking spaces within the study area was 111,124 spaces. Of this total, 5,888 spaces, or 5 percent, were located at the curb with the remaining 105,236 spaces located in off-street parking facilities. Since 852 of the curb spaces are restricted to usage only for loading/unloading activities, a net total of 110,272 spaces are available for parking. The general composition of the parking located in the Central City study area is illustrated in Figure 3.

### Curb Parking

Curb parking provides only five percent of the total CBD parking capacity, and most of the spaces have either time or



**PARKING SUPPLY BY TYPE  
1979**  
**Los Angeles Central City Parking Study**

usage restrictions. The curb inventory is illustrated in Figure 4. Slightly over 44 percent of the available curb spaces are metered, amounting to 2,616 spaces. Of the remaining 3,272 spaces, 852 are loading areas, 1,470 have time restrictions and 950 are unrestricted as to usage. (See Table 1.)

As depicted in Figure 4, the parking inventory indicates that the core area--generally bounded by First Street, Los Angeles Street, Ninth Street, and Figueroa Street--has little or no curb parking. Two-hour metered curb parking has been retained along portions of the north-south streets in the Bunker Hill area. Other curb parking in the core area is predominantly of the loading-zone type, including taxi zones, which reflects the intensive office-hotel-commercial land use in this area, and the resultant need for the entire available street width to accommodate traffic movement.

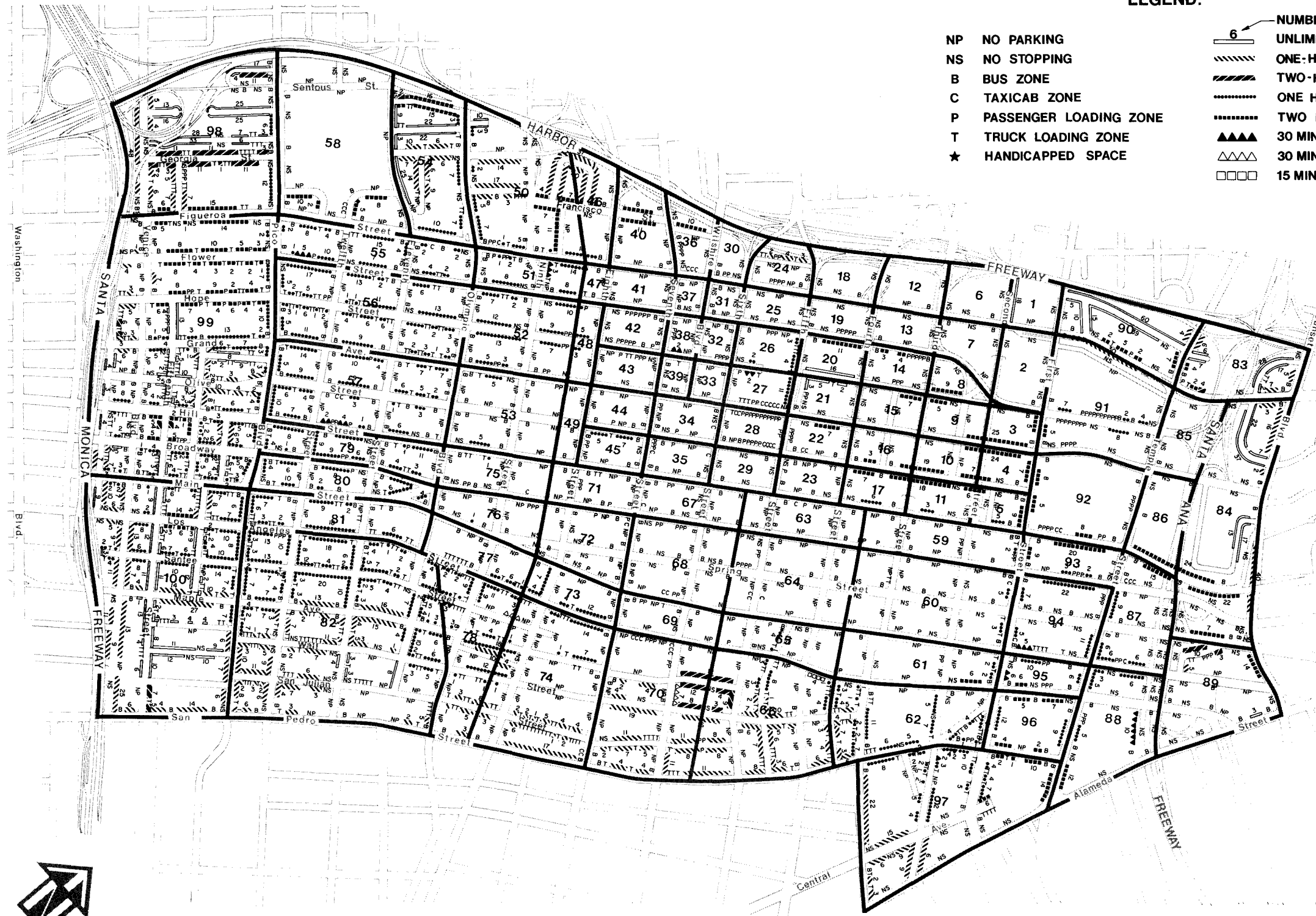
Metered parking is concentrated south of Ninth Street, and in the Civic Center-Little Tokyo area. The unmetered stalls fill out the remainder of the study area, predominantly at the periphery of the study area to the south and the east.

#### Off-Street Parking

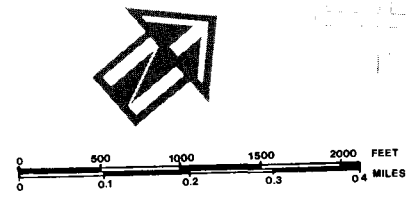
The 974 off-street parking facilities provide 105,236 spaces. Of these spaces, 64 percent are classed as public parking, that is, those which are available to the general public regardless of their trip purpose or destination. There are 373 public facilities (lots and garages) containing 66,748 spaces, and 601 private facilities (lots and garages) containing 38,488 spaces. The location and type of off-street facilities are shown in Figure 5, and summarized in Table 1.







- LEGEND:**
- NP NO PARKING
  - NS NO STOPPING
  - B BUS ZONE
  - C TAXICAB ZONE
  - P PASSENGER LOADING ZONE
  - T TRUCK LOADING ZONE
  - ★ HANDICAPPED SPACE
- 
- 6 NUMBER OF SPACES UNLIMITED
  - //// ONE-HOUR NO METERS
  - //// TWO-HOUR NO METERS
  - ..... ONE HOUR METERS
  - ..... TWO HOUR METERS
  - ▲▲▲ 30 MINUTE-METERS
  - △△△ 30 MINUTE-NO METERS
  - 15 MINUTE-NO METERS

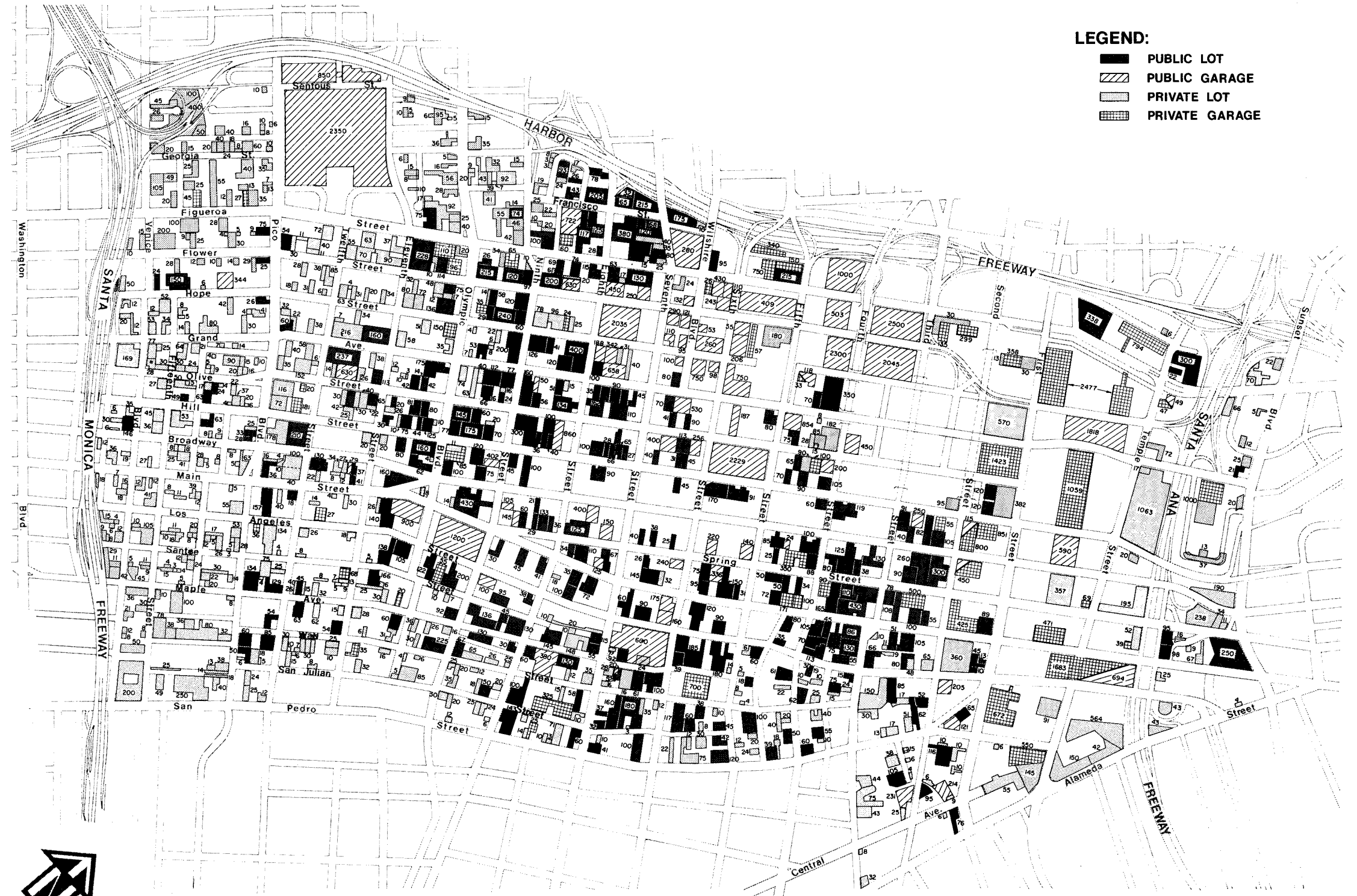


**CURB PARKING INVENTORY-JULY 1979**  
**LOS ANGELES CENTRAL CITY PARKING STUDY**

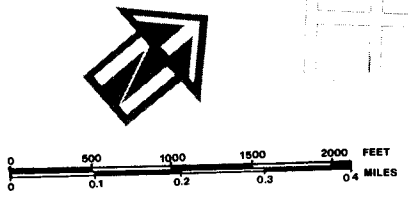
*Wilbur Smith & Associates*

**Figure 4**





- LEGEND:**
- PUBLIC LOT
  - PUBLIC GARAGE
  - PRIVATE LOT
  - PRIVATE GARAGE



**OFF-STREET PARKING INVENTORY-JULY 1979**  
**LOS ANGELES CENTRAL CITY PARKING STUDY**

*Wilbur Smith & Associates*





Table 1  
**PARKING SPACE INVENTORY**  
 Los Angeles Central City Parking Study

<u>TYPE PARKING</u>		<u>PARKING SPACES</u>	
		(Number)	(Percent)
Curb Unmetered	Handicapped	1	0.0
	15 Minute	4	0.0
	30 Minute	11	0.0
	1 Hour	1,293	1.2
	2 Hours	161	0.1
	Unlimited	950	0.9
Curb Metered	30 Minute	46	0.0
	1 Hour	1,846	1.7
	2 Hour	<u>724</u>	<u>0.6</u>
Subtotal Curb Parking		5,036	4.5
Curb Loading Areas	Truck	546	0.5
	Passenger	254	0.2
	Taxi	<u>52</u>	<u>0.1</u>
Subtotal Curb Loading		852	0.8
TOTAL CURB		5,888	5.3
Off-Street Public	Lot	28,022	25.2
	Garage	<u>38,726</u>	<u>35.1</u>
Subtotal		66,748	60.0
Off-Street Private	Lot	20,537	18.4
	Garage	<u>17,951</u>	<u>16.2</u>
Subtotal		38,488	34.6
TOTAL OFF-STREET		<u>105,236</u>	<u>94.7</u>
GRAND TOTAL PARKING AND LOADING SPACES		111,124	100.0

About 54 per cent of the off-street spaces (56,677 spaces) are now in garages, and 48,559 spaces are in open lots. The garages surveyed have a higher capacity per facility than the lots. The 76 public garages averaged 510 spaces per facility, while the 297 public lots averaged 93 spaces per lot. In the 57 private garages, an average of 315 spaces exists per facility, compared with an average of 38 spaces per facility in the 544 private lots.

The largest number of spaces in a single facility are the 3,200 public spaces in the garage facilities at the Los Angeles Convention Center. Other large garage facilities are those associated with the new high-rise office and retail developments in the Bunker Hill area and westside Financial District (Areas B and E). This includes the World Trade Center (2,500 spaces), the ARCO Garage (2,300 spaces), Security Pacific Bank Plaza (2,045 spaces), and Broadway Plaza (2,035 spaces). The oldest facility of this size is the 2,229 space Pershing Square Garage, constructed in 1952. A complete tabulation of parking supply by block number can be found in Appendix A-1.

Approximately 11 per cent of public off-street parking spaces are operated by government agencies (city, county, and state) predominantly in the Civic Center area, El Pueblo de Los Angeles, and at the Convention Center. The majority of public off-street parking is privately owned and/or operated. Over 40 different companies operate parking facilities in the study area. The largest operator downtown is System Auto Parks (8,730 spaces), followed by Allright Auto Parks (6,636 spaces), Joe's Auto Parks (4,315 spaces), ABM (3,279 spaces), Charter (2,196 spaces), Meyers Brothers (2,314 spaces), Century (1,899 spaces), Allied (1,864 spaces), and Midtown (1,819 spaces)

Of the 38,488 private off-street spaces, approximately 52 per cent are provided by government agencies for their employees



and visitors. Most of these spaces are located in the Civic Center area. Table 2 summarizes these government facilities.

Parking lots and garages operated by the County of Los Angeles account for approximately 33 per cent (6,588 spaces) of all parking provided by government agencies for employees and visitors, while parking facilities operated by the City of Los Angeles account for close to 25 per cent (5,024 spaces). The major government facilities which provide parking primarily for their employees and fleet vehicles include the 1,059-space County garage under the Civic Center Mall, a 1,100-space County lot on Temple Street between Hill Street and Grand Avenue, the City-operated Los Angeles Mall garage (1,683 employee/visitor/fleet spaces), and the 672-space Los Angeles Police Department garage.

The State of California utilizes 2,749 spaces, primarily in garage facilities contained within its buildings just south of 1st Street in the Civic Center area. The planned new State Building was expected to be built on what is now a State employee surface lot on the block bounded by 1st, 2nd, Main, and Los Angeles streets, and was assumed by this study analyses to provide no parking. Since the study analyses, the State has revised its plans and currently expects to develop the facility in the Spring Street development area and include parking.

The U.S. Government utilizes 946 private off-street spaces, located primarily at the rear of the Federal Building on Los Angeles Street. These spaces are primarily for fleet vehicles, with most employees at the Federal Building not afforded agency-provided parking.

Other large private-space users include light manufacturing firms (8,451 spaces) which are predominantly garment-related;

Table 2  
 GOVERNMENT-RELATED PRIVATE OFF-STREET  
 PARKING FACILITIES  
 Los Angeles Central City Parking Study

<u>GOVERNMENT JURISDICTION</u>	<u>NUMBER OF SPACES</u>
City	
General City	3,210
Police	1,513
Central Library	180
Fire Stations	<u>121</u>
Subtotal	5,024
County	6,588
Department of Water and Power (City)	2,809
State	2,749
Board of Education	1,833
Federal	946
SCRTD	<u>187</u>
TOTAL	20,136

general office users (4,715 spaces); residential users (1,041 spaces), predominantly from the Bunker Hill Towers complex; and private bank customer and/or employee users (735 spaces). These non-government private spaces are summarized by land use category in Table 3.

Inventory Comparison: 1966 to 1979

A review of previous inventory data from the 1966 Parking Study and the 1971 Peripheral Parking Study was undertaken to provide comparative data and to reveal trends in the parking supply. The 1966 and 1971 study areas excluded the area north of First Street (Civic Center) and east of San Pedro Street (Little Tokyo). To provide a realistic comparison, this part of the 1979 study was excluded from the two trend comparison tables that follow.

As shown in Table 4, between 1966 and 1979 the number of parking spaces in the smaller study area has increased by 11,318 spaces, or an increase of approximately 14 per cent. There has been an increase of 8,100 public spaces or 15 per cent. This increase has been entirely in the public garage category, with available spaces in public lots decreasing by 12,882 spaces, or 33 per cent, and curb spaces decreasing by 1,144 spaces, or 19 per cent.

The reduction of public surface lot spaces has been more pronounced since 1971, paralleling the period of new construction which utilized land formerly occupied by surface parking lots. This continuing trend towards more efficient use of land in the downtown area is shown in the sizeable increase in garage parking located in subterranean facilities and/or in conjunction with intensive high rise office and retail complexes.



Table 3

NON-GOVERNMENT PRIVATE OFF-STREET  
PARKING FACILITIES

Los Angeles Central City Parking Study

<u>USAGE CATEGORY</u>	<u>NUMBER OF SPACES</u>
Light Manufacturing	8,451
General Office	4,715
Residential	1,041
Private Clubs	807
Banks	735
Medical	500
Hotel-Motel	413
Church	318
School	264
Gas Stations	251
Retail Stores	241
Auto-Repair Related	218
Restaurants	210
Rent-a-Car Related	140
Markets	<u>48</u>
TOTAL	18,352

Table 4  
**PARKING SPACE INVENTORY** (a)  
 1966, 1971 and 1979  
 Los Angeles Central City Parking Study

Facility	1966		1971		INCREASE OR DECREASE 1966 to 1971		1979		INCREASE OR DECREASE 1966 to 1979	
	No. of Spaces	Percent of All Spaces	No. of Spaces	Percent of All Spaces	No. of Spaces	Percent Change	No. of Spaces	Percent of All Spaces	No. of Spaces	Percent Change
Curb	5,956	7.3	4,639	5.5	-1,317	-22.1	4,812	5.2	- 1,144	-19.2
Public Garage	12,993	16.0	20,098	24.0	+7,105	+54.7	35,130	38.7	+22,137	+170.3
Public Lot	<u>39,388</u>	<u>48.3</u>	<u>39,104</u>	<u>46.8</u>	<u>- 284</u>	<u>- 0.7</u>	<u>26,506</u>	<u>28.6</u>	<u>-12,882</u>	<u>-32.7</u>
Subtotal	58,337	71.6	63,841	76.3	+5,504	+ 9.4	66,448	72.5	+ 8,111	+13.9
Private Garage	5,445	6.7	6,057	7.2	+ 612	+11.2	9,575	10.3	+ 4,130	+75.8
Private Lot	<u>17,670</u>	<u>21.7</u>	<u>13,856</u>	<u>16.5</u>	<u>-3,814</u>	<u>-21.6</u>	<u>15,947</u>	<u>17.2</u>	<u>- 1,723</u>	<u>- 9.8</u>
Subtotal	23,115	28.4	19,913	23.7	-3,202	-13.9	25,522	27.5	+ 2,407	+10.4
<b>TOTAL</b>	81,452	100.0	83,754	100.0	+2,302	+2.8	91,970	100.0	+10,518	+12.9

(a) San Pedro Street, Santa Monica Freeway, and Harbor Freeway, the comparable study area is bounded by First Street.

Table 5 also reviews the trend toward garages and away from lots within the public parking category. Due to several large developments in recent years, the average number of spaces per public garage facility has increased significantly. While the actual number of public lots has declined, the average number of spaces per public lot has remained constant. The increase in the number of private lots, with a slight drop in the average number of spaces per lot, has resulted from the increased number of small garment-related manufacturing firms who have located their offices within the southern portion of the study area.

Table 5  
 NUMBER OF FACILITIES AND  
 AVERAGE SPACES PER FACILITY <sup>(a)</sup>  
 1966 to 1979

<u>FACILITY</u>	<u>NUMBER OF FACILITIES</u>			<u>AVERAGE SPACES PER FACILITY</u>		
	<u>1966</u>	<u>1979</u>	<u>Percent Change</u>	<u>1966</u>	<u>1979</u>	<u>Percent Change</u>
Public Garage	45	70	+77	289	502	+78
Public Lot	432	286	-32	91	93	+ 2
Private Garage	33	45	+36	165	213	+29
Private Lot	<u>409</u>	<u>493</u>	<u>-21</u>	<u>43</u>	<u>32</u>	<u>-26</u>
TOTAL	919	894	- 3	82	97	+18

(a) The comparable study area is bounded by First Street, San Pedro Street, Santa Monica Freeway, and Harbor Freeway.

Parking Fees

The fee which the public is willing to pay for parking is a function of city size, supply, demand, trip purpose, walking distance to destination, and numerous other interrelated factors. Typically, the charge is highest in the area of greatest demand,



with concentric bands of lower rates outward away from this central area. The physical arrangement of the different land uses in the downtown area causes variations in this general configuration of fee levels.

Parking charges for public off-street facilities (lots and garages) according to the various lengths of time parked are shown in Table 6. The highest rate of \$1.00 per 20 minutes is found in the area around 6th and Hill, which coincides with the area of highest occupancy. A band of \$0.75 per 20 minutes extends outward from here, maintaining rates of \$0.75 to \$1.00 per 30 minutes westward through the new financial district and north and south through the Broadway shopping district.

A secondary peak charge area for short-term transient parking is also centered on the California Mart, reflecting the importance of the garment district area in terms of parking demand. Charges are \$1.50 per 30 minutes at the California Mart, with surrounding facilities ranging from \$0.75 per 30 minutes to \$0.75 and \$0.85 per 20 minutes. These rates are only slightly lower than the 6th and Hill area.

All day charges reflect the more intensive parking demand in the heart of the westside financial district. All day rates of \$5.00, \$6.00, and up to \$7.65 are centered around Wilshire Boulevard from Flower to Grand. All day rates drop relative to distance from this area, from around \$3.00 in the Broadway retail area to \$1.50 south towards Olympic Boulevard. The garment district experiences rates of \$3.50 to \$4.00 per day. The Civic Center-Little Tokyo area rates are \$2.50-\$3.00 per day.

The monthly parking charges reflect a similar pattern as the all-day charges, with a somewhat broader zone of peak prices. The westside financial district is the peak area, with rates generally at \$50 to \$60, and up to a high of \$75 per month within

Table 6

OFF-STREET PARKING CHARGES  
CLASSIFIED BY DURATION  
Los Angeles Central City Parking Study

TRANSIENT PARKING CHARGE	NUMBER OF SAMPLED FACILITIES CLASSIFIED BY PARKING DURATION					ALL DAY PARKING CHARGE	NUMBER OF SAMPLED FACILITIES	ALL DAY PARKING CHARGE	NUMBER OF SAMPLED FACILITIES	MONTHLY PARKING CHARGE	NUMBER OF SAMPLED FACILITIES	MONTHLY PARKING CHARGE	NUMBER OF SAMPLED FACILITIES
	15 Min.	20 Min.	30 Min.	One Hour	Two Hour								
\$ 0.25			6	5	2	\$0.25	1	\$2.50	33	\$10.00	2	\$42.50	1
0.35			1			0.30	1	2.75	10	12.00	2	45.00	12
0.40			1			0.45	1	3.00	44	14.00	2	47.50	1
0.45			4			0.50	14	3.25	4	15.00	1	50.00	27
0.50		2	77	2		0.60	4	3.50	12	17.50	1	52.50	2
0.55			1			0.75	10	3.75	3	18.00	4	55.00	9
0.60	1	1	9			0.85	2	4.00	20	18.50	2	57.50	1
0.65		1	6			0.90	2	4.20	1	20.00	12	60.00	8
0.70			3			0.95	2	4.25	1	22.50	2	65.00	8
0.75		27	97	2		1.00	28	4.50	6	25.00	13	70.00	2
0.80			2			1.10	1	4.80	1	27.00	1	72.00	1
0.85		4	6			1.25	14	5.00	15	27.50	1	75.00	4
0.90			2			1.35	3	5.10	1	29.50	1	85.00	2
0.95		2	1			1.40	2	5.75	1	30.00	25		
1.00		6	20			1.50	54	6.00	7	30.50	1		
1.50				3		1.65	1	7.00	2	32.50	3		
1.75				1		1.75	16	7.50	3	35.00	18		
2.00			1			2.00	28	7.60	1	37.50	3		
						2.25	9	7.65	1	40.00	20		
						2.40	1	10.00	1	41.50	1		
Sample Size	1	43	236	13	2				361				193
Average Fee (Dollars)	0.60	0.75	0.75	0.50	0.25				\$2.00				\$40.00

\* A random sample; does not include all facilities within study area.

the same Wilshire Boulevard district from Flower to Grand. This rate is consistent among the garages in the new high-rise office complexes. Monthly charges are around \$40 to \$50 in the heart of the garment district and from \$30 to \$40 in the Broadway retail area.

Figure 6 indicates the general rate contours for all parking. The rates indicated are daytime rates. For facilities which operate after the normal working day (6:00 P.M.), a lower flat fee is typically charged.

These rates should be viewed as relative, rather than absolute. Public parking rate increases, which have in the recent past averaged from three to six per cent annually, are presently increasing more rapidly. These faster increases reflect an ever-increasing higher occupancy level of both existing and new parking facilities, as well as recent high inflation rates. (See Table 7.)

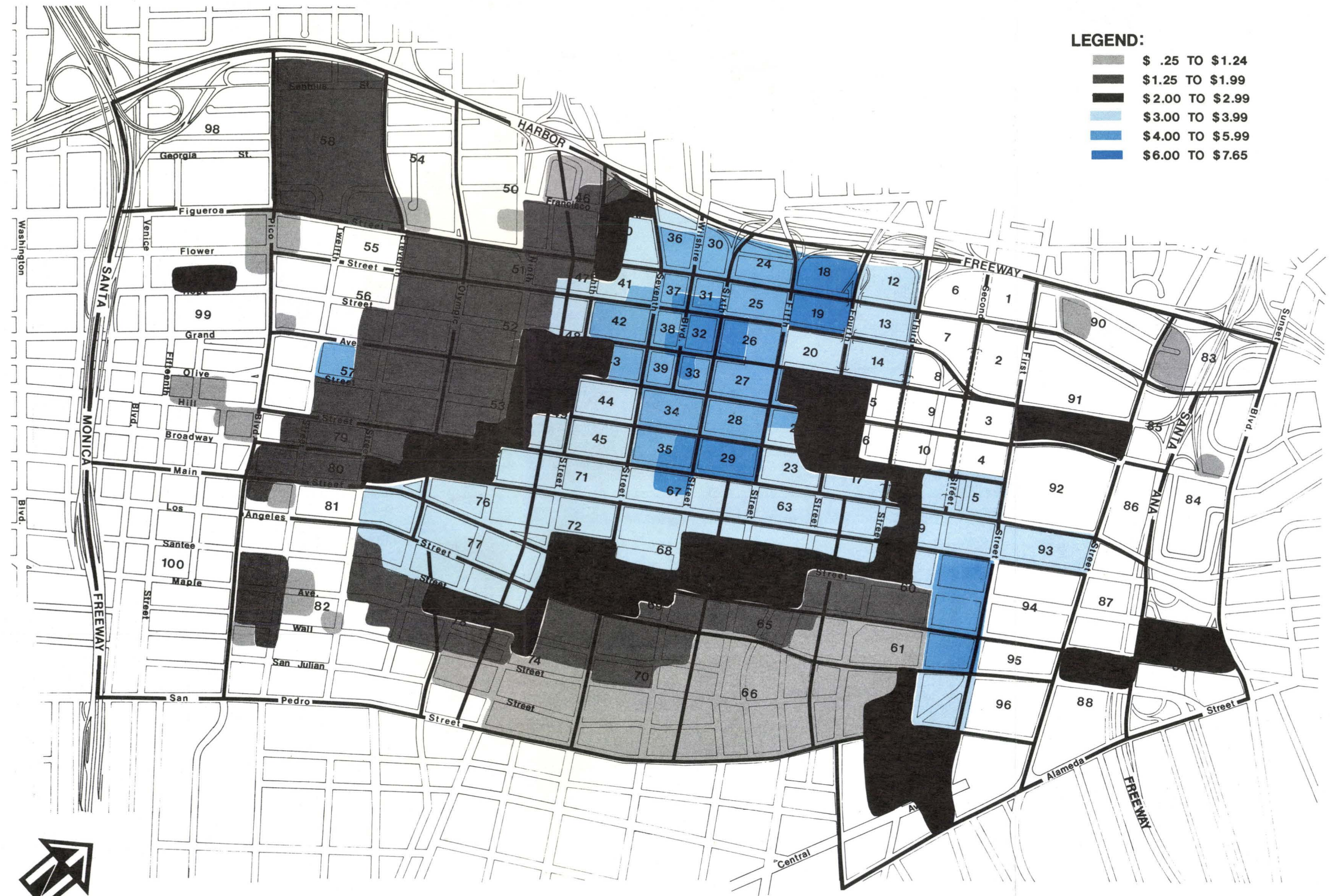
Table 7  
CHANGES IN OFF-STREET PARKING CHARGES  
Los Angeles Central City Parking Study

	<u>1966</u>	1966-71 PER CENT ANNUAL <u>INCREASE</u> <sup>(a)</sup>	<u>1971</u>	1971-79 PER CENT ANNUAL <u>INCREASE</u> <sup>(a)</sup>	<u>1979</u>
First Half Hour	\$0.28	-	-	12 (1966)	\$0.75
Daily	1.01	11	\$1.57	3	2.00
Monthly	14.67	17	27.00	6	40.00

(a) Not Compounded

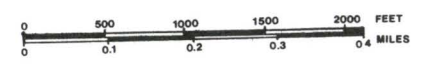






**LEGEND:**

Light Gray	\$ .25 TO \$1.24
Medium Gray	\$1.25 TO \$1.99
Dark Gray	\$2.00 TO \$2.99
Light Blue	\$3.00 TO \$3.99
Medium Blue	\$4.00 TO \$5.99
Dark Blue	\$6.00 TO \$7.65



**ALL-DAY PARKING CHARGES - JULY 1979**  
**LOS ANGELES CENTRAL CITY PARKING STUDY**

*Wilbur Smith & Associates*

Figure 6





## Chapter 3

# EXISTING PARKING USAGE AND DEMANDS

The demand for parking in the Central City has increased more rapidly in recent years than the increases in the number of parking spaces. This has resulted in a higher usage level of the available parking spaces, and increasing areas of local parking deficiencies. These trends and areas of deficiencies were confirmed through a sample survey which was conducted by Wilbur Smith and Associates during October, 1979 to determine the peak occupancy level of parking spaces during typical weekday conditions.

During the field work, Central City parker characteristics were determined by parker interviews at off-street parking facilities and at curb spaces, and through a series of interviews, conducted at retail and office buildings. The parker characteristics identified during the survey included time of day parked, trip purpose, length of time parked, and distance walked to destination. The results of these surveys were used to adjust the parking demand factors for the various types of Central City land uses.

Present 1979 parking demands for each block or area of the Central City were then estimated through the application of the parking demand factors to the 1979 employment and building floor area data. The employment and floor area data was obtained from public agencies, principally the City of Los Angeles Community Redevelopment Agency, and supplemented by field checks. The resultant estimates of 1979 parking demands were then compared against field survey data to determine reasonableness of the estimates.

### Parking Space Usage

The accumulation of parked vehicles and the occupancy level of available parking facilities provides a reasonable indication of the parking demands in an area, and the relative parking needs. The count of parked vehicles, however, is not an accurate indicator of parking demand on a block-by-block basis. A parker's selection of parking space is not exclusively a factor of his or her destination, but also reflects the availability of a space at the destination, parking restrictions and enforcement levels, parking fees, duration of stay, and walking distances and environment.

The peak accumulation of parked vehicles, when compared to the available supply of parking spaces, is the principal measure of parking demand/supply conditions.

The practical maximum occupancy level of a public parking facility is considered to be 85 per cent of the parking spaces for an off-street facility and 90 per cent for curb spaces. Occupancy levels in public lots above this are difficult to obtain due to time required to circulate to locate empty spaces and park. Long-term employee facilities may obtain a higher efficiency, however, this may also be limited if assigned spaces are employed in the facility since these spaces remain unused if the assigned parker is not using the space.

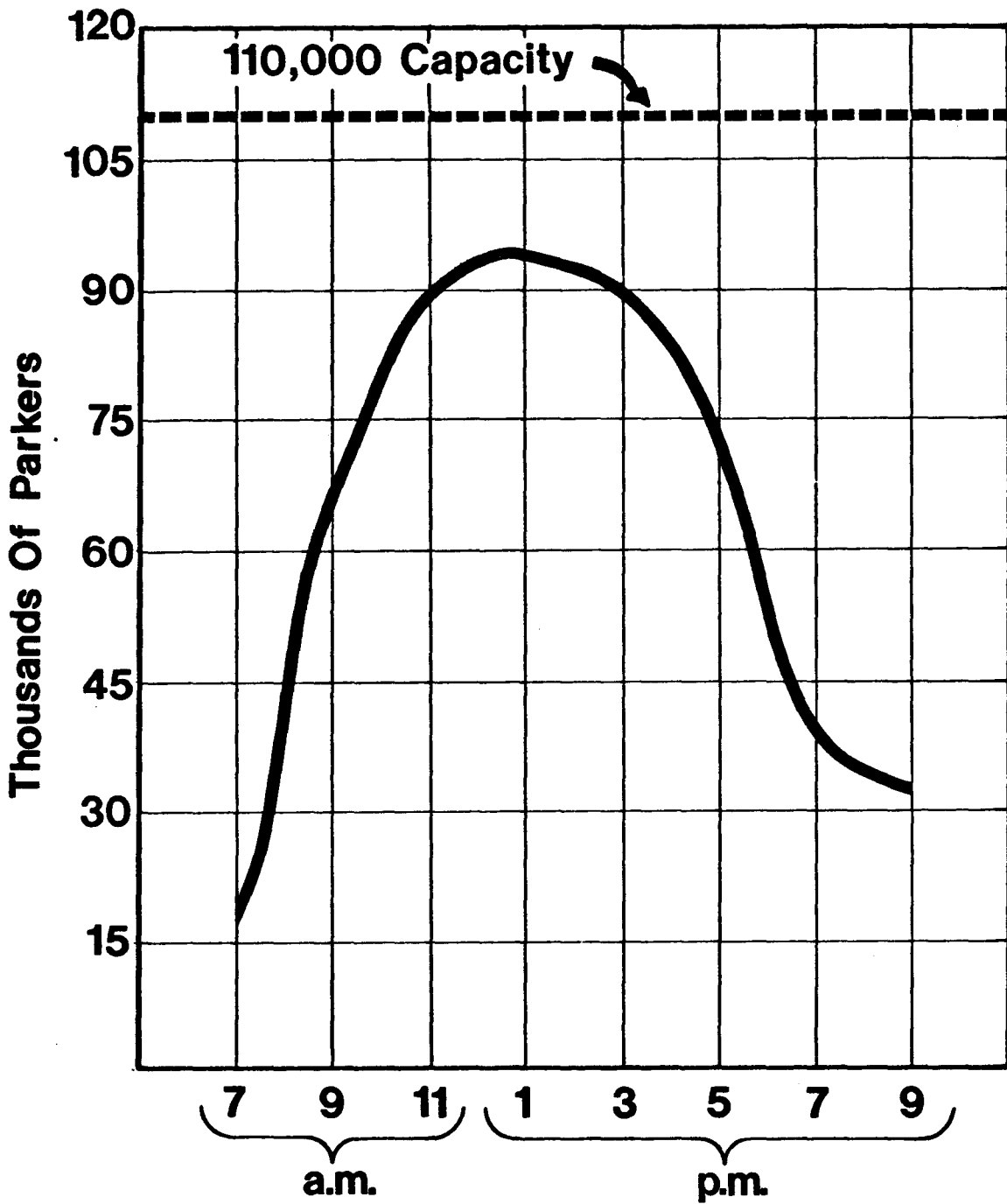
Overall, an occupancy level approaching 85 per cent of all parking spaces in an area is indicative of a "tight" parking condition and would be expected to result in parker perceptions of insufficient parking.

1979 Central City Peak Accumulation - The peak accumulation of parked vehicles generally occurs at about 2:00 P.M in the Central City, with a very high usage level present throughout the 11 A.M. to 4 P.M. period (Figure 7). The peak parker accumulation in the study area, based on sample counts made in October 1979, is summarized in Table 8. On the survey days, the peak weekday accumulation within the study area 92,188 vehicles. This represents an estimated 84 per cent occupancy of the available spaces.

However, a more realistic assessment of the peak occupancy rate is obtained by excluding the large Convention Center facility, which is intended for special use and is not reflective of study area conditions. When that facility is excluded, the overall peak occupancy level in the study area is 86 per cent of

Table 8  
PEAK PARKING ACCUMULATION, OCTOBER, 1979  
Los Angeles Central City Parking Study

<u>FACILITY</u>	<u>SPACES</u>	<u>PEAK ACCUMULATION</u>	<u>PER CENT OCCUPANCY</u>
Public Facilities	66,748	55,985	84
Private Facilities	38,408	32,278	84
Curb	<u>5,036</u>	<u>4,135</u>	82
"    TOTAL	110,272	92,398	84
Less Convention Center	<u>3,200</u>	<u>210</u> (Survey day)	7
TOTAL, EXCLUDING CONVENTION CENTER	107,072	92,188	86



**ACCUMULATION OF PARKED VEHICLES**  
**Los Angeles Central City Parking Study**



all parking spaces. This estimate is within the 85 to 90 per cent areawide occupancy range normally considered to represent maximum practical occupancy levels of parking facilities. This saturated use of parking facilities is evidenced by the currently frequent increases in parking rates reported in the study area, and is consistent with the 1978 City of Los Angeles Cordon Count results for a smaller study area. Curb parking occupancy is slightly below the overall average due to the location of most curb parking in the fringe areas. Curb parking use is still up significantly from the 71 per cent rate in 1971, indicating the potential for parking meter installation, as identified in a separate report. (1)

Trend of Parking Space Usage -Previous Central City parking studies focused on the area south of First Street. Information from this study was tabulated for the comparable area and compared to the findings of the previous studies in 1966 and 1971. This comparison is summarized in Table 9.

Table 9  
 CHANGES IN PEAK ACCUMULATION AND OCCUPANCY (a)  
 Los Angeles Central City Parking Study

	<u>1966</u>	<u>ANNUAL PER CENT INCREASE</u>	<u>1971</u>	<u>ANNUAL PER CENT INCREASE</u>	<u>1979</u>
Parking Spaces	81,452	0.6	83,754	1.3	92,770
Peak Accumulation	60,500	1.4	64,756	2.2	76,002
Per Cent Occupancy	74	0.6	77	0.6	82

(a) Comparable area is south of First Street and west of San Pedro Street. Per cent is not compounded.

(1) Letter from Wilbur Smith and Associates to Donald R. Howery dated August 2, 1979.

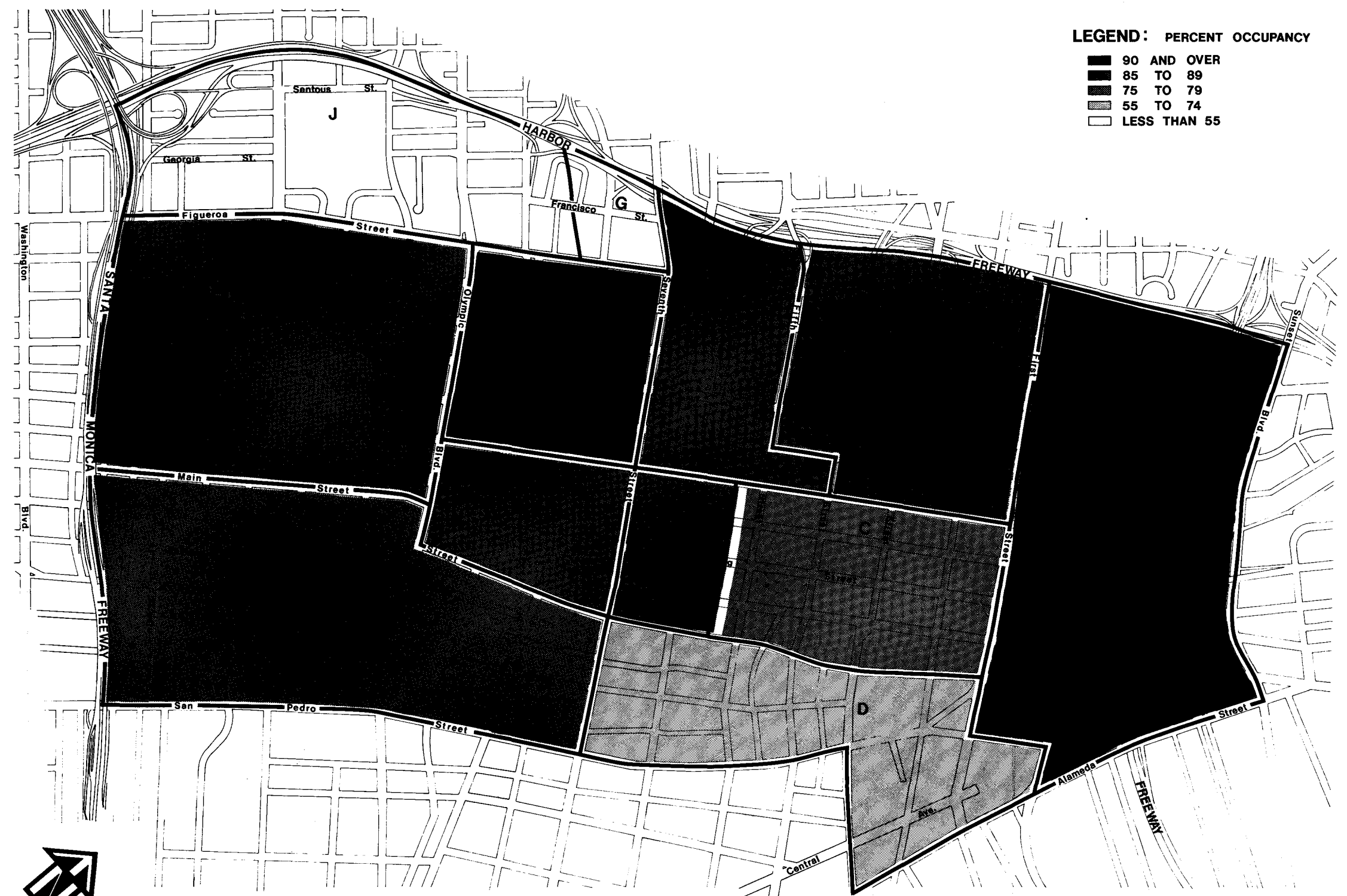
As indicated, the parking demand for the area has increased at a greater rate than the increase in the parking supply, both for the 1966 to 1971 and the 1971 to 1979 periods. Increases in both supply and demand occurred at a higher annual rate in the later period. The result is a continually higher parking space occupancy factor, with an increase from 74 per cent in 1966, to 82 per cent in 1979.

Area-By-Area Parking Use - The results of the peak parker accumulation surveys for each of the 12 analysis areas are displayed in Figure 8 and Table 10. Highest occupancy rates are in portions of Areas A, B, E, G, H, I, K, and L, with particularly high rates in portions of Areas H and I. Lower occupancies are located along portions of the west side, with the lowest occupancy rate occurring in Area J, which includes the Convention Center.

Turnover Rates - Data from previous studies on the duration of stays was supplemented by field checks of curb turnover. Each space is likely to be occupied by several different vehicles in succession during the day. In destination Areas A and H, turnover rates of six and seven vehicles per day for the average curb space indicate intensive short-term use of spaces. In Zones G and I, turnover rates were three and four vehicles per day, respectively, indicate significant all-day use by employees working nearby. In Zone K, near Pico Boulevard, a combination of low occupancy rates at one hour zones and high occupancy rates at two hour zones indicates that moderate turnover rates occur in hospital and other areas where most visits generally require more than one hour of parking.

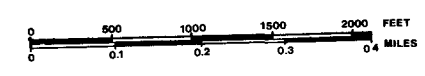
#### Characteristics of Usage

A variety of factors were considered in identifying and assessing parking usage characteristics that influence present and future demand. User characteristics identified in the 1978



**LEGEND: PERCENT OCCUPANCY**

- 90 AND OVER
- 85 TO 89
- 75 TO 79
- 55 TO 74
- LESS THAN 55



**PEAK OCCUPANCY OF PARKING FACILITIES  
LOS ANGELES CENTRAL CITY PARKING STUDY**

*Wilbur Smith & Associates*

**Figure 8**





Table 10

PEAK ACCUMULATION AND OCCUPANCY RATES - OCTOBER 1979  
Los Angeles Central City Parking Study

DESTINATION ZONE	ON-STREET			OFF-STREET						TOTAL		
	CURB PARKING			PUBLIC FACILITIES			PRIVATE FACILITIES			Peak	Per Cent	
	Capacity	Peak Accum.	Per Cent Occupancy	Capacity	Peak Accum.	Per Cent Occupancy	Capacity	Peak Accum.	Per Cent Occupancy	Capacity	Peak Accum.	Per Cent Occupancy
A	793	725	91	4,275	3,785	89	11,890	10,690	90	16,958	15,200	90
B	234	211	90	10,505	9,378	89	3,671	3,267	89	14,410	12,856	89
C	25	25	100	5,238	3,929	75	4,180	3,553	85	9,443	7,507	79
D	576	530	92	4,342	3,126	72	2,703	1,973	73	7,621	5,629	74
E	43	43	100	9,699	8,628	89	1,727	1,468	85	11,469	10,139	88
F	-	-	-	2,151	1,828	85	32	22	69	2,183	1,850	85
G	68	559	87	2,304	2,212	96	132	116	88	2,504	2,387	95
H	135	118	87	10,530	9,898	94	776	660	85	11,441	10,676	93
I	1,387	1,096	79	5,064	4,760	94	4,765	3,631	76	11,216	9,487	85
J	698	551	79	7,542	484	14	2,615	1,203	46	6,855	2,238	33
K	1,035	735	71	4,673	4,019	86	5,869	5,576	95	11,577	10,330	89
L	42	42	100	4,425	3,938	89	128	119	93	4,595	4,099	89
TOTAL	5,036	4,135	82	66,748	55,985	84	38,488	32,278	84	110,272	92,398	84
Less Convention Center Parking (Zone J)										3,200	210	7
REMAINDER OF STUDY AREA										107,072	92,188	86

Cordon Survey (City of Los Angeles Department of Transportation) and the 1975 Employee Survey for Southern California Rapid Transit District (Wilbur Smith and Associates) were reviewed and supplemented by doorway pedestrian surveys.

The 1978 Cordon Survey indicated that 51 per cent of travelers passing the cordon are drivers, 18 per cent are passengers, 24 per cent are bus passengers, and 7 per cent are pedestrians, which may include persons traveling by car but parking outside the cordon zone. The 1975 Employee Survey showed that the percentage of drivers varies from 43 per cent in Area G to 68 per cent in Area B.

Field surveys undertaken as part of this study found a range from only 7 per cent drivers for a Broadway variety store to 37 per cent for a department store and 62 per cent for a financial district office building. Tabulations of the three largest buildings sampled are presented in Appendix B-1.

The field studies indicate that long term parkers will walk further from their destination to park, than will short term parkers, but few will walk beyond three blocks. This concurs with the findings of previous parking studies. Employment concentrations tend to generate longer term parking than visitor-oriented uses. This is evidenced by the distribution of parking durations of those persons interviewed at the retail and office uses. Work trips constitute 78 per cent of those persons entering the office building, but only 3 to 5 per cent for those entering the retail establishments.

Central City interviewees appear to take advantage of the convenience of varied downtown destinations. From 25 to 35 per cent of retail visitors and 53 per cent of office building visitors make only one stop during a trip. The survey data shows that from 54 to 79 per cent of retail visitors spend less than

30 minutes at one location, while only 12 per cent of office building visitors and employees stay that briefly.

#### Parking Demand - 1979

The 1979 parking demands were estimated for each block or block group to assess the relative locations of those activities generating the parking usage identified in the field counts. Estimates of the 1979 parking demands were based on the application of unit parking demand rates, as determined for the Central City area, to the existing floor area and employment data in the various parking analyses zones.

Floor Area Inventory - Estimated gross floor area by land use type was obtained for each CRA zone by use of field inspections to update Wilbur Smith and Associates' 1978 floor area inventory developed for the CRA Downtown People Mover Preliminary Engineering Phase. Total gross floor area in the study area is estimated at 70,000,000 square feet. The 1979 floor area by block is presented in Appendix Table C-1.

Employment Data - Changes in employment from the 1978 CRA employment update were identified from employer and building management sources, as well as from the comparison of floor area-to-employment ratios. Checks were made with generally accepted employment totals. Total 1979 employment in the parking study area is estimated as 182,800 persons. The 1979 employment by block is presented in Appendix Table C-2.

Parking Demand Rates: Long Term Parkers - A parking demand factor was applied to the zonal employment data to generate estimates of long term parking demand, which is predominately employee parking. These parking demand factors were derived from a cross-section of data and sources relevant to automobile usage and parking characteristics. Comparison of recent City

Department of Transportation cordon counts with Wilbur Smith and Associates' 1975 Employee Survey indicated sufficient consistency to use the Auto Driver Factor (per cent of employees who drive to work) and the Peak Employment Factor (per cent of employees who are working at 2:00 p.m. on a weekday as the basis for development of the factors). Generally accepted absentee factors from national parking studies and Los Angeles data were used to take into account sickness, vacations, no-shows, odd work-weeks, travel, and long-term visitor parking. A lower rate was used for hotel, service, and institutional land uses. The resultant parking demand factors are presented in Table 11.

Parking Demand Rates: Short Term - For short-term parking, the unit parking rates used in previous Central City parking studies and trip generation surveys were updated to 1979 conditions, which includes significant additions to the inventory of modern construction and high floor area occupancy. As is shown in Table 12, gross to net floor area of structures was determined for each destination zone and estimated areas with low building occupancy, such as along Spring Street, were reflected in a Net Per Cent Activity Factor. These factors were adjusted for parking demand rates by land use type to realize a Net Parking Demand Rate.

The long-term and short-term factors were calibrated to Central City control totals by comparisons with peak accumulation data, excluding construction worker vehicles.

Estimated Demand - 1979 - Based upon considerations described above, the 1979 short-term parking demand is 13,730 parkers and the long-term estimate is 78,660. The percentage of short-term parkers is down slightly from the 1971 estimates, to 15 per cent of all parkers. This reflects increased office development, as compared to the growth in retail activity over this same time period. Total 1979 parking demand is 92,390



Table 11

PARKING DEMAND RATES FOR LONG-TERM PARKERS  
Los Angeles Central City Parking Study

<u>DESTINATION ZONE</u>	<u>AUTO DRIVER FACTOR</u>	<u>PEAK EMPLOYMENT FACTOR</u>	<u>NON-ABSENTEEISM FACTOR</u>		<u>NET PARKING DEMAND RATE/EMPLOYEE</u>	
			<u>HOTEL/SERVICE/ INSTITUTIONS</u>	<u>ALL OTHERS</u>	<u>HOTEL/SERVICE/ INSTITUTIONS</u>	<u>ALL OTHERS</u>
A	0.66	0.97	0.7	0.86	0.45	0.55
B	0.68	0.99	0.7	0.86	0.47	0.58
C	0.50	0.98	0.7	0.86	0.34	0.42
D	0.41	0.90	0.7	0.86	0.25	0.31
E	0.46	0.94	0.7	0.86	0.30	0.37
F	0.39	0.96	0.7	0.86	0.26	0.32
G	0.43	0.96	0.7	0.86	0.29	0.35
H	0.57	0.96	0.7	0.86	0.38	0.47
I	0.46	0.97	0.7	0.86	0.31	0.38
J	0.38	0.97	0.7	0.86	0.26	0.31
K	0.50	0.89	0.7	0.86	0.31	0.38
L	0.60	0.98	0.7	0.86	0.41	0.50

Table 12  
1979 PARKING DEMAND RATES FOR SHORT-TERM PARKERS  
Los Angeles Central City Parking Study

DESTINATION ZONE	PER CENT NET WITH RESPECT TO GROSS FLOOR AREA	PER CENT BUILDING OCCUPANCY	NET PER CENT ACTIVITY FACTOR	NET PARKING DEMAND RATE/SQUARE FOOT NET FLOOR AREA-1979				
				OFFICE	GOVT.	RETAIL	HOTEL SERVICE- INSTIT.	MANUF./ WHOLESALE
UNIT PARKING DEMAND:	-	-	-	0.15	0.27	0.84	0.10 <sup>(a)</sup>	0.27
A	80	95	0.76	0.11	0.21	0.64	0.08	0.21
B	80	95	0.76	0.11	0.21	0.64	0.08	0.21
C	95	80	0.76	0.11	0.21	0.64	0.08	0.21
D	95	95	0.90	0.14	0.24	0.76	0.09	0.24
E	80	95	0.76	0.11	0.21	0.64	0.08	0.21
F	85	60	0.51	0.08	0.14	0.43	0.05	0.14
G	90	95	0.86	0.13	0.23	0.72	0.09	0.23
H	90	95	0.86	0.13	0.23	0.72	0.09	0.23
I	95	95	0.90	0.14	0.24	0.76	0.09	0.24
J	95	95	0.90	0.14	0.24	0.76	0.31	0.24
K	90	95	0.86	0.13	0.23	0.72	0.46 <sup>(1)</sup>	0.23
L	85	60	0.51	0.08	0.14	0.43	0.05	0.14

(a) Due to unique conditions, Unit Parking Demands of 0.34 in Zone J-54.  
and 0.54 in Zone K-99 were used.

parkers, and is distributed by CRA zone as illustrated in Figure 9. Appendix Table C-3 identifies short and long-term demand by CRA zone. The zones of highest demand, except for the large zones in the fringe areas, are in the Core Area and the governmental offices of the City, County, State, and Federal agencies. Recent increases have occurred in the areas of new development and in the Garment District.

Figure 10 provides a comparison of several parking demand characteristics with past years. Areas B, C, H, and L show significant increases in demand, relative to floor area. The most pronounced relative increases in demand can be attributed to activity increases in several of the Spring Street destination zones at the same time as floor area occupancy has dropped. Increased parker activity has been quite pronounced in the Broadway shopping areas and in the California Mart area, despite low occupancy of the office buildings in those areas.

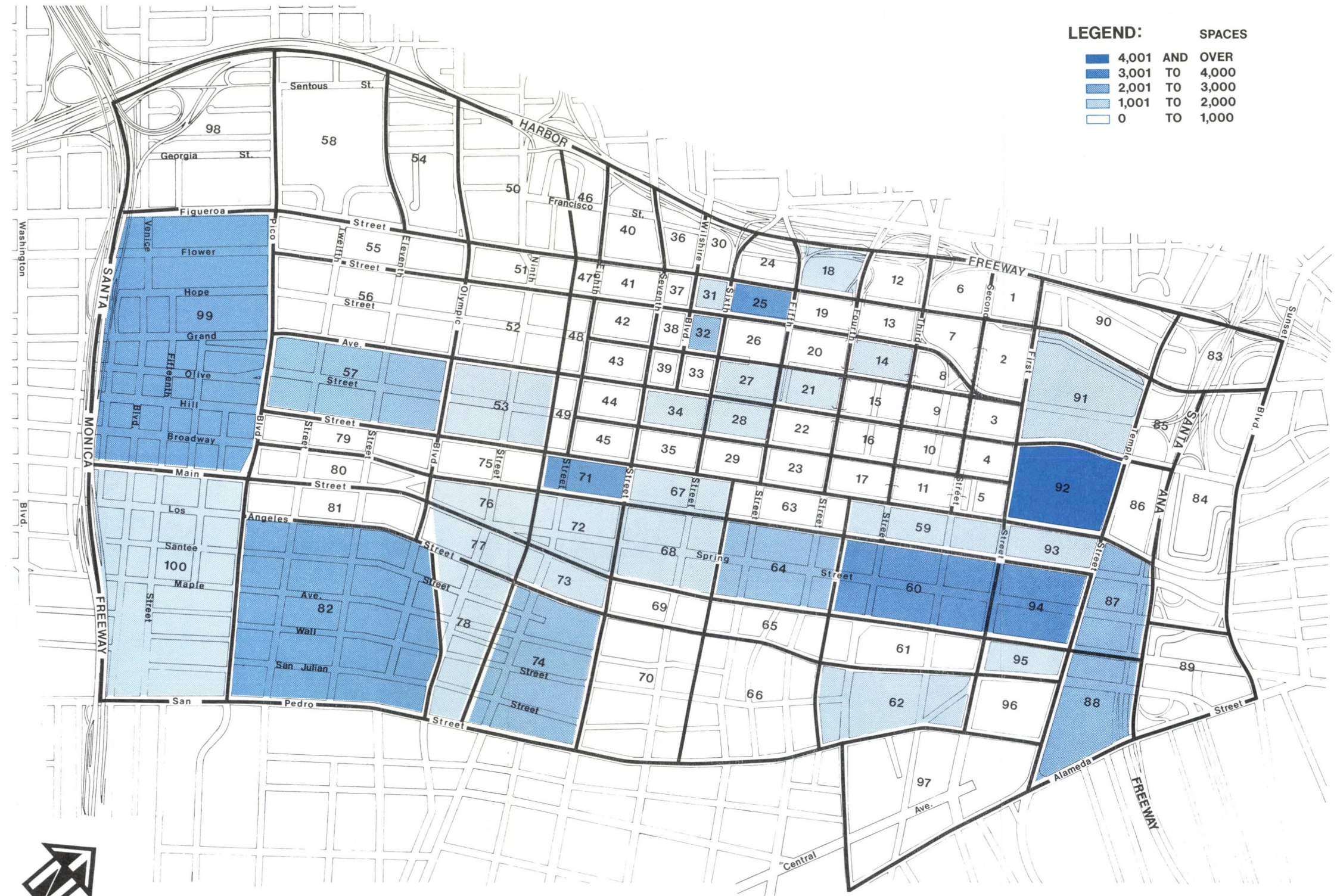
#### Parking Space Surpluses and Deficiencies - 1979

In order to assess existing parking needs, a comparison was made of parking supply and demand for each CRA zone. For zones with parking deficiencies, the parking space deficiency was reduced to the extent possible by any parking space surpluses in those zones within an acceptable walking distance. Those deficiencies which cannot be offset through this process represent unsatisfied parking needs.

Adjusted Parking Supply - Comparisons of parking demand and supply must be made using an adjusted parking space supply. The adjustment of parking supply accounts for the usage efficiency which can be expected for the spaces. In the past, standard practice was to assume that only 85 per cent of off-street spaces and 90 per cent of curb spaces are normally filled under capacity conditions, due to circulation of parkers seeking and leaving spaces, as well as the difficulty of finding remote spaces. However, current high occupancy rates in the Central







**LEGEND: SPACES**

■ (darkest blue)	4,001 AND OVER
■ (medium-dark blue)	3,001 TO 4,000
■ (medium blue)	2,001 TO 3,000
■ (light blue)	1,001 TO 2,000
□ (white)	0 TO 1,000

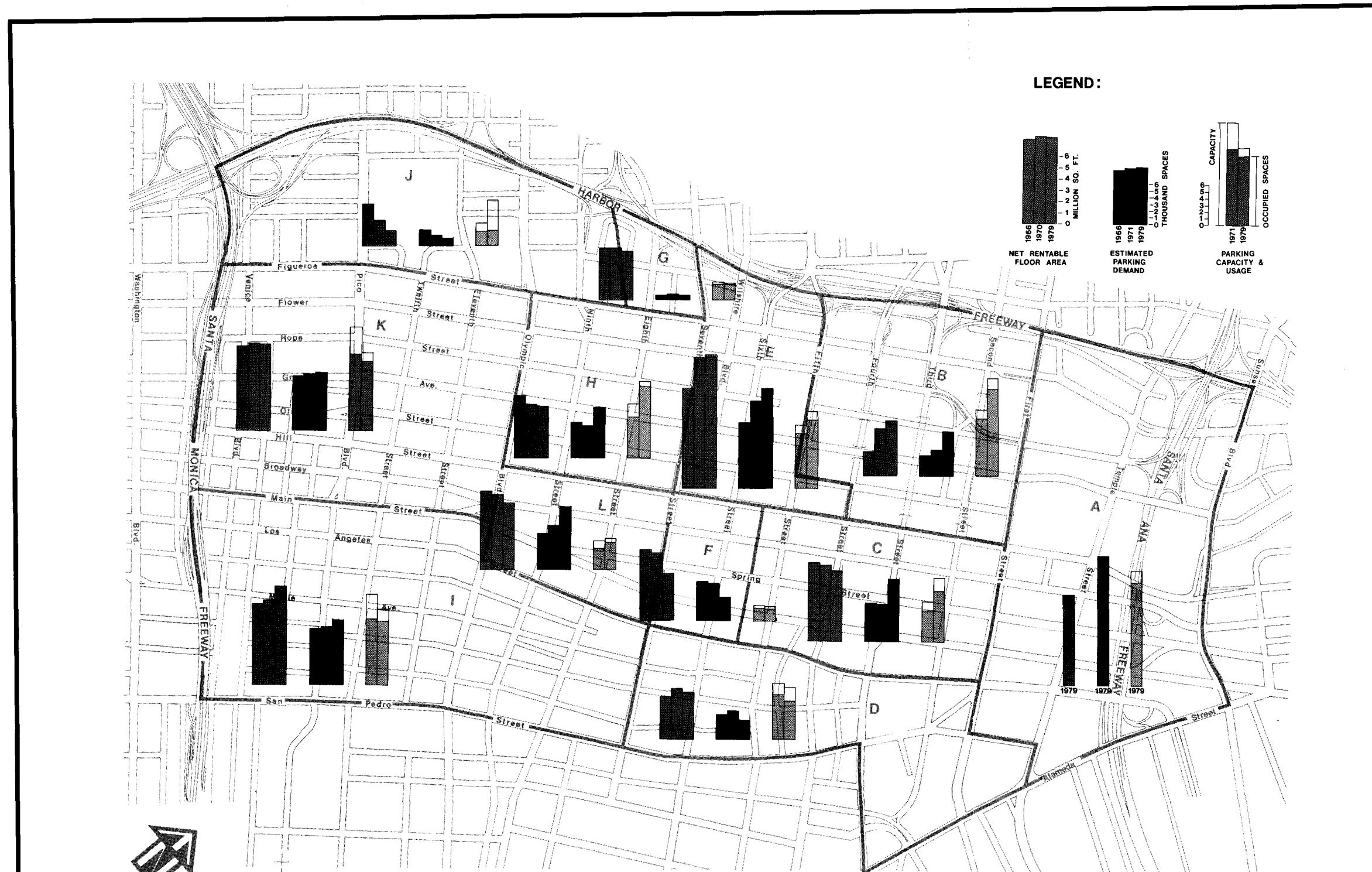
**1979 PARKING DEMAND  
LOS ANGELES CENTRAL CITY PARKING STUDY**

*Wilbur Smith & Associates*

**Figure 9**







**1979 PARKING DEMAND CHARACTERISTICS  
Los Angeles Central Business District**





City indicate that parkers are seeking convenient spaces more aggressively than in the past, and therefore the adjusted parking supply is now estimated at 90 per cent of available off-street and curb spaces.

Parking Surpluses and Deficiencies - 1979 - Using the 1979 parking demand and adjusted supply estimates, the parking surplus or deficiency has been calculated for each CRA zone. As can be seen in Figure 11, some zones have very high surpluses or deficiencies because of the assumption that all parkers would prefer to park in the same block as their destination, without having to walk. (See Appendix C-3.)

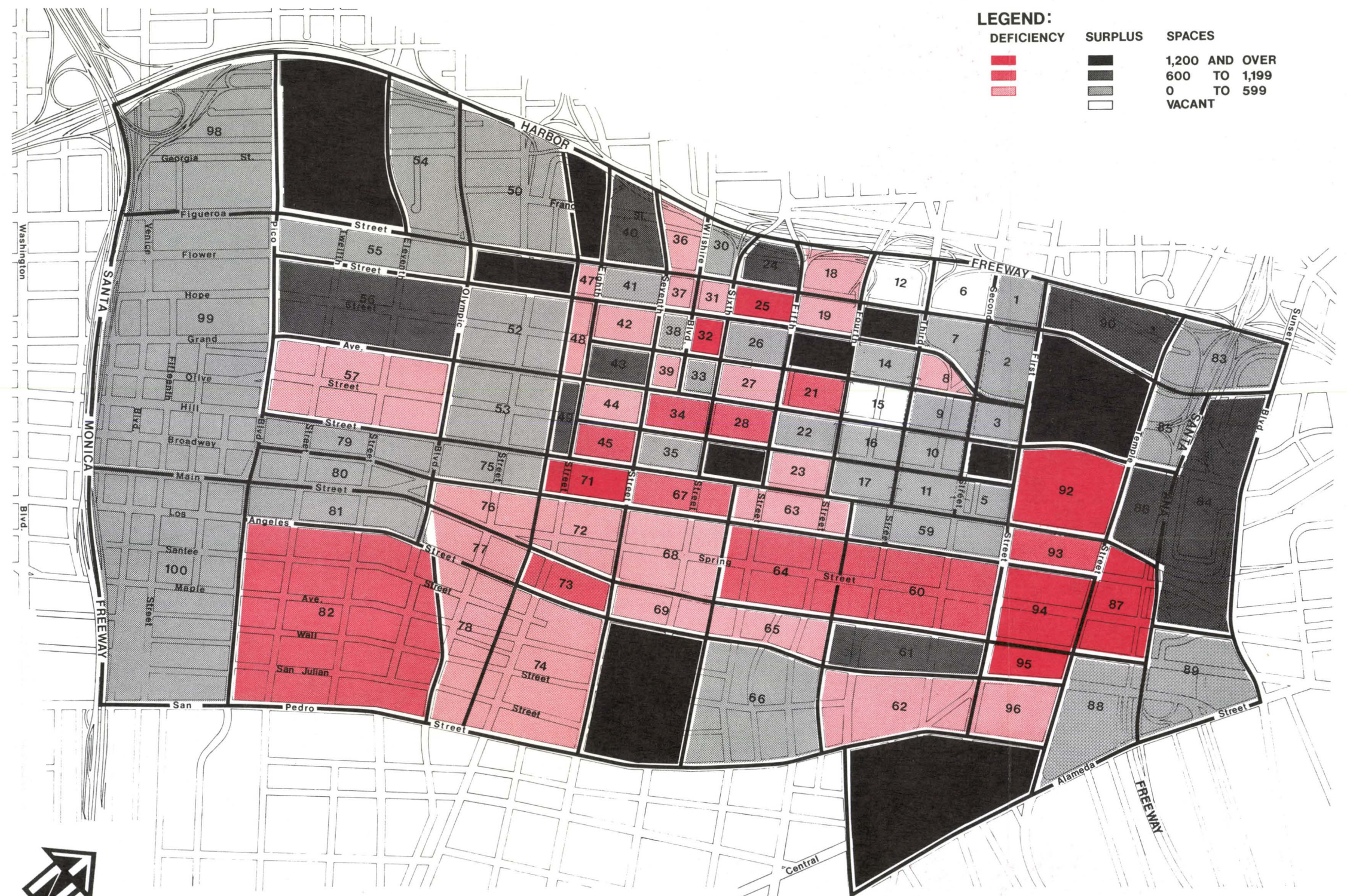
Assuming that people were to park only in their destination block or zone, there would be a total deficiency of 30,883 long-term and 1,140 short-term spaces in the Central City. Those individual blocks and zones with surplus parking amount to a surplus of 36,880 long-term and 406 short-term spaces. These are preliminary gross figures which must be balanced as discussed below.

Balanced Surpluses and Deficiencies - The net amount includes some very large deficiencies in core area zones, while the fringe areas contain many surplus spaces. It is realistic to assume, as was found in the 1966 parking survey and confirmed in 1971 and 1979 surveys, that short-term parkers will walk about a block away from their destination to park, and long-term parkers, primarily employees, will generally walk up to three blocks from their destinations.

Zonal parking surpluses were used to the maximum extent possible to offset those zonal deficiencies within the above acceptable walking distances. After completion of this surplus/deficiency balancing analysis, several parking deficient areas remain, and have been identified as areas of parking need. These are located in Figure 12 and listed by zone in Appendix Table C-4.







**1979 PARKING SURPLUSES AND DEFICIENCIES**  
**LOS ANGELES CENTRAL CITY PARKING STUDY**

*Wilbur Smith & Associates*

Figure 11







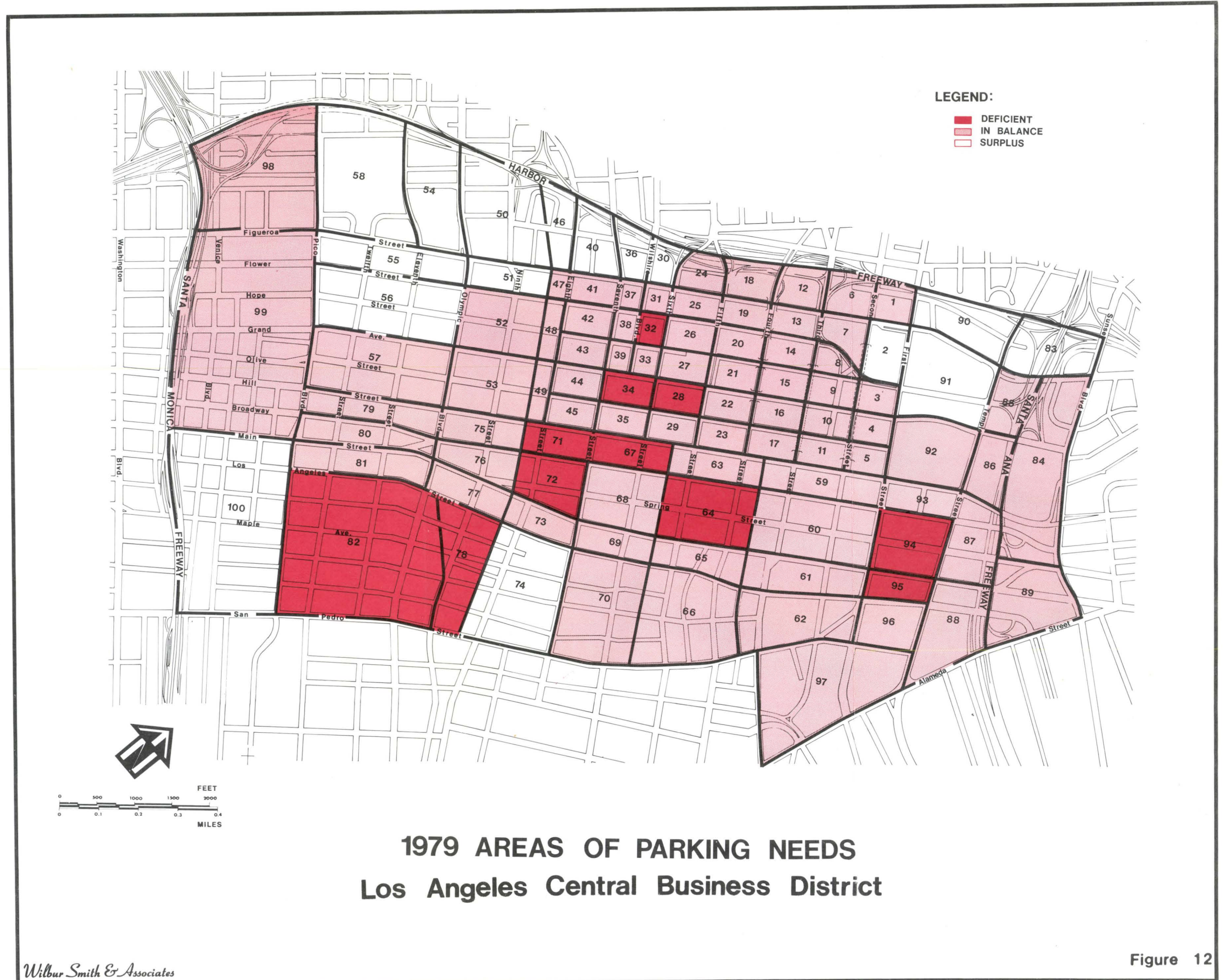


Figure 12





A core area deficiency of an estimated 1,875 spaces, located primarily in the Olive-Hill area, is evident. Most of the deficiencies are in the May Company, Bullocks, Biltmore and One Wilshire blocks. For many of the other nearby blocks, many employees find it necessary to walk three blocks or more.

A significant short-term parking deficiency is estimated in several blocks containing City, County, and Federal office buildings near Spring and Temple Streets. This deficiency is estimated to total over 200 spaces. There is a deficiency of more than 200 long-term spaces in a portion of the Garment District area, after adjusting for parking spaces available in nearby zones.

Areas of surplus include the Music Center area, where performer and visitor parking usually does not peak during the normal workday, zones west of Grand Street between Eighth Street and Pico Boulevard, and several areas east of Los Angeles Street.

Overall, the Central City parking situation was in relative balance, in August, 1979, with significant local deficiencies in the core area and local surpluses in several fringe areas.

For the most part, these findings are consistent with the results of the 1972 parking study, which did not include the governmental offices north of First Street. However, the net actual 1979 parking deficiency in the core area is lower than that projected for 1980 by the 1972 study. This lower actual deficiency largely results from several development-related assumptions which did not occur. These are the continued low occupancy of Spring Street offices, provision of more parking spaces than had been planned by developers in 1971, cancellation of some proposed development, and continued availability of a number of Bunker Hill parcels for surface parking and temporary parking structures.

# Chapter 4

## 1990 PARKING DEMANDS AND NEEDS BASED UPON CURRENT TRENDS

A forecast of 1990 parking demand and needs has been developed from carefully considered forecasts of floor area and employment by land use type. The development of Bunker Hill, the rehabilitation of portions of the Spring Street, and the maintenance of significant retail activity in the Olive-Hill area are all key assumptions in this forecast of parking needs.

The "current trends" parking demand forecast discussed in this chapter reflects no significant change in trip patterns nor impedances to use of the automobile. First, the analysis assumes no further increase in severity of the energy crisis. Such an occurrence could significantly change both trip generation rates and parking demand factors; however, the extent of the change would depend upon the nature and magnitude of the "crisis" and therefore cannot be meaningfully assessed for the purposes of this study.

The forecasts presented in this chapter also assumed no implementation of the proposed SCRTD Wilshire Starter Line, the City's Downtown People Mover, the Parking Management programs,



or the Caltrans Busway Program. The anticipated impacts of the programs upon Central City parking needs are identified in Chapter 5.

### Future Development

The estimates of 1990 Central City floor area and employment, which are used as the basis for these parking demand forecasts, have been updated from the 1990 forecasts prepared by Wilbur Smith and Associates for the CRA in May, 1978.<sup>(2)</sup> The forecast memorandum provides detailed documentation of the development assumptions made for 1990. The forecasts made in 1978 were based upon several Bunker Hill market analyses by Taylor Dark and Company, CRA planning and transportation staff reports and comments, City Planning Department inputs and comments, results of a Central City Association employment survey, plus spot checks of building occupancy by Wilbur Smith and Associates.

The 1978 study for CRA included assumptions concerning Bunker Hill commitments, significant new office developments; and gradual reoccupancy of rehabilitated Spring Street offices. These included:

- . Development of two new State buildings along First Street.
- . Minor retail growth for east side.
- . Relocation of Bullock's to a proposed multi-purpose development of Seventh and Figueroa Streets.

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(2) Community Redevelopment Agency of the City of Los Angeles, "Memorandum: Environmental Baseline Data Update, Task 4.01," May 15, 1978, prepared by Wilbur Smith and Associates.

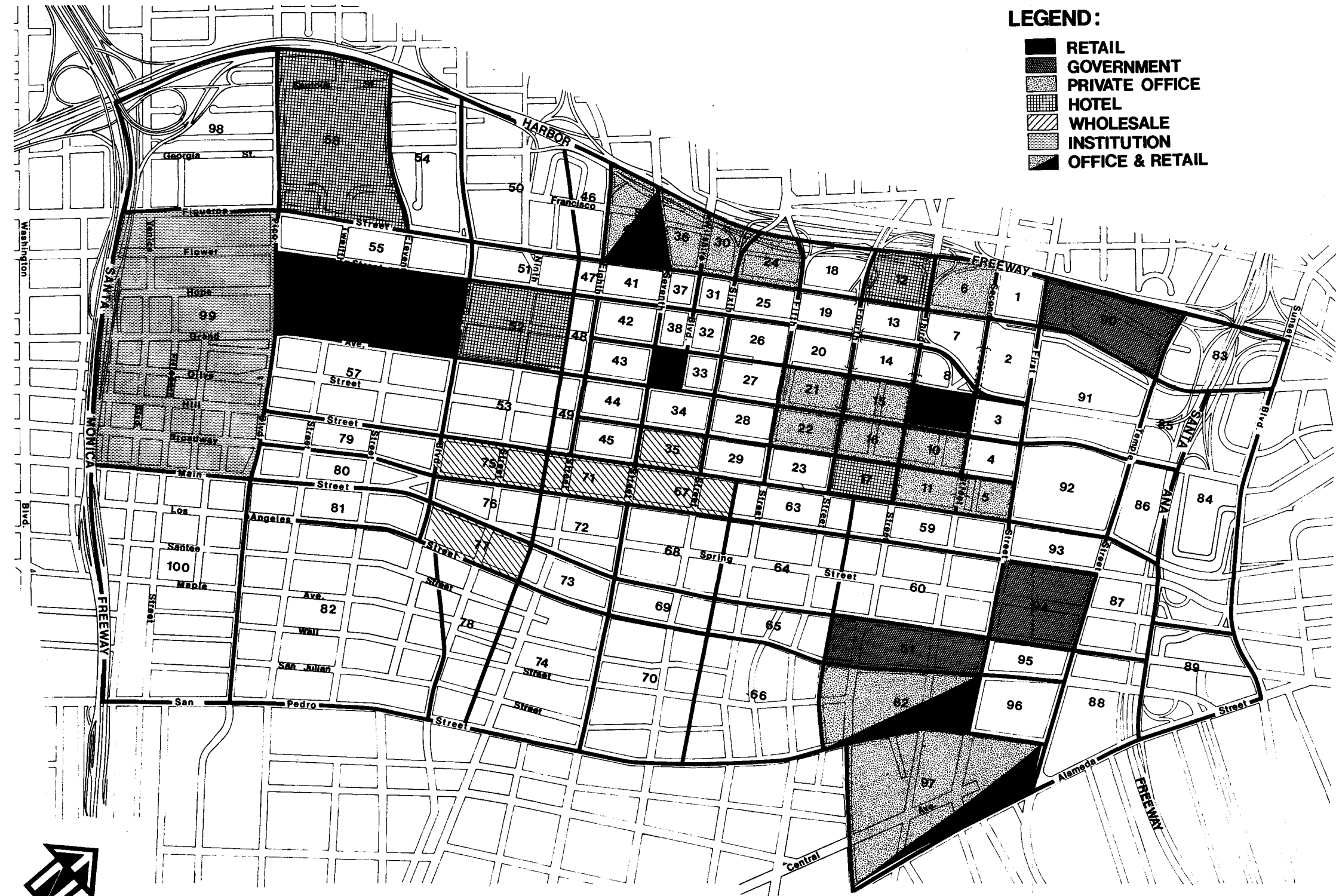
- . Several major new hotels, anticipated prior to the 1984 Olympic Games.
- . A continuing increase in manufacturing and wholesaling employment, particularly for the garment district.
- . Minor growth in local government employment.

In the year since the 1978 CRA forecast was completed, several office and retail developments have increased their planned development, while there has been increasing speculator activity among low-occupancy or vacant Spring Street office buildings. These changes were taken into consideration for the updated forecasts of 1990 floor area and employment, which are provided in Appendix Tables D-1 and D-2. The locations of major development changes are shown in Figure 13. (Note: Since the parking projections were made, the State has changed location of the proposed new State office building from the First-Main Street area to the block bounded by Spring, Third, Broadway and Fourth Streets.

Whenever a new development occurs, there are generally two effects on area parking: (1) any parking spaces that were located on the development site are eliminated, and (2) construction of a garage for the new development adds some parking availability. Information obtained from current development plans, where available, or calculated from zoning requirements, indicates that an increase in parking spaces from about 110,000 spaces to an estimated 119,000 spaces will occur in the Central City as a result of the expected developments.

#### 1990 Parking Demand

The estimation of 1990 parking demand by CRA zone was carried out in a manner consistent with the 1979 demand estimation procedures. Long-term demand was forecast based upon the



- LEGEND:**
- RETAIL
  - GOVERNMENT
  - PRIVATE OFFICE
  - HOTEL
  - WHOLESALE
  - INSTITUTION
  - OFFICE & RETAIL

**1990 DEVELOPMENT CHANGES**  
**LOS ANGELES CENTRAL CITY PARKING STUDY**

*Wilbur Smith & Associates*

Figure 13





1979 parking demand rates per employee, while short-term demand was based on 1990 parking demand rates. These revised short-term rates are shown in Table 13, and reflect a continuation of the 1966-to-1979 trend to increased short-term parker activity per square foot of floor area. There is little change expected in the areawide ratio of short to long-term parkers. Short-term demand is estimated at 19,950 peak parkers, while long-term demand is 103,610 parkers. This reflects a total increase of 34 per cent in parker activity, as compared to 1979 conditions.

Distribution of 1990 Demands - The projected parking demand for 1990 is listed by analyses zone in Appendix Table D-3, while zones of highest demand are illustrated in Figure 14. In addition to the physically large zones which have low unit area demand rates, the new high demand areas include the top of Bunker Hill, the Seventh and Figueroa Streets developments, and the State office developments.

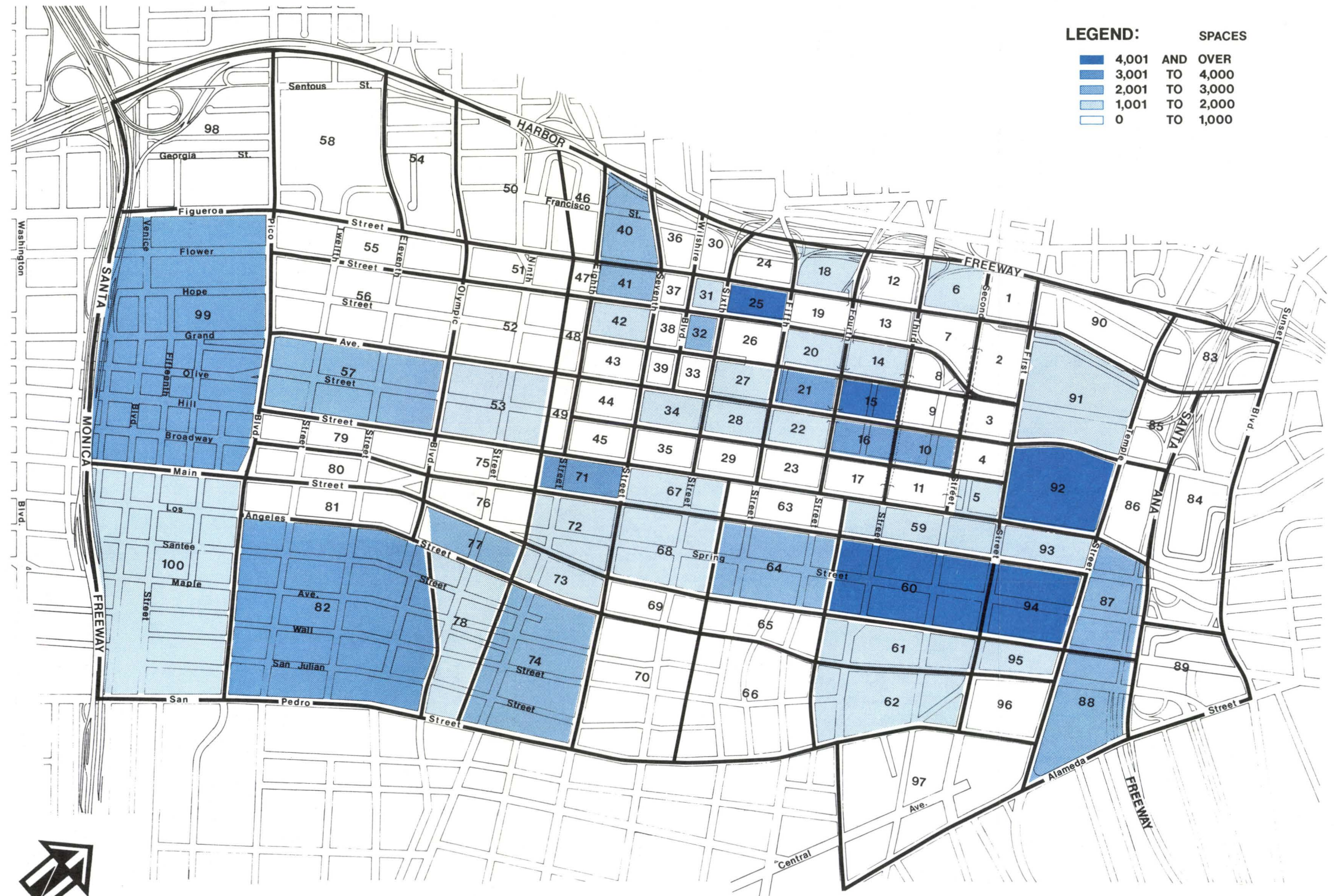
1990 Parking Characteristics - The relative increases in 1990 parking demand and parking supply are indicated in Figure 15 for each zone. Estimates of parking supply are based upon developer plans for major projects, and code requirements for other growth. The increases in demand will not necessarily be accommodated by proportionate increases in parking supply. Sizeable increases in demand relative to supply are anticipated for analysis areas B, G and K. Each of these areas is largely affected by potential displacement of surface parking lots by new development.

#### Parking Surplus and Deficiencies - 1990

The analysis of surpluses and deficiencies for 1979 was made in a manner consistent with the 1979 analysis. The 1990 parking supply was modified to an adjusted parking supply of approximately 90 per cent of projected spaces to account for

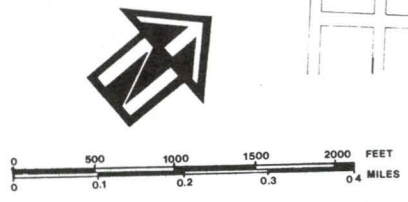






**LEGEND: SPACES**

■ (darkest blue)	4,001 AND OVER
■ (medium-dark blue)	3,001 TO 4,000
■ (medium blue)	2,001 TO 3,000
■ (light blue)	1,001 TO 2,000
□ (white)	0 TO 1,000



**1990 PARKING DEMAND  
LOS ANGELES CENTRAL CITY PARKING STUDY**

*Wilbur Smith & Associates*

**Figure 14**









**1990 PARKING DEMAND CHARACTERISTICS  
Los Angeles Central Business District**

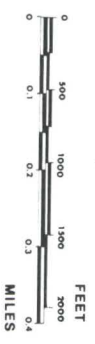




Table 13  
 1990 PARKING RATES FOR SHORT-TERM PARKERS  
 Los Angeles Central City Parking Study

DESTINATION ZONE	NET PER CENT ACTIVITY FACTOR	NET PARKING FACTOR - 1990				
		OFFICE	GOVT.	RETAIL	HOTEL SERVICE- INSTIT.	MANUF./ WHOLESALE
UNIT PARKING DEMAND	-	0.20	0.40	1.34	0.17 <sup>(a)</sup>	0.33
A	0.76	0.15	0.30	1.02	0.13	0.25
B	0.76	0.15	0.30	1.02	0.13	0.25
C	0.86	0.17	0.34	1.15	0.15	0.28
D	0.90	0.18	0.36	1.21	0.15	0.30
E	0.76	0.15	0.30	1.02	0.13	0.25
F	0.76	0.15	0.30	1.02	0.13	0.25
G	0.86	0.17	0.34	1.15	0.15	0.28
H	0.86	0.17	0.34	1.15	0.15	0.28
I	0.90	0.18	0.36	1.21	0.15	0.30
J	0.90	0.18	0.36	1.21	0.15 <sup>(a)</sup>	0.30
K	0.86	0.17	0.34	1.15	0.15 <sup>(a)</sup>	0.28
L	0.76	0.15	0.30	1.02	0.13	0.25

(a) Due to unique conditions, Land Use Factors of 0.39 in Zone J-54 and 0.54 in Zone K-99 were used.

efficiency of space use. However, in 1990 it is assumed that private parking supply will be either fully used or else converted to public availability to accommodate increased demand, as well as to generate revenue.

A tabulation of the net surpluses or deficiencies in each zone or block was prepared to identify areas where parkers cannot park in their destination block. (See Appendix D-3.) The resultant parking surpluses and deficiencies are indicated for each block or zone in Figure 16. In contrast with the 1979 distribution, new areas of significant local deficiencies appear to be on Bunker Hill, at Seventh and Figueroa Streets, along First Street areas (where new state buildings are planned to exclude parking), and in Spring Street office rehabilitation areas. Deficiencies in the Olive-Hill, Sixth and Flower Streets, and Garment District areas will remain.

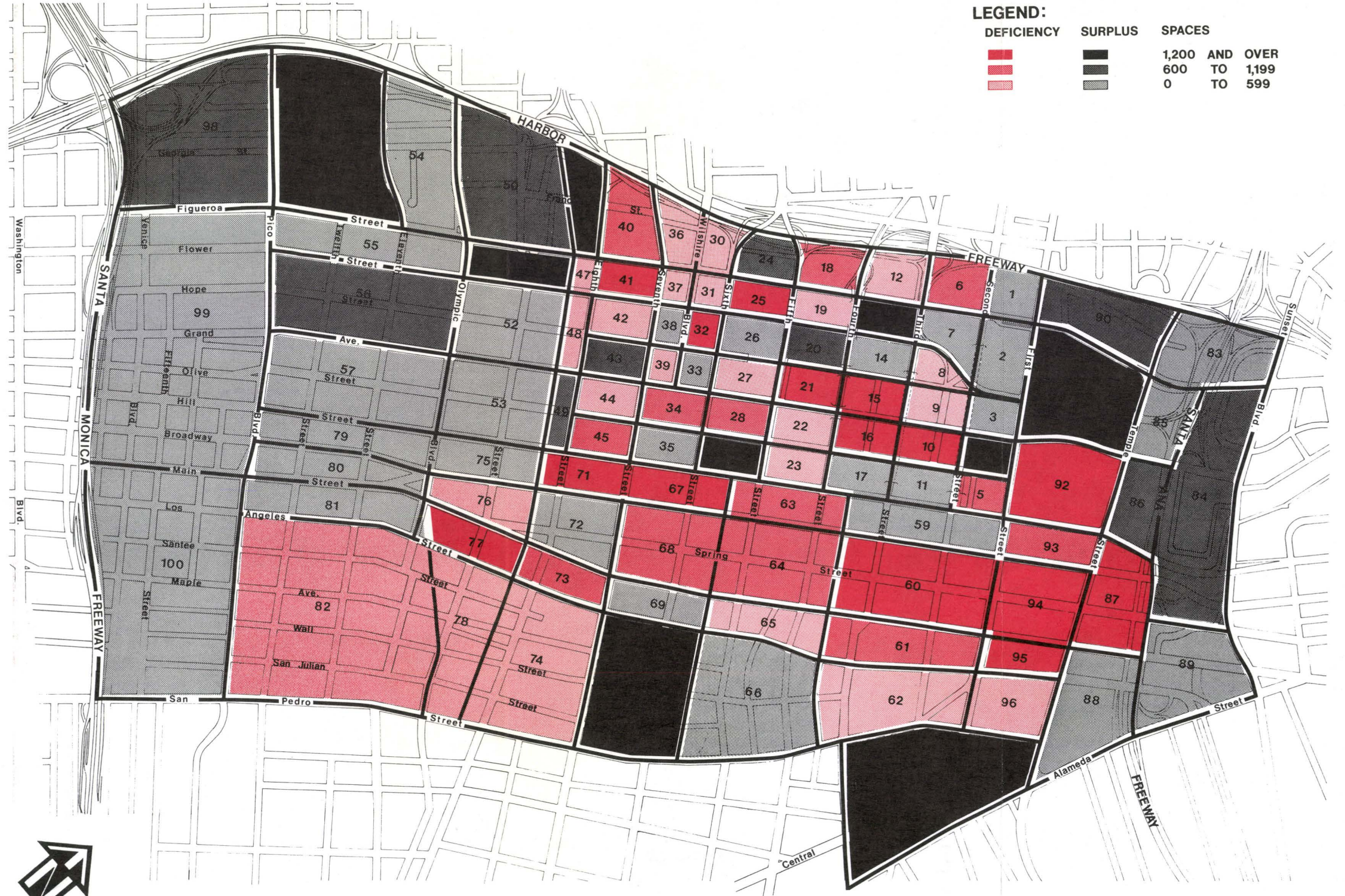
Areas south of Eighth Street and west of Grand Avenue will continue to have a surplus of parking spaces.

#### Areas of Parking Needs - 1990

As was done for 1979, the 1990 parking surpluses and deficiencies were reviewed to identify long-term parking space surpluses within three blocks of those blocks with a future parking space deficiency. Several Central City areas are still indicated as deficient, as shown in Figure 17 and tabulated in Appendix Table D-4, even after consideration of surplus parking within nearby blocks.

The most significant parking deficiencies in 1990, assuming the current trends projection (with no further energy constraints and no construction of the Starter Line and DPM or implementation of Parking Management) are in several defineable areas, as shown in Table 14.



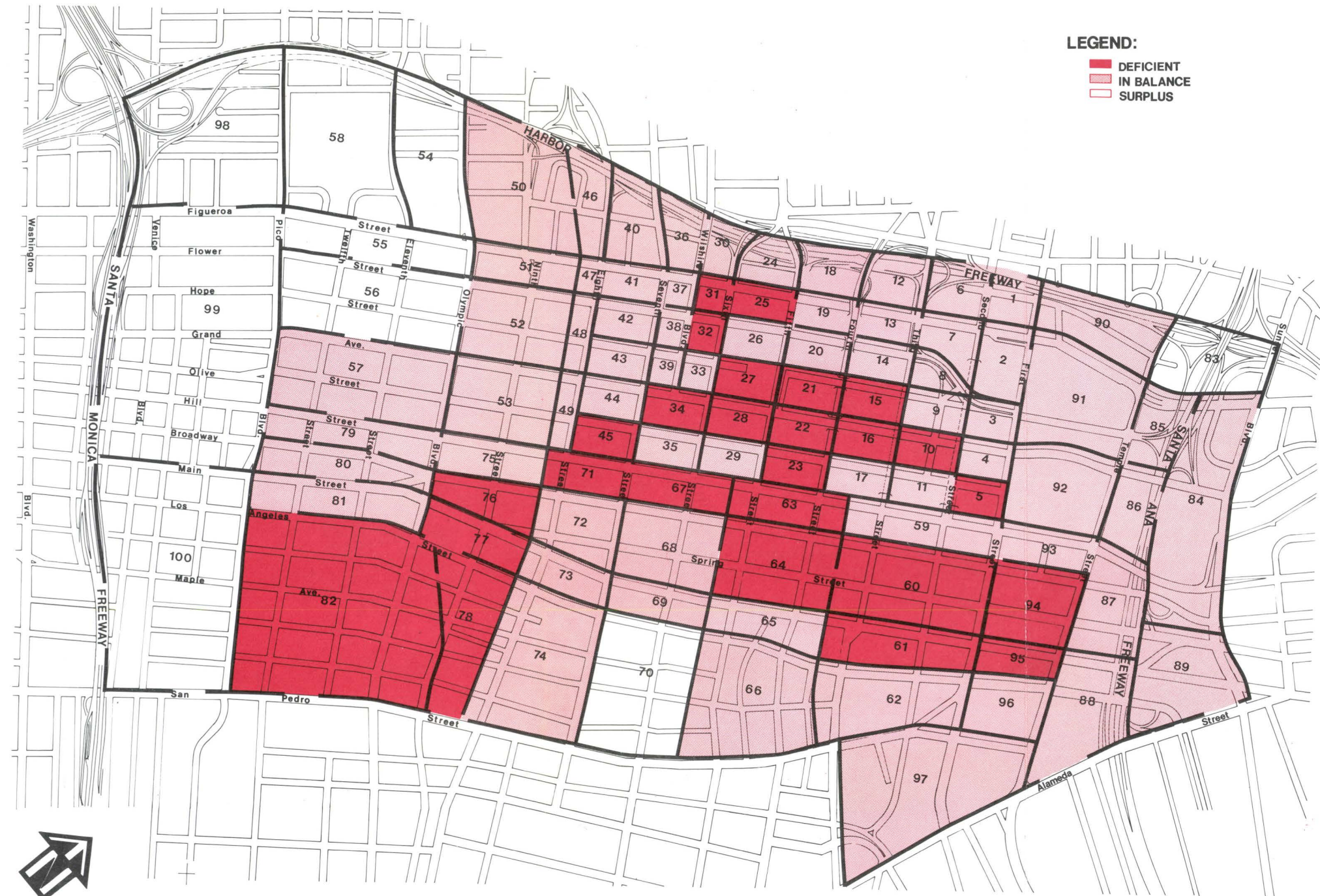


**1990 PARKING SURPLUSES AND DEFICIENCIES**  
**LOS ANGELES CENTRAL CITY PARKING STUDY**

*Wilbur Smith & Associates*

Figure 16





**LEGEND:**  
 ■ DEFICIENT  
 ■ IN BALANCE  
 ■ SURPLUS

**1990 AREAS OF PARKING NEEDS  
 Los Angeles Central Business District**

Table 14

AREAS OF PARKING NEEDS - 1990 PRESENT TREND ANALYSIS  
Los Angeles Central City Parking Study

<u>AREA</u>	<u>APPROXIMATE SPACES DEFICIENT</u>	<u>COMMENT</u>
Garment District	1,400	Increased Activity
Olive-Hill-South <sup>(a)</sup>	1,300	Reflects Continuation of Present Department Stores
Olive-Hill-North <sup>(a)</sup>	1,500	
5th-Broadway-Spring	900 <sup>(b)</sup>	Spring Street Rehabilitation and Broadway Retail
6th-Flower	2,600	Financial District
Bunker Hill	9,600	CRA Assumes Minimum Zoning & DPM Available, Removes Parking Lots
County-Los Angeles Times	900	Displacement of Large Parking Area
Spring-First	5,600 <sup>(b)</sup>	Reflects Two New State Build- ings Assuming No Parking; Includes Short-Term Deficiency of 400 Spaces.
TOTAL	23,800	

(a) The Olive-Hill Area is split at Seventh Street.

(b) The proposed State Office development has since been changed from the Spring-First area to the Spring, and Fourth Streets area, which would effect these deficiencies.

There are additional parkers in these areas, of course, who cannot park in their destination block but are expected to be willing to walk up to 3 full blocks to parking. These areas of need are consistent with the areas identified in previous analyses, except for the First Street locations which largely results from the proposed State Office Buildings.

Note that the parking deficiencies summarized above and in Appendix Table D-4 would be greatly changed by the recent plans to locate the planned State Office Building on the block



bounded by Spring, Fourth, Broadway, and Fifth Streets, rather than at the previously proposed First and Main Street location, which was used in this parking analysis. The 5,600-space deficiency indicated for the Main-Spring-First Street areas largely resulted from the proposed State building, which was to provide no employee parking. Relocation would reduce the Main-Spring-First Street deficiency by over 5,000 spaces. Conversely, the State building location in the 5th-Broadway-Spring Street area would increase the 900-space deficiency indicated for that area to a revised total deficiency of approximately 2,800 spaces. The total 23,800-space deficiency would be reduced by approximately 1,000 spaces by this change.

### Implications

The area of largest anticipated parking deficiency is Bunker Hill, where a number of very large office structures are committed or in negotiation and design completion stages. These negotiations include the development of agreements to lease parking at the proposed DPM intercept parking garages, from which employees would ride the DPM from the parking garages to the Bunker Hill offices. The forecasts in this chapter reflect the parking as proposed by the developer, or in the absence of a specified number of spaces, the parking to be provided is assumed to equal the City ordinance requirements.

The parking deficiency in the Olive-Hill area has been present for some years. The area contains older medium and high-rise structures which were mostly built in less auto-dependent years, and therefore provided very limited parking facilities as compared to current needs. A significant part of the deficiency is attributable to the May Company, which is housed in an older structure. The long-term plans for this structure are unknown. Also, in this area are numerous small jewelers who tend to produce high levels of auto trip generation to floor area since the facilities are predominately retail-oriented and require very little space.



The Fifth-Broadway-Spring Street area of parking deficiency includes very heavy ground floor retail sales in older buildings. Many of these buildings were originally constructed as office buildings and provided very limited numbers of parking spaces. The forecasts reflect a continuation of this current usage and activity level.

The 6th and Flower area is a high rise area including some older buildings with inadequate parking.

The Spring and First Streets area would be affected by both a short-term parking deficiency caused by Los Angeles City Hall visitors and by two new State office buildings that will provide no parking in order to encourage transit and ridesharing modes. These would result in anticipated parking deficiencies in the surrounding blocks.

The need for some action on Central City parking is evident. However, before considering the development of parking structures, it is also desirable to identify the potential impacts of other proposed transportation programs that could influence the level and locations of parking needs.

## Chapter 5

# PARKING IMPACTS OF PROPOSED TRANSPORTATION PROGRAMS

The process of identifying and quantifying parking needs is generally based on an assumption that present trends in travel patterns and mode choice will continue. While many transportation proposals have been put forth over the years, and drastic changes in gasoline prices and availability have occurred in recent years, established behavior and customs are difficult to change. As recently as the Summer and Fall of 1979, parking surveys indicated record numbers of parkers and levels of parking space occupancy despite major increases in parking rates, increases in driving costs, and increases in both bus and carpool usage.

Despite the reluctance of automobile drivers to change travel modes, there are four transportation programs which could potentially have a major impact on Central City travel characteristics, and could reduce future parking requirements and improvement needs. The potential parking impacts of the following programs are evaluated in this chapter:

- Southern California Rapid Transit District (SCRTD) Wilshire-North Hollywood Rapid Transit (Subway) Starter Line, which could become operational just before 1990.

- City of Los Angeles Downtown People Mover.  
(At the time of the herein described analysis, the final design was about to begin and operation was expected in 1983. Federal funding support has since been withdrawn and the project effort is being terminated.)
- City of Los Angeles Parking Management Program - the parking space waiver element. A demonstration of this program is expected to be conducted in the early 1980's.
- Freeway Transit, or Rail Transit of Freeway Right-of-Way, which are proposed in the Region's long-range four-point program and are approaching the detailed planning phases. Implementation of a facility in the Harbor-Century Freeway Corridor is anticipated by 1990.

In this chapter, the parking impacts of each of these programs is evaluated independent of the others, with an assessment also provided at the conclusion of the cumulative effects of the four programs.

Other factors and planning assumptions also could impact the need for parking downtown: the return of long gasoline lines, much higher gasoline prices, increased local taxes (Proposition A) to fund increased bus operations and usage, and either greater or less development activity in the Central City area. Because of their uncertainty, these factors are not analyzed in this report.

## SCRTD Rapid Transit Starter Line

The Proposed Wilshire-North Hollywood Rapid Transit Starter Line would have four subway stations in the study area, located at Seventh and Flower Street, Fifth and Broadway, First and Broadway, and Union Station. (See Figure 18.) The program is presently in the preliminary engineering phase and is proposed to be in operation by 1990.

Description - The proposed starter line subway would begin at Union Station, with its alignment generally paralleling Broadway and Seventh Streets within the Central City. The proposed Starter Line alignment would generally follow Wilshire Boulevard, Fairfax and La Brea Avenues, and Cahuenga Pass to North Hollywood.

A conclusion of the 1979 SCRTD Alternatives Analysis was that the Wilshire-North Hollywood Rapid Transit Starter Line would attract usage by a significant number of present Central City automobile commuters. The Alternatives Analysis estimated that the transit line would attract usage by approximately 12,400 Central Business District area employees in 1990 who would otherwise drive to work. <sup>(3)</sup>

Evaluation - The projected reductions in automobile trips would result in a reduction in Central City parking requirements, although not on a one-for-one basis. The total reduction must be adjusted to reflect the different areas addressed by this study and the Alternatives Analysis, and to reflect the extent to which this daily total reduction would affect the peak parking requirement. These adjustments resulted in an estimated reduction of 9,880 spaces in the 1990 peak parking demand for the Central City study area.

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(3) Alternatives Analysis and Environmental Impact Statement Report on Transit System Improvements in the Los Angeles Regional Core, Appendix Chapter II.D.3., Table 10.







To determine the reduction in parking space needs, the reduction in parking demands had to be identified for each parking analysis zone. These reduced demands were then used to reevaluate zonal parking surpluses and deficiencies, since a part of the parking demand reduction might occur in parking surplus areas and thus not affect the need for additional parking.

The Alternatives Analyses estimates were developed for the LARTS zonal system, which are much larger than the parking analysis zones. Therefore, the LARTS assignments of Starter Line trips were disaggregated among the smaller parking zones. This distribution of Starter Line trips and parking demand reductions to the CRA zones was accomplished using a modified gravity model procedure.

The zone-by-zone reductions in parking demand are summarized in Table 15. The 1990 "Current Trends" parking space surpluses and deficiencies were adjusted for each CRA zone by the estimated reduction in parking demands to produce a revised set of zonal surpluses and deficiencies. For each zone where the reduced parking demand would result in surplus spaces, those surpluses were used to offset any remaining parking deficiencies within three blocks of the surplus zone.

Since the four Starter Line stations affect only 47 Central City zones, and only 18 of those zones are expected to have deficiencies totaling 14,027 spaces, the reduction of 9,880 produces a net deficiency in these areas of 4,147 spaces in 1990 and deficiencies in other zones will be unchanged. The result is a rather significant 41 per cent reduction of 1990 parking needs, from 23,826 spaces to 13,946 spaces deficient in the Central City.

In addition, the SCRTD report indicates that this parking space savings understates the overall savings in parking spaces since only home-to-work trips were considered.

## Downtown People Mover

At the time of this parking analysis, the Los Angeles Downtown People Mover (DPM) was expected to begin operation in 1983. The withdrawal of Federal funding for the Los Angeles DPM has thus indefinitely postponed the project, thus, voiding its anticipated impacts upon parking needs. The following analysis is presented for informational purposes.

Description - The Los Angeles Downtown People Mover has been planned as a circulation/distribution system for the central business district (CBD). It would run approximately three miles through the north and west sides of the CBD, between Union Station on the north and the Convention Center on the south. (See Figure 18.). Total trip time between Union Station and the Convention Center would be less than 15 minutes. The DPM is planned as a grade-separated facility with automated vehicles providing service to 13 stations along the proposed route. The vehicles, operating singly or in trains, would operate over the elevated guideway except for a short underground segment under Bunker Hill.

The two terminal stations, at Union Station and the Convention Center would include intercept parking structures providing 2,000 parking spaces at the Union Station and 1,750 at the Convention Center station. Preferential access and parking would be afforded to carpools in both locations. It would be possible to transfer to and from regional and local buses at the two intercepts and at some stations along the route. The DPM system would cross the route of the proposed Regional Core Rapid Transit (Starter) Line at three locations, thus providing additional transfer points for circulation/distribution.

In 1990, the DPM station locations are within a five-minute walking distance of 80 percent of Central City employment.



Figure 18 illustrates the alignment and station locations of both the DPM and the SCRTD Starter Line.

Evaluation - The DPM was planned to provide a capacity of 2,000 parking spaces at Union Station and 1,750 at the Convention Center. Application of a 90 per cent efficiency factor to these parking facilities, would indicate that a total of 3,375 peak parkers could be accommodated at the intercepts in lieu of parking downtown.

The 3,375 parking supply was allocated to each DPM Station Area in order to analyze the impact of the DPM on local parking deficiencies. These parkers were assigned to each DPM station destination based upon the magnitude of the parking deficiency in the area adjacent to each station. This indicated that an average of 16 per cent of the deficiency in each area, within two blocks of a DPM station, could be accommodated at the DPM intercepts, leaving a remaining Central City deficiency of 17,725 parkers. Note that the distribution of parkers to Bunker Hill depends partly on the level of development there in 1990, but in addition it also depends on the extent to which Bunker Hill developers would accept the CRA plan for substitution of parking spaces on-site with spaces at the intercept stations.

Given the status of the DPM project at the time of this report, its potential parking impacts were not included in the analysis of the overall, cumulative affects of the various programs on Central City parking needs.

#### Parking Management Program - Parking Space Waiver Element

Over the past several years, the City of Los Angeles has been developing a number of low-cost energy conservation, air quality improvement, and transportation systems management programs in cooperation with a private sector Steering Committee.

A parking management program was developed to provide positive incentives for employers through reduced parking construction and operating costs, while encouraging their employees to use more efficient modes and/or remote parking. A demonstration of the concept has been funded by the U.S. Department of Transportation.

Description - Under the guidance of the Planning Commission and the Department of Building and Safety, the City would permit developers and existing building owners to save capital and operating costs by providing below code parking in return for legal assurances of increased ridesharing by employees, subsidized employee bus passes, covenants for lower-cost remote parking substitution, and preferential parking for high-occupancy carpool and vanpool vehicles. The provisions would apply to new construction and to rehabilitation of existing buildings.

Evaluation of Parking Impact - The program is intended to have a direct impact on parking needs. However, the program's impacts on parking is very difficult to quantify due to the innovative nature of the program, and the fact that its impacts on parking have not been simulated in detail and cannot be assessed on the basis of past results. In addition, the type and amount of incentives to be offered to individual employees has not been determined by the City.

Given the preliminary nature of the City proposal at the time of this study, this parking analyses is based on the City's assessment of the program's potential impacts. This also ensures consistency with the City estimates and judgements used in developing the parking management proposals. The City's estimates indicate that from 65 to 1,308 parking spaces could be reduced by the proposed programs, with a medium estimate of a 327 space savings. <sup>(4)</sup>

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(4) "Los Angeles Parking Management Plan Proposal", City of Los Angeles, 1977, p. 67.

This savings range is from 0.3 to 5.5 per cent of the 1990 Central City parking deficiency of 23,826 spaces.

The City's range of estimates may be low. A recent carpool program evaluation by Commuter Transportation Services in Los Angeles, based on surveys of Commuter Computer respondents, indicated that for employees marketed through their employers, 30 per cent express interest in ridesharing and 9 per cent of those form carpools as a result. About half as many non-applicants also join these pools, resulting in an actual carpool formation equivalent to 4 per cent of those employees contacted in larger firms during non-crisis conditions. Occasional crisis situations temporarily double this response rate.

However, the inclusion of hard-to-reach employees in small firms generally reduces the ridesharing participation rate to two per cent of the long-term (employee) parking demand. In the Central City, these would equate to a 2,000-space reduction in parking demands. Therefore, the City's maximum estimated reduction in parking space demand of approximately 1,300 spaces would appear to be a conservative estimate for the Central City area. The reduction in parking demand would likely be distributed throughout the Central City area based on employer support and area parking deficiencies and parking fees. This program is not likely to receive participation in areas with surplus parking. Therefore, the estimated reduction was distributed uniformly in proportion to 1990 long-term parking deficiencies, as shown in Table 15. The 1,300 space reduction represents 5.5 per cent of the 1990 long-term parking deficiency, and 1.3 per cent of long-term demand.

A more accurate estimate of the magnitude and distribution of the reductions would require a survey of developers and employers to determine employee parking subsidies, employer parking investment and operating costs, and interest in parking management participation.

Table 15

ESTIMATED REDUCTION IN 1990 PARKING NEEDS  
AS A RESULT OF PARKING MANAGEMENT PROGRAMS

Los Angeles Central City Parking Study

<u>AREA</u>	<u>1990 PARKING DEFICIENCY</u>	<u>ESTIMATED REDUCTION BY PARKING MANAGEMENT</u>	<u>REMAINING PARKING DEFICIENCY</u>
A	3,310 (a)	190	3,120 (a)
B	10,582	590	9,992
C	2,678	150	2,528
D	0	0	0
E	3,962	220	3,742
F	240	10	230
G	0	0	0
H	227	10	217
I	400	20	380
J	0	0	0
K	0	0	0
L	<u>2,037</u>	<u>110</u>	<u>1,927</u>
TOTAL	23,436	1,300	22,136

(a) Excludes deficiency of 390 short-term spaces.

Freeway Transit Program

The California Department of Transportation has a key role in the Los Angeles Regional Transit Development Program, which includes as one principal element the development of busways and rail transit services within or adjacent to area freeways. This program is now in the planning and/or alternatives analysis/ environmental impact documentation phase (AA/EIS). Implementation of a transit facility in one corridor, possibly the Harbor Freeway-Century Freeway corridor, is anticipated prior to 1990. An AA/EIS is currently being prepared for busway and rail alternatives in this corridor.

Light rail transit using existing rail rights-of-way is also under consideration by the Los Angeles County Transportation



Commission for implementation in the Harbor Freeway corridor between Los Angeles and Long Beach. The line would principally use the Southern Pacific Railroad Willowbrook branch right-of-way and would be expected to require lower implementation costs than a Harbor Freeway transit project. However, The Harbor Freeway transit facility is considered in this analysis due to its more advanced stage of analysis, as well as a current lack of information concerning the patronage and the alignment of the Willowbrook rail line in the Central City, both of which are essential to an analysis of parking impacts.

Description - The Harbor Freeway transitway would extend from the Central City southward to and beyond the planned Century Freeway. The facility would be either a busway or rail line located within or adjacent to the freeway right-of-way. Transit stations would be located at major arterials outside of the Central City.

If the Harbor Freeway transitway is developed as an intermediate capacity rail line, the rail facility would likely enter the Central City via Figueroa Street and follow the planned DPM alignment through the Central City to Union Station (Figure 18). Station locations would be the same as for the DPM. Development as a light rail line would probably result in the line terminating at Seventh Street.

For a Harbor Freeway busway, the buses would exit the busway south of the Central City and enter the Central City on Figueroa Street. The buses would probably travel through the Central City on the Eleventh-Twelfth Streets, Olive Street and First Street to Union Station.

Weekday travel on the Harbor Freeway rail or busway facility could potentially total 50,000 persons entering or leaving the Central City if operational by 1990.

Evaluation - The development of a Harbor Freeway corridor busway or rail line was assumed to provide a level of effectiveness in reducing Central City parking demands similar to that estimated for the SCRTD Metro rail Starter Line. Application of similar parking demand reduction factors to the estimated Harbor Freeway transit line patronage results in an estimated reduction of 3,100 parking spaces for 1990.

The locational distribution of this reduction of 3,100 spaces would vary slightly depending whether a busway or rail line is implemented, since the vehicles for each would be routed somewhat differently through the Central City. For the purpose of this analysis, it was assumed that the rail alternative is implemented and follows the DPM alignment. The resultant impact on parking deficiencies is summarized in Table 16.

Table 16  
POTENTIAL IMPACT OF FREEWAY TRANSIT ON 1990 PARKING DEFICIENCIES  
Los Angeles Central City Parking Study

<u>AREA</u>	<u>1990 PARKING DEFICIENCY</u>	<u>ESTIMATED REDUCTION BY FREEWAY TRANSIT</u>	<u>REMAINING PARKING DEFICIENCY</u>
A	3,310 (a)	520	2,790 (a)
B	10,582	1,550	9,032
C	2,678	410	2,268
D	0	0	0
E	3,962	580	3,382
F	240	40	200
G	0	0	0
H	227	0	227
I	400	0	400
J	0	0	0
K	0	0	0
L	<u>2,037</u>	<u>0</u>	<u>2,037</u>
TOTAL	23,436	3,100	20,336

(a) Excludes deficiency of 390 short-term spaces.

If the busway alternative were implemented and routed through the Downtown on Olive Street, the principal difference would be a greater reduction of parking demands on the Fifth-Broadway-Spring Street area (Areas C and F) and a lesser reduction on the Sixth-Flower Streets and Bunker Hill areas (Areas B and E).

#### Combined Impact of Implementing Proposed Programs

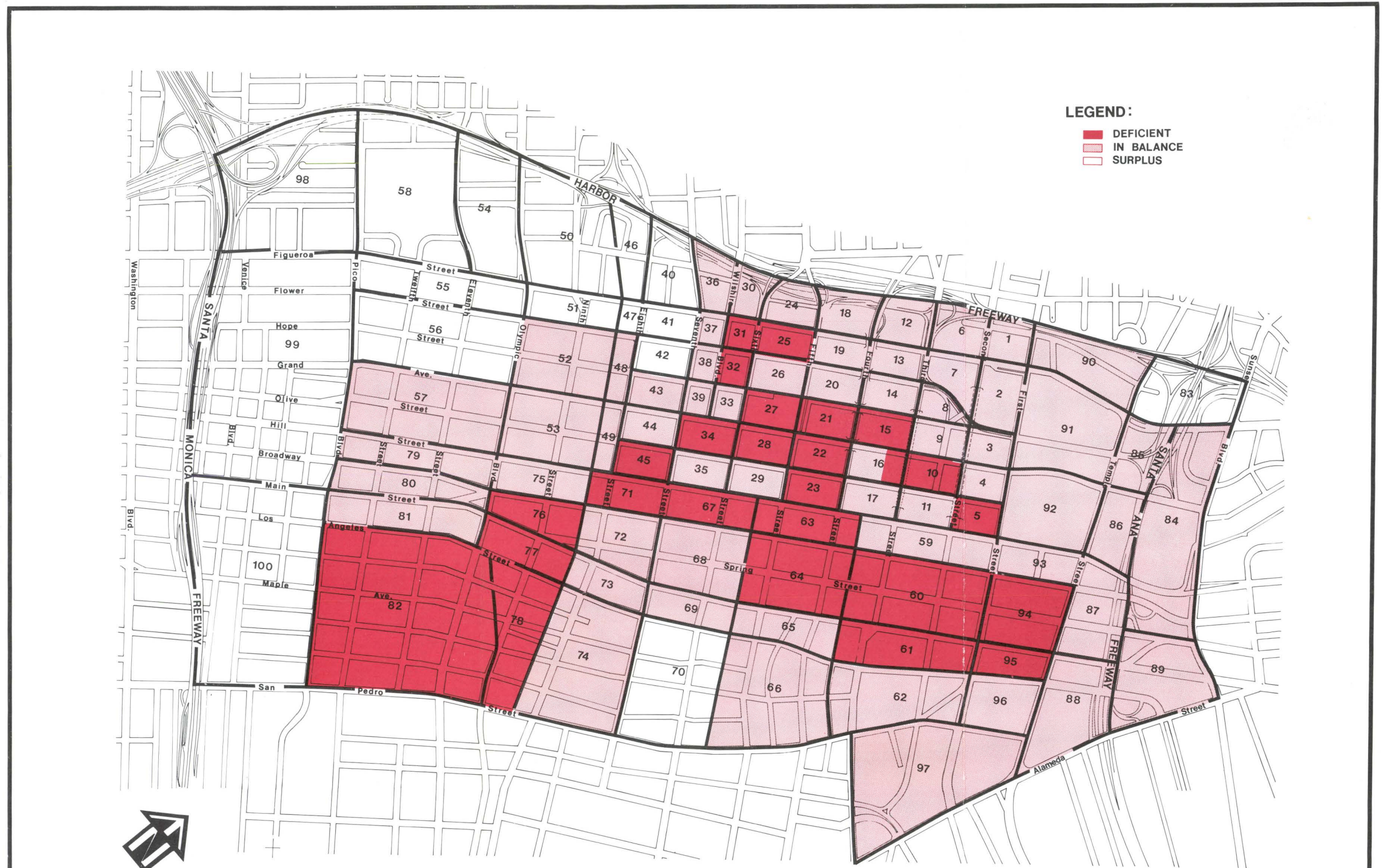
A preliminary assessment of the collective impact of implementing these expected programs -- the SCRTD Starter Line, the Los Angeles Parking Management Program, and a transit line in the Harbor Freeway corridor -- has been made in order to develop a conservative estimate of parking needs. The impacts of each proposed program were determined on a mutually exclusive basis. These individual impacts can be added on a zone-by-zone basis with minor balancing adjustments to estimate the cumulative effect. The estimated 1990 parking conditions, of all three programs were implemented, is illustrated in Figure 19 and summarized in Table 17.

In overview, the proposed transportation programs would in general reduce parking needs where the highest parking deficiencies are anticipated for 1990. These needs would be reduced most significantly in areas where DPM and Starter Line stations are proposed. The proposed location of both DPM and Starter Line stations in the central Financial/Pershing Square/Spring Street areas would be expected to eliminate most parking deficiencies from the area between Fourth and Seventh Streets and would produce an estimated surplus of parking in the area south of Seventh Street and west of Flower Street.

Deficiencies would remain but would be significantly reduced in the east Civic Center area, and in the southern portion of the Olive-Hill area, assuming that May Company remains there. There would be a lesser impact on the Bunker Hill area,







**LEGEND:**  
 ■ DEFICIENT  
 ■ IN BALANCE  
 □ SURPLUS

**1990 AREAS OF PARKING NEEDS WITH PROPOSED PROGRAMS  
 Los Angeles Central Business District**



Table 17  
 ESTIMATED REDUCTION IN 1990 PARKING NEEDS  
 AS A RESULT OF PROPOSED PROGRAMS  
 Los Angeles Central City Parking Study

AREA	1990 PARKING DEFICIENCY	ESTIMATED REDUCTION IN PARKING DEMAND AS A RESULT OF INDIVIDUAL PROGRAMS				REMAINING DEFICIENCY (UNBALANCED)	ADJUSTMENTS TO DEFICIENCIES FOR REVISED SURPLUS	1990 UNMET PARKING NEEDS
		Starter Line	Freeway Transit (b)	Parking Management	All Programs			
A	3,310 <sup>(a)</sup>	1,390	520	190	2,100	1,210	0	1,210 <sup>(a)</sup>
B	10,582	230	1,550	590	2,370	8,212	-920	7,292
C	2,678	2,230	410	150	2,790	(112) surplus	737	625
E	3,962	2,960	580	220	3,760	202	-147	55
F	240	400	40	10	450	(210) surplus	210	0
G	0	390	0	0	390	(390) surplus	0	(390) surplus
H	227	2,280	0	10	2,290	(2,063) surplus	210	(1,853) surplus
I	400	0	0	20	20	380	0	380
L	<u>2,037</u>	<u>0</u>	<u>0</u>	<u>110</u>	<u>110</u>	<u>1,927</u>	-340	1,587
TOTAL	23,436	9,880	3,100	1,300	14,280	9,156		
						TOTAL REMAINING DEFICIENCY		11,149
						NET REDUCTION		
						OF 1990 PARKING NEEDS BY PROGRAMS		12,287
						INCREASE IN SURPLUS SPACES		1,993

(a) Excludes deficiency of 390 short-term spaces

(b) Reflects Busway or Rail Line in Harbor Freeway Corridor.



unless the DPM is implemented and/or significant parking management agreements are reached with the developers. Parking deficiencies would also be expected to remain in the Southern Financial District along Fifth and Sixth Streets, and in the Main-Spring Streets area.

The California Mart-Garment District parking deficiencies are expected to be only slightly impacted by the programs unless the City works closely with businesses in that area to implement aggressive parking management programs, or unless a transit station or busway lines are located to more directly serve the area.

In sum, the estimated impact of the proposed transportation programs is to reduce parking demands by 12,287 spaces in parking deficient areas and to increase the areas of parking surplus by 1,993 additional surplus spaces. Even with all these programs, given the level of effectiveness estimated in this analysis, the Central City would continue to have parking deficient areas totalling 11,149 spaces in 1990, and areas of parking surpluses totalling approximately 8,100 surplus spaces. Needs for additional parking in the Central City would remain in the Civic Center, Bunker Hill, Broadway-Spring Street and California Mart-Garment District areas.

The implication of this parking analysis is that although these programs would greatly reduce the parking deficiencies that would otherwise be present in the Central City, further efforts would still be required to attain reasonable availability of parking. Such efforts should be threefold:

- Provide improved means of circulation within the Central City, either by expanded minibus services or a DPM-type system, to improve access from parking deficient areas to the transit stations and parking



surplus facilities, and to reduce the need for automobile use between Central City destinations.

- Provide additional parking facilities in the parking deficient areas, particularly for those areas where older buildings are being renovated and reoccupied by office and retail uses.
- Promote further transportation management and facility development programs which would change travel mode usage for trips to the Central City.

#### In Prospect

This report identifies the Central City areas which are expected to be parking deficient over the next 10 years and beyond. This study has provided the data and analyses that will form a solid technical basis for the specific and detailed development of a parking program for the locations that have been identified as the critical parking deficient areas in the Central City

Parking will continue to be a vital consideration in assuring the proper economic development of high-potential areas, revitalizing obsolescent areas, and enhancing the competitive position of Central City businesses. Continuing City and private business efforts are necessary to ensure that both immediate and future parking needs are met for the Central City, with the critical needs being the identification and evaluation of the development-financing, operations, and management mechanisms which can be used to implement parking facilities in parking deficient areas, and to promote the development and expansion to non automobile travel modes for access to and circulation within the Central City.

APPENDICES

Table A-1  
1979 PARKING INVENTORY  
BY AREA AND ZONE

DESTINATION ZONE	CRA ZONE	ACTUAL SUPPLY				
		<u>CURB</u>	<u>PUBLIC</u>	<u>PRIVATE</u>	<u>TOTAL</u>	
A	83	88	322	92	502	
	84	198	21	1,651	1,870	
	85	-	49	119	168	
	86	12	-	1,080	1,092	
	87	42	-	306	348	
	88	41	694	2,439	3,174	
	89	35	443	207	685	
	90	149	338	800	1,287	
	91	56	1,818	2,477	4,351	
	92	21	-	1,059	1,080	
	93	34	590	-	624	
	94	50	-	897	947	
	95	28	-	-	28	
	96	<u>39</u>	<u>-</u>	<u>763</u>	<u>802</u>	
	SUBTOTAL-A		793	4,275	11,890	16,958

Table A-1  
1979 PARKING INVENTORY  
BY AREA AND ZONE

<u>AREA</u>	<u>CRA ZONE</u>	<u>ACTUAL SUPPLY</u>			
		<u>CURB</u>	<u>PUBLIC</u>	<u>PRIVATE</u>	<u>TOTAL</u>
B	1	18	-	-	18
	2	-	-	401	401
	3	30	-	570	600
	4	38	-	1,423	1,461
	5	14	240	382	636
	6	-	-	-	0
	7	-	-	464	464
	8	9	-	-	9
	9	12	-	-	12
	10	19	-	-	19
	11	18	-	95	113
	12	-	-	-	0
	13	-	2,500	-	2,500
	14	7	2,045	-	2,052
	15	-	-	-	-
	16	3	450	-	453
	17	22	-	-	22
	18	-	1,000	-	1,000
	19	-	503	-	503
	20	27	2,300	-	2,327
	21	10	538	33	581
	22	7	929	303	1,239
SUBTOTAL-B		234	10,505	3,671	14,410



Table A-1  
1979 PARKING INVENTORY  
BY AREA AND ZONE

AREA	CRA ZONE	ACTUAL SUPPLY			
		<u>CURB</u>	<u>PUBLIC</u>	<u>PRIVATE</u>	<u>TOTAL</u>
C	59	2	683	1,706	2,391
	60	8	1,793	1,260	3,061
	61	10	641	503	1,154
	63	-	179	-	179
	64	-	1,329	711	2,040
	65	<u>5</u>	<u>613</u>	<u>-</u>	<u>618</u>
	SUBTOTAL-C		25	5,238	4,180
D	62	96	680	317	1,093
	66	167	524	301	992
	70	126	2,301	988	3,415
	97	<u>187</u>	<u>837</u>	<u>1,097</u>	<u>2,121</u>
	SUBTOTAL-D		576	4,342	2,703
E	23	-	530	190	720
	24	9	215	1,240	1,464
	25	-	409	-	409
	26	11	261	237	509
	27	11	750	-	761
	28	-	267	-	267
	29	-	2,229	-	2,229
	30	-	95	-	95
	31	-	783	26	809
	32	-	313	-	313
	33	-	848	-	848
	34	-	731	-	731
	35	-	885	-	885
	36	10	455	10	475
	37	-	132	24	156
	38	2	616	-	618
39	<u>-</u>	<u>180</u>	<u>-</u>	<u>180</u>	
SUBTOTAL-E		43	9,699	1,727	11,469

Table A-1  
1979 PARKING INVENTORY  
BY AREA AND ZONE

AREA	CRA ZONE	ACTUAL SUPPLY				
		<u>CURB</u>	<u>PUBLIC</u>	<u>PRIVATE</u>	<u>TOTAL</u>	
F	67	-	306	-	306	
	68	-	1,240	32	1,272	
	69	-	605	-	605	
SUBTOTAL-F		-	2,151	32	2,183	
GG	40	19	960	115	1,094	
	46	49	1,344	17	1,410	
SUBTOTAL-G		68	2,304	132	2,504	
H	41	-	893	17	910	
	42	-	2,035	-	2,035	
	43	-	1,288	71	1,359	
	44	-	442	-	442	
	45	12	286	-	298	
	47	12	115	-	127	
	48	17	520	-	537	
	49	-	1,085	15	1,100	
	51	24	1,431	135	1,590	
	52	60	927	319	1,366	
	53	10	1,508	219	1,737	
	SUBTOTAL-H		135	10,530	776	11,441
	I	74	70	1,539	872	2,481
78		103	820	219	1,142	
81		53	1,215	141	1,409	
82		536	1,490	1,382	3,408	
100		625	-	2,151	2,776	
SUBTOTAL-I		1,387	5,064	4,765	11,216	

Net Surplus  
of Deficiency

Table A-1  
1979 PARKING INVENTORY  
BY AREA AND ZONE

<u>AREA</u>	<u>CRA ZONE</u>	<u>ACTUAL SUPPLY</u>			
		<u>CURB</u>	<u>PUBLIC</u>	<u>PRIVATE</u>	<u>TOTAL</u>
J	50	154	267	699	1,120
	54	201	75	484	760
	58	25	3,200	-	3,225
	98	<u>318</u>	<u>-</u>	<u>1,432</u>	<u>1,750</u>
SUBTOTAL-J		698	3,542	2,615	6,855
K	55	66	396	715	1,177
	56	150	431	1,262	1,843
	57	125	1,801	990	2,916
	79	65	512	222	799
	80	47	483	281	811
	99	<u>582</u>	<u>1,050</u>	<u>2,399</u>	<u>4,031</u>
SUBTOTAL-K		1,035	4,673	5,869	11,577
L	71	-	90	-	90
	72	-	1,371	-	1,371
	73	40	248	18	306
	75	1	842	96	939
	76	1	599	14	614
	77	<u>-</u>	<u>1,275</u>	<u>-</u>	<u>1,275</u>
SUBTOTAL-L		42	4,425	128	4,595
TOTAL		5,036	66,748	38,488	110,272

Table B-1  
 SAMPLE DOORWAY INTERVIEWS  
 Los Angeles Central City Parking Study

<u>INTERVIEW SUBJECT</u>	<u>RETAIL:</u> <u>DEPARTMENT STORE</u>		<u>RETAIL:</u> <u>VARIETY STORE</u>		<u>OFFICE:</u> <u>FINANCIAL DISTRICT</u>	
	<u>RESPONSES</u>	<u>PER CENT</u>	<u>RESPONSES</u>	<u>PER CENT</u>	<u>RESPONSES</u>	<u>PER CENT</u>
<u>TRIP PURPOSE</u>						
Work Here	12	3	5	5	235	78
Business Call	31	9	2	2	48	16
Personal Business	34	10	14	13	14	5
Shopping	271	75	85	80	3	1
Other	<u>11</u>	<u>3</u>	<u>3</u>	<u>0</u>	<u>2</u>	<u>0</u>
TOTAL	359	100	106	100	302	100
<u>MODE OF TRANSPORTATION</u>						
Grove Car & Parked	138	37	7	7	188	62
Bus	151	8	84	79	91	30
Car Passenger	28	41	8	7	11	4
Walked	43	12	7	7	9	3
Other	<u>7</u>	<u>2</u>	<u>0</u>	<u>0</u>	<u>3</u>	<u>1</u>
TOTAL	367	100	106	100	302	100

Table B-1  
 SAMPLE DOORWAY INTERVIEWS  
 Los Angeles Central City Parking Study

<u>INTERVIEW SUBJECT</u>	<u>RETAIL: DEPARTMENT STORE</u>		<u>RETAIL: VARIETY STORE</u>		<u>OFFICE: FINANCIAL DISTRICT</u>	
	<u>RESPONSES</u>	<u>PER CENT</u>	<u>RESPONSES</u>	<u>PER CENT</u>	<u>RESPONSES</u>	<u>PER CENT</u>
<u>NUMBER OF PLACES VISITED WHILE CAR IS PARKED</u>						
One	85	35	21	22	47	53
Two	73	30	16	15	19	21
Three	44	18	23	22	13	15
Four	23	9	26	25	3	3
Five	9	4	26	25	1	1
Six or More	<u>11</u>	<u>4</u>	<u>10</u>	<u>9</u>	<u>6</u>	<u>7</u>
TOTAL	245	100	106	100	89	100

TIME HERE

5 Minutes	8	2	15	14	12	4
10 Minutes	29	8	12	11	11	4
15 Minutes	33	9	16	15	11	4
20 Minutes	35	10	19	18	4	1
30 Minutes	91	25	19	13	9	3
45 Minutes	9	2	4	4	4	1
60 Minutes	94	26	5	5	10	4
2 Hours	39	11	2	2	17	6
3 Hours	9	2	5	5	25	8
5 Hours	5	1	2	2	32	11
8 + Hours	10	3	7	6	161	54



Table B-1  
 SAMPLE DOORWAY INTERVIEWS  
 Los Angeles Central City Parking Study

<u>INTERVIEW SUBJECT</u>	<u>RETAIL:</u> <u>DEPARTMENT STORE</u>		<u>RETAIL:</u> <u>VARIETY STORE</u>		<u>OFFICE:</u> <u>FINANCIAL DISTRICT</u>	
	<u>RESPONSES</u>	<u>PER CENT</u>	<u>RESPONSES</u>	<u>PER CENT</u>	<u>RESPONSES</u>	<u>PER CENT</u>
<u>DISTANCE WALKED</u> <u>TO GET HERE</u> <u>IN BLOCKS</u>						
$\frac{1}{4}$	38	12	14	13	45	17
$\frac{1}{2}$	48	16	11	10	33	13
1	52	17	17	16	30	12
$1\frac{1}{2}$	17	6	7	7	4	2
2	66	22	21	20	45	18
3	39	12	15	14	38	15
4	28	9	8	7	27	10
5	11	4	6	6	17	7
6	5	2	0	0	10	4
7 or More	4	1	7	7	10	4

Table C-1

1979 LACBD DISTRIBUTION OF FLOOR AREA  
BY CRA BLOCKS

ZONE	FLOOR AREA-GROSS SQUARE FOOTAGE: (000's)					TOTAL
	PRIVATE OFFICE	GOVERNMENT	RETAIL	HOTEL- SERVICE- INSTITU.	MANUFACT. WHOLESALE	
1	0	0	0	0	0	0
2	0	0	10	10	0	20
3	0	0	0	0	0	0
4	0	0	0	0	0	0
5	0	0	0	0	0	0
6	0	0	0	0	0	0
7	0	0	20	10	0	30
8	0	0	0	0	0	0
9	0	0	0	0	0	0
10	0	0	0	0	0	0
11	0	0	0	0	0	0
12	0	0	0	0	0	0
13	300	0	15	10	0	325
14	1,300	0	0	10	0	1,310
15	0	0	0	0	0	0
16	0	0	0	0	0	0
17	0	0	0	0	0	0
18	700	0	0	10	0	710
19	0	0	140	1,000	0	1,140
20	0	0	0	0	0	0
21	1,035	0	0	5	0	1,040
22	350	0	0	0	0	350
23	640	0	20	10	40	710
24	70	0	0	20	0	90
25	2,800	0	60	60	0	2,920
26	160	0	10	130	0	300
27	750	0	0	200	0	950
28	500	0	10	450	0	960

Table C-1  
(Continued)

1979 LACBD DISTRIBUTION OF FLOOR AREA  
BY CRA BLOCKS

ZONE	FLOOR AREA-GROSS SQUARE FOOTAGE: (000's)					TOTAL
	PRIVATE OFFICE	GOVERNMENT	RETAIL	HOTEL-SERV. INSTITU.	MANUFACT. WHOLESALE	
29	0	0	0	5	0	5
30	0	0	0	10	0	10
31	750	0	0	10	0	760
32	1,700	0	5	10	0	1,715
33	200	0	5	40	0	245
34	1,310	0	25	20	0	1,355
35	300	0	10	45	0	355
36	170	0	20	440	0	630
37	300	0	5	10	0	315
38	240	0	10	20	0	270
39	190	0	60	10	0	260
40	15	0	0	0	0	15
41	50	0	385	10	60	505
42	600	0	330	330	0	1,260
43	50	0	250	40	0	340
44	250	0	100	0	0	350
45	570	0	30	15	40	655
46	0	0	0	0	0	0
47	25	0	20	5	35	85
48	300	0	5	5	0	310
49	50	0	20	0	0	70
50	30	0	30	125	40	225
51	35	0	20	40	20	115
52	355	0	5	90	25	475
53	290	105	35	50	10	490
54	70	0	25	25	65	185
55	315	0	0	115	95	525
56	380	0	20	120	685	1,205

Table C-1  
(Continued)

1979 LACBD DISTRIBUTION OF FLOOR AREA  
BY CRA BLOCKS

ZONE	FLOOR AREA-GROSS SQUARE FOOTAGE: (000's)					TOTAL
	PRIVATE OFFICE	GOVERNMENT	RETAIL	HOTEL-SERV. INSTITU.	MANUFACT. WHOLESALE	
57	860	0	90	205	360	1,515
58	0	0	0	400	0	400
59	290	515	40	20	30	895
60	445	520	60	15	520	1,560
61	30	0	10	100	170	310
62	90	0	40	220	1,600	1,950
63	425	0	150	110	0	685
64	1,630	150	150	400	0	2,330
65	170	0	80	150	55	455
66	0	10	45	50	805	910
67	105	0	1,185	20	0	1,310
68	1,970	0	235	110	95	2,410
69	400	0	20	20	10	450
70	0	65	25	65	700	855
71	930	30	550	25	0	1,540
72	780	0	75	75	220	1,150
73	5	0	170	5	660	840
74	30	105	210	30	1,360	1,735
75	475	115	20	5	40	655
76	265	0	60	25	270	620
77	10	0	55	5	1,070	1,140
78	50	110	55	20	780	1,015
79	680	0	30	45	30	785
80	115	0	35	45	45	240
81	0	20	35	0	795	850
82	10	35	95	120	3,440	3,700
83	15	0	20	0	0	35
84	0	395	40	70	25	530

Table C-1  
(Continued)

1979 LACBD DISTRIBUTION OF FLOOR AREA  
BY CRA BLOCKS

ZONE	FLOOR AREA-GROSS SQUARE FOOTAGE: (000's)					TOTAL
	PRIVATE OFFICE	GOVERNMENT	RETAIL	HOTEL-SERV. INSTITU.	MANUFACT. WHOLESALE	
85	20	0	0	20	0	40
86	0	0	0	0	0	0
87	0	1,250	0	0	0	1,250
88	0	970	30	25	0	1,025
89	0	0	0 <sup>(1)</sup>	0 <sup>(1)</sup>	0 <sup>(1)</sup>	0
90	0	195	0	0	0	195
91	0	485	0	100	0	585
92	0	1,285	0	0	0	1,285
93	0	300	0	510	0	810
94	0	1,385	0	0	0	1,385
95	0	610	0	0	0	610
96	0	275	0	0	0	275
97	180	20	95	140	40	475
98	5	15	25	0	500	545
99	5	90	160	1,500	1,700	3,455
100	0	285	15	0	1,180	1,480
TOTAL	27,145	9,940	5,605	8,165	17,615	68,470

(1) Zone 89 floor area is included with Zone 84.



Table C-2

## 1979 LACBD EMPLOYMENT

EMPLOYMENT:						
<u>ZONE</u>	<u>PRIVATE OFFICE</u>	<u>GOVERNMENT</u>	<u>RETAIL</u>	<u>HOTEL- SERVICE- INSTITU.</u>	<u>MANUFACT. WHOLESALE</u>	<u>TOTAL</u>
1	0	0	0	0	0	0
2	0	0	40	40	0	88
3	0	10	0	0	0	10
4	0	0	0	0	0	0
5	0	0	0	0	0	0
6	0	0	0	0	0	0
7	0	0	30	20	0	50
8	0	0	0	20	0	20
9	0	0	0	0	0	0
10	0	0	0	0	0	0
11	0	0	0	0	0	0
12	0	0	0	0	0	0
13	510	0	35	30	0	575
14	2,300	0	20	40	0	2,360
15	0	0	0	0	0	0
16	0	0	0	0	0	0
17	0	0	0	0	0	0
18	2,000	0	0	30	0	2,030
19	0	0	0	1,125	0	1,125
20	0	0	0	0	0	0
21	2,720	0	0	20	0	2,740
22	1,600	0	0	0	0	1,600
23	1,940	0	58	58	100	2,140
24	310	0	0	50	0	360
25	9,360	0	160	70	0	9,590
26	440	0	0	200	0	640
27	2,550	0	0	200	0	2,750
28	1,980	0	50	600	0	2,630

Table C-2  
(continued)

1979 LACBD EMPLOYMENT

ZONE	EMPLOYMENT:					TOTAL
	PRIVATE OFFICE	GOVERNMENT	RETAIL	HOTEL- SERVICE- INSTITU.	MANUFACT. WHOLESALE	
29	0	0	0	50	0	50
30	0	0	0	10	0	10
31	3,050	0	0	50	0	3,100
32	5,040	0	20	25	0	5,085
33	590	0	20	105	0	715
34	4,000	0	100	50	0	4,150
35	1,270	0	20	320	0	1,610
36	400	0	55	900	0	1,355
37	1,220	0	20	40	0	1,280
38	720	0	20	50	0	790
39	570	0	75	25	0	670
40	70	0	0	0	0	70
41	250	0	475	40	95	860
42	2,240	0	660	400	0	3,300
43	190	0	500	20	0	710
44	750	0	200	0	0	950
45	1,500	0	60	50	200	1,810
46	0	0	0	20	0	20
47	130	0	25	20	55	230
48	1,250	0	20	20	0	1,290
49	150	0	40	0	0	190
50	150	0	50	300	200	700
51	200	0	50	100	100	450
52	1,000	0	20	150	50	1,220

Table C-2  
(Continued)

1979 LACBD EMPLOYMENT

ZONE	EMPLOYMENT:					TOTAL
	PRIVATE OFFICE	GOVERNMENT	RETAIL	HOTEL- SERVICE- INSTITU.	MANUFACT. WHOLESALE	
53	1,500	550	100	150	20	2,320
54	100	0	50	100	150	400
55	800	0	0	150	450	1,400
56	500	0	50	50	750	1,350
57	5,000	0	20	150	850	6,020
58	0	0	0	50	0	50
59	700	2,600	200	100	100	3,700
60	3,200	2,600	100	100	1,700	7,700
61	150	0	50	100	500	800
62	510	0	50	350	1,300	2,210
63	800	0	450	100	0	1,350
64	3,500	500	150	350	0	4,500
65	900	0	100	325	200	1,525
66	0	0	50	300	800	1,150
67	600	0	1,800	25	0	2,425
68	3,600	0	200	200	250	4,250
69	1,400	0	50	30	100	1,580
70	0	750	50	350	500	1,650
71	3,200	100	2,300	100	0	5,700
72	2,000	0	100	100	800	3,000
73	50	0	250	20	2,000	2,320
74	150	450	400	100	3,600	4,700
75	900	100	50	50	150	1,250*
76	800	0	100	50	900	1,850
77	50	0	100	20	2,500	2,670*
78	200	500	100	50	1,500	2,350
79	1,300	0	50	50	70	1,470
80	450	0	50	50	100	650

Table C-2  
(Continued)

1979 LACBD EMPLOYMENT

EMPLOYMENT:						
<u>ZONE</u>	<u>PRIVATE OFFICE</u>	<u>GOVERNMENT</u>	<u>RETAIL</u>	<u>HOTEL- SERVICE- INSTITU.</u>	<u>MANUFACT. WHOLESALE</u>	<u>TOTAL</u>
81	0	50	50	50	1,100	1,250
82	50	50	200	250	6,400	6,950
83	50	0	40	0	0	90
84	0	1,350	70 (1)	50 (1)	50 (1)	1,520
85	100	0	0	40	0	140
86	0	0	0	0	0	0
87	0	3,500	0	0	0	3,500
88	0	4,350	200	50	0	4,600 (2)
89	0	0	0	0 (1)	0 (1)	0
90	0	780	10	0	0	790 (2)
91	0	2,610	0	200	0	2,810
92	0	6,790	0	0	0	6,790
93	0	2,300	0	100	0	2,400
94	0	5,000	0	0	0	5,000
95	0	3,000	0	50	0	3,050
96	0	1,300	0	0	0	1,300
97	600	100	180	200	100	1,180
98	10	60	50	0	1,150	1,270
99	20	410	300	2,610	3,000	6,340
100	<u>0</u>	<u>1,300</u>	<u>30</u>	<u>0</u>	<u>2,830</u>	<u>4,160</u>
TOTAL	83,640	41,110	10,920	12,410	34,720	182,800

(1) Zone 89 Employment is included in Zone 84.

(2) Includes 1979 emp. for Bonaventure; New Otani, Credit Union Plaza under Hotel-Service-Inst.)

Table C-3

1979 PARKING SURPLUSES AND DEFICIENCIES  
Los Angeles Central City Parking Study

AREA	CRA ZONE	ADJUSTED SUPPLY			DEMAND		SURPLUSES		DEFICIENCIES		
		CURB	PUBLIC	PRIVATE	SHORT TERM	LONG TERM	SHORT TERM	LONG TERM	SHORT TERM	LONG TERM	
A	83	79	290	83	16	50	9	377	-	-	
	84	178	19	1,486	120	835	-	737	9	-	
	85	-	44	107	5	75	-	71	-	-	
	86	11	-	972	-	-	11	972	-	-	
	87	38	-	275	263	1,925	-	-	225	1,650	
	88	37	625	2,195	227	2,525	-	105	-	-	
	89	32	399	187	-	-	29	589	-	-	
	90	134	304	720	41	440	-	677	-	-	
	91	50	1,636	2,229	109	1,525	-	2,281	-	-	
	92	19	-	953	270	3,735	-	-	251	2,782	
	93	31	531	-	104	1,310	-	-	-	852	
	94	45	-	807	290	2,750	-	-	245	1,943	
	95	25	-	-	127	1,670	-	-	102	1,670	
	96	35	-	687	58	715	-	-	23	28	
	Subtotal-A		714	3,848	10,701	1,630	17,555	49	5,809	855	8,925
	Net Surplus or Deficiency									3,922	



Table C-3  
 1979 PARKING SURPLUSES AND DEFICIENCIES  
 Los Angeles Central City Parking Study

AREA	CRA ZONE	ADJUSTED SUPPLY			DEMAND		SURPLUSES		DEFICIENCIES	
		CURB	PUBLIC	PRIVATE	SHORT TERM	LONG TERM	SHORT TERM	LONG TERM	SHORT TERM	LONG TERM
B	1	16	-	-	-	-	-	16	-	-
	2	-	-	160	7	40	-	120	7	-
	3	27	-	513	-	5	27	508	-	-
	4	34	-	1,280	-	-	34	1,280	-	-
	5	13	216	344	-	-	13	560	-	-
	6	-	-	-	-	-	-	-	-	-
	7	-	-	418	14	30	-	388	14	-
	8	8	-	-	-	10	8	-	-	10
	9	11	-	-	-	-	11	-	-	-
	10	17	-	-	-	-	17	-	-	-
	11	16	-	86	-	-	16	86	-	-
	12	-	-	-	-	-	-	-	-	-
	13	-	2,250	-	44	330	-	1,876	-	-
	14	6	1,841	-	144	1,365	-	338	-	-
	15	-	-	-	-	-	-	-	-	-
	16	3	405	-	-	-	3	405	-	-
	17	20	-	-	-	-	20	-	-	-
	18	-	900	-	78	1,175	-	-	-	353
	19	-	453	-	171	530	-	-	-	248
	20	24	2,070	-	-	-	24	2,070	-	-
	21	9	484	30	114	1,590	-	-	-	1,181
	22	6	836	273	38	930	-	147	-	-
Subtotal-B		210	9,455	3,104	610	6,005	173	7,794	21	1,792
Net Surplus or Deficiency							6,154			

Table C-3  
 1979 PARKING SURPLUSES AND DEFICIENCIES  
 Los Angeles Central City Parking Study

AREA	CRA ZONE	ADJUSTED SUPPLY			DEMAND		SURPLUSES		DEFICIENCIES	
		CURB	PUBLIC	PRIVATE	SHORT TERM	LONG TERM	SHORT TERM	LONG TERM	SHORT TERM	LONG TERM
C	59	2	615	1,536	175	1,545	-	433	-	-
	60	7	1,614	1,134	306	3,225	-	-	-	776
	61	9	577	453	52	325	-	659	-	-
	63	-	161	-	152	560	-	-	-	551
	64	-	1,196	325	341	1,865	-	-	-	685
	65	5	552	-	94	615	-	-	-	152
	Subtotal-C	23	4,715	3,448	1,120	8,135	0	1,095	0	2,164
Net Surplus or Deficiency									1,069	
D	62	86	612	231	447	670	-	-	-	188
	66	150	472	220	232	340	-	270	-	-
	70	113	2,071	721	207	495	-	2,203	-	-
	97	168	753	801	124	350	-	1,248	-	-
	Subtotal-D	517	3,908	1,973	1,010	1,855	0	3,721	-	188
Net Surplus or Deficiency							3,533			

Table C-3

1979 PARKING SURPLUSES AND DEFICIENCIES  
Los Angeles Central City Parking Study

AREA	CRA ZONE	ADJUSTED SUPPLY			DEMAND		SURPLUSES		DEFICIENCIES		
		CURB	PUBLIC	PRIVATE	SHORT TERM	LONG TERM	SHORT TERM	LONG TERM	SHORT TERM	LONG TERM	
E	23	-	477	171	95	795	-	-	-	242	
	24	8	194	1,116	10	130	-	1,178	-	-	
	25	-	368	-	353	3,545	-	-	-	3,530	
	26	10	235	213	34	225	-	199	-	-	
	27	10	675	-	99	1,005	-	-	-	419	
	28	-	240	-	97	935	-	-	-	992	
	29	-	2,006	-	-	15	-	1,991	-	-	
	30	-	86	-	1	5	-	80	-	-	
	31	-	705	23	83	1,145	-	-	-	500	
	32	-	282	-	191	1,880	-	-	-	1,789	
	33	-	763	-	28	260	-	475	-	-	
	34	-9	658	-	161	1,535	-	-	-	1,038	
	35	-	797	-	43	570	-	184	-	-	
	36	9	410	9	69	440	-	-	-	81	
	37	-	119	22	37	465	-	-	-	361	
	38	2	554	-	33	385	-	238	-	-	
	39	-	162	-	61	250	-	-	-	149	
	Subtotal-E		39	8,731	1,554	1,395	13,485	0	4,345	0	8,901
	Net Surplus or Deficiency									4,556	

Table C-3  
1979 PARKING SURPLUSES AND DEFICIENCIES  
Los Angeles Central City Parking Study

AREA	CRA ZONE	ADJUSTED SUPPLY			DEMAND		SURPLUSES		DEFICIENCIES	
		CURB	PUBLIC	PRIVATE	SHORT TERM	LONG TERM	SHORT TERM	LONG TERM	SHORT TERM	LONG TERM
F	67	-	275	-	521	770	-	-	246	770
	68	-	1,116	22	279	1,345	-	-	-	486
	69	-	545	-	45	505	-	-	-	5
Subtotal-F		0	1,936	22	845	2,620	0	0	246	1,261
Net Surplus or Deficiency										1,507
G	40	17	864	104	5	25	12	943	-	-
	46	44	1,210	15	-	5	44	1,220	-	-
	Subtotal-G		61	2,074	119	5	30	56	2,163	0
Net Surplus or Deficiency							2,219			
H	41	-	804	15	300	405	-	114	-	-
	42	-	1,832	-	347	1,515	-	-	-	30
	43	-	1,159	64	190	335	-	698	-	-
	44	-	398	-	104	445	-	-	-	151
	45	11	257	-	107	850	-	-	-	689
	47	11	104	-	27	105	-	-	-	17
	48	15	468	-	44	610	-	-	-	171
	49	-	977	14	21	90	-	880	-	-
	51	22	1,288	122	25	205	-	1,202	-	-
	52	54	834	287	65	560	-	550	-	-
	53	9	1,357	197	95	1,075	-	393	-	-
Subtotal-H		122	9,478	699	1,325	6,195	0	3,837	0	1,058
Net Surplus or Deficiency							2,779			

Table C-3

1979 PARKING SURPLUSES AND DEFICIENCIES  
Los Angeles Central City Parking Study

AREA	CRA ZONE	ADJUSTED SUPPLY			DEMAND		SURPLUSES		DEFICIENCIES	
		CURB	PUBLIC	PRIVATE	SHORT TERM	LONG TERM	SHORT TERM	LONG TERM	SHORT TERM	LONG TERM
I	74	63	1,385	560	516	1,775	-	-	-	283
	78	93	738	146	263	890	-	-	-	176
	81	48	1,094	127	220	475	-	574	-	-
	82	482	1,341	921	916	2,625	-	-	-	797
	100	<u>563</u>	-	<u>1,936</u>	<u>360</u>	<u>1,580</u>	<u>25</u>	<u>534</u>	<u>-</u>	<u>-</u>
Subtotal-I	1,249	4,558	3,690	2,275	7,345	25	1,108	0	1,256	
Net Surplus or Deficiency									123	
J	50	139	240	377	75	200	47	434	-	-
	54	181	68	209	52	115	56	235	-	-
	58	23	2,880	-	123	15	-	2,765	-	-
	98	<u>286</u>	-	<u>617</u>	<u>145</u>	<u>400</u>	<u>-</u>	<u>376</u>	<u>18</u>	<u>-</u>
	Subtotal-J	629	3,188	1,203	395	730	103	3,810	18	-
Net Surplus or Deficiency							3,895			



Table C-3

1979 PARKING SURPLUSES AND DEFICIENCIES  
Los Angeles Central City Parking Study

AREA	CRA ZONE	ADJUSTED SUPPLY			DEMAND		SURPLUSES		DEFICIENCIES		
		CURB	PUBLIC	PRIVATE	SHORT TERM	LONG TERM	SHORT TERM	LONG TERM	SHORT TERM	LONG TERM	
K	55	60	356	644	116	520	-	424	-	-	
	56	135	388	1,136	276	510	-	873	-	-	
	57	113	1,621	891	355	2,280	-	-	-	10	
	79	59	461	200	139	555	-	26	-	-	
	80	42	435	253	72	245	-	413	-	-	
	99	524	945	2,159	1,217	2,230	-	181	-	-	
	Subtotal-K	933	4,206	5,283	2,175	6,340	0	1,917	0	10	
Net Surplus or Deficiency											
L	71	-	81	-	318	2,840	-	-	-	3,077	
	72	-	1,234	-	128	1,490	-	-	-	384	
	73	36	223	16	165	1,160	-	-	-	1,050	
	75	1	758	87	71	620	-	155	-	-	
	76	1	539	13	88	920	-	-	-	455	
	77	-	1,148	-	175	1,335	-	-	-	362	
	Subtotal-L	38	3,983	116	945	8,365	0	155	0	5,328	
Net Surplus or Deficiency											
									5,173		
TOTAL		4,535	60,080	31,912	13,730	78,660	406	36,880	1,140	30,883	
NET SURPLUS							4,857				
NET SURPLUS EXCLUDING CONVENTION CENTER							2,092				

Table C-4

1979 BALANCED SURPLUSES AND DEFICIENCIES  
Los Angeles Central City Parking Study

AREA	CRA ZONE	ADJUSTED SUPPLY			DEMAND		SURPLUSES		DEFICIENCIES	
		CURB	PUBLIC	PRIVATE	SHORT TERM	LONG TERM	SHORT TERM	LONG TERM	SHORT TERM	LONG TERM
A	83	79	290	83	16	50	9	377	-	-
	84	178	19	1,486	120	835	-	-	-	-
	85	-	44	107	5	75	-	-	-	-
	86	11	-	972	-	-	-	-	-	-
	87	38	-	275	263	1,925	-	-	-	-
	88	37	625	2,195	227	2,525	-	-	-	-
	89	32	399	187	-	-	-	-	-	-
	90	134	304	720	41	440	-	677	-	-
	91	50	1,636	2,229	109	1,525	-	1,302	-	-
	92	19	-	953	270	3,735	-	-	-	-
	93	31	531	-	104	1,310	-	-	-	-
	94	45	-	807	290	2,750	-	-	245	1,838
	95	25	-	-	127	1,670	-	-	-	763
	96	35	-	687	58	715	-	-	-	-
Subtotal-A		714	3,848	10,701	1,630	17,555	9	2,356	245	2,601
Net Surplus or Deficiency									481	

Table C-4

1979 BALANCED SURPLUSES AND DEFICIENCIES  
Los Angeles Central City Parking Study

AREA	CRA ZONE	ADJUSTED SUPPLY			DEMAND		SURPLUSES		DEFICIENCIES	
		CURB	PUBLIC	PRIVATE	SHORT TERM	LONG TERM	SHORT TERM	LONG TERM	SHORT TERM	LONG TERM
B	1	16	-	-	-	-	-	-	-	-
	2	-	-	160	7	40	-	120	-	-
	3	27	-	513	-	5	-	-	-	-
	4	34	-	1,280	-	-	-	-	-	-
	5	13	216	344	-	-	-	-	-	-
	6	-	-	-	-	-	-	-	-	-
	7	-	-	418	14	30	-	-	-	-
	8	8	-	-	-	10	-	-	-	-
	9	11	-	-	-	-	-	-	-	-
	10	17	-	-	-	-	-	-	-	-
	11	16	-	86	-	-	-	-	-	-
	12	-	-	-	-	-	-	-	-	-
	13	-	2,250	-	44	330	-	-	-	-
	14	6	1,841	-	144	1,365	-	-	-	-
	15	-	-	-	-	-	-	-	-	-
	16	3	405	-	-	-	-	-	-	-
	17	20	-	-	-	-	-	-	-	-
	18	-	900	-	78	1,175	-	-	-	-
	19	-	453	-	171	530	-	-	-	-
	20	24	2,070	-	-	-	-	-	-	-
	21	9	484	30	114	1,590	-	-	-	-
	22	6	836	273	38	930	-	-	-	-
Subtotal-B		210	9,455	3,104	610	6,005	-	120	-	-
Net Surplus or Deficiency							120			

Table C-4  
 1979 BALANCED SURPLUSES AND DEFICIENCIES  
 Los Angeles Central City Parking Study

AREA	CRA ZONE	ADJUSTED SUPPLY			DEMAND		SURPLUSES		DEFICIENCIES	
		CURB	PUBLIC	PRIVATE	SHORT TERM	LONG TERM	SHORT TERM	LONG TERM	SHORT TERM	LONG TERM
C	59	2	615	1,536	175	1,545	-	-	-	-
	60	7	1,614	1,134	306	3,225	-	-	-	-
	61	9	577	453	52	325	-	-	-	-
	63	-	161	-	152	560	-	-	-	-
	64	-	1,196	325	341	1,865	-	-	-	74
	65	5	552	-	94	615	-	-	-	-
	Subtotal-C	23	4,715	3,448	1,120	8,135	-	-	-	74
Net Surplus or Deficiency									74	
D	62	86	612	231	447	670	-	-	-	-
	66	150	472	220	232	340	-	-	-	-
	70	113	2,071	721	207	495	-	379	-	-
	97	168	753	801	124	350	-	-	-	-
	Subtotal-D	517	3,908	1,973	1,010	1,855	-	379	-	-
Net Surplus or Deficiency							379			

Table C-4  
 1979 BALANCED SURPLUSES AND DEFICIENCIES  
 Los Angeles Central City Parking Study

AREA	CRA ZONE	ADJUSTED SUPPLY			DEMAND		SURPLUSES		DEFICIENCIES	
		CURB	PUBLIC	PRIVATE	SHORT TERM	LONG TERM	SHORT TERM	LONG TERM	SHORT TERM	LONG TERM
E	23	-	477	171	95	795	-	-	-	-
	24	8	194	1,116	10	130	-	-	-	-
	25	-	368	-	353	3,545	-	-	-	-
	26	10	235	213	34	225	-	-	-	-
	27	10	675	-	99	1,005	-	-	-	-
	28	-	240	-	97	935	-	-	-	320
	29	-	2,006	-	-	15	-	-	-	-
	30	-	86	-	1	5	-	-	-	-
	31	-	705	23	83	1,145	-	-	-	-
	32	-	282	-	191	1,880	-	-	-	59
	33	-	763	-	28	260	-	-	-	-
	34	-	658	-	161	1,535	-	-	-	230
	35	-	797	-	43	570	-	-	-	-
	36	9	410	9	69	440	-	-	-	-
	37	-	119	22	37	465	-	-	-	-
	38	2	554	-	33	285	-	-	-	-
	39	-	162	-	61	250	-	-	-	-
Subtotal-E		39	8,731	1,554	1,395	13,485	-	-	-	609
Net Surplus or Deficiency									609	



1979 BALANCED SURPLUSES AND DEFICIENCIES  
Los Angeles Central City Parking Study

AREA	CRA ZONE	ADJUSTED SUPPLY			DEMAND		SURPLUSES		DEFICIENCIES	
		CURB	PUBLIC	PRIVATE	SHORT TERM	LONG TERM	SHORT TERM	LONG TERM	SHORT TERM	LONG TERM
F	67	-	275	-	521	770	-	-	-	330
	68	-	1,116	22	279	1,345	-	-	-	-
	69	-	545	-	45	505	-	-	-	-
Subtotal-F		0	1,936	22	845	2,620	-	-	-	330
Net Surplus or Deficiency										
G	40	17	864	104	5	25	12	-	-	-
	46	44	1,210	15	-	5	44	1,020	-	-
Subtotal-G		61	2,074	119	5	30	56	1,020	-	-
Net Surplus or Deficiency							1,076			
H	41	-	804	15	300	405	-	-	-	-
	42	-	1,832	-	347	1,515	-	-	-	-
	43	-	1,159	64	190	335	-	-	-	-
	44	-	398	-	104	445	-	-	-	-
	45	11	257	-	107	850	-	-	-	-
	47	11	104	-	27	105	-	-	-	-
	48	15	468	-	44	610	-	-	-	-
	49	-	977	14	21	90	-	-	-	-
	51	22	1,288	122	25	205	-	885	-	-
	52	54	834	287	65	560	-	-	-	-
53	9	1,357	197	95	1,075	-	-	-	-	
Subtotal-H		122	9,478	699	1,325	6,195	-	885	-	-
Net Surplus or Deficiency							885			

Table C-4  
 1979 BALANCED SURPLUSES AND DEFICIENCIES  
 Los Angeles Central City Parking Study

AREA	CRA ZONE	ADJUSTED SUPPLY			DEMAND		SURPLUSES		DEFICIENCIES	
		CURB	PUBLIC	PRIVATE	SHORT TERM	LONG TERM	SHORT TERM	LONG TERM	SHORT TERM	LONG TERM
I	74	63	1,385	560	516	1,775	-	-	-	-
	78	93	738	146	263	890	-	-	-	176
	81	48	1,094	127	220	475	-	-	-	-
	82	482	1,341	921	916	2,625	-	-	-	285
	100	<u>563</u>	<u>-</u>	<u>1,936</u>	<u>360</u>	<u>1,580</u>	<u>-</u>	<u>234</u>	<u>-</u>	<u>-</u>
Subtotal-I		1,249	4,558	3,690	2,275	7,345	-	234	-	461
Net Surplus or Deficiency										227
-96- J	50	139	240	377	75	200	47	434	-	-
	54	181	68	209	52	115	56	235	-	-
	58	23	2,880	-	123	15	-	3,392	-	-
	98	<u>286</u>	<u>-</u>	<u>617</u>	<u>145</u>	<u>400</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
	Subtotal-J		629	3,188	1,203	395	730	103	4,061	-
Net Surplus or Deficiency								4,164		

Table C-4  
 1979 BALANCED SURPLUSES AND DEFICIENCIES  
 Los Angeles Central City Parking Study

AREA	CRA ZONE	ADJUSTED SUPPLY			DEMAND		SURPLUSES		DEFICIENCIES		
		CURS	PUBLIC	PRIVATE	SHORT TERM	LONG TERM	SHORT TERM	LONG TERM	SHORT TERM	LONG TERM	
K	55	60	356	644	116	520	-	424	-	-	
	56	135	388	1,136	276	510	-	653	-	-	
	57	113	1,621	891	355	2,280	-	-	-	-	
	79	59	461	200	139	555	-	-	-	-	
	80	42	435	253	72	245	-	-	-	-	
	99	524	945	2,159	1,217	2,230	-	-	-	-	
	Subtotal-K	933	4,206	5,283	2,175	6,340	-	1,077	-	-	
	Net Surplus or Deficiency							1,077			
	L	71	-	81	-	318	2,840	-	-	-	995
72		-	1,234	-	128	1,490	-	-	-	384	
73		36	223	16	165	1,160	-	-	-	-	
75		1	758	87	71	620	-	-	-	-	
76		1	539	13	88	920	-	-	-	-	
77		-	1,148	-	175	1,335	-	-	-	-	
Subtotal-L		38	3,983	116	945	8,365	-	-	-	1,379	
Net Surplus or Deficiency									1,379		
TOTAL		4,535	60,080	31,912	13,730	78,660	168	10,132	245	5,454	
NET SURPLUS							4,601				
NET SURPLUS EXCLUDING CONVENTION CENTER							1,836				

Table D-1

1990 LACBD DISTRIBUTION OF FLOOR AREA  
BY CRA BLOCKS

ZONE	GROSS FLOOR SQUARE FOOTAGE: (000's)					TOTAL
	PRIVATE OFFICE	GOVERNMENT	RETAIL	HOTEL SERVICE INSTITU.	MANUFACT. WHOLESALE	
1	0	0	0	0	0	0
2	0	0	20	10	0	30
3	0	0	0	0	0	0
4	0	0	0	0	0	0
5	500	0	65	0	0	565
6	260	0	10	0	0	270
7	0	0	20	10	0	30
8	0	0	0	0	0	0
9	0	0	100	0	0	100
10	1,450	0	40	0	0	1,490
11	0	0	0	10	0	10
12	50	0	50	350	0	450
13	300	0	15	10	0	325
14	1,300	0	0	10	0	1,310
15	2,100	0	80	50	0	2,230
16	1,300	0	60	125	0	1,485
17	30	0	80	265	0	375
18	700	0	0	10	0	710
19	0	0	140	1,000	0	1,140
20	1,000	0	20	10	0	1,030
21	2,000	0	0	5	0	2,005
22	700	0	10	0	0	710
23	640	0	20	30	40	730
24	300	0	0	20	0	320
25	2,800	0	90	60	0	2,950
26	160	0	10	130	0	300
27	750	0	0	200	0	950
28	500	0	10	450	0	960
29	0	0	0	5	0	5
30	270	0	0	10	0	280

Table D-1  
(Continued)

1990 LACBD DISTRIBUTION OF FLOOR AREA  
BY CRA BLOCKS

<u>ZONE</u>	<u>GROSS FLOOR SQUARE FOOTAGE: (000 's)</u>					<u>TOTAL</u>
	<u>PRIVATE OFFICE</u>	<u>GOVERNMENT</u>	<u>RETAIL</u>	<u>HOTEL-SERVICE- INSTITU.</u>	<u>MANUFACT. WHOLESALE</u>	
31	750	0	0	10	0	760
32	1,700	0	5	10	0	1,715
33	200	0	5	40	0	245
34	1,310	0	25	20	0	1,355
35	300	0	10	45	40	395
36	170	0	20	440	0	630
37	300	0	5	10	0	315
38	240	0	10	20	0	270
39	190	0	10	40	0	240
40	1,000	0	450	0	0	1,450
41	900	0	435	10	60	1,405
42	600	0	330	330	0	1,260
43	50	0	250	40	0	340
44	250	0	100	0	0	350
45	570	0	30	35	40	675
46	0	0	0	0	0	0
47	25	0	20	5	35	85
48	300	0	5	5	0	310
49	50	0	20	0	0	70
50	30	0	30	125	40	225
51	35	0	28	40	20	115
52	355	0	5	50	25	435
53	290	105	35	25	0	455
54	70	0	25	25	65	185
55	315	0	0	115	35	465
56	380	0	20	60	300	760
57	860	0	90	205	360	1,515
58	0	0	0	950	0	950
59	290	515	40	20	30	895
60	445	520	60	15	520	1,560



Table D-1  
(Continued)

1990 LACBD DISTRIBUTION OF FLOOR AREA  
BY CRA BLOCKS

GROSS FLOOR SQUARE FOOTAGE: (000's)						
<u>ZONE</u>	<u>PRIVATE OFFICE</u>	<u>GOVERNMENT</u>	<u>RETAIL</u>	<u>HOTEL-SERVICE- INSTITU.</u>	<u>MANUFACT. WHOLESALE</u>	<u>TOTAL</u>
61	30	460	0	100	170	760
62	185	0	130	270	1,600	2,185
63	425	0	150	110	210	895
64	1,430	150	150	525	0	2,255
65	170	0	80	150	55	455
66	0	10	45	50	805	910
67	105	0	1,185	20	210	1,520
68	1,970	0	235	110	95	2,410
69	100	0	20	20	40	180
70	0	65	25	65	700	855
71	935	0	550	25	0	1,510
72	300	0	75	75	220	670
73	9	0	170	5	660	840
74	30	105	210	30	1,360	1,735
75	200	15	20	5	320	560
76	100	0	60	25	270	455
77	10	0	55	10	1,570	1,645
78	50	110	55	20	780	1,015
79	680	0	30	45	30	785
80	115	0	35	45	45	240
81	0	20	35	0	795	850
82	10	35	95	120	3,440	3,700
83	15	0	20	0	0	35
84	0	395	40	70	25	530
85	20	0	0	20	0	40
86	0	0	0	0	0	0
87	0	1,250	0	0	0	1,250
88	0	970	30	40	0	1,040
89	0	0	0	0	0	0
90	0	225	0	0	0	225

Table D-1  
(Continued)

1990 LACBD DISTRIBUTION BY FLOOR AREA  
BY CRA BLOCKS

<u>GROSS FLOOR SQUARE FOOTAGE: (000's)</u>						
<u>ZONE</u>	<u>PRIVATE OFFICE</u>	<u>GOVERNMENT</u>	<u>RETAIL</u>	<u>HOTEL- SERVICE- INSTITU.</u>	<u>MANUFACT. WHOLESALE</u>	<u>TOTAL</u>
91	0	485	0	100	0	585
92	0	1,285	0	0	0	1,285
93	0	300	0	510	0	810
94	0	1,735	0	0	0	1,735
95	0	610	0	0	0	610
96	0	275	0	0	0	275
97	210	20	135	140	40	545
98	5	15	25	0	500	545
99	5	90	160	1,675	1,700	3,630
100	0	285	15	0	1,180	1,480
	<u>          </u>	<u>          </u>	<u>          </u>	<u>          </u>	<u>          </u>	<u>          </u>
TOTAL	36,190	10,050	6,730	9,840	18,430	81,240

Table D-2  
1990 IACBD EMPLOYMENT

<u>EMPLOYMENT:</u>						
<u>ZONE</u>	<u>PRIVATE OFFICE</u>	<u>GOVERNMENT</u>	<u>RETAIL</u>	<u>HOTEL- SERVICE- INSTITU.</u>	<u>MANUFACT. WHOLESALE</u>	<u>TOTAL</u>
1	0	0	0	0	0	0
2	0	0	70	40	0	110
3	0	10	0	0	0	10
4	0	0	0	0	0	0
5	2,260	0	125	0	0	2,385
6	1,730	0	0	20	0	1,750
7	0	0	30	40	0	70
8	0	0	0	20	0	20
9	0	0	175	0	0	175
10	5,655	0	140	0	0	5,795
11	0	0	0	20	0	20
12	150	0	90	350	0	590
13	510	0	50	40	0	600
14	2,300	0	20	40	0	2,360
15	6,400	0	300	100	0	6,800
16	5,895	0	200	75	0	6,170
17	150	0	75	290	0	515
18	2,500	0	0	30	0	2,530
19	0	0	350	1,125	0	1,475
20	2,600	0	80	30	0	2,710
21	6,000	0	0	20	0	6,020
22	2,120	0	20	0	0	2,140
23	2,000	0	50	150	100	2,300
24	860	0	0	50	0	910
25	9,860	0	240	70	0	10,170
26	440	0	20	200	0	660
27	2,550	0	0	200	0	2,750
28	1,980	0	50	600	0	2,630
29	0	0	0	50	0	50
30	1,080	0	0	25	0	1,105

Table D-2  
(Continued)

1990 LACBD EMPLOYMENT

EMPLOYMENT:						
<u>ZONE</u>	<u>PRIVATE OFFICE</u>	<u>GOVERNMENT</u>	<u>RETAIL</u>	<u>HOTEL- SERVICE- INSTITU.</u>	<u>MANUFACT. WHOLESALE</u>	<u>TOTAL</u>
31	3,050	0	0	50	0	3,100
32	5,040	0	20	25	0	5,085
33	590	0	20	105	0	715
34	4,000	0	100	50	0	4,150
35	1,000	0	20	320	200	1,540
36	400	0	55	900	0	1,355
37	1,220	0	20	40	0	1,280
38	720	0	25	50	0	795
39	670	0	25	100	0	795
40	4,780	0	790	0	0	5,570
41	4,540	0	535	40	95	5,210
42	2,240	0	660	400	0	3,300
43	190	0	500	20	0	710
44	750	0	200	0	0	950
45	1,500	0	60	100	200	1,860
46	0	0	0	20	0	20
47	130	0	25	20	55	230
48	1,250	0	20	20	0	1,290
49	150	0	40	0	0	190
40	150	0	50	300	200	700
51	100	0	50	100	100	350
52	1,000	0	20	80	50	1,150
53	1,500	550	100	75	0	2,225
54	100	0	50	100	150	400
55	750	0	0	150	150	1,050
56	500	0	50	50	500	1,100
57	5,000	0	20	150	850	6,020
58	0	0	0	550	0	550
59	500	2,600	200	100	100	3,500
60	4,500	2,600	100	100	1,700	9,000

Table D-2  
(Continued)  
1990 LACBD EMPLOYMENT

EMPLOYMENT:						
<u>ZONE</u>	<u>PRIVATE OFFICE</u>	<u>GOVERNMENT</u>	<u>RETAIL</u>	<u>HOTEL- SERVICE- INSTITU.</u>	<u>MANUFACT. WHOLESALE</u>	<u>TOTAL</u>
61	100	2,320	50	100	500	3,070
62	1,045	0	370	430	1,300	3,145
63	600	0	450	100	570	1,720
64	4,000	500	150	400	0	5,050
65	600	0	100	325	200	1,225
66	0	0	50	300	800	1,150
67	300	0	500	25	570	1,395
68	3,400	0	200	200	250	4,050
69	300	0	50	30	500	880
70	0	750	50	350	500	1,650
71	2,500	0	2,300	100	0	4,900
72	800	0	100	50	800	1,750
73	50	0	250	20	2,000	2,320
74	150	450	400	100	3,600	4,700
75	400	100	50	50	650	1,250
76	200	0	100	50	900	1,250
77	50	0	100	50	4,000	4,200
78	200	500	100	50	1,500	2,350
79	1,300	0	50	50	70	1,470
80	450	0	50	50	100	650
81	0	50	50	50	1,100	1,250
82	50	50	200	250	6,400	6,950
83	50	0	40	0	0	90
84	0	1,350	70	50	50	1,520
85	100	0	0	40	0	140
86	0	0	0	0	0	0
87	0	3,500	0	0	0	3,500
88	0	4,350	250	80	0	4,680
89	0	0	0	0	0	0
90	0	880	15	0	0	895



Table D-2  
(Continued)  
1990 LACBD EMPLOYMENT

<u>ZONE</u>	<u>EMPLOYMENT:</u>					<u>TOTAL</u>
	<u>PRIVATE OFFICE</u>	<u>GOVERNMENT</u>	<u>RETAIL</u>	<u>HOTEL- SERVICE- INSTITU.</u>	<u>MANUFACT. WHOLESALE</u>	
91	0	2,610	0	200	0	2,810
92	0	6,800	0	0	0	6,800
93	0	2,300	0	100	0	2,400
94	0	7,000	0	0	0	7,000
95	0	3,000	0	50	0	3,050
96	0	1,300	0	0	0	1,300
97	700	100	250	200	100	1,350
98	10	60	50	0	1,150	1,270
99	20	410	300	2,910	3,000	6,640
100	0	1,300	30	0	2,830	4,160
<b>TOTAL</b>	<b>120,735</b>	<b>45,440</b>	<b>12,570</b>	<b>14,355</b>	<b>37,890</b>	<b>230,990</b>

Table D-3

1990 PARKING SURPLUSES AND DEFICIENCIES  
Los Angeles Central City Parking Study

AREA	CRA ZONE	ADJUSTED SUPPLY			DEMAND		SURPLUSES		DEFICIENCIES		
		CURB	PUBLIC	PRIVATE	SHORT TERM	LONG TERM	SHORT TERM	LONG TERM	SHORT TERM	LONG TERM	
A	83	79	290	83	20	45	-	387	-	-	
	84	178	19	1,486	150	835	-	737	39	-	
	85	-	44	107	5	70	39	37	-	-	
	86	11	-	972	0	0	11	972	-	-	
	87	38	-	275	315	1,925	-	-	277	1,650	
	88	37	625	2,195	270	2,565	-	22	-	-	
	89	32	399	187	0	0	32	586	-	-	
	90	134	304	720	55	495	-	608	-	-	
	91	50	1,636	2,229	135	1,525	-	2,255	-	-	
	92	19	-	953	320	3,740	-	-	301	2,787	
	93	31	531	-	140	1,310	-	-	-	888	
	94	45	-	807	435	3,850	-	-	390	3,043	
	95	25	-	-	150	1,670	-	-	125	1,670	
	96	35	-	687	70	715	-	-	35	28	
	Subtotal-A		714	3,848	10,701	2,065	18,745	82	5,604	1,167	10,066
	Net Surplus or Deficiency									5,547	

Table D-3

1990 PARKING SURPLUSES AND DEFICIENCIES  
Los Angeles Central City Parking Study

AREA	CRA ZONE	ADJUSTED SUPPLY			DEMAND		SURPLUSES		DEFICIENCIES	
		CURB	PUBLIC	PRIVATE	SHORT TERM	LONG TERM	SHORT TERM	LONG TERM	SHORT TERM	LONG TERM
B	1	16	-	-	0	0	-	16	-	-
	2	-	-	361	20	60	-	301	20	-
	3	27	-	513	0	5	27	508	-	-
	4	34	-	1,280	0	0	34	1,280	-	-
	5	13	-	216	120	1,380	-	-	-	927
	6	-	-	380	45	1,010	-	-	-	675
	7	-	-	418	20	40	-	378	20	-
	8	8	-	-	0	10	8	-	-	10
	9	11	-	-	85	100	-	-	74	100
	10	17	-	1,395	220	3,360	-	-	-	2,168
	11	16	-	-	0	10	-	92	-	-
	12	-	-	180	90	300	-	-	-	210
	13	-	-	2,250	50	345	-	1,855	-	-
	14	6	-	1,841	170	1,365	-	312	-	-
	15	-	-	1,800	355	3,930	-	-	-	2,485
	16	3	-	1,395	240	3,570	-	-	-	2,412
	17	20	-	540	105	270	-	185	-	-
	18	-	-	900	90	1,465	-	-	-	655
	19	-	-	453	250	730	-	-	-	527
	20	24	-	2,543	150	1,570	-	847	-	-
	21	9	-	484	260	3,490	-	-	-	3,227
	22	6	-	836	100	1,240	-	-	-	225
Subtotal-B		210	15,213	3,305	2,370	24,250	69	5,774	114	13,630
Net Surplus or Deficiency									7,901	

Table D-3  
 1990 PARKING SURPLUSES AND DEFICIENCIES  
 Los Angeles Central City Parking Study

AREA	CRA ZONE	ADJUSTED SUPPLY			DEMAND		SURPLUSES		DEFICIENCIES	
		CURB	PUBLIC	PRIVATE	SHORT TERM	LONG TERM	SHORT TERM	LONG TERM	SHORT TERM	LONG TERM
C	59	2	615	1,536	245	1,465	-	443	-	-
	60	7	1,614	1,134	395	3,765	-	-	-	1,405
	61	9	516	129	190	1,280	-	-	-	816
	63	-	319	-	270	715	-	-	-	666
	64	-	1,196	640	470	2,095	-	-	-	729
	65	5	552	-	135	485	-	-	-	63
Subtotal-C		23	4,812	3,439	1,705	9,805	-	443	-	3,679
Net Surplus or Deficiency										3,236
D	62	86	860	247	600	940	-	-	-	347
	66	150	472	271	255	340	-	298	-	-
	70	113	2,071	889	230	490	-	2,353	-	-
	97	168	753	987	210	410	-	1,288	-	-
	Subtotal-D		517	4,156	2,394	1,295	2,180	-	3,939	-
Net Surplus or Deficiency								3,592		

Table D-3

1990 PARKING SURPLUSES AND DEFICIENCIES  
Los Angeles Central City Parking Study

AREA	CRA ZONE	ADJUSTED SUPPLY			DEMAND		SURPLUSES		DEFICIENCIES		
		CURB	PUBLIC	PRIVATE	SHORT TERM	LONG TERM	SHORT TERM	LONG TERM	SHORT TERM	LONG TERM	
E	23	-	477	171	115	845	-	-	-	312	
	24	8	554	810	40	335	-	997	-	-	
	25	-	368	-	455	3,760	-	-	-	3,847	
	26	10	235	213	45	225	-	188	-	-	
	27	10	675	-	125	1,000	-	-	-	440	
	28	-	240	-	135	930	-	-	-	825	
	29	-	2,006	-	0	15	-	1,991	-	-	
	30	-	86	-	35	410	-	-	-	359	
	31	-	705	23	100	1,145	-	-	-	517	
	32	-	282	-	220	1,880	-	-	-	1,818	
	33	-	763	-	30	255	-	478	-	-	
	34	-	658	-	195	1,535	-	-	-	1,072	
	35	-	797	-	60	545	-	192	-	-	
	36	9	410	9	100	440	-	-	-	112	
	37	-	119	22	40	465	-	-	-	364	
	38	2	554	-	45	290	-	221	-	-	
	39	-	162	-	40	290	-	-	-	168	
	Subtotal-E		39	9,091	1,248	1,780	14,365	-	4,067	-	9,834
	Net Surplus or Deficiency									5,767	

Table D-3

1990 PARKING SURPLUSES AND DEFICIENCIES  
Los Angeles Central City Parking Study

AREA	CRA ZONE	ADJUSTED SUPPLY			DEMAND		SURPLUSES		DEFICIENCIES		
		CURB	PUBLIC	PRIVATE	SHORT TERM	LONG TERM	SHORT TERM	LONG TERM	SHORT TERM	LONG TERM	
F	67	-	198	-	1,070	440	-	-	872	440	
	68	-	1,116	29	490	1,285	-	-	-	630	
	69	-	545	-	50	280	-	215	-	-	
Subtotal-F		0	1,859	29	1,610	2,005	-	215	872	1,070	
Net Surplus or Deficiency										1.727	
G	40	17	1,695	0	575	1,945	-	-	-	808	
	46	44	1,210	15	0	5	44	1,220	-	-	
	Subtotal-G		61	2,905	15	575	1,950	44	1,220	-	808
Net Surplus or Deficiency								456			
H	41	-	1,755	15	555	2,440	-	-	-	1,225	
	42	-	1,832	-	455	1,510	-	-	-	133	
	43	-	1,159	64	255	330	-	638	-	-	
	44	-	398	-	135	445	-	-	-	182	
	45	11	257	-	125	870	-	-	-	727	
	47	11	104	-	30	100	-	-	-	15	
	48	15	468	-	45	605	-	-	-	167	
	49	-	977	14	30	90	-	871	-	-	
	51	22	1,288	122	35	160	-	1,237	-	-	
	52	54	834	287	70	530	-	575	-	-	
	53	9	1,357	197	105	1,045	-	413	-	-	
	Subtotal-H		122	10,429	699	1,840	8,125	-	3,734	-	2,449
	Net Surplus or Deficiency								1,285		



Table D-3  
 1990 PARKING SURPLUSES AND DEFICIENCIES  
 Los Angeles Central City Parking Study

AREA	CRA ZONE	ADJUSTED SUPPLY			DEMAND		SURPLUSES		DEFICIENCIES	
		CURB	PUBLIC	PRIVATE	SHORT TERM	LONG TERM	SHORT TERM	LONG TERM	SHORT TERM	LONG TERM
I	74	63	1,385	785	595	1,775	-	-	-	137
	78	93	738	197	290	890	-	-	-	152
	81	48	1,094	127	240	470	-	559	-	-
	82	482	1,341	1,244	990	2,625	-	-	-	548
	100	563	-	1,936	395	1,575	168	361	-	-
Subtotal-I		1,249	4,558	4,289	2,510	7,335	168	920	-	837
Net Surplus or Deficiency							251			
J	50	139	240	629	65	200	57	686	-	-
	54	181	68	436	60	120	48	457	-	-
	58	23	2,880	-	140	140	-	2,623	-	-
	98	286	-	1,289	155	395	-	1,053	28	-
	Subtotal-J		629	3,188	2,354	420	855	105	4,819	28
Net Surplus or Deficiency							4,896			

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Table D-3

1990 PARKING SURPLUSES AND DEFICIENCIES  
Los Angeles Central City Parking Study

AREA	CRA ZONE	ADJUSTED SUPPLY			DEMAND		SURPLUSES		DEFICIENCIES	
		CURB	PUBLIC	PRIVATE	SHORT TERM	LONG TERM	SHORT TERM	LONG TERM	SHORT TERM	LONG TERM
K	55	60	356	644	75	390	-	595	-	-
	56	135	388	1,136	155	415	-	1,089	-	-
	57	113	1,621	891	325	2,270	-	30	-	-
	79	59	461	200	140	550	-	30	-	-
	80	42	435	253	65	245	-	420	-	-
	99	<u>524</u>	<u>945</u>	<u>2,600</u>	<u>1,360</u>	<u>2,320</u>	-	<u>393</u>	<u>4</u>	<u>-</u>
Subtotal-K		933	4,206	5,724	2,170	6,190	-	2,557	4	-
Net Surplus or Deficiency						2,553				
L	71	-	81	-	600	2,440	-	-	-	2,959
	72	-	1,234	-	160	870	-	204	-	-
	73	36	223	16	785	1,160	-	-	-	1,170
	75	1	758	87	115	620	-	111	-	-
	76	1	539	13	120	620	-	-	-	187
	77	<u>-</u>	<u>1,148</u>	<u>-</u>	<u>380</u>	<u>2,095</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>1,327</u>
Subtotal-L		38	3,983	116	1,660	7,805	-	315	-	5,643
Net Surplus or Deficiency										5,328
TOTAL		4,535	69,348	33,593	19,950	103,610	468	33,607	2,185	48,354
NET DEFICIENCY										16,464
NET DEFICIENCY EXCLUDING CONVENTION CENTER										19,089

1990 BALANCED SURPLUSES AND DEFICIENCIES  
Los Angeles Central City Parking Study

AREA	CRA ZONE	ADJUSTED SUPPLY			DEMAND		SURPLUSES		DEFICIENCIES	
		CURB	PUBLIC	PRIVATE	SHORT TERM	LONG TERM	SHORT TERM	LONG TERM	SHORT TERM	LONG TERM
A	83	79	290	83	20	45		387		
	84	178	19	1,486	150	835				
	85	-	44	107	5	70				
	86	11	-	972	0	0				
	87	38	-	275	315	1,925				
	88	37	625	2,195	270	2,565				
	89	32	399	187	0	0				
	90	134	304	720	55	495				
	91	50	1,636	2,229	135	1,525				
	92	19	-	953	320	3,740				
	93	31	531	-	140	1,310				
	94	45	-	807	435	3,850			390	2,535
	95	25	-	-	150	1,670				775
	96	35	-	687	70	715				
	Subtotal-A	714	3,848	10,701	2,065	18,745		387	390	3,310

Table D-4

1990 BALANCED SURPLUSES AND DEFICIENCIES  
Los Angeles Central City Parking Study

AREA	CRA ZONE	ADJUSTED SUPPLY			DEMAND		SURPLUSES		DEFICIENCIES	
		CURB	PUBLIC	PRIVATE	SHORT TERM	LONG TERM	SHORT TERM	LONG TERM	SHORT TERM	LONG TERM
B	1	16	-	-	0	0				
	2	-	-	361	20	60				
	3	27	-	513	0	5				
	4	34	-	1,280	0	0				
	5	13	216	344	170	1,380				927
	6	-	380	-	45	1,010				
	7	-	-	418	20	40				
	8	8	-	-	0	10				
	9	11	-	-	85	100				
	10	17	1,395	-	220	3,360				2,168
	11	16	-	86	0	10				
	12	-	180	-	90	300				
	13	-	2,250	-	50	345				
	14	6	1,841	-	170	1,365				
	15	-	1,800	-	355	3,930				2,135
	16	3	1,395	-	240	3,570				2,312
	17	20	540	-	105	270				
	18	-	900	-	90	1,465				
	19	-	453	-	250	730				
	20	24	2,543	-	150	1,570				
	21	9	484	30	260	3,490				2,915
	22	6	836	273	100	1,240				125
Subtotal-B		210	15,213	3,305	2,370	24,250				10,582
Net Surplus or Deficiency										

Table D-4  
 1990 BALANCED SURPLUSES AND DEFICIENCIES  
 Los Angeles Central City Parking Study

AREA	CRA ZONE	ADJUSTED SUPPLY			DEMAND		SURPLUSES		DEFICIENCIES	
		CURB	PUBLIC	PRIVATE	SHORT TERM	LONG TERM	SHORT TERM	LONG TERM	SHORT TERM	LONG TERM
C	59	2	615	1,536	245	1,465				-
	60	7	1,614	1,134	395	3,765				1,105
	61	9	516	129	190	1,280				816
	63	-	319	-	270	715				263
	64	-	1,196	640	470	2,095				494
	65	5	552	-	135	485				-
Subtotal-C		23	4,812	3,439	1,705	9,805				2,678
Net Surplus or Deficiency										
D	62	86	860	247	600	940				
	66	150	472	271	255	340				
	70	113	2,071	889	230	490		631		
	97	168	753	987	210	410		-		
	Subtotal-D		517	4,156	2,394	1,295	2,180		631	
Net Surplus or Deficiency										





Table D-4  
 1990 BALANCED SURPLUSES AND DEFICIENCIES  
 Los Angeles Central City Parking Study

AREA	CRA ZONE	ADJUSTED SUPPLY			DEMAND		SURPLUSES		DEFICIENCIES	
		CURB	PUBLIC	PRIVATE	SHORT TERM	LONG TERM	SHORT TERM	LONG TERM	SHORT TERM	LONG TERM
F	67	-	198	-	1,070	440				
	68	-	1,116	29	490	1,285				240
	69	-	545	-	50	280				
Subtotal-F		0	1,859	29	1,610	2,005				240
Net Surplus or Deficiency										
G	40	17	1,695	0	575	1,945				
	46	44	1,210	15	0	5				
Subtotal-G		61	2,905	15	575	1,950				
Net Surplus or Deficiency										
H	41	-	1,755	15	555	2,440				
	42	-	1,832	-	455	1,510				
	43	-	1,159	64	255	330				
	44	-	398	-	135	445				
	45	11	257	-	125	870				227
	47	11	104	-	30	100				
	48	15	468	-	45	605				
	49	-	977	14	30	90				
	51	22	1,288	122	35	160				
	52	54	834	287	70	530				
53	9	1,357	197	105	1,045					
Subtotal-H		122	10,429	699	1,840	8,125				227
Net Surplus or Deficiency										

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Table D-4  
 1990 BALANCED SURPLUSES AND DEFICIENCIES  
 Los Angeles Central City Parking Study

AREA	CRA ZONE	ADJUSTED SUPPLY			DEMAND		SURPLUSES		DEFICIENCIES	
		CURB	PUBLIC	PRIVATE	SHORT TERM	LONG TERM	SHORT TERM	LONG TERM	SHORT TERM	LONG TERM
I	74	63	1,385	785	595	1,775				
	78	93	738	197	290	890				152
	81	48	1,094	127	240	470				-
	82	482	1,341	1,244	990	2,625				248
	100	563	-	1,936	395	1,575		61		-
Subtotal-I		1,249	4,558	4,289	2,510	7,335		61		400
Net Surplus or Deficiency										339
J	50	139	240	629	65	200				
	54	181	68	436	60	120	48	457		
	58	23	2,880	-	140	140		2,595		
	98	286	-	1,289	155	395		647		
	Subtotal-J		629	3,188	2,354	420	855	48	3,699	
Net Surplus or Deficiency								3,747		

Table D-4

1990 BALANCED SURPLUSES AND DEFICIENCIES  
Los Angeles Central City Parking Study

AREA	CRA ZONE	ADJUSTED SUPPLY			DEMAND		SURPLUSES		DEFICIENCIES		
		CURB	PUBLIC	PRIVATE	SHORT TERM	LONG TERM	SHORT TERM	LONG TERM	SHORT TERM	LONG TERM	
K	55	60	356	644	75	390		495			
	56	135	388	1,136	155	415		618			
	57	113	1,621	891	325	2,270					
	79	59	461	200	140	550					
	80	42	435	253	65	245					
	99	<u>524</u>	<u>945</u>	<u>2,600</u>	<u>1,360</u>	<u>2,320</u>		<u>123</u>			
	Subtotal-K	933	4,206	5,724	2,120	6,190		1,236			
	Net Surplus or Deficiency										
	L	71	-	81	-	600	2,440				1,080
72		-	1,234	-	160	870					
73		36	223	16	285	1,160					
75		1	758	87	115	620					
76		1	539	13	120	620				187	
77		<u>-</u>	<u>1,148</u>	<u>-</u>	<u>380</u>	<u>2,095</u>				<u>770</u>	
Subtotal-L		38	3,983	116	1,660	7,805				2,037	
Net Surplus or Deficiency											
TOTAL		<u>4,535</u>	<u>69,348</u>	<u>33,593</u>	<u>19,950</u>	<u>103,610</u>	<u>48</u>	<u>6,014</u>	<u>390</u>	<u>23,436</u>	
NET DEFICIENCY									17,812		
NET DEFICIENCY, EXCLUDING CONVENTION CENTER.									20,438		

Table E-1

IMPACT OF SCRTD STARTER LINE ON  
1990 PARKING SURPLUSES AND DEFICIENCIES  
Los Angeles Central City Parking Study

<u>AREA</u>	<u>CRA ZONE</u>	<u>WITHOUT STARTER LINE</u>		<u>ESTIMATED</u>	<u>WITH STARTER LINE</u>		
		<u>SURPLUSES</u>	<u>DEFICIENCIES</u>	<u>SPACES SAVED</u> <u>BY STARTER LINE</u>	<u>SURPLUSES</u>	<u>DEFICIENCIES</u>	
A:	84			30	30		
	87			50	50		
	88			190	190		
	89			90	90		
	92			280	280		
	93			190	190		
	94		2,925	450		2,475	
	95		775	110		665	
	SUBTOTAL-A			3,700	1,390	830	3,140
	Net Deficiency						2,310
B:	5		927	110		817	
	10		2,168	90		2,078	
	22		125	30		95	
	SUBTOTAL-B			3,220	230		2,990
C:	59		-	260	260	-	
	60		1,105	550		555	
	61		816	90		726	
	63		263	690	427		
	64		494	560			
	65		-	80	66		
	SUBTOTAL-C			2,678	2,230	833	1,281
Net Deficiency							

Table E-1

IMPACT OF SCRTD STARTER LINE ON  
1990 PARKING SURPLUSES AND DEFICIENCIES  
Los Angeles Central City Parking Study

AREA	CRA ZONE	WITHOUT STARTER LINE		ESTIMATED SPACES SAVED BY STARTER LINE	WITH STARTER LINE	
		SURPLUSES	DEFICIENCIES		SURPLUSES	DEFICIENCIES
A:	84			30	30	
	87			50	50	
	88			190	190	
	89			90	90	
	92			280	280	
	93			190	190	
	94		2,925	450		2,475
	95		775	110		665
		SUBTOTAL-A		3,700	1,390	830
	Net Deficiency					2,310
B:	5		927	110		817
	10		2,168	90		2,078
	22		125	30		95
		SUBTOTAL-B		3,220	230	
C:	59		-	260	260	-
	60		1,105	550		555
	61		816	90		726
	63		263	690	427	
	64		494	560	66	
	65		-	80	80	
	SUBTOTAL-C		2,678	2,230	833	1,281
	Net Deficiency					

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Table E-1  
(Continued)

IMPACT OF SCR TD STARTER LINE ON  
1990 PARKING SURPLUSES AND DEFICIENCIES  
Los Angeles Central City Parking Study

<u>AREA</u>	<u>CRA ZONE</u>	<u>WITHOUT STARTER LINE</u>		<u>ESTIMATED SPACES SAVED BY STARTER LINE</u>	<u>WITH STARTER LINE</u>	
		<u>SURPLUSES</u>	<u>DEFICIENCIES</u>		<u>SURPLUSES</u>	<u>DEFICIENCIES</u>
E:	23		107	240	133	
	24		-	30	30	
	25		1,291	330		961
	26		-	20	20	
	27		362	90		272
	28		405	120		285
	29		-	10	10	
	30		-	80	80	
	31		206	330	124	
	32		1,128	550		578
	33		-	80	80	
	34		463	130		333
	35			140	140	
	36			90	90	
	37			390	390	
	38			240	240	
	39			90	90	
SUBTOTAL-E			3,962	2,960	1,427	2,429
Net Deficiency						1,002



Table E-1  
(Continued)

IMPACT OF SCR TD STARTER LINE ON  
1990 PARKING SURPLUSES AND DEFICIENCIES  
Los Angeles Central City Parking Study

AREA	CRA ZONE	WITHOUT STARTER LINE		ESTIMATED SPACES SAVED BY STARTER LINE	WITH STARTER LINE	
		<u>SURPLUSES</u>	<u>DEFICIENCIES</u>		<u>SURPLUSES</u>	<u>DEFICIENCIES</u>
F:	67		240	100		140
	68		-	300	300	-
SUBTOTAL-F			240	400	300	140
	Net Surpluses				160	
G:	40			390		
SUBTOTAL-G				390		
H:	41			860	860	
	42			980	980	
	43			80	80	
	44			30	30	
	45		227	140	-	87
	47			10	10	
	48			40	40	
	49			20	20	
	51			30	30	
	52			90+	90	
SUBTOTAL-H			227	2,280	2,140	87
	Net Surplus				2,053	
TOTAL IN STUDY AREA			14,027	9,880	5,920	10,067
	Net Deficiency					4,147