OLD TOWN
VISITOR ORIENTED PARKING FACILITIES STUDY – PHASE II

Introduction

Wilbur Smith Associates (WSA) was retained by the City of San Diego to provide an assessment of existing parking supply and demand conditions; estimate future parking demand conditions; determine the extent of parking deficiencies; develop a set of practical alternatives to mitigate these deficiencies; and to conduct a conceptual analysis identifying parking program costs and financing techniques to implement parking improvements in the visitor oriented area of Old Town.

The study area (See Figure 1.0) consists of approximately 230 acres of historic preserved structures and recreational and commercial attractions including historic buildings, plazas, shops, restaurants, hotels, and offices. The study area also includes single-family and multi-family residential units, the Old Town State Historic Park, Caltrans District office, and the Old Town Transit Center.

This report is divided into four sections, as follows:

1. **Issues & Existing Supply/Demand Analysis:** This section identifies existing parking issues and provides an analysis of existing supply and demand.

2. **Future Supply/Demand & Structure Site Analysis:** This section provides an analysis of future supply and demand and presents a structure site analysis for the Old Town area.

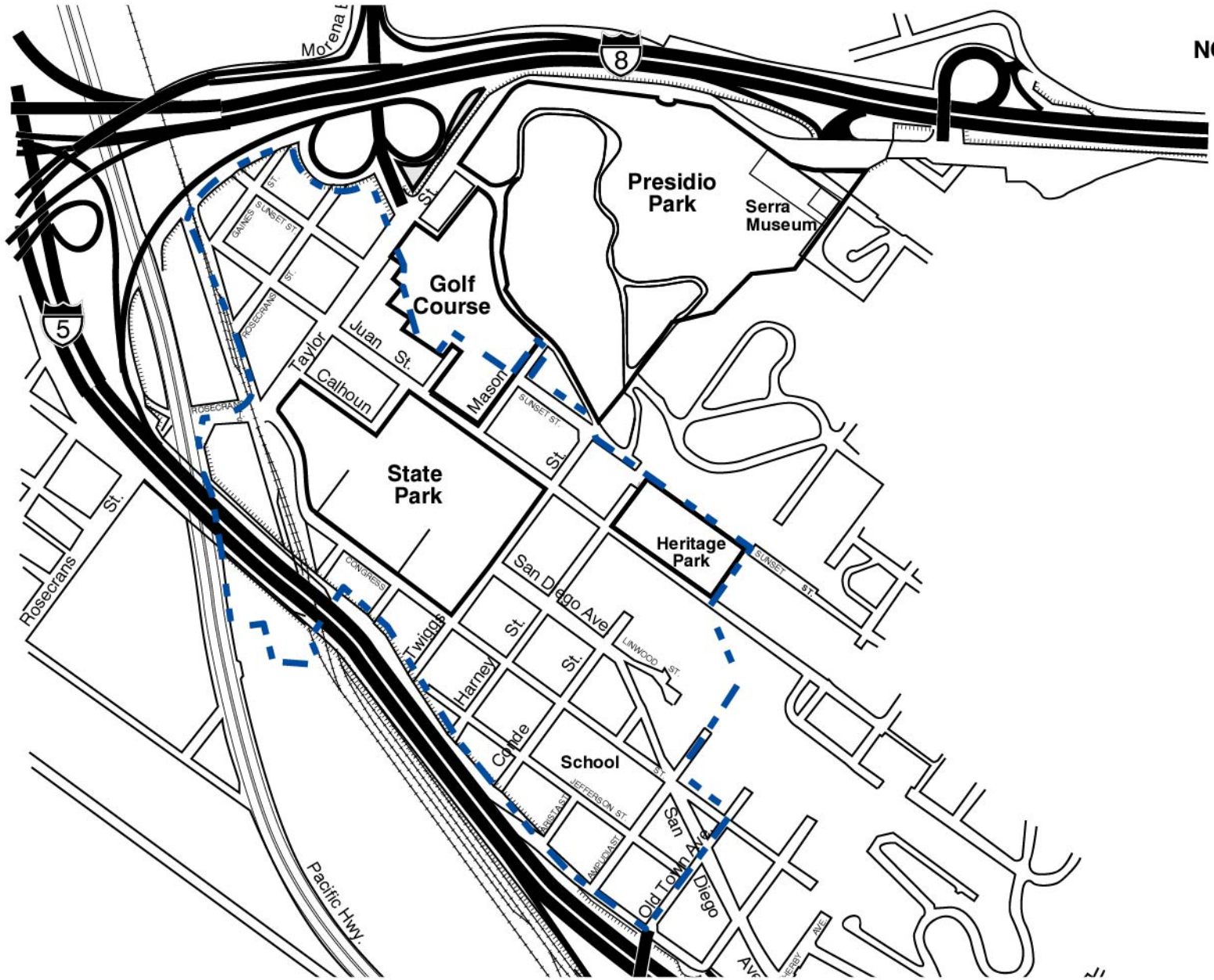
3. **Parking Structure Financial Analysis:** This section presents an analysis of parking program costs and financing techniques for potential parking structure sites.

4. **Recommendations:** This section presents the recommendations of the study.

Background

Old Town is a visitor-oriented historic, recreational, and commercial community containing the historic site of pioneer settlement of the City of San Diego. Old Town's historic district dates back to 1821 and is the core of a vital recreational, commercial, and tourist area.

Preservation and development of the Old Town community, including both the 10-acre historic core and surrounding commercial and recreational areas, is guided by the Old Town Planned District Ordinance (PDO), which contains special regulations pertaining to property development and permitted uses.



Study Area Boundary

Old Town Community

City of San Diego Visitor Oriented Parking Survey

Figure 1.0

1.0 Issues & Existing Supply/Demand Analysis

This section provides an assessment of existing parking conditions and parking demand in the community of Old Town. The section also documents observations and issues, parking characteristics, existing parking demand and supply within the community, and provides conclusions pertaining to the analysis of existing parking supply and demand.

1.1 Existing Parking Supply and Usage Patterns

A parking survey was conducted in Old Town during peak and off peak seasons to determine existing parking characteristics such as parking supply, occupancy, accumulation, duration and turnover. City staff conducted the field survey during August and November of 2000. Data was collected hourly from 11:00 A.M. to 8:00 P.M. for weekday conditions and from 11:00 A.M. to 3:00 P.M. for weekend conditions. Additional parking observations were made between 8:00 A.M. and 11:00 A.M. This data was then analyzed to determine turnover, duration, and occupancy for specific Sub Areas of the community (See Figure 1.1). These Sub Areas were developed based on characteristics of the community and known travel patterns.

Parking Supply

There are three primary types of parking supply available to the general public in the Old Town area: 1) On-street public parking spaces; 2) off-street parking in public lots and; 3) valet parking. The majority is provided in the 1,058 off-street public parking lots, which comprise approximately 58 percent of the total parking supply (1,814) in the study area. Approximately 656 spaces (36 percent) are provided in on-street public spaces and approximately 100 spaces (6 percent) are provided by valet service.

The largest public parking lot in Old Town, with a capacity of 456 spaces, is the Old Town Transit Center lot located south of Taylor Street between the railroad tracks and Pacific Highway. This lot primarily serves the regional and local transit system and is somewhat remote from the core activity area of Old Town. Other public lots are located along Juan Street and in the northwest corner of the State Historic Park.

On-street parking and off-street parking in public lots is provided free of charge. Current flat rate fees for valet services range from $3.00 to $4.00 year round.

Parking Occupancy

Parking occupancy is the number of vehicles observed in a parking lot or along the street at any given point in time and is typically expressed as a percent of the parking supply. Full occupancy of every parking space is not considered realistic due to significant delays and safety concerns as motorists search for available parking spaces. Industry standards indicate that practical capacity should be in the range of 85 percent to 90 percent occupancy. For purposes of this study we assume 85 percent occupancy as the practical parking capacity to maintain adequate traffic circulation conditions.

1 Sub-Area Identification

Sub-Area Boundary

Old Town Sub Areas

City of San Diego Visitor Oriented Parking Survey

Figure 1.1

As expected, the analysis indicates that on street parking occupancy in the primary activity areas generally exceeds practical capacity on weekdays and weekends for peak and off-peak seasons at the following locations (See Figures 1.2 and 1.3):

- Juan Street from Taylor Street to Twiggs Street
- San Diego Avenue from Conde Street to Twiggs Street
- Congress Street from Wallace Street to Arista Street
- Twiggs Street from its southern terminus to Sunset Street
- Harney Street from Jefferson Street to north of San Diego Avenue
- Conde Street from Jefferson Street to north of San Diego Avenue

Off-street parking exceeds practical capacity in the lots nearest the State Park Historic Site and near the Caltrans district offices. However, parking in the transit center parking lot is underutilized. Specifically, demand exceeds supply in the following off-street parking lot locations:

- Lot A, which is located between San Diego Avenue and Congress Street near Twiggs Street.
- Lot B, which is located along Congress Street near Wallace Street.
- Lot C, which is located along Calhoun Street near Taylor Street.
- Lots E & F, which are located along Juan Street near Mason Street.
- Lot G, which is located at the northwest corner of Juan Street and Twiggs Street.
- Lot H, which is located at the southwest corner of Juan Street and Twiggs Street.

Parking Accumulation

The accumulation of parked vehicles is a direct measure of parking space usage during different periods of the day.

Parking demand levels in the major activity areas tend to remain high during all survey periods (peak and off-peak, weekday and weekend). Parking demand levels are highest during the mid-day lunch period and the evening dinner period. Accumulation in each Sub Area is shown in Figures B.1 through B.12 in the Appendix.

Parking Duration and Turnover

Parking duration is the average length of time that a space remains occupied by a given vehicle, while turnover is the average number of vehicles occupying one parking space during the survey period. For the majority of the study area, a license plate survey was used to determine duration and turnover characteristics of parking space utilization for on-street and off-street parking facilities within the community. The remaining areas utilized an occupancy-only survey. Using both methods allowed for a larger survey study area.

AVERAGE OCCUPANCY RATES FOR WEEKDAY PARKING
Old Town Community
City of San Diego Visitor Oriented Parking Survey

Figure 1.2

AVERAGE OCCUPANCY RATES FOR WEEKEND PARKING
Old Town Community
City of San Diego Visitor Oriented Parking Survey

Figure 1.3

Much of the area is without posted time limits. A two-hour time limit exists along Juan Street from Taylor Street to Wallace Street and along San Diego Avenue from Twiggs Street to Ampudia Street. Parking durations for these areas averaged approximately 2 hours during weekdays.

Parking duration and turnover characteristics for each Sub Area are summarized in Tables 1.1 and 1.2 below.

Table 1.1
Duration and Turnover Characteristics – On-Street Parking

Sub Area		Weekday		Weekend	
		Average Duration (hours)	Average Turnover (vehicles)	Average Duration (hours)	Average Turnover (vehicles)
2 Taylor Street/Caltrans	Peak Season	2.7	3.1	3.5	1.4
	Off-Peak Season	2.1	2.1	3.7	1.6
3 State Park Historic District	Peak Season	2.6	2.8	2.7	1.6
	Off-Peak Season	2.5	1.9	3.1	1.8
4 Old Town Ave./School/ San Diego Ave.	Peak Season	2.4	2.0	2.5	1.2
	Off-Peak Season	2.8	2.0	3.4	1.5

Table 1.2
Duration and Turnover Characteristics – Off-Street Parking

Sub Area		Weekday		Weekend	
		Average Duration (hours)	Average Turnover (vehicles)	Average Duration (hours)	Average Turnover (vehicles)
1 Trolley Stop	Peak Season	3.7	1.7	3.2	0.7
	Off-Peak Season	4.3	1.1	2.6	1.0
2 Taylor Street/Caltrans	Peak Season	2.7	3.0	2.6	1.5
	Off-Peak Season	2.1	1.5	2.6	1.8
3 State Park Historic District	Peak Season	2.4	3.4	2.5	1.0
	Off-Peak Season	2.3	2.3	2.8	2.1

Visitor and Employee Parking Characteristics

Studies have shown that employees will generally tolerate walking longer distances from their vehicles to their destination than people shopping or taking care of personal business. It has also been cited that motorists parking for a longer duration, such as employees, were willing to accept longer walking distances.

Studies have also shown that short-trip visitors, those that spend less than one-hour in an area such as this, will typically walk about one block from their parked vehicle to their primary destination. Visitors that are familiar with or frequent the area have the tendency to circulate around the block a few times until a convenient curb space becomes available. Short-trip visitors that are not familiar with the area may become frustrated by the lack of available on-street parking and drive away without completing their trip purpose.

Issues and Observations

There are a number of issues identified through field observations and discussions with City staff. One of the key issues identified relates to employee parking on-street and off-street in public lots in the core area. These employees are occupying prime parking spaces that should be utilized by visitors to the area. However, there appears to be insufficient convenient parking spaces available to accommodate employee parking, which is why employees are occupying prime parking spaces.

Other issues and observations include:

- There are many distractions in the area and off-street parking and signage may not be clearly visible to visitors.
- There are a large number of vehicles circulating the area seeking more convenient on-street parking spaces.
- Vehicles are sometimes parked in restricted zones at curb faces and curb returns.

1.2 Existing Parking Supply/Demand Balance

Parking demand refers to the amount of parking needed in a specific area. Since drivers can only park where parking is provided, occupancy rates alone do not necessarily indicate the demand for a particular area.

Latent Demand

Latent demand refers to that demand which is not directly visible in an area. Latent parking demand during peak periods can be considered in two forms. One form involves parkers who cannot find a parking space within an area they would prefer to park and ultimately park outside the preferred area. This form of latent demand is common as evidenced by occupancy rates along Congress Street near the Freemont School and field observations of other areas. This type of latent demand is more prevalent on weekends. The majority of this demand can be attributed to visitors with destinations in Sub Area 3.

The second form of latent parking demand involves parkers who become so frustrated when required to search for an empty parking space that they ultimately leave the area. Observations of travel patterns and parking occupancy levels in the area strongly suggest that this form of latent demand exists, but it is difficult to quantify.

Existing Parking Demand

An average and peak parking demand was determined and compared to the existing parking supply. The average demand presented is the highest daily average encountered for the on- or off-peak season, weekday or weekend for each Sub Area. The peak demand presented is the highest individual hour encountered for the on- or off-peak season, weekday or weekend for each Sub Area. Table 1.3 presents the parking demand versus supply for the Sub Areas within the community of Old Town. Figures 1.4 and 1.5 present the average and peak parking demand, respectively, by Sub Area.

Table 1.3
Average and Peak Parking Demand Versus Supply

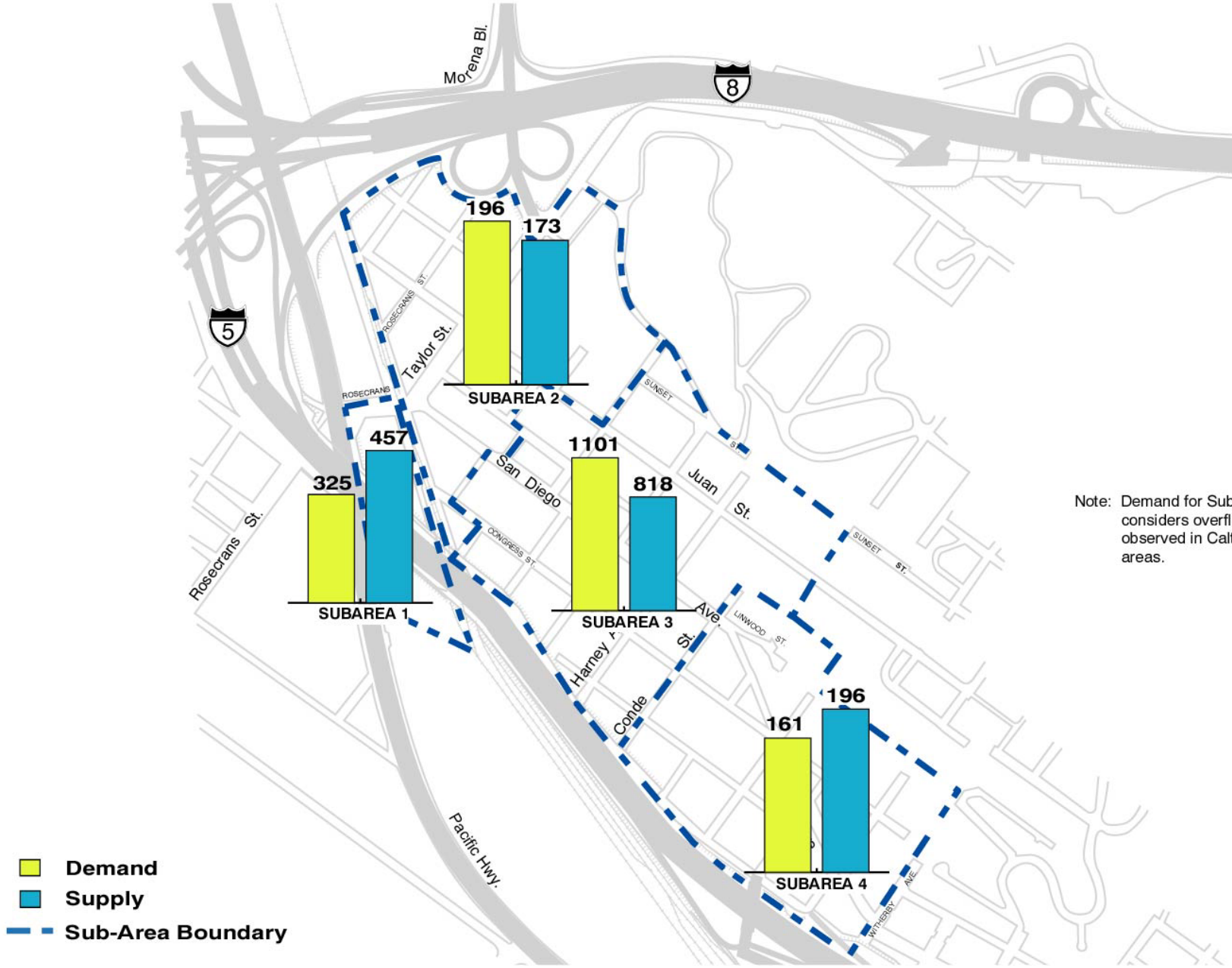
Sub Area	Parking Supply	Average Demand	Average Deficiency (Surplus)	Peak Demand	Peak Deficiency (Surplus)
1 Trolley Stop	457	325	(132)	504	47
2 Taylor Street/Caltrans	173	196	23	200	27
3 State Park Historic District	818	1,101	283	1,123	305
4 Old Town Ave./School/ San Diego Ave.	196	161	(35)	180	(16)

1.3 Parking Management Strategies

Parking management strategies help to balance parking supply and demand and improve parking efficiency. A number of these strategies were evaluated for this study as identified below.

Parking Space Striping & Parking Zones

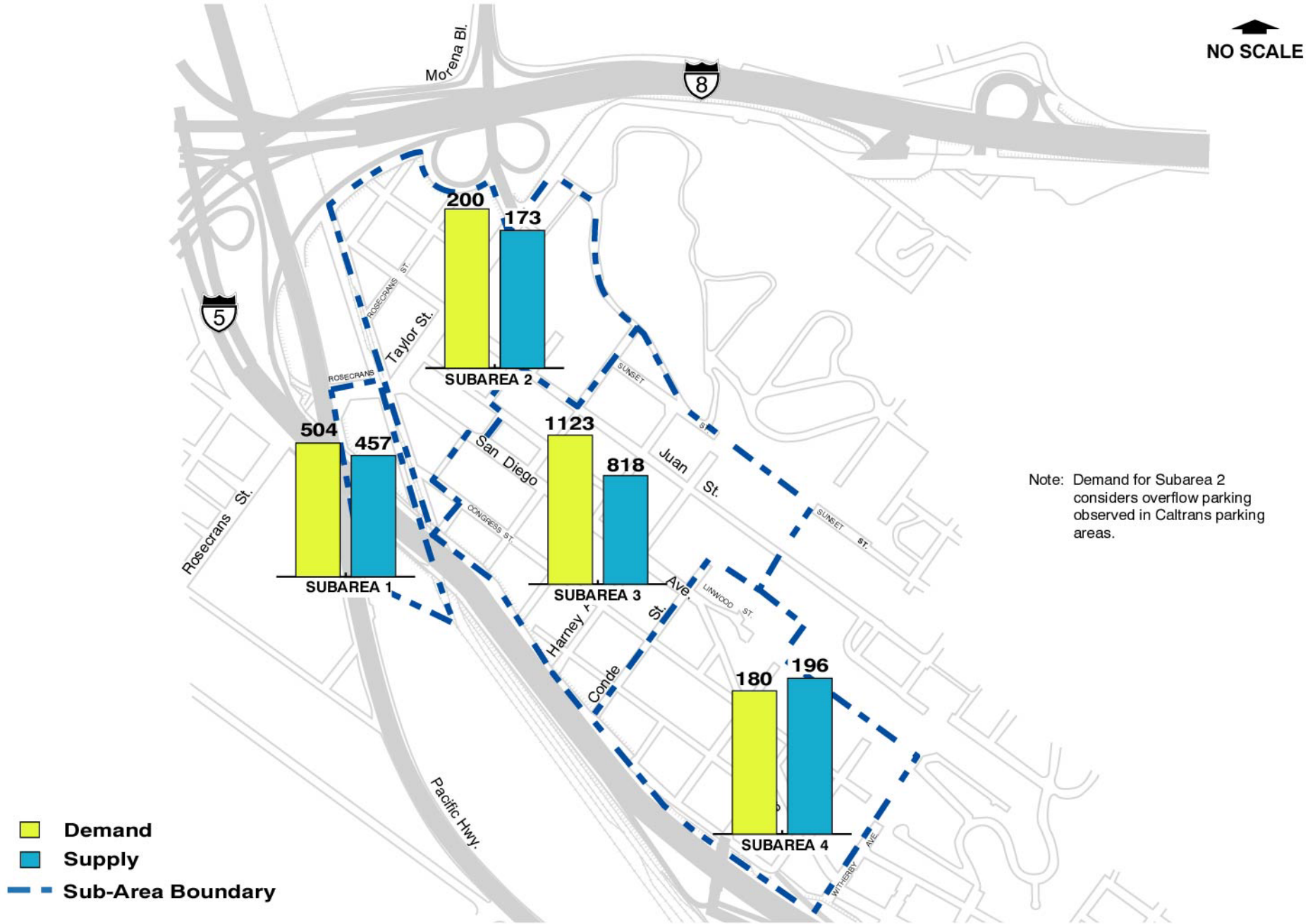
On-street and off-street parking space striping and red curb zones were evaluated to determine if changes could be made to increase parking supply. It was suggested that removal of excessive red curbing on Juan Street and Congress Street would result in additional parallel parking spaces. However, this change would not make a significant difference in parking supply. Additionally, this concept should be reviewed with the Fire Department and the Traffic Engineering Department to determine if the red curb should remain.



Note: Demand for Subarea 2 considers overflow parking observed in Caltrans parking areas.

Old Town On and Off Street Parking
Existing Demand For Average Occupancy
City of San Diego Visitor Oriented Parking Survey

Figure 1.4



Note: Demand for Subarea 2 considers overflow parking observed in Caltrans parking areas.

Old Town On and Off Street Parking
Existing Demand For Peak Hour Occupancy
City of San Diego Visitor Oriented Parking Survey

Figure 1.5

Parking Regulations and Zoning

Current zoning and parking regulations were reviewed and compared with other municipalities in Southern California that have similar characteristics to the area of this study. It appears that the City parking regulations are consistent with these other communities and they are periodically updated to reflect current growth conditions.

However, in anticipation that parking structures will be needed in the area, there are a few recommended changes specifically related to the Old Town PDO, as identified below.

- Amend Municipal Code Section 103.0203(f)(2) to permit (Only by Special Use Permit) a minimum of 500 parking spaces in the structure. The PDO currently requires a minimum of 1000 parking spaces be provided in the structure.
- Amend Municipal Code Section 103.0203(f)(3) to permit (Only by Special Use Permit) the maximum height of the building to not exceed 30-feet. The PDO currently limits the height of buildings to twenty-six-feet.

Posted Time Limits

As identified previously, much of the area is without posted time limits. The entire study area was reviewed in comparison to parking duration, turnover and occupancy to determine what changes in posted time limits, if any, are needed. On-street time limits should be set to maximize the opportunity for short-term visitor use, while off-street parking facilities should accommodate longer-term parking. Based on this evaluation changes in posted time limits are recommended as described below:

- Post a 2-hour time limit along the following streets: Congress Street, from Taylor Street to San Diego Avenue; Harney Street, from Jefferson Street to San Diego Avenue; and Conde Street, from Jefferson Street to the east end. This change should be re-evaluated after six-months to ensure its effectiveness.
- Post a 3-hour time limit along the following streets: Juan Street, from Wallace Street to Harney Street; and Twiggs Street, from the west end to Congress Street. This change should be re-evaluated after six-months to ensure its effectiveness.

A 2 or 3-hour on-street time limit will force longer-term parking users to use off-street parking facilities, thereby allowing these parking spaces to be utilized for short-term visitors. Time limits in other areas are not recommended at this time because there are insufficient off-street parking facilities available to accommodate longer-term parking. Therefore, posted time limits for all other areas should be re-evaluated as additional parking facilities are provided.

Parking Enforcement

The City's Parking Management Department provides parking enforcement in the area from the hours of 8:00 A.M. to 5:00 P.M. daily. The parking enforcement officer rotates exclusively throughout the community during that period of time. Discussions with the City's Parking Management Department indicated that the level of violations or abuse of parking regulations appears to be normal as compared to other areas of the City.

The most common violations involve illegal parking along curb returns, designated loading zones, and red curb zones.

If the recommended time limit changes are implemented, then they should be strictly enforced. Strict enforcement of parking regulations, particularly time limits on curb parking, can be effective in reducing demand for on-street parking spaces and forcing longer-term parkers, such as employees, to off-street parking facilities. Employees parking in on-street spaces meant for short-term parking is a common problem for most cities. Employees often try to exceed parking time limits by wiping chalk marks off tires and shuffling their vehicle from one space to another.

If the recommended time limit changes are implemented, enforcement should be re-evaluated after six-months to ensure its effectiveness.

Signage

The lack of adequate comprehensive signage is typically one of the key reasons that off-street parking facilities are underutilized. A comprehensive signage and wayfinding program could increase utilization of off-street parking facilities and increase the availability of on-street parking spaces. Therefore, it is recommended that a comprehensive signage program be developed to maximize visitor awareness to public parking locations. This could be prepared in conjunction with a community-wide public parking map which would identify all available public parking locations as well as the time limits and parking fees, if any, associated with each of the locations. The program should consider directional signage in advance of the primary entry points to the area and also within the area. The basic idea is to attract the visitor's attention to parking locations before they get to the primary activity corridor.

Residential Parking Permit Program

Residential parking permits are typically implemented to "protect" residential neighborhoods from spillover parking from adjacent commercial land uses. In this case, the residential area is within the primary activity corridor. Residential parking permits would not directly address the supply and demand balances in the area, and in fact may exacerbate deficiencies or increase pressure on prime parking because there are insufficient off-street parking facilities available to accommodate parking spaces that would be displaced by the use of residential parking permits. Therefore, residential parking permits are not recommended at this time. However, the concept of residential parking permits should be evaluated periodically as additional parking facilities are provided in the future.

Shuttle Service and Satellite/Peripheral Parking Facilities

Bus shuttle services from satellite/peripheral-parking facilities are frequently considered as a means to limit the amount of new parking in a downtown or major activity center. Shuttles are most cost-effective when there is a relatively constant stream of potential passengers; a relatively simple route; and the shuttle origination point is a short distance from the destination point. Additionally, satellite/peripheral-parking facilities should be located in areas with efficient access and high visibility. Satellite/peripheral-parking facilities could provide shuttle bus service for employees and visitors alike. The service could operate during peak season and special event periods.

Shuttle operations and maintenance costs can be substantial. Joint use or shared use opportunities should be considered. The concept of utilizing or providing peripheral-parking facilities and bus shuttle service should be evaluated as part of traffic circulation planning efforts for the area.

Two candidate sites have been identified for consideration in the future:

- Old Town Transit Center Lot – MTDB is studying the feasibility of building a large parking structure on this site. The structure would primarily serve the transit center, but it may be possible to have joint use of this facility to also serve future parking for employees or visitors to Old Town.
- Freemont School Site – This site is currently occupied by the school. However, there has been some discussion of relocating the school, which may provide the opportunity to develop the site with parking facilities.

These two sites are not currently within acceptable walking distance for visitors destined for the core activity areas of the Historic District, but employees working in the area may utilize them. These sites could also serve as a shuttle bus service stop. The service could operate during peak season and special event periods. These details are outside the scope of this study, but they merit additional study.

Shuttle Service and satellite/peripheral-parking facilities are not recommended as the only means of addressing parking deficiencies in the area. The concept of providing shuttle service and satellite/peripheral-parking facilities requires further study and should be done in cooperation with the Metropolitan Transit Development Board (MTDB).

Parking Meter Installation

Parking meters can increase the availability of on-street parking through price differentials and higher turnover. Studies have shown that installation of parking meters increases turnover of on-street parking spaces by about 70 percent. Parking meters force longer-term parkers to use off-street lots. Enforcement of time limits is also simplified by the installation of parking meters, and revenue is generated by the collection of meter fees. However, implementing parking meters can be a very sensitive issue within a community.

The possibility of using parking meters was reviewed in comparison to parking duration, turnover and occupancy. It was determined that their use would not make a significant difference in existing parking supply and in fact may exacerbate deficiencies or increase pressure on prime parking because there are insufficient off-street parking facilities available to accommodate longer-term parkers that would be displaced by the use of on-street parking meters. However, the use of parking meters should be considered as additional parking facilities are provided.

Other Management Strategies

Employees working in the core activity area should be encouraged to park in lots further away from the core area, such as the Old Town Transit Lot. This concept should be discussed with the MTDB before being seriously considered.

Efforts should be made to reduce parking demand through improved transit service and increased carpooling for the business portions of the community. A public awareness campaign should be implemented to promote awareness of the availability of alternate public transportation that would connect visitors and employees to the Old Town area (e.g. the trolley, Coaster, and the Old Town Trolley bus routes).

Additionally, bicycle-parking facilities (bicycle lockers and/or parking racks) should be provided in the visitor areas of the community, such as in and around the State Historic Park.

1.4 Conclusions

Based on the data analysis and observations there is clearly a parking deficiency throughout the study area. There are a few parking management strategies that could be employed to help alleviate parking deficiencies, as identified above. However, the combination of all these parking management strategies will not significantly increase parking supply or decrease parking demand.

The analysis of existing conditions indicates the need for additional parking facilities in the core area of Old Town, namely Sub Area 3. Off-street surface lots could not accommodate the existing parking deficiencies identified in this area. Specifically, there is a need for additional parking facilities that could accommodate employees and visitors. If employees had designated parking areas it would free up on-street and off-street prime parking spaces for visitors. Therefore, it is recommended that the City consider the feasibility of constructing one or more parking structures in Sub Area 3. Additionally, the parking management strategies identified above should be implemented as indicated.