

COMPREHENSIVE PARKING PLAN FOR DOWNTOWN SAN DIEGO

Final Report

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INTRODUCTION

The Comprehensive Parking Plan for Downtown San Diego (or the Plan) prepared by the Centre City Development Corporation (CCDC) is a guiding document and implementation tool to address parking issues in downtown San Diego. The 1997 Comprehensive Parking Plan established a strategic parking program to capitalize on existing parking resources and provided downtown with secure, affordable and long-term public parking. Since 1997, downtown San Diego has experienced tremendous new development and activity. As a result, downtown's parking conditions, needs and opportunities have evolved. In addition, downtown has a new strategy for continued regeneration, intensification, urban design, mobility and neighborhood development embodied in the 2006 Downtown Community Plan.

In 1997, the City Council of the City of San Diego established the Community Parking Meter District Program to address parking supply and mobility issues in areas where parking meters are located. Community Parking District (CPD) Advisory Boards for the three districts (Downtown, Uptown and Mid City) were created. The City Council designated CCDC as the CPD Advisory Board for District One (Downtown). Each District receives 45 percent of the parking meter revenues and by retaining a portion of meter revenues collected in each district, the districts can increase the availability, supply and effective use of parking to its residents, visitors and employees. The Downtown Parking Management Group (DPMG) advises CCDC which acts as the CPD for downtown. The CPD is required to update its comprehensive parking plan every five years. Therefore, this Plan presents recommendations and serves as an update to the comprehensive parking plan for Parking District One.

Since the turn of the 21st Century, downtown San Diego has grown in stature both economically and culturally and become physically denser and more vertical. One of the consequences of this burgeoning urban expansion is a need to accommodate and manage available public parking resources and parking demand. Downtown San Diego is a destination for workers during the day, shoppers and tourists on weekends and nights, and attendees of special events at PETCO Park and the Convention Center at various times of the year. Add in the enormous growth in housing via large condominium high-rises during the recent construction boom and downtown San Diego will need to manage parking resources to accommodate increased demand. In order to alleviate parking deficit "hotspots" and the associated increased demand for these areas, a functional mobility pattern is vital and therefore, the issue of parking must be addressed. This Plan directly explores the parking situation as it currently stands and discusses how the parking arena will likely evolve in future decades in downtown San Diego. The culmination of the Plan presents a series of recommendations for a strategic approach to solve parking challenges now through the Year 2030. To develop these recommendations, this Plan inventoried current parking spaces in downtown (both on-street and off-street), undertook an extensive outreach effort with stakeholders representing downtown neighborhoods, reviewed case studies from other localities in the United States, conducted parking supply/demand analysis for the near, mid- and long-term, crafted a blueprint to effectively manage and operate the existing parking supply, and developed a set of recommendations as the cornerstone of the strategic plan for the future.

It should be noted that this Plan was not completed in a vacuum nor should its' recommendations be implemented in an isolated manner. Parking is merely one aspect of the transportation and mobility puzzle that downtown San Diego must solve in order to evolve into a truly multi-modal and transit-oriented destination. Thus, this Plan is consistent with and complements the CCDC's San Diego Downtown Community Plan and associated Final Environmental Impact Report (FEIR) (adopted in March 2006), CCDC's Downtown San Diego Complete Community/Complete Mobility report (recently completed in September 2008), CCDC's Draft Downtown Design Guidelines (dated July 28, 2008), the Downtown Multi-space Parking Pay Station Pilot Project (the "Pay & Display" meters), the Downtown Varied Meter Rates and Time-Limits Pilot Project and the North Embarcadero Visionary Plan (NEVP). Increased transit usage and availability, modifications to street designs and roadway configurations, new parking meter technologies and changes to on-street parking management are all related and affect the overall demand and use of parking in downtown San Diego.

The previous parking Plan for downtown San Diego, which was developed in 1997, established both short and long term goals, most of which have been achieved. This current Plan addresses the parking policy and mitigation measures that were part of the approval of the 2006 San Diego Downtown Community Plan (Chapter 7). To this end, this Plan does not simply advocate for more parking spaces in downtown San Diego, but rather examines the need for the strategic use of current parking spaces and an increase in future of parking capacity as-needed and only in selected areas of downtown that clearly show a deficit of parking supply. This approach is consistent with and complimentary to the other CCDC reports previously cited.

1.0 Study Purpose and Objectives

In its role as CPD advisory board, CCDC hired a consulting team lead by Wilbur Smith Associates, Inc. (WSA) to help update the Comprehensive Parking Plan for Downtown San Diego. The Wilbur Smith Associates team (also called the CCDC project team) includes San Diego based EDAW for public participation, Keyser Marston Associates (San Diego) for real estate economics, Michael R. Kodama Planning Consultants for parking policy and innovative solutions and Wilson & Company (San Diego) for local parking and transportation planning assistance.

This Plan will be a guiding document and implementation tool for parking strategies addressing infrastructure solutions, supply and demand, policy requirements, management and other elements of parking. The original plan developed in 1997 established both short- and long-term goals, most of which have been achieved. This Plan also addresses the parking policies and mitigation measures that were part of the approval of the 2006 San Diego Downtown Community Plan and associated FEIR.

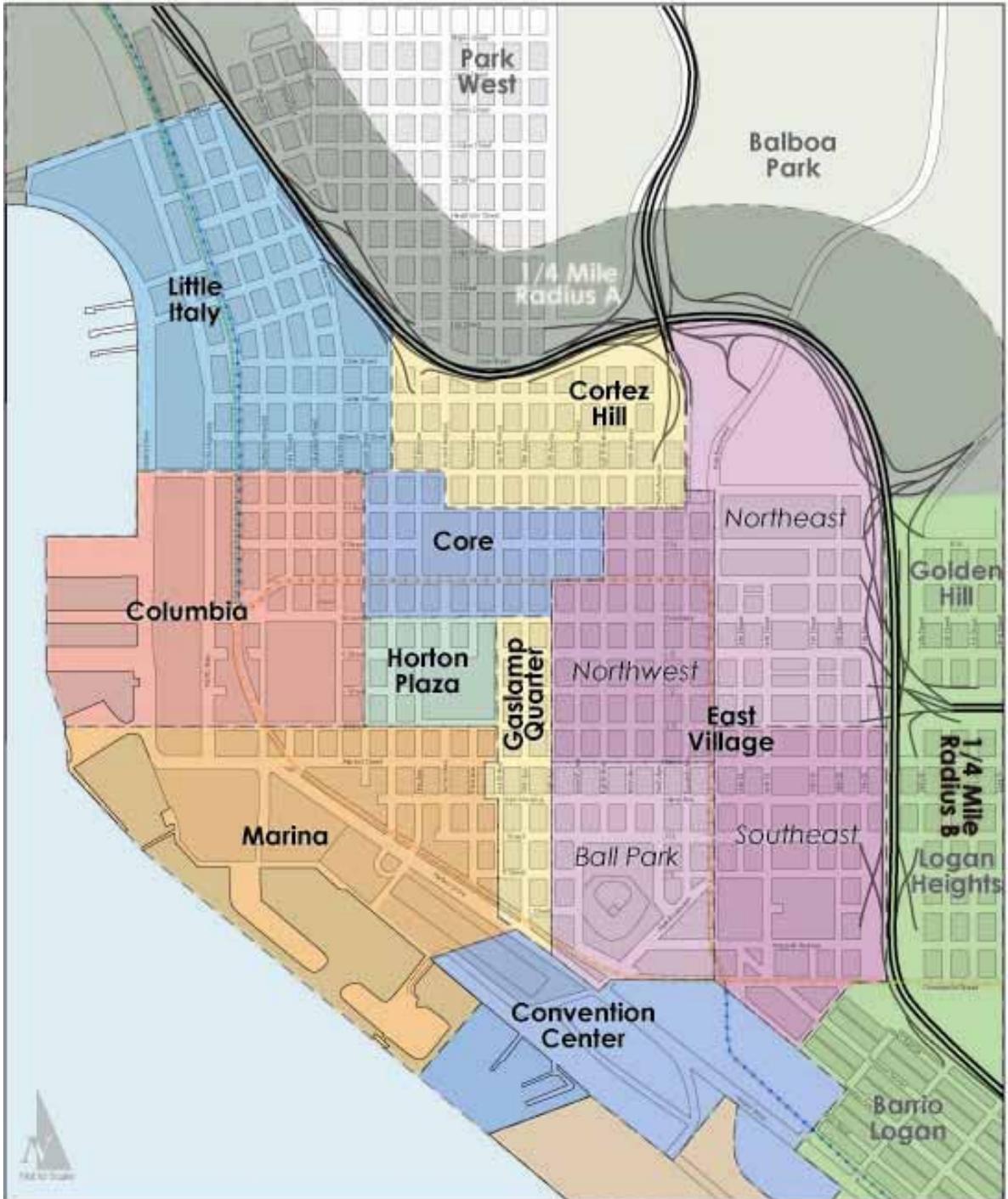
This Plan represents an exceptional participation of a diverse range of stakeholders that includes CCDC, City of San Diego, DPMG, the Downtown Partnership, downtown business owners, residents, workers, parking operators and numerous other downtown interests.

The study area includes all neighborhoods within the primary downtown area of San Diego and an area within an approximately quarter-mile radius outside of the downtown boundary. The downtown area, which primarily encompasses the CCDC boundaries, includes a mix of both off-street and on-street publicly available parking as well as private off-street parking. The purpose of including the quarter-mile radius outside of the downtown was expressly to fulfill one parking mitigation requirement of the Downtown Community Plan FEIR. The quarter-mile radius includes parts of Balboa Park, northern parts of Little Italy and the adjacent Banker's/Mission Hills neighborhood, western parts of Golden Hill and the western part of Logan Heights.

Figure 1.1 shows the study area including the area within a quarter-mile radius. The set of geographical zones or neighborhoods that constitute the study area, consistent with the Downtown Community Plan, are as follows:

- Little Italy
- Cortez Hill
- Columbia
- Civic Core (or Core)
- Gaslamp
- Horton Plaza
- Marina
- Convention Center
- East Village (Northwest, Northeast, Southeast, Ballpark)
- Quarter-mile radius adjacent neighborhoods

Figure 1.1
Study Area



Source: Wilson & Co., Wilbur Smith Associates, 2008

1.1 Integration of the Plan

To synchronize parking management with current development patterns and trends, as well as plan for future parking needs, CCDC launched this update of the Comprehensive Parking Plan for Downtown San Diego in 2007. This update presents near-, mid- and long-term parking recommendations for downtown San Diego. This Plan also provides required mitigation measures related to the 2006 Downtown Community Plan FEIR. All aspects of parking are considered in the update, including on-street parking, public and private structures, parking management and demand management. The new Comprehensive Parking Plan for Downtown San Diego emerges from an open planning process that addresses downtown San Diego's specific needs.

The Comprehensive Parking Plan for Downtown San Diego include the following objectives:

- Fulfill a portion of the FEIR mitigation requirements of the 2006 Downtown Community Plan related to parking
- Identify issues and opportunities related to parking
- Conduct a comprehensive parking inventory
- Perform parking demand analyses, determine if any parking deficiencies exist now or in the future
- Explore successful and innovative parking management case studies from other downtowns
- Evaluate options for downtown San Diego related to parking
- Identify strategies to address any potential parking deficiencies
- Prepare the Comprehensive Parking Plan for Downtown San Diego

This study also provides complementary support to existing activities already being undertaken by CCDC and the City of San Diego. For example, in the Downtown Community Plan, it is stated in the Parking chapter that: "Expansion of parking in general can raise concerns about maintaining dependence on automobiles and diminishing people's motivation to use transit, carpool, bike, or walk to accomplish local trips and commuting...The Community Plan seeks to balance the diversity of these issues. Additionally, rather than simply accommodating additional parking, more efficient use of available spaces is essential." One of the solutions the Downtown Community Plan lists is restriping and diagonal parking to create nearly 25 percent more parking spaces. This solution is one of many that this Plan supports through its' recommendations. Similarly, this Plan covers and is consistent with many of the policy solutions explored in the Complete Community/Complete Mobility report (Appendix C1), including Parking Management tools, Parking Technology solutions and Parking Pricing schemes.

In order to be consistent with previous CCDC efforts, this Plan took into account the goals of those plans when developing the Demand-Based Parking Management Approach. This approach focuses on a recurring cycle of Demand Management, Location Management, Time Management, Price Management and Supply Management. The recommendations of the Plan - as will be demonstrated in the body of this report - seek to fit with the goals of downtown parking cited in the

Downtown Community Plan: "While integration of new parking into the downtown environment is anticipated, encouraging transit, ride sharing and nurturing downtown's pedestrian appeal remain goals of this Plan." Similarly, the goal for this Plan is for downtown parking solutions to be part of an overall transportation solution that can accommodate residents, commuters and visitors to/from/within downtown in a cost effective, operationally efficient and environmentally sensitive manner. It is self-evident that improving and encouraging other means of transportation (bus, light-rail, bike and foot) to, from and within downtown should also be explored in addition to addressing parking supply concerns, which latently encourages more auto use. Thus, it is essential that solutions for other means of transport continue to be developed for downtown San Diego to compliment the parking solutions listed in this report. In the meantime, the coupling of this report's analysis of the downtown parking environment along with future implementation of the recommended actions of this Plan will likely ensure that the balance between parking supply and demand in San Diego's downtown is effectively treated now and in the future.

1.2 Guiding Principles

In the creation of the Plan, the CCDC project team worked with the community to develop a set of important guiding principles for the Comprehensive Parking Plan for Downtown San Diego. These guiding principles were developed at the first of three public workshops, held in November 2007. These principles (taken directly from workshop participants) included:

- Developing a comprehensive on-street and off-street system that maximizes the effectiveness of on-street and off-street parking to better manage parking resources in order to alleviate parking supply and demand mismatches that result in either too much parking or not enough parking.
- Creating new development strategies that share parking resources and use demand-based parking requirements.
- Recognize the importance of transit as a means to increase economic vitality while reducing parking demand.
- Use wayfinding systems that enhance access and mobility and link parking to transportation and various downtown destinations.
- Identify the priority parker for each specific project area and recognize that no "one size fits all" approach will be successful and account for the unique land use and site characteristics of each neighborhood in downtown San Diego.
- Recognize the importance of non-commute modes and activities in a vibrant downtown and develop a parking management program to reduce the impact of special event parking on other downtown activities.

The guiding principles described above have been used throughout the development of the Plan to assist the CCDC project team and stakeholders in identifying the appropriate recommendations for downtown San Diego.

1.3 Development of the Plan

To achieve the previously mentioned objectives, the following elements were included as part of the Plan's development:

- Public outreach: public participation and consensus building from a diverse range of constituents was conducted.
- Existing parking inventory and occupancy: the CCDC project team collected a comprehensive inventory of the number of on- and off-street parking spaces available for public parking within the study area and determined occupancy rates for peak weekday and weekend hours.
- Parking supply and demand analysis: the CCDC project team developed a model to project supply and demand in five year increments up to the Year 2030.
- Case studies: the CCDC project team completed case studies of similar cities and downtowns in order to document successful techniques and approaches to address parking issues.
- Recommended parking solutions: the CCDC project team generated ideas for on-street and off-street parking.

This Plan focuses on balancing the diversity of parking needs. It is not the goal of this Plan to simply suggest accommodating additional parking to address the deficiencies, but to start with the efficient use of available parking spaces while also encouraging transit, ride-sharing programs and other transportation means such as biking and walking. Recommendations include near-term, mid-term and long-term solutions and address issues identified during the development of the Plan.

The Plan also provides complementary support to existing programs already being undertaken by CCDC and the City of San Diego such as the two Pilot Parking Meter programs underway. One pilot program is assessing the effectiveness of varying meter rates and time limits, while the other pilot program is evaluating the use of new parking meter technology. The Port of San Diego, with collaboration from CCDC, completed the NEVP which is comprised of a set of public infrastructure improvements related to parking and mobility. The NEVP is envisioned to shape the future of San Diego by joining downtown and the bay. As stated in previous portions of this document, the Comprehensive Parking Plan for Downtown San Diego complements these and other ongoing efforts by CCDC, the City of San Diego and other stakeholders as they relate to parking.

PUBLIC OUTREACH

The Comprehensive Parking Plan for Downtown San Diego involved an extensive public participation process that addressed downtown San Diego's unique urban environment, regional and local transportation trends and proven parking strategies used in other downtowns. During this process, the CCDC project team conducted research and presented ideas that responded to input contributed by community members and stakeholders.

Public input played an essential role in formulating the approach and recommendations for the update to the Comprehensive Parking Plan for Downtown San Diego. CCDC has initiated a stakeholder-driven process whereby issues and ideas voiced by community members guided the CCDC project team's research, alternatives analysis and recommendations. The community's input informed the CCDC project team's work at each step and directed the long-range goals for the Comprehensive Parking Plan for Downtown San Diego.

The public participation program included the following three major components:

- Stakeholder interviews with representatives of a broad spectrum of downtown interests, including residents, commuters, employers, business owners, parking operators and others.
- A series of three interactive public workshops involving the broader community.
- A series of three Fact Sheets to keep community members informed of project progress and participation opportunities.

2.0 Stakeholder Interviews

As part of the initial information gathering phase, the CCDC project team conducted interviews of downtown stakeholders. The stakeholders represented a broad spectrum of downtown interests such as residents and neighborhood representatives, business and commercial interests, developers, environmental advocates, arts and culture, employees and labor, parking facility operators and downtown anchors such as PETCO Park and City College. The purpose of the interviews was to gain an understanding of the diverse perspectives on parking issues affecting downtown and to explore ideas and opportunities for addressing current and future parking needs.

2.1 Public Workshops

Public participation was an essential component throughout the development of this process. In doing so, three public workshops were conducted as part of the outreach activities. The purpose of these workshops was to give community members an opportunity to learn about the update of the Comprehensive Parking Plan for Downtown San Diego and to gather public input.

The workshops were publicized using a variety of methods to maximize participation from downtown San Diego's diverse community that included distributing fact sheets, making announcements at Center City Advisory Committee meetings and on CCDC's website, publication in the local newspaper, emailing individuals who have expressed interest in downtown parking issues and through CCDC's e-mail network.

The workshops were structured to inform and foster dialogue among community members. Each of the public workshop agendas consisted of a presentation, brain storming sessions, small group discussions and community feedback.

Comment cards were another means to solicit input at the public workshops. Workshop participants could comment on draft policy recommendations, research conclusions and the public involvement process for the Comprehensive Parking Plan for Downtown San Diego. These comment cards are opinions expressed by the participants at the end of each workshop. The top three strategies identified from the comment cards received at the first public workshop were:

- Shared parking
- Pedestrian wayfinding system
- Real time parking systems

The following parking strategies received generally favorable responses at the second workshop:

- Coordinate off-street and on-street parking pricing
- Differentiate parking pricing by location, time of day and duration
- Shuttle system
- Shared parking
- Neighborhood parking management plans
- Real-time parking information systems

Comments about parking strategies from the third workshop (taken directly from workshop participants) included the following:

- Unbundle parking down to the individual level
- Standardize parking signage
- Modify parking minimum to two parking spaces per unit
- Tailor parking minimums to each downtown area
- Encourage the use of alternative transportation (e.g., transit, scooters, motorcycles, bicycles)
- Consider in-lieu fees tailored to different areas and to contribute to transit
- Improve, expand and make transit more affordable in the long-term
- Restrict parking limitations until and unless convenient public transit is in place
- Ensure that long-term solutions are visionary and short-term solutions consider local economics, incentivize downtown living and attract new business
- Provide more residential permit parking spaces in Cortez Hill and eliminate nine-hour metered parking within the residential permit area

EXISTING PARKING INVENTORY, OCCUPANCY, AND TURNOVER

In order to understand the existing parking supply and how it is used in downtown San Diego, the Plan preparation included a comprehensive inventory of existing public on- and off-street parking facilities and utilization characteristics. This inventory fulfilled one of the parking mitigation requirements of the Downtown Community Plan FEIR.

3.0 Data Collection Methodology

This section describes the parking data collection methodology used to complete the Plan and summarizes the inventory, occupancy and turnover data collected. The CCDC project team collected and documented parking utilization characteristics, including percent occupancy and turnover. In addition to typical daily conditions, data for weekends and special downtown events was collected. For the purposes of this project, “weekday” was defined as a Tuesday, Wednesday, or Thursday on which no holiday occurs. “Weekend” was defined as a Saturday or Sunday on which no holiday occurs.

The CCDC project team also collected additional occupancy data for a limited number of off-street parking facilities, as described below. These parking structures/surface lots were selected based on their relative location to the neighborhoods being studied.

Occupancy and turnover surveys were performed in each of the geographic zones (described in Section 1) in the downtown area. Occupancy and turnover surveys were collected during the peak activity periods for each geographic zone. The occupancy surveys document the percent of parking spaces occupied within a geographic zone in 30-minute to two-hour intervals, depending on the geographic zone. The turnover data was observed in half-hour intervals, in every neighborhood except Cortez Hill. A separate residential parking permit study was conducted for Cortez Hill to collect occupancy and turnover data.

Last, the CCDC project team also conducted occupancy and turnover surveys in the residential neighborhoods within a quarter-mile of the CCDC boundaries.

3.1 On-Street Parking

This portion documents the on-street parking inventory and occupancy rates within the downtown study area. It includes average on-street parking conditions during weekdays and evenings, as well as special events.

In total, the Plan study area includes approximately 9,108 on-street parking spaces within the primary downtown area (within the CCDC boundaries) and 8,923 on-street parking spaces within a quarter-mile radius of downtown. On-street parking reflects a variety of spaces, including non-

metered (regular) and metered spaces, short-term metered (30 minutes and under) and those reserved for handicap use and loading activity. Table 3.1 provides a description of typical parking spaces within the City of San Diego.

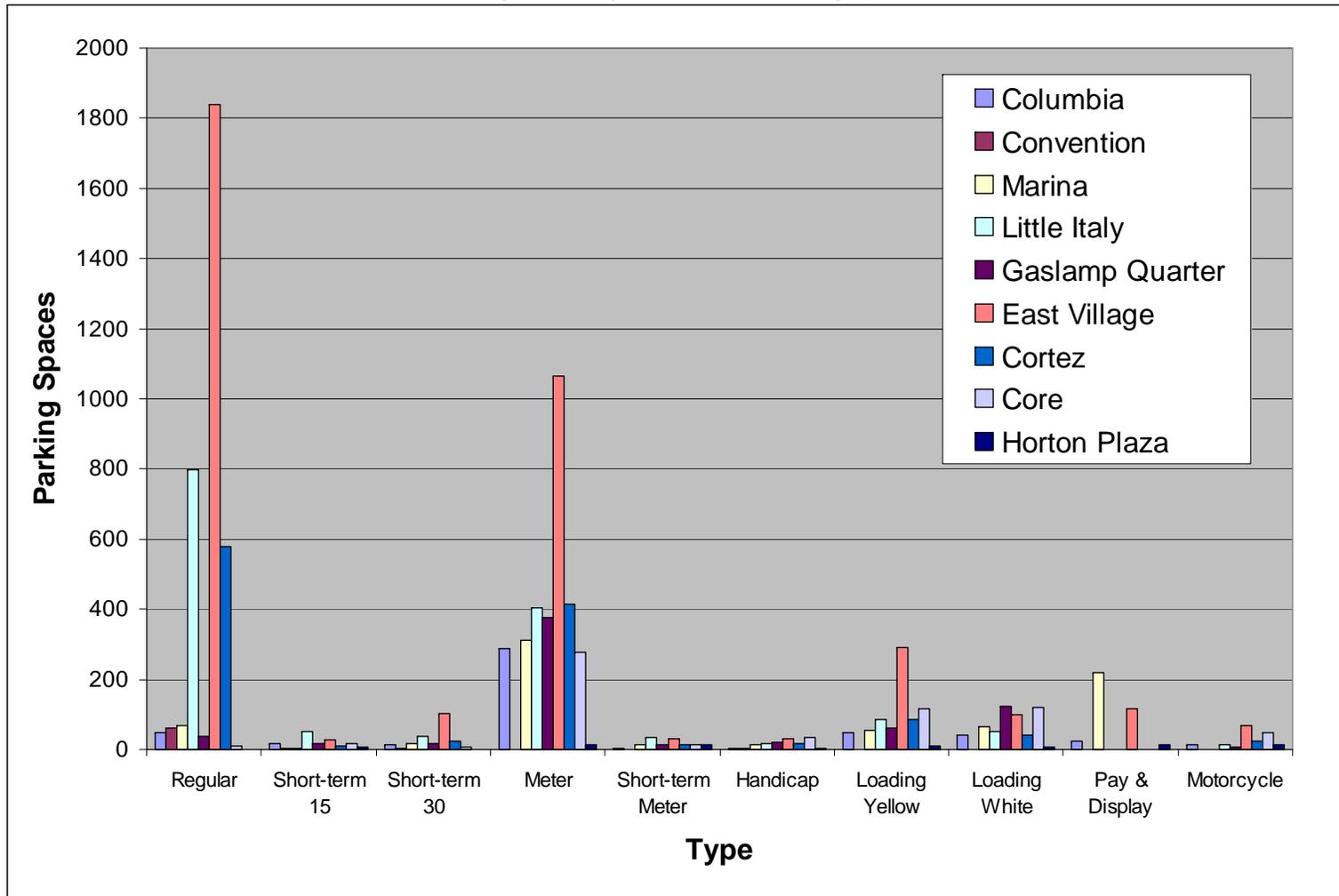
**Table 3.1
 On-Street Parking Types**

Parking Types	Descriptions
Regular	Regular parking is defined as any parking spaces not regulated by a curb striping, or meter. Regular parking may be regulated by signage indicating maximum parking time.
Short-term 15	Short-term 15 is defined as any parking spaces with green curb striping, green-top parking meters and/or signage indicating maximum parking time of 15 minutes.
Short-term 30	Short-term 30 is defined as any parking spaces with green curb striping, green-top parking meters and/or signage indicating maximum parking time of 30 minutes.
Meter	Meter is defined as any parking space regulated by a meter with maximum parking time of one hour or more.
Short-term Meter	Short-term Meter is defined as any parking space regulated by a meter with maximum parking time less than one hour.
Handicap	Handicap is defined as any parking space with signage or curb striping indicating a disabled permit is required for parking.
Loading Yellow	Loading Yellow is defined as any parking space with yellow curb striping. Trucks and commercial vehicles are permitted to stop for 20 minutes to load or unload goods. Passenger vehicles may also stop for three minutes to load or unload passengers. Commercial loading zones are in effect between 6 a.m. and 6 p.m., except Sunday and City holidays.
Loading White	Loading White is defined as any parking space with white curb striping. Vehicles are allowed to stop for the purpose of loading or unloading passengers. The time limit is three minutes or 10 minutes in front of a hotel. Passenger loading zones are in effect 24 hours a day, 7 days a week.
Pay & Display	Pay & Display is defined as any parking space with signage indicating that parking user must pay the parking station in advance and display the receipt on his/her dashboard.
Motorcycle	Motorcycle is defined as any parking spaces striped for motorcycle parking only

Source: Wilson & Co., Wilbur Smith Associates, 2008

Figure 3.1 displays the available on-street parking spaces in the different neighborhoods of downtown San Diego.

Figure 3.1
 Parking Inventory – On-Street Parking Spaces



Source: Wilson & Co., Wilbur Smith Associates, 2008

Table 3.2 summarizes the number of on-street parking spaces within the downtown area and quarter-mile area by type and neighborhood. The Plan recognizes that the exact number of on-street parking spaces can vary depending on vehicle sizes and parking characteristics. This variation can specifically affect the inventory of on-street parking in those locations without marked on-street parking stalls. In addition, daily inventories of on-street parking in downtown San Diego can be affected by construction activities, street closures, media events, weather, and numerous other temporary events.

**Table 3.2
 Parking Inventory – On-Street Parking Spaces**

Available Parking Space / Location	Regular	Short-term 15	Short-term 30	Meter	Short-term Meter	Handicap	Loading Yellow	Loading White	Pay & Display	Motorcycle	Total
Columbia	47	16	13	289	3	4	49	42	23	13	499
Convention Center	61	5	2	N/A	N/A	2	1	0	N/A	N/A	71
Marina	70	4	16	311	15	13	55	66	218	N/A	768
Little Italy	797	50	37	403	35	16	84	53	N/A	15	1,490
Gaslamp	37	16	16	376	12	19	60	125	N/A	7	668
East Village	1,840	29	104	1,065	31	32	290	100	117	70	3,678
Cortez Hill	579	9	24	414	12	17	86	41	N/A	25	1,207
Civic Core	9	18	6	279	15	35	118	119	N/A	48	647
Horton Plaza	N/A	6	N/A	15	13	4	9	6	15	12	80
Downtown subtotal	3,440	153	218	3152	136	142	752	552	373	190	9,108
Quarter-mile radius subtotal	7,994	131	64	324	6	106	190	93	N/A	15	8,923
Total	11,434	284	282	3476	142	248	942	645	373	205	18,031

Source: Wilson & Co., Wilbur Smith Associates, 2008

As shown above, about one-third of the parking spaces in the downtown area (defined as the areas covered by CCDC boundaries) are unmetered (regular) and another one-third are metered. A majority of the spaces within a quarter-mile radius of downtown are unmetered (regular).

On-Street Parking Occupancy

On-street parking occupancy data was collected for all the neighborhoods within the downtown and quarter-mile area. Data collection was conducted from 11 a.m. to 4 p.m. and from 6 p.m. to 10 p.m. on weekdays. In general, this schedule allows for parking conditions to normalize for a typical work week, thus capturing typical weekday demand. Data was also collected on a non-holiday weekend from 11 a.m. to 4 p.m. and from 6 p.m. to 10 p.m. to capture typical weekend demand.

The average weekday on-street parking occupancy for downtown San Diego is 67 percent for daytime (11 a.m. – 4 p.m.) and 64 percent for evening (6 p.m. – 10 p.m.). The Columbia

neighborhood has the highest occupancy rate in the daytime and the Gaslamp/Horton Plaza neighborhood has the highest occupancy rate during the evening.

The average weekend on-street parking occupancy for downtown San Diego is 53 percent in the daytime and 48 percent in the evening. The Marina neighborhood has the highest occupancy rate during the day and the Gaslamp/Horton Plaza neighborhood has the highest rate of occupancy during the evening.

Table 3.3 provides a summary of the weekday and weekend occupancy rate for all on-street parking space types in each of the neighborhoods covered in this study.

**Table 3.3
 On-Street Occupancy Rates**

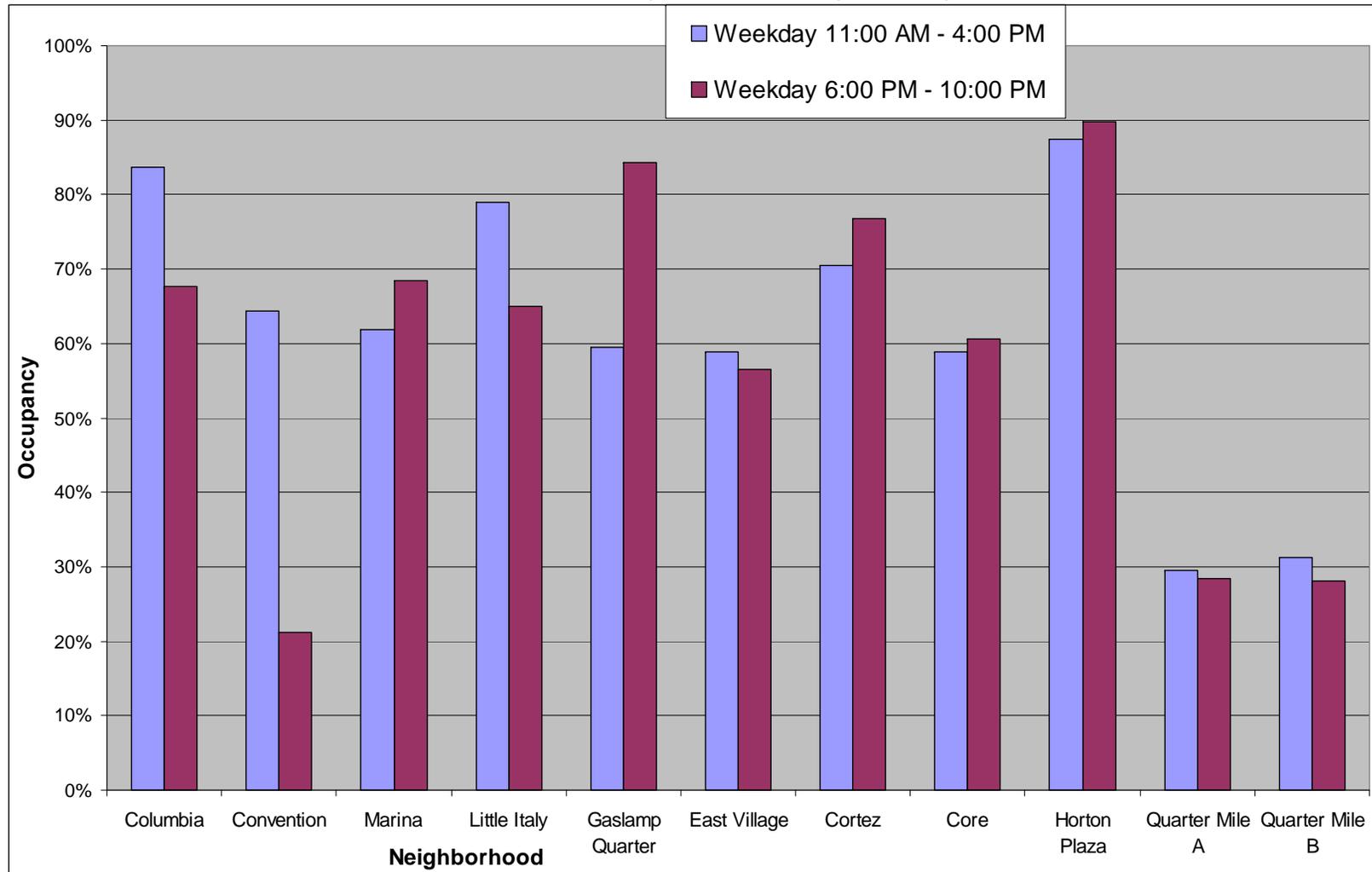
Occupancy / Neighborhoods	Weekday 11 a.m. - 4 p.m.	Weekday 6 p.m.- 10 p.m.	Weekend 11 a.m. - 4 p.m.	Weekend 6 p.m. - 10 p.m.
Columbia	84%	68%	53%	72%
Convention Center	64%	21%	35%	46%
Marina	62%	68%	72%	76%
Little Italy	79%	65%	64%	62%
Gaslamp	59%	84%	55%	88%
East Village	59%	57%	49%	34%
Cortez Hill	70%	77%	N/A*	N/A*
Civic Core	59%	61%	46%	48%
Horton Plaza	88%	90%	80%	88%
Downtown Subtotal	67%	64%	53%	48%
Quarter-mile Radius Subtotal	30%	28%	28%	27%
Total	48%	46%	41%	38%

* Separate turnover data was collected for the Cortez Hill neighborhood as part of a parking permit study and did not include weekend days.

Source: Wilson & Co., Wilbur Smith Associates, 2008

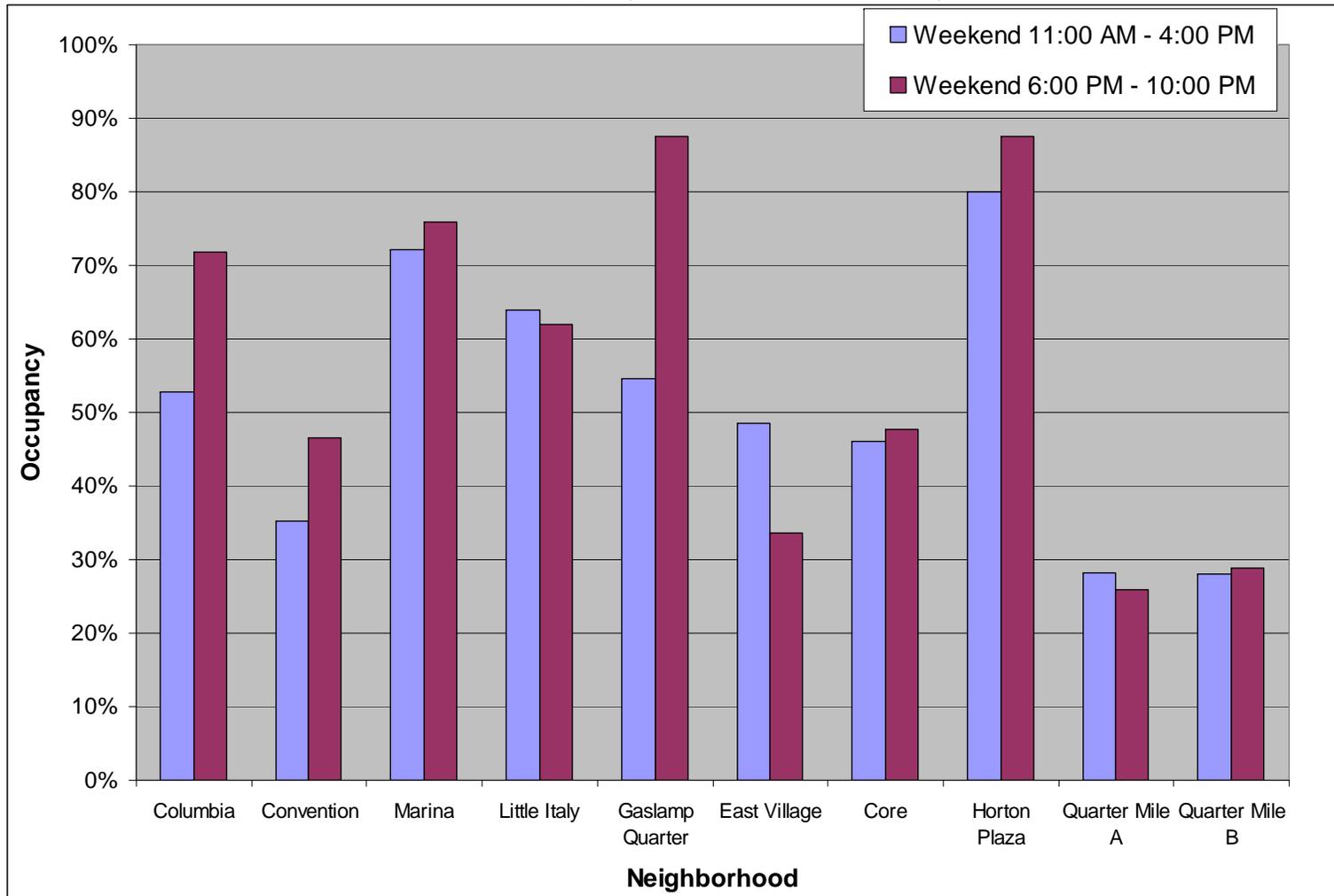
Figure 3.2 displays the weekday daytime and evening on-street parking occupancy rate for each neighborhood covered by this study. Figure 3.3 displays similar information for the weekend.

Figure 3.2
On-Street Occupancy Rates – Weekday Summary



Source: Wilson & Co., Wilbur Smith Associates, 2008

Figure 3.3
On-Street Occupancy Rates – Weekend Summary



Source: Wilson & Co., Wilbur Smith Associates, 2008

On-Street Parking Occupancy During Special Events

On-Street Parking Occupancy During Carnival

During the occupancy data collection for different neighborhoods in downtown San Diego, the CCDC project team was able to document weekend occupancy in Little Italy during the Carnival on February 2, 2008. Most of the available public on-street was occupied and Date Street from India Street to Columbia Street was closed for traffic. Table 3.4 shows the occupancy rates from 6 p.m. to 10 p.m.

Table 3.4
On-Street Parking Occupancy Rates - Weekend Evening (6 p.m. – 10 p.m.)
In Little Italy During Carnival

Neighborhood	Regular	Short-term 15	Short-term 30	Meter	Short-term Meter	Handicap	Loading Yellow	Loading White	Pay & Display	Motorcycle	Total
Little Italy	85%	87%	94%	86%	79%	81%	88%	92%	N/A	47%	85%

Source: Wilson & Co., Wilbur Smith Associates, 2008

On-Street Parking Occupancy During PETCO Park Events

This part of the Plan documents the on-street parking inventory and occupancy rate within the downtown study area on days when there is an event at PETCO Park. The on-street parking types and inventory are the same as those displayed in Tables 3.1 and 3.2 with the exception of certain segments of streets in the immediate vicinity of PETCO Park, where on-street parking is prohibited during events.

Three on-street parking occupancy surveys were conducted during August of 2007 and April of 2008. The first on-street parking occupancy survey was conducted on August 28, 2007, during a night game with low attendance (23,006 out of an available 42,445 seats¹). Meters were not in operation after 6 p.m. and parking regulations were enforced for red zone, white loading zone and disabled parking restrictions. On-street parking occupancy was observed prior to the game and during the game.

The second on-street parking occupancy survey was conducted on March 31, 2008, during the San Diego Padres home opening game with sold out attendance (44,965 out of an available 42,445 seats²). March 31, 2008 was also Cesar Chavez Day, a state holiday during which downtown parking regulations were not enforced, with the exception of red zone, white loading zone and disabled

¹ Source: www.padres.com

² Ibid

parking restrictions. For this survey, on-street parking occupancy was observed prior to the game, during the game and after the game.

The third on-street parking occupancy survey was conducted on April 5, 2008 during a weekend game on a Saturday afternoon with moderately high attendance (38,819 out of 42,445 seats³). Meters were not in operation after 6 p.m. and parking regulations were enforced for red zone, white loading zone and disabled parking restrictions. On-street parking occupancy was observed prior to the game and during the game.

Figure 3.4 displays the on-street parking occupancy rates during ballpark events surveyed.

Table 3.5 summarizes the on-street parking occupancy rates in downtown during ballgame events by attendance level.

Table 3.5
Average On-Street Occupancy Rates During PETCO Park Events

Timeframe	Before Game	During Game	After Game
Low Attendance*	76%*	89%*	-
High Attendance	79%	91%	75%
Sold Out	84%	100%	-

Source: Wilson & Co., Wilbur Smith Associates, 2008

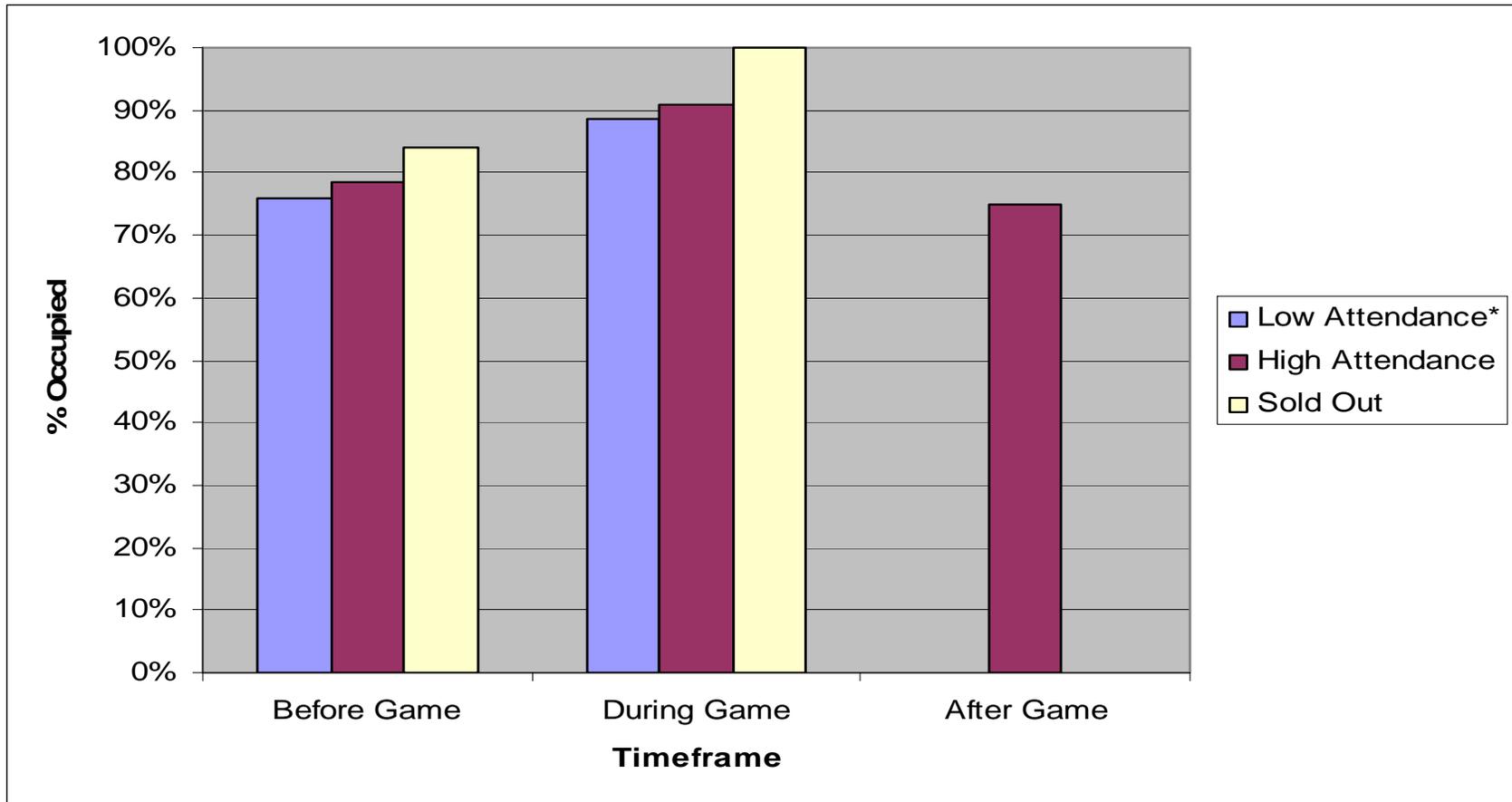
Note:

* Low Attendance ballgame study area covered the entire downtown area and therefore does not correlate directly with the High Attendance and Sold Out games.

As shown above, the average on-street parking occupancy during a low attended game was 89 percent, for a high attended game it was 91 percent and for a sold out game it was 100 percent. The "after game" on-street parking occupancy was 75 percent for a high attended game.

³ Ibid

Figure 3.4
On-Street Occupancy Rates During PETCO Park Events – Summary



Source: Wilson & Co., Wilbur Smith Associates, 2008

* Low Attendance ballgame study area covered the entire downtown area and therefore does not correlate directly with the High Attendance and Sold Out games.

On-Street Parking Turnover

Documenting how people use available on-street parking spaces provided important information for establishing the parameters of the Plan and its recommendations. Many factors affect the selection of a parking space including the user's trip purpose, location of available spaces, intended parking duration, applicable parking restrictions, traffic access and parking fees. Understanding parking characteristics provides a factual basis for planning and policy decisions. Turnover data is especially useful as it depicts the true number of vehicles being served by a single parking space.

Data Collection and Methodology

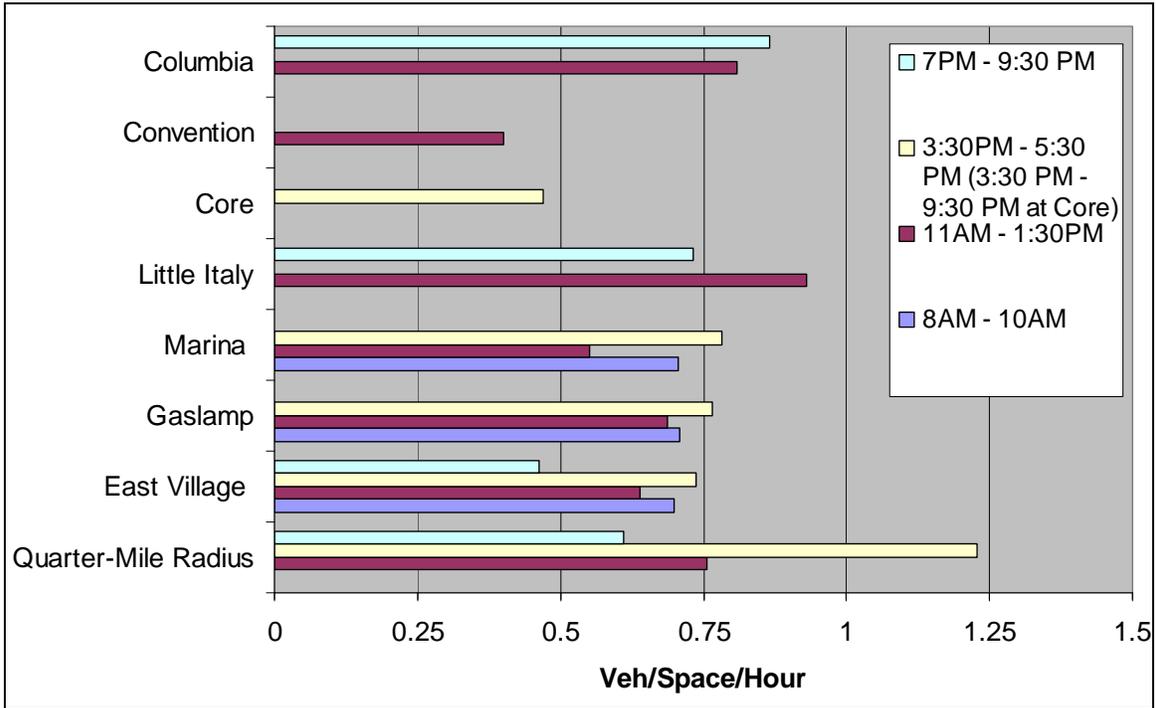
On-street parking turnover data was collected on a weekday in half-hour intervals and recorded by the CCDC project team in every neighborhood except Cortez Hill. A specific study of the use of on-street parking within Cortez Hill was conducted and is described in greater detail later in this section. For each parking space observed, the last three digits of the vehicle license plate present was recorded and compared to the plate numbers recorded for that space in the preceding and following interval. Because of the size of the neighborhoods being recorded and the number of available on-street parking spaces, a smaller sample size of 25 percent of the total number of on-street parking spaces was used for turnover data collection in each neighborhood. The sample was calculated to be statistically significant at the 95th percentile with a range of three to seven and one-half percent variance. Additionally, the samples were distributed such that a balanced representation of each neighborhood was collected.

Average On-Street Parking Turnover and Duration Analysis

The collected data of short-term and long-term spaces was analyzed for both turnover and duration for each neighborhood. Short-term was defined as any space restricted to one hour or less, while all other spaces were considered long-term.

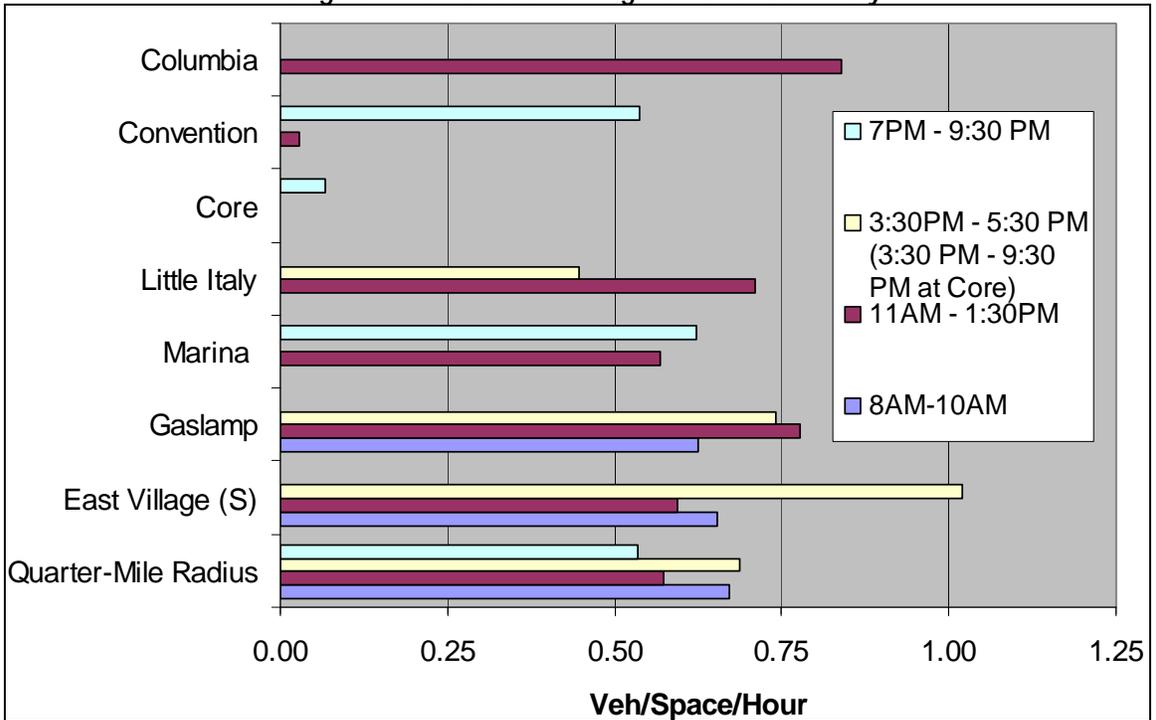
The turnover data shown in Figures 3.5 and 3.6 represent the average number of vehicles a single on-street parking space served per hour for a given neighborhood during a defined time period. Parking duration, shown in Figures 3.7 and 3.8, is the average amount of time a vehicle remained parked in a specific on-street parking space within a neighborhood during a specific time period.

Figure 3.5
 Short-Term On-Street Parking Turnover Summary



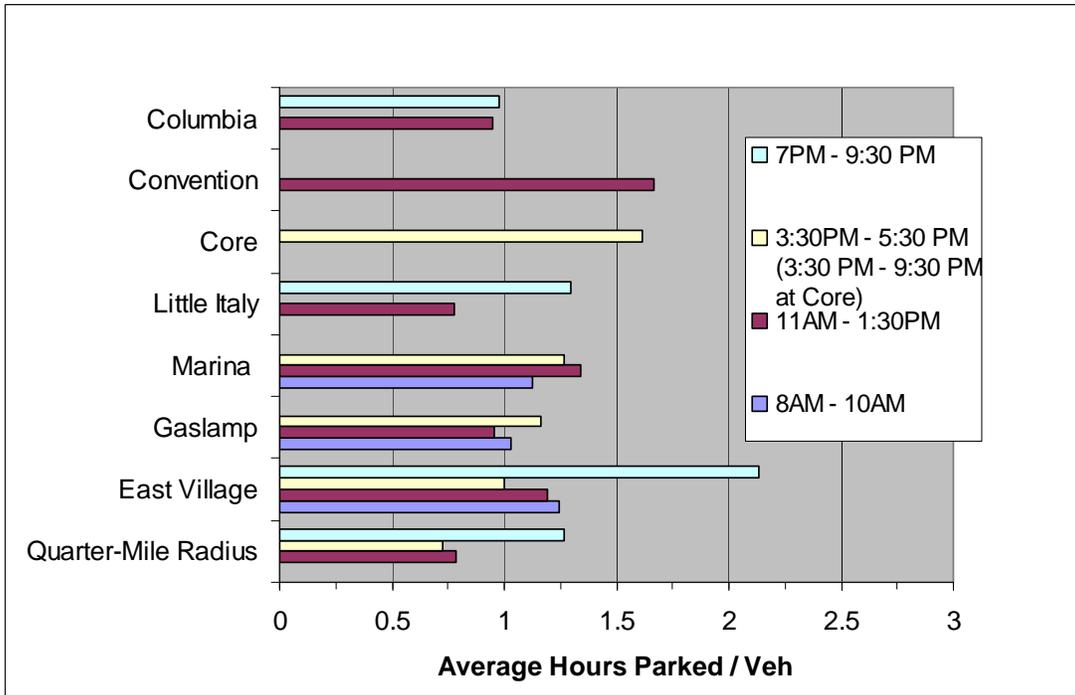
Source: NDS, Wilbur Smith Associates, 2008.

Figure 3.6
 Long-Term On-Street Parking Turnover Summary



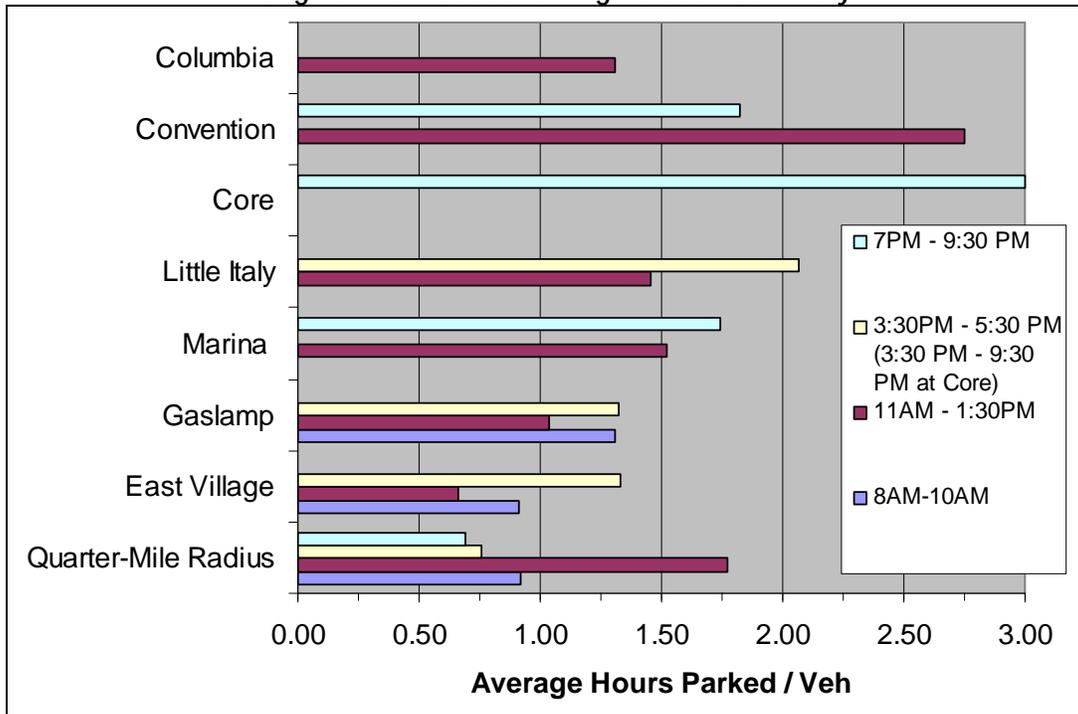
Source: NDS, Wilbur Smith Associates, 2008.

Figure 3.7
 Short-Term On-Street Parking Duration Summary



Source: NDS, Wilbur Smith Associates, 2008.

Figure 3.8
 Long-Term On-Street Parking Duration Summary



Source: NDS, Wilbur Smith Associates, 2008.

On-Street Parking Turnover and Duration Summary

The following paragraphs summarize each individual neighborhood's turnover and duration rates collected by the CCDC project team.

Columbia: Average short-term duration was under one hour and consistent through midday and evening time periods. For long-term spaces, average duration is roughly a half-hour greater in the evening than in the midday. Short-term and long-term turnover data for the Columbia neighborhood shows higher turnover rates than most neighborhoods, except in the late evening, when turnover significantly decreases.

Convention Center: The midday highest average duration was seen in the Convention Center neighborhood, where midday long-term parkers stayed three and one-half hours and evening parkers stayed three hours. Likewise, very little long-term vehicle turnover was noticed in this neighborhood, as it was by far the lowest turnover of all neighborhoods studied. Short-term turnover was also the lowest of all other neighborhoods. Short-term duration was the second highest of the neighborhoods, at greater than one and one-half hours.

Civic Core: The Civic Core had the second lowest turnover rates for both short-term and long-term parkers. Average long-term duration was second highest at approximately two hours. Short-term duration was also higher than other downtown neighborhoods, at greater than one and one-half hours.

Little Italy: Long-term parking duration was approximately one and one-half hours during the midday and one and three-fourths hours in the late evening. Short-term durations were less than one hour in the midday and greater than one and one-half hours in the late evening hours.

Marina: The Marina short-term duration was consistently around one and one-fourth hours across all time periods. Long-term duration peaked in the midday period at roughly one and one-half hours. Turnover was similar to that of Little Italy for long-term parkers.

Gaslamp: The Gaslamp had among the highest turnover rates in long-term spaces and a short-term turnover similar to other downtown neighborhoods. Most notably, the turnover rates from 7 p.m. to 9:30 p.m. were the highest observed among all neighborhoods. Likewise, long-term parking duration was lower than all other neighborhoods.

East Village: Long-term parking duration was consistently above one and one-half hours, which was higher than Little Italy, Marina and the Gaslamp districts. Short-term durations were typical of most neighborhoods and were between one and one and one-fourths hours. During the 7 p.m. to 9:30 p.m. period, short-term duration was higher than any neighborhood with an average of two hours.

In addition to the above mentioned downtown neighborhoods, turnover data was also collected in the quarter-mile radius of downtown. The turnover and duration rates for this area can be summarized as follows.

Quarter-mile radius: Within the quarter-mile radius of downtown, turnover rates observed were similar to those of the East Village for short-term and long-term parkers and were lower than those of Little Italy and the Gaslamp. Long-term parking duration was also consistently similar to East Village, while short-term durations were significantly lower than most neighborhoods in downtown.

3.2 Cortez Hill On-Street Parking Occupancy and Turnover Data

In addition to the data collection described previously, a specific study of the Cortez Hill Residential Parking Permit (RPP) program was conducted. The purpose of this study was to review the use of on-street parking within the Cortez Hill Residential Parking Permit area since the inception of the RPP program. This study included the collection of on-street parking occupancy and turnover data within the Cortez Hill Residential Parking Permit area. Parking turnover and occupancy was recorded for a Tuesday and Wednesday in two-hour intervals from 5 a.m. to 9 p.m. Turnover results are summarized by street in Table 3.6 and occupancy rate is shown in Table 3.7.

Table 3.6
Cortez Hill – On-Street Parking Turnover and Duration

Location	Turnover (Vehicles/Day)		Duration (Hours)	
	Tuesday	Wednesday	Tuesday	Wednesday
E/W Streets				
Date St.	2.34	2.37	2.81	2.85
Cedar St.	4.09	3.66	2.45	3.28
Beech St.	3.91	4.27	2.12	2.25
Ash St.	2.98	3.00	2.47	2.84
A St.	2.54	2.58	4.81	5.01
N/W Streets				
6th St.	3.40	3.21	2.10	1.60
7th St.	4.27	4.28	2.11	1.15
8th St.	3.61	3.81	1.97	0.97
9th St.	3.51	3.62	2.19	1.07
10th St.	3.28	2.25	3.43	1.82
Neighborhood Average	3.39	3.30	2.65	2.28

Source: Wilson & Co., Wilbur Smith Associates, 2008

**Table 3.7
Cortez Hill – On-Street Parking Occupancy Rates**

Locations	Percent Occupied													
	Tuesday							Wednesday						
	5 a.m.	7 a.m.	9 a.m.	3 p.m.	5 p.m.	7 p.m.	9 p.m.	5 a.m.	7 a.m.	9 a.m.	3 p.m.	5 p.m.	7 p.m.	9 p.m.
E/W Streets														
Date St	97%	45%	45%	36%	45%	59%	59%	89%	54%	43%	44%	52%	44%	59%
Cedar St	100%	84%	64%	63%	66%	78%	79%	89%	87%	78%	73%	63%	73%	93%
Beech St	80%	68%	57%	68%	66%	68%	78%	88%	71%	61%	71%	60%	70%	95%
Ash St	64%	59%	48%	59%	59%	57%	78%	59%	57%	61%	55%	58%	58%	94%
A St	52%	55%	51%	50%	80%	77%	64%	45%	70%	76%	59%	50%	52%	74%
N/W Streets														
6th St	42%	83%	64%	83%	52%	39%	25%	35%	60%	76%	86%	41%	57%	43%
7th St	59%	63%	58%	64%	96%	65%	74%	53%	74%	78%	71%	66%	69%	88%
8th St	65%	55%	47%	56%	53%	50%	72%	58%	57%	66%	61%	54%	62%	89%
9th St	73%	68%	31%	41%	75%	78%	73%	66%	64%	55%	52%	55%	57%	94%
10th St	92%	54%	65%	74%	69%	96%	88%	88%	83%	70%	74%	69%	79%	83%
Neighborhood Average	72%	63%	53%	59%	66%	67%	69%	67%	68%	67%	65%	57%	62%	81%

Source: Wilson & Co., Wilbur Smith Associates, 2008

3.3 Off-Street Public Parking Inventory and Occupancy

As a part of the Plan preparation, off-street public parking data was collected from the following private parking operators in downtown San Diego:

- Five Star Parking
- Ace Parking
- Central Parking System
- Sunset Parking

There are currently 149 off-street parking lots and garages located within the Downtown boundary that are open to the general public. These facilities are operational at different hours of the day generally at the operator's discretion. These lots provide a total of 39,563 off-street parking spaces to downtown patrons.

A modest amount of parking occupancy data gathered for off-street public parking locations was provided by parking operators. A selective data collection effort was also conducted by the CCDC project team to verify the public off-street parking occupancy.

The approximate occupancy of the above listed private lots/ structures during the field survey was noted and compared with the data provided by some of the private operators. The combined parking occupancy of the public off-street parking facilities is shown in Table 3.8. Some of the evening occupancy data may seem low due to the varied operational hours of the different parking facilities (e.g., currently not all public off-street facilities are open in the evening hours).

Table 3.8
Downtown San Diego
Off-Street Public Parking Occupancy

Neighborhood	Percent Occupied	
	Time-of-Day	
	Midday	Evening
East Village	73%	38%
Gaslamp/Horton	78%	54%
Marina	74%	39%
Little Italy	73%	9%
Cortez Hill	82%	7%
Civic Core	75%	13%
Columbia	84%	19%

Source: Wilson & Co., Wilbur Smith Associates, ACE Parking Co., 2008

Based upon field reviews, it was noted that the off-street parking lots in the downtown study area are at approximately 77 percent capacity during the average weekday midday and 26 percent capacity during the average weekday evening periods.

There are also private off-street parking spaces not available for public use, generally associated with residential developments or businesses, in downtown San Diego. Although difficult to inventory, available data⁴ suggests that there are approximately 14,015 private off-street parking spaces in downtown San Diego.

3.4 Conclusions

Public Parking Inventory

Pursuant to Mitigation Measure TRF-D.1-1 of the 2006 Downtown Community Plan, this Plan provides “an inventory of the number of public and private parking spaces available for public parking within downtown and the residential neighborhoods within a quarter-mile radius of downtown.” In total, the Plan study area includes 9,108 on-street parking spaces within the primary downtown area (within the CCDC boundaries) and an additional 8,923 on-street parking spaces within a quarter-mile radius of downtown. There are currently 149 off-street parking lots and garages located within the downtown that are open to the general public (with varying hours of operation). These lots provide a total of 39,563 public off-street parking spaces to downtown patrons, for a total of 48,671 publicly available parking spaces currently existing within the downtown. There are an additional 14,015 private off-street spaces, for a total inventory of 62,686 public and private parking spaces in downtown San Diego. If the quarter-mile radius area is included, the number of public and private parking spaces is increased to 71,609.

The Plan recognizes that the exact number of on-street parking spaces can vary depending on vehicle sizes and parking characteristics. This variation can specifically affect the inventory of on-street parking in those locations without marked on-street parking stalls. In addition, daily inventories of on-street parking in downtown San Diego can be affected by construction activities, street closures, media events, weather, and numerous other temporary events.

In addition, the Plan recognizes that the supply of public off-street parking can vary daily depending on the hours of operation for parking lots and facilities. The inventory of parking listed above assumes that all public parking is open and available for public use during morning and evening conditions. This is currently not always the case in downtown San Diego, as some off-street parking structures (either stand-alone or subterranean structures) close after certain times of the day.

On-Street Parking Occupancy

The occupancy data collected shows an overall peak weekday midday occupancy between 11 a.m. and 4 p.m., corresponding to a total occupancy rate of 62 percent for the downtown area. In almost all of the neighborhoods (with the exception of Columbia), the regular spaces are the most occupied during weekday daytime. In the Columbia neighborhood, the Pay & Display spaces are 100 percent occupied and the metered spaces at 96 percent occupied for the same timeframe. The quarter-mile radius shows occupancy of 30 percent for typical weekday midday from 11 a.m. to 4

⁴ CCDC Parking Inventory, August 31, 2003.

p.m. The occupancy rate for weekday evening hours between 6 p.m. and 10 p.m. for downtown totals 58 percent. Short-term parking in some neighborhoods such as Gaslamp, Marina and Little Italy show greater occupancy during the same timeframe. This could be because parking regulations are not enforced past 6 p.m.

Downtown is 52 percent occupied during weekend midday (11 a.m. – 4 p.m.) and about 38 percent occupied during evenings (6 p.m. – 10 p.m.).

In comparing the data collected, no type of parking space shows 100 percent occupancy in the entire Downtown area for either weekday daytime or evening, except for Pay & Display in the Columbia neighborhood.

On-Street Parking Turnover

Based on the turnover data for long-term spaces, Marina and Gaslamp were the only neighborhoods that showed the highest turnover rates in the evening hours. Among all other neighborhoods, long-term parking turnover drops between 10 and 30 percent from peak turnover rates. Midday turnover rates were fairly consistent among the neighborhoods surveyed, at approximately 0.65 to 0.70 vehicles per hour per space. Midday turnover rates varied significantly, as Marina and East Village showed the lowest rates and Columbia showed the highest. Little Italy and the Gaslamp showed similar midday turnover between the minimum and maximum observed. Evening turnover also varied greatly among neighborhoods. Neighborhoods with strong retail and restaurant land uses showed the highest evening turnover rates, including Little Italy, Marina and Gaslamp. Short-term turnover was consistently above one vehicle every half hour except in the Civic Core and Convention Center neighborhoods, indicating a possible lack of enforcement in these areas.

Comparing the quarter-mile radius turnover data, long-term parking duration was consistently similar to East Village which showed the lowest rates, along with short-term durations which were also significantly lower than most neighborhoods.

Off-Street Public Parking Occupancy

Based on field reviews, it was noted that the off-street parking lots in the downtown study area are at approximately 77 percent capacity during the average weekday midday and 26 percent capacity during the average weekday evening.

Cortez Hill Residential Permit Program On-Street Parking Occupancy and Turnover

Key findings related to Cortez Hill Residential Parking Permit (RPP) program data are:

1. The existing RPP in the Cortez Hill neighborhood is working effectively, allowing those vehicles displaying the appropriate permit to park on-street during the day.
2. The effectiveness of the RPP in Cortez Hill is due in large part to the fact that the permit area is approximately 65 percent residential (based on land use) and the need for on-street parking is driven by residential uses.

3. The RPP has successfully discouraged on-street commuter parking within the predominantly residential neighborhood of Cortez Hill.
4. The RPP provides on-street parking for those residents who do not have access to on-site parking at their place of residence to accommodate their parking needs.
5. Many Cortez Hill residents are parking on-street overnight.
6. During weekday daytime hours, many residents are utilizing the on-street permit parking spaces, with occupancies between 60 and 70 percent.
7. During weekday daytime hours parking meters are somewhat less utilized, with occupancies from 50 to 70 percent.
8. Many residents of Cortez Hill have obtained neighborhood parking permits while also having access to on-site parking at their place of residence to accommodate their parking needs.

PARKING DEMAND ANALYSIS

This section explains in detail the parking demand estimates developed and methodology used for the Comprehensive Parking Plan for Downtown San Diego. These demand estimates were used to identify future parking issues which are then addressed by the Plan recommendations described in Section 5. In brief, the *ULI Shared Parking Second Edition* and *Institute of Transportation Engineers (ITE) Third Edition Parking Generation* parking demand methodologies were used to estimate the base parking demand for the downtown San Diego area, with additional calibration by the CCDC project team to replicate observed conditions in the field. This section also describes the application of the parking demand methodologies and the specific calibration applied, as well as compares the observed parking demand rates to the current parking requirements for downtown San Diego. Lastly, this section identifies those neighborhoods in downtown San Diego where additional parking supplies could be required between the Year 2015 and the Year 2030.

4.0 Development Scenarios

The parking demand evaluations for downtown San Diego were calculated for existing and future development scenarios and timeframes. Keyser Marston Associates (KMA) reviewed and verified the market absorption potential of pipeline projects and future development as identified in the Downtown Community Plan to identify low, mid and high buildout scenarios. Based on these future development estimates provided by KMA, parking demand estimates were developed for the following scenarios and timeframes:

1. Pipeline (0 to 2 years): Year 2010
 - a. Low buildout
 - b. Mid buildout
 - c. High buildout
2. Year 2015
 - a. Low buildout
 - b. Mid buildout
 - c. High buildout
3. Build out: Year 2030
 - a. Low buildout
 - b. Mid buildout
 - c. High buildout
4. Year 2030 High-transit buildout with reduced parking demand based on assumed 48 percent peak hour transit mode share during the peak hour in downtown⁵.

In total, 10 scenarios were evaluated to determine the parking supply and demand for the following six land use types:

⁵ Downtown Development Corporation, Downtown San Diego: Complete Community/Mobility (San Diego: CCDC, September 2008).

1. Residential
2. Office
3. Civic office
4. Culture and Education
5. Retail
6. Hotel

For the scenarios described above, Year 2010 and 2015 quantities of new development were extrapolated based on Year 2030 estimated buildout of the Downtown Community Plan. CCDC land use and square footage data (described below) were used to calculate parking demand for future development scenarios.

The future development estimates by land use are displayed in Table 4.1 for the 2030 build-out scenario.

**Table 4.1
 Estimated Total Buildout at 2030**

Land Uses	Low		Mid		High	
	Total	Percent of DCP Buildout	Total	Percent of DCP Buildout	Total	Percent of DCP Buildout
Residential (units)	43,200	81%	51,000	96%	58,800	111%
Office (SF)	12,073,000	55%	14,023,000	64%	15,973,000	73%
Civic Office (SF)	5,751,000	74%	6,271,000	80%	6,791,000	87%
Retail (SF)	4,608,000	76%	5,258,000	87%	5,908,000	97%
Hotel (Rooms)	14,000	70%	17,900	90%	21,800	109%

Source: Keyser Marston Associates, 2008

As shown above, KMA estimates indicate that some of the land uses will develop at a slower or faster rate when compared to the assumptions of the Downtown Community Plan for the Year 2030. Future development assumptions from the Community Plan for the various land use types are shown in Table 4.2.

**Table 4.2
 Downtown Community Plan Estimated Total Buildout at 2030**

Land Uses	Existing	2030
Residential (units)	14,600	53,100
Office (SF)	9,472,600	22,028,100
Civic Office (SF)	3,671,200	7,793,000
Retail (SF)	2,658,400	6,069,700
Hotel (Rooms)	8,800	20,000

Source: CCDC, 2006

The Downtown Community Plan used the average intensities for the different land use classifications and applied those to vacant land and sites with potential redevelopment/intensification opportunities to arrive at total buildout. KMA estimates are based on current observed absorption rates in downtown San Diego and are indicative of the changes that have already been observed since the completion of the Downtown Community Plan and further indicate that ongoing fluctuations in economic and market trends play a vital role in dictating future developments.

As described previously, each of the future years for demand analyses are divided into low, mid and high buildout development scenarios. In this document buildout refers to completion of all projects associated with the Downtown Community Plan through the respective forecast year. For the calculation of future parking demand, a certain percentage of total buildout was applied to each of the planned years. This percentage was averaged from the KMA estimates described above and was calculated to be 70 percent for low buildout, 85 percent for mid buildout and 100 percent for high buildout. This means that for a high buildout scenario, it is assumed that all the potential planned development is fully built, for mid and low buildout scenario, 85 percent and 70 percent of the planned development is built, respectively, depending on the forecast year. Complete buildout of the Downtown Community Plan would be represented by the Year 2030 High Buildout Scenario.

In producing the parking demand estimates, WSA utilized the KMA estimates for Year 2010 development. These estimates verified pipeline projects in downtown San Diego and confirmed the development estimates provided by CCDC. For the Years 2015 and 2030 the development assumptions of the Downtown Community Plan were used and factored to the respective analysis year. These future scenarios are inherently uncertain given the observed changes in market conditions in the short time since the Downtown Community Plan was completed (as described previously). Therefore, the Year 2010 analyses represent the most certain assessment of planned development and associated parking demand, while the Year 2015 and 2030 scenarios have a degree of uncertainty. As stated in the Downtown Community Plan FEIR, CCDC will periodically review the parking supply and determine what, if any, actions could be undertaken to reduce excessive demand. Therefore, this Plan documents a methodology that may be applied periodically to address potential changes to parking demand resulting from changes in market conditions.

4.1 Parking Demand Calculations

The *ULI Shared Parking Second Edition* parking demand methodology was used to estimate the potential parking demand for downtown San Diego. The shared parking methodology is used to calculate the parking demand by hour of day and day of week for each month of the year so that peak parking demand patterns can be identified.

The shared parking methodology provides a systematic way to apply appropriate adjustments to parking ratios for each land use in a mixed-use district. Downtown San Diego is evolving into an exciting urban center for economic, residential and cultural activity to which the ULI shared parking methodology can be appropriately applied. Also, given the Downtown Community Plan guidelines, which are to promote unique and diverse neighborhoods with a full complement of uses, the

shared parking methodology is very appropriate in supporting the overall vision of the Downtown Community Plan.

It is important to recognize that these demand analyses allow for each downtown neighborhood to be analyzed as a single mixed-use site that exhibits the characteristics of shared parking. Although each neighborhood is made up of individual structures with distinct (and often mixed) uses, each neighborhood as a whole operates as a mixed-use site. For example, it is not uncommon in San Diego for workers to park in a surface lot and walk to their places of employment and also walk to dining establishments; nor is it uncommon for downtown residents to walk to markets or entertainment establishments. Therefore, a shared parking approach to downtown parking demand estimation allows for the calibration of existing demand calculations and observed field conditions at the neighborhood and overall downtown level.

This analysis accounts for the shared parking characteristics of each neighborhood in downtown San Diego and the interaction between neighborhoods. The analysis recognizes that some users of parking in downtown San Diego currently park their vehicles in one neighborhood while also visiting adjacent neighborhoods. For the purposes of this analysis a "spillover" adjustment was applied to account for this aspect of parking behavior.

Peak Parking Rates

The first step of the demand analysis was to establish peak weekday parking generation rates for each land use type. The *ITE Parking Generation Third Edition* was referenced for weekday rates. These rates reflect the observed parking demand for a specific stand-alone land use during its peak period. For the purposes of this analysis, base rates were taken from a recently completed parking study prepared by CCDC.

Unadjusted parking rates (the number of spaces needed if the land use was isolated) were used as a starting point in the calculation of parking demand under existing conditions. Table 4.3 displays the unadjusted parking demand rates for the different land uses that were used for downtown San Diego.

Table 4.3
Unadjusted Parking Demand Rate

Land Uses	Parking Demand Rate
Residential	1.65 spaces per dwelling unit
Office	2.80 spaces per 1,000 SF
Civic Office	4.00 spaces per 1,000 SF
Culture and Education	1.80 spaces per 1,000 SF
Retail	4.00 spaces per 1,000 SF
Hotel	1.25 spaces per room

Source: Gaslamp/East Village South Garage Parking Study
ITE Third Edition Parking Generation

Adjustment Factors

A number of adjustment factors were utilized in order to calibrate the peak demand for the development scenarios and desired analysis period. The following paragraphs summarize the source and basis for the various adjustment factors:

Average Monthly Adjustment

Monthly adjustment factors for each land use were obtained from the *ULI Shared Parking Second Edition*. The purpose of this factor was to reflect parking demand for an average month.

Midday and Evening Adjustment

Hourly adjustment factors ranging from 6 a.m. to 12 a.m. were obtained from *ULI Shared Parking Second Edition*. These factors were averaged for each evaluated time period as follows:

- Midday (9 a.m. – 3 p.m.)
- Evening (6 p.m. – 9 p.m.)

Due to the extensiveness of the surveyed neighborhoods, the morning and midday time periods were consolidated into a midday period. As a result, midday conditions represent the average parking demand between 9 a.m. and 3 p.m.

Mode Adjustment

The mode adjustment was employed to take into account local transportation characteristics. It reflects local transit availability, ride sharing programs and other alternatives to single-occupancy automobile travel that generally reduce parking demand. For all retail-related rates, the customer related mode adjustment was derived from case studies of similar developments within the Southern California region. These case studies were obtained from the *ULI Shared Parking Second Edition*. For all employee-related rates, 2005 journey-to-work data for downtown San Diego was obtained from SANDAG. From this data, an estimated 20 percent of downtown workers are expected to commute to work via transit under existing conditions for the Years 2010 and 2016. For the Year 2030, 25 percent of downtown employees are estimated to take transit, based on the most recent SANDAG Regional Transportation Plan. This demand analysis also included a high-transit scenario for the Year 2030. This development scenario assumed a 48 percent transit mode share for commuters, visitors, and residents in downtown.

Non-Captive Adjustment

The non-captive adjustment factor takes into account the percentage of parkers by land use in a mixed-use development that are not already counted as being parked at another land use. For example, when a restaurant patron decides to visit a nearby retail shop, usually no additional parking demand is generated for the retail shop. This factor is especially important in the evaluation of parking demand at a neighborhood level and was applied to neighborhoods in downtown San Diego.

Spillover and Local Adjustment

Spillover parking refers to instances in which parking demand in one neighborhood is accommodated by available capacity in an adjacent neighborhood, such as when business customers and employees park on nearby residential streets or use other parking facilities because of convenience, availability and/or price. The spillover factor is used to reflect the high parking occupancy rates observed in certain neighborhoods when compared to the parking generation estimates in the same neighborhood. It is observed from field observations that spillover occurs in certain downtown San Diego neighborhoods. For example, it was observed in previous studies that employees/visitors to the Civic Core neighborhood park in Cortez Hill⁶ or Columbia.

Local adjustment addresses the differences between calculated parking demand and actual observed parking demand. The base parking demand was calculated for existing conditions as described in previous portions of this section, yet was sometimes observed to be lower or higher than the actual parking occupancy based on field observations from Section 3. The local adjustment factor was applied to better reflect the unique characteristics of downtown San Diego.

Application of the adjustment factors resulted in a final shared parking demand estimate representative of average weekday midday and evening time periods for all development scenarios. After applying the adjustment factors described above, the calibrated parking demand rates for downtown San Diego under existing conditions were estimated as shown on Table 4.4. Note that these rates were developed through the examination of parking occupancy at a neighborhood level and are therefore not indicative of stand-alone parking generation for specific land uses.

**Table 4.4
Adjusted Parking Demand Rates**

Land Uses	Parking Demand Rate
Residential	1.04 spaces per dwelling unit
Office	1.90 spaces per 1,000 SF
Civic Office	3.20 spaces per 1,000 SF
Culture and Education	1.15 spaces per 1,000 SF
Retail	1.45 spaces per 1,000 SF
Hotel	0.64 spaces per room

Source: Wilbur Smith Associates, 2008

The adjusted parking demand rates shown on Table 4.4 do not represent specific parking generation rates for specific land uses in downtown San Diego and should not be used to determine future parking requirements.

The above parking demand rates were calculated for a midday period for the entire downtown area excluding the Convention Center. The Convention Center neighborhood was excluded due to its specific use, relatively high parking inventory and relative isolation from other downtown neighborhoods. These adjusted parking demand rates are lower than the demand rates shown

⁶ Downtown Development Corporation, Cortez Hill Residential Permit Parking Study (San Diego: CCDC, 2002)

previously. This indicates that the interaction between land uses, the use of transit and alternative modes and the interaction between neighborhoods reduces overall parking demand in downtown San Diego, when compared to isolated stand-alone uses.

4.2 Overall Parking Supply and Demand

By comparing the total parking supply outlined in the Section 4 with the calculated shared parking demand for downtown San Diego, an overall assessment of parking versus supply was prepared for existing conditions and the Years 2015 and 2030. The complete comparison of total parking supply versus demand is shown in Table 4.5A. Note that future demand estimates assume that new parking will be provided by new developments according to Planned District Ordinance (PDO) requirements.

On an average weekday under existing conditions a surplus of parking exists during the midday and evening time periods. It is important to note, however, that this surplus is based on the assumption that all off-street public and commercial parking is open and available for public use during morning and evening conditions. This is currently not always the case in downtown San Diego, as some off-street parking structures (either stand-alone or subterranean structures) close after certain times of the day. Similar conditions are forecast for the Year 2010 scenarios.

For the Year 2015, the estimates show a parking deficit during the midday time periods for all scenarios. The peak deficit for the Year 2015 (mid buildout scenario) is estimated to occur during the midday timeframe with a projected deficit of 9,374 spaces. For the Year 2030, on average, the specified time periods would operate at a deficit. The peak deficit for the Year 2030 varies by scenario, but almost all show a deficit for both the time periods. The midday period for the Year 2030 mid buildout scenario shows a maximum deficit of more than 40,000 spaces. As noted in previous parts of the Plan, these future estimates may change with market conditions.

The deficit for the midday and evening time periods for the 2030 high-transit buildout scenario is 39,031 and 17,564 spaces, respectively. This indicates that by increasing the transit mode share for downtown commuters from 25 percent to 48 percent, there could be a decrease in parking demand by more than 20,000 spaces during midday conditions. This scenario shows that increased transit usage for downtown workers, residents and commuters not only reduces the amount of parking required, but also reinforces the goals and objectives of the Downtown Community Plan and SANDAG as they relate to increased transit development throughout San Diego.

Table 4.5A
Estimated Parking Surplus (Deficit)

Scenario	Total Supply (Spaces)	Surplus (Deficit)	
		Midday	Evening
Existing	62,686	16,162	30,972
2010 Low	62,686	8,687	20,351
2010 Mid	62,686	3,412	18,075
2010 High	71,086	8,938	24,199
2015 Low	62,686	(4,719)	11,680
2015 Mid	62,686	(9,374)	11,191
2015 High	72,955	(3,399)	13,681
2030 Low	62,686	(33,150)	(14,070)
2030 Mid	65,903	(40,811)	(20,537)
2030 High	78,560	(39,031)	(17,564)
2030 Transit-High	78,560	(17,385)	(6,950)

Source: Wilbur Smith Associates, 2008

Table 4.5B provides an estimate of future parking demand and supply relationships with an adjusted supply for the evening period. The adjustments are based on an estimate of the percent of the off-street parking supply that is closed to public use in the evening hours for each of the downtown neighborhoods. With the reduced supply the table shows that by the year 2015 significant evening parking deficits would occur, and that they would be similar in magnitude to those experienced during the midday on weekdays.

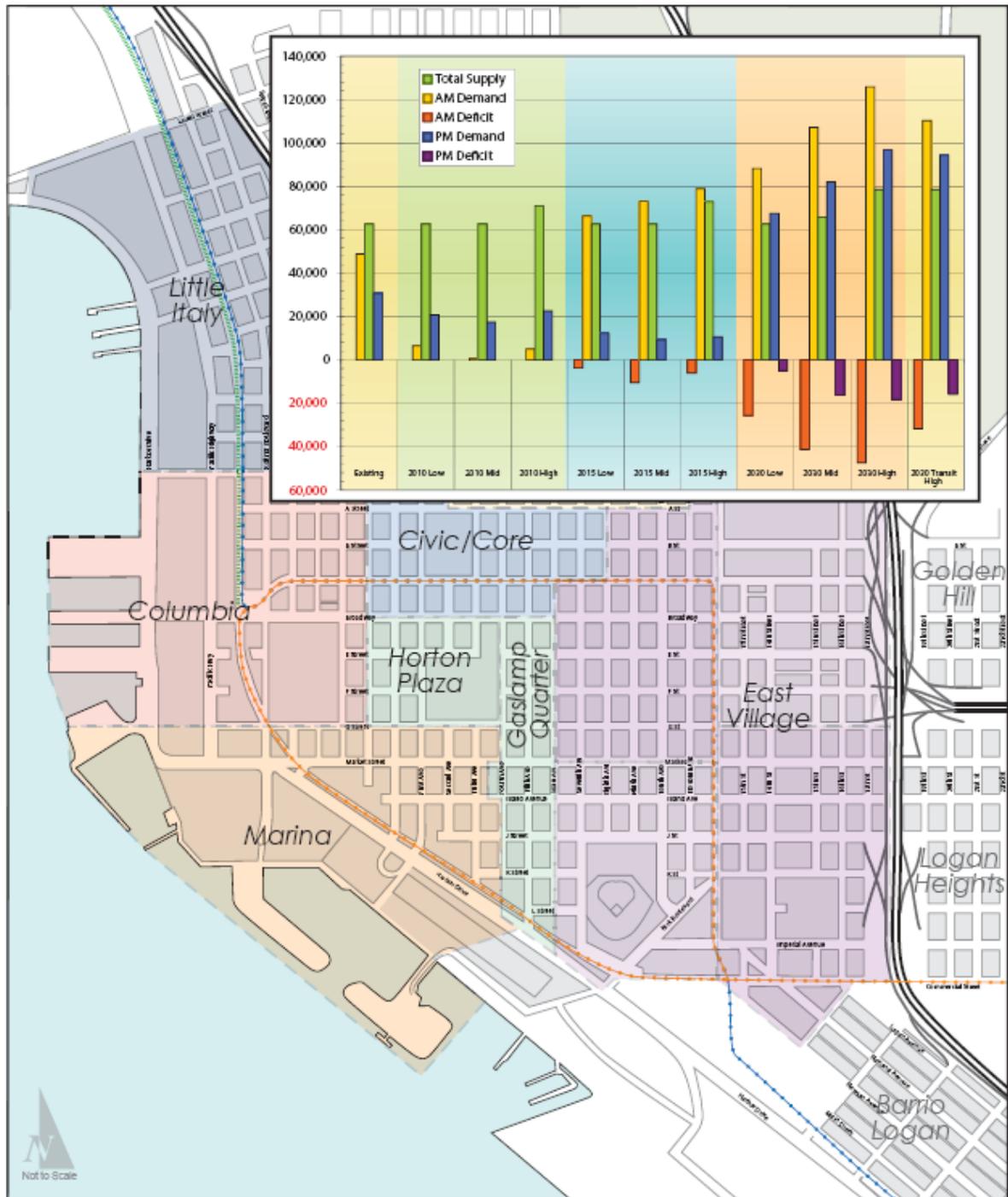
Table 4.5B
Estimated Parking Surplus (Deficit)
(With Adjusted Evening Supply)

Scenario	Total Supply (Midday)	Total Supply (Evening)	Surplus (Deficit)	
			Midday	Evening
Existing	62,686	46,504	16,162	14,790
2010 Low	62,686	46,504	8,687	4,169
2010 Mid	62,686	46,504	3,412	1,893
2010 High	71,086	54,904	8,938	8,017
2015 Low	62,686	46,504	(4,719)	(4,502)
2015 Mid	62,686	46,504	(9,374)	(4,991)
2015 High	72,955	56,772	(3,399)	(2,501)
2030 Low	62,686	46,504	(33,150)	(30,253)
2030 Mid	65,903	46,504	(40,811)	(39,936)
2030 High	78,560	62,378	(39,031)	(33,746)
2030 Transit-High	78,560	62,378	(17,385)	(23,132)

Source: Wilbur Smith Associates, 2008

Figure 4.1 depicts the comparison of supply and demand for all the development scenarios assuming total parking supply is available for public use at all times of the day.

Figure 4.1
 Comparison of Parking Supply versus Parking Demand - By Development Scenarios



Source: Wilson & Co., Wilbur Smith Associates, 2008

Table 4.6 summarizes the parking supply and demand by neighborhood.

Table 4.6
Summary of Parking Supply versus Demand by Neighborhood and Time-of-Day

Scenario	Neighborhood	Total Supply	Parking Demand		Surplus (Deficit)	
			Midday	Evening	Midday	Evening
Existing	East Village	15,351	10,795	7,680	4,556	7,671
	Gaslamp/Horton	5,386	4,100	3,527	1,286	1,859
	Marina	10,070	8,395	7,215	1,675	2,855
	Little Italy	5,027	4,169	3,129	858	1,898
	Cortez Hill	6,416	5,406	3,824	1,010	2,592
	Civic Core	8,616	6,169	3,806	2,447	4,810
	Convention Center	2,312	42	0	2,270	2,312
	Columbia	9,508	7,447	2,533	2,061	6,975
	Total	62,686	46,524	31,714	16,162	30,972
2010 Low	East Village	15,351	15,614	13,570	(263)	1,781
	Gaslamp/Horton	5,386	4,708	4,439	678	947
	Marina	10,070	9,271	7,824	799	2,246
	Little Italy	5,027	4,528	4,073	499	954
	Cortez Hill	6,416	4,941	4,300	1,475	2,116
	Civic Core	8,616	4,941	4,208	3,675	4,408
	Convention Center	2,312	157	0	2,155	2,312
	Columbia	9,508	9,838	3,922	(330)	5,586
	Total	62,686	53,999	42,335	8,687	20,351
2010 Mid	East Village	15,351	16,223	14,832	(872)	519
	Gaslamp/Horton	5,386	5,482	4,634	(96)	752
	Marina	10,070	8,957	7,954	1,113	2,116
	Little Italy	5,027	4,545	4,275	482	752
	Cortez Hill	6,416	5,035	4,402	1,381	2,014
	Civic Core	8,616	8,604	4,294	12	4,322
	Convention Center	2,312	182	0	2,130	2,312
	Columbia	9,508	10,244	4,219	(736)	5,289
	Total	62,686	59,274	44,611	3,412	18,075
2010 High	East Village	20,559	18,329	16,094	2,230	4,465
	Gaslamp/Horton	5,786	5,605	4,830	181	956
	Marina	10,086	8,442	8,085	1,644	2,001
	Little Italy	6,584	5,232	4,477	1,352	2,107
	Cortez Hill	7,011	5,205	4,504	1,806	2,507
	Civic Core	8,616	8,142	4,380	474	4,236
	Convention Center	2,312	207	0	2,105	2,312
	Columbia	10,132	10,985	4,517	(853)	5,615
	Total	71,086	62,148	46,887	8,938	24,199

Table 4.6
Summary of Parking Supply versus Demand by Neighborhood and Time-of-Day

Scenario	Neighborhood	Total Supply	Parking Demand		Surplus (Deficit)	
			Midday	Evening	Midday	Evening
2015 Low	East Village	15,351	17,725	16,169	(2,374)	(818)
	Gaslamp/Horton	5,386	5,593	5,626	(207)	(240)
	Marina	10,070	9,562	8,107	508	1,963
	Little Italy	5,027	6,214	4,819	(1,187)	208
	Cortez Hill	6,416	7,225	4,945	(809)	1,471
	Civic Core	8,616	9,001	5,875	(385)	2,741
	Convention Center	2,312	165	0	2,147	2,312
	Columbia	9,508	11,921	5,464	(2,413)	4,044
	Total	62,686	67,405	51,006	(4,719)	11,680
2015 Mid	East Village	15,351	22,541	16,560	(7,190)	(1,209)
	Gaslamp/Horton	5,386	4,781	5,103	605	283
	Marina	10,070	9,813	8,298	257	1,772
	Little Italy	5,027	6,652	4,665	(1,625)	362
	Cortez Hill	6,416	7,795	5,229	(1,379)	1,187
	Civic Core	8,616	7,408	5,032	1,208	3,584
	Convention Center	2,312	191	0	2,121	2,312
	Columbia	9,508	12,879	6,608	(3,371)	2,900
	Total	62,686	72,060	51,495	(9,374)	11,191
2015 High	East Village	21,359	24,614	23,113	(3,254)	(1,754)
	Gaslamp/Horton	5,786	4,901	4,918	885	868
	Marina	10,521	10,063	7,354	458	3,167
	Little Italy	6,584	7,090	5,930	(506)	654
	Cortez Hill	7,011	8,004	5,458	(993)	1,553
	Civic Core	8,672	7,627	5,032	1,044	3,640
	Convention Center	2,312	217	0	2,095	2,312
	Columbia	10,710	13,838	7,469	(3,128)	3,241
	Total	72,955	76,354	59,274	(3,399)	13,681
2030 Low	East Village	15,351	34,311	33,162	(18,960)	(17,811)
	Gaslamp/Horton	5,386	4,651	4,667	735	719
	Marina	10,070	10,852	8,947	(782)	1,123
	Little Italy	5,027	9,967	9,180	(4,940)	(4,153)
	Cortez Hill	6,416	10,885	7,803	(4,469)	(1,387)
	Civic Core	8,616	7,950	5,110	666	3,506
	Convention Center	2,312	182	0	2,130	2,312
	Columbia	9,508	17,037	7,886	(7,529)	1,622
	Total	62,686	95,836	76,756	(33,150)	(14,070)

Table 4.6
Summary of Parking Supply versus Demand by Neighborhood and Time-of-Day

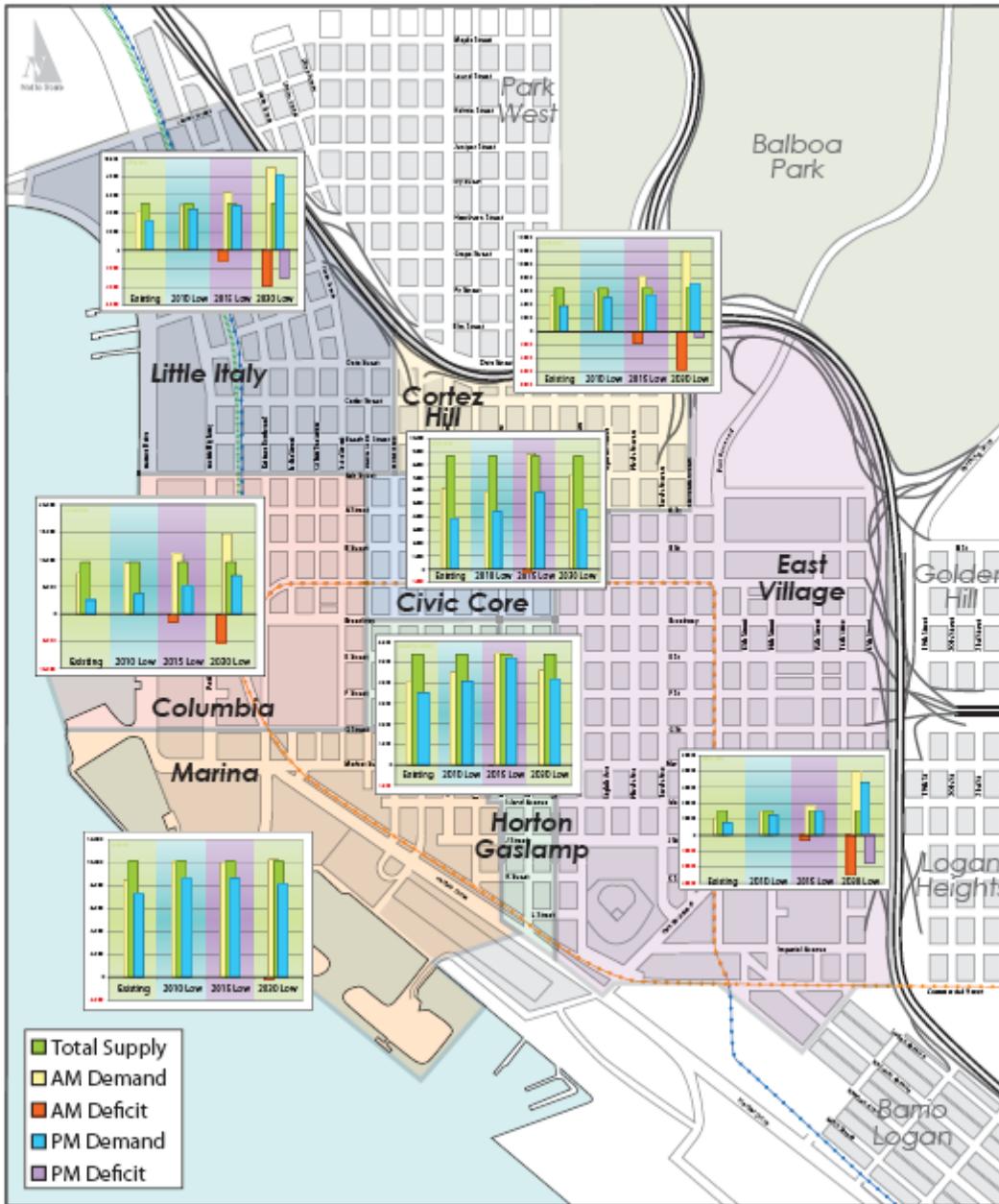
Scenario	Neighborhood	Total Supply	Parking Demand		Surplus (Deficit)	
			Midday	Evening	Midday	Evening
2030 Mid	East Village	19,815	39,411	38,625	(19,595)	(18,810)
	Gaslamp/Horton	4,826	4,799	4,916	27	(90)
	Marina	9,863	11,408	9,320	(1,545)	543
	Little Italy	5,491	11,234	10,479	(5,743)	(4,988)
	Cortez Hill	5,847	12,081	8,657	(6,234)	(2,810)
	Civic Core	7,371	8,396	5,403	(1,025)	1,967
	Convention Center	2,312	213	0	2,099	2,312
	Columbia	10,378	19,172	9,040	(8,794)	1,338
	Total	65,903	106,714	86,440	(40,811)	(20,537)
2030 High	East Village	23,759	44,510	44,088	(20,751)	(20,329)
	Gaslamp/Horton	5,786	4,947	5,164	839	622
	Marina	11,826	11,964	9,692	(138)	2,134
	Little Italy	6,584	12,501	11,778	(5,917)	(5,194)
	Cortez Hill	7,011	13,278	9,512	(6,267)	(2,501)
	Civic Core	8,838	8,841	5,697	(3)	3,141
	Convention Center	2,312	244	0	2,068	2,312
	Columbia	12,444	21,308	10,194	(8,864)	2,250
	Total	78,560	117,591	96,124	(39,031)	(17,564)
2030 Transit-High	East Village	23,759	37,390	39,443	(13,630)	(15,684)
	Gaslamp/Horton	5,786	3,996	4,570	1,790	1,216
	Marina	11,826	10,038	8,665	1,788	3,161
	Little Italy	6,584	10,499	10,520	(3,915)	(3,936)
	Cortez Hill	7,011	11,169	8,505	(4,158)	(1,494)
	Civic Core	8,838	6,585	4,882	2,253	3,956
	Convention Center	2,312	244	0	2,068	2,312
	Columbia	12,444	16,026	8,924	(3,582)	3,520
	Total	78,560	95,945	85,510	(17,385)	(6,950)

Source: Wilbur Smith Associates, 2008

As shown on Table 4.6 some of the individual neighborhoods are likely to experience a parking deficit, even though there is an overall surplus of parking under the same scenario for the entire downtown area. This could lead to increased spillover into adjacent neighborhoods.

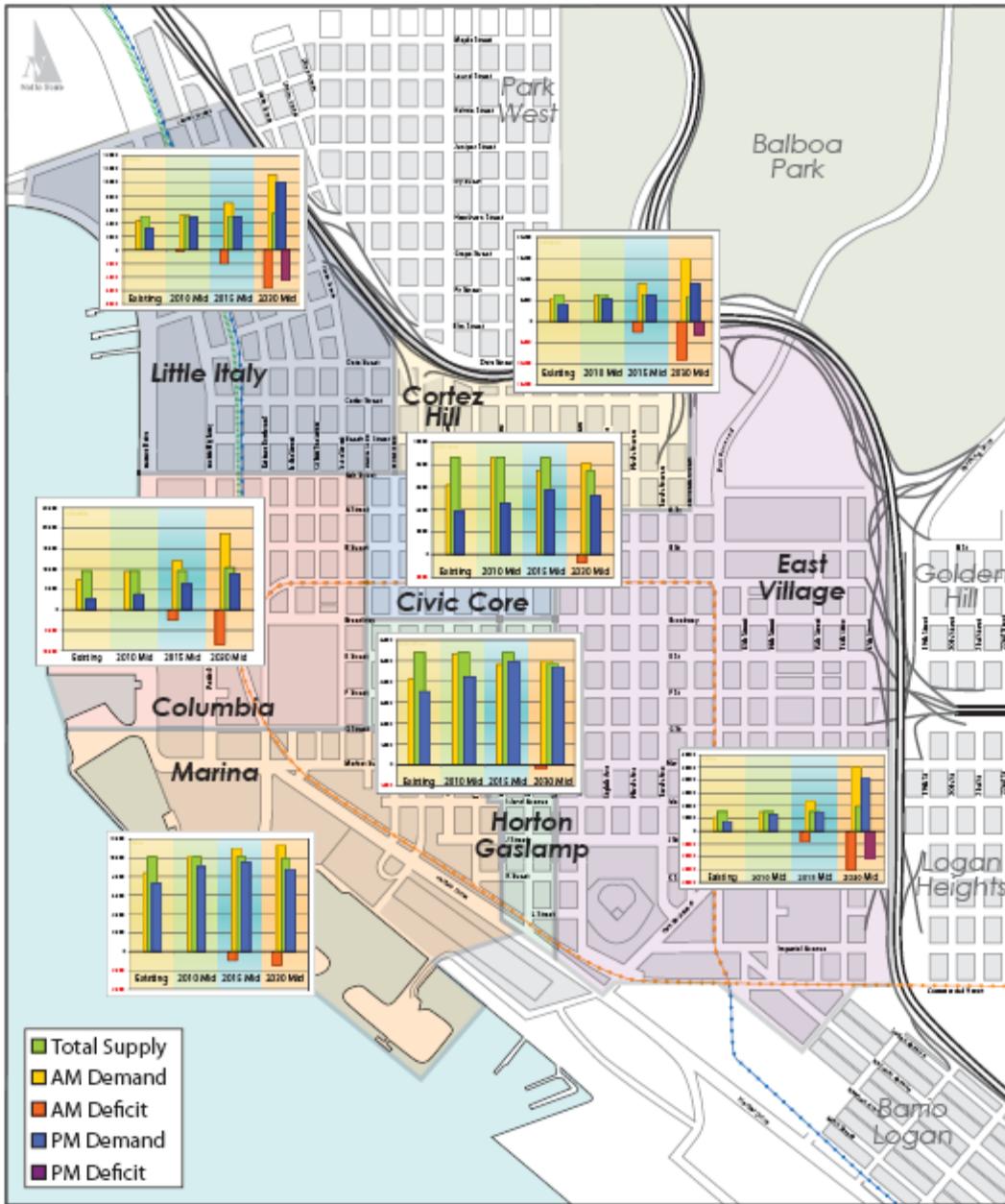
Figures 4.2 through 4.5 displays the comparison of supply and demand by neighborhoods for all the development scenarios.

Figure 4.2
Summary of Parking Supply versus Demand – Comparison of Low Development Scenarios



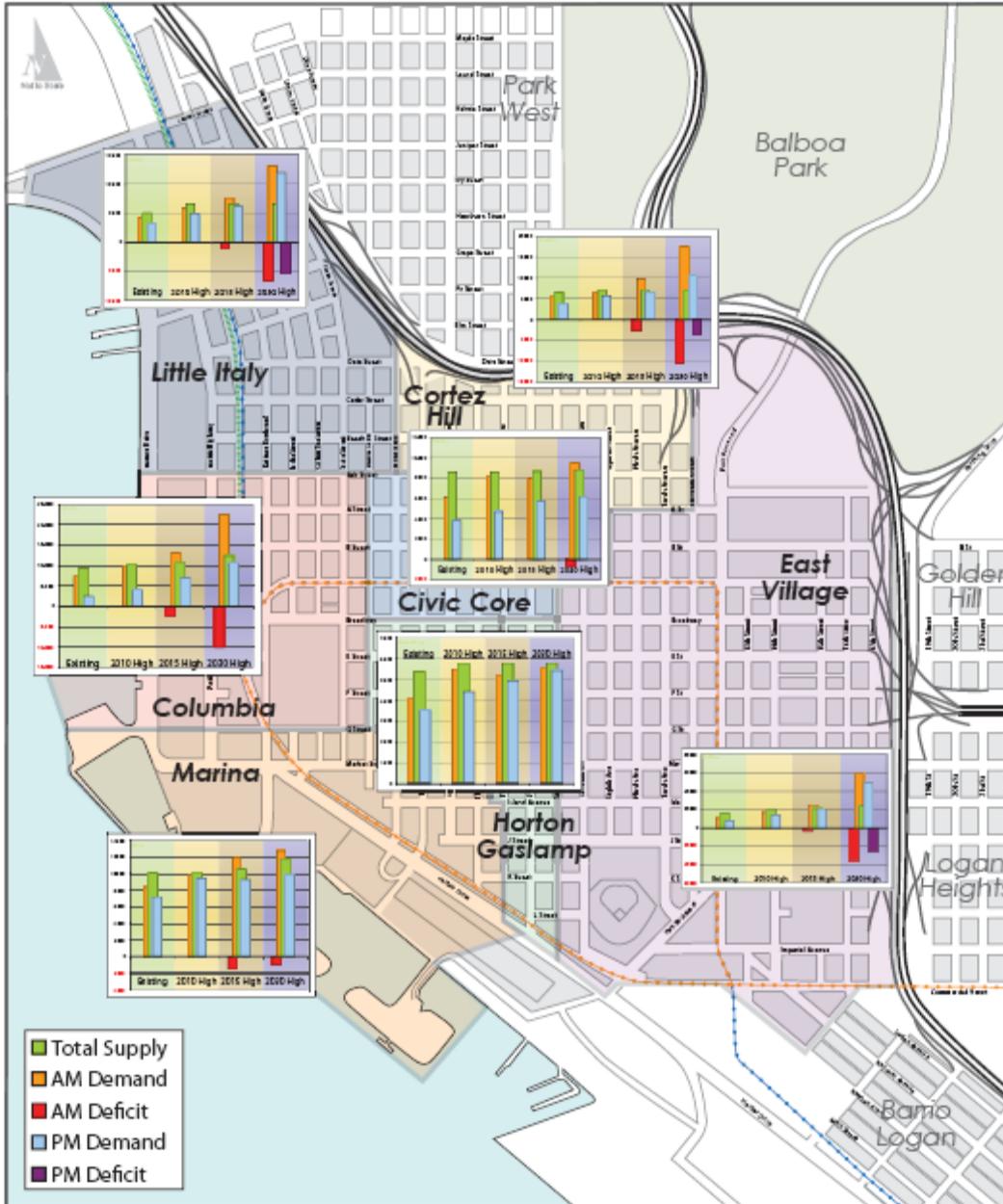
Source: Wilson & Co., Wilbur Smith Associates, 2008

Figure 4.3
Summary of Parking Supply versus Demand – Comparison of Mid Development Scenarios



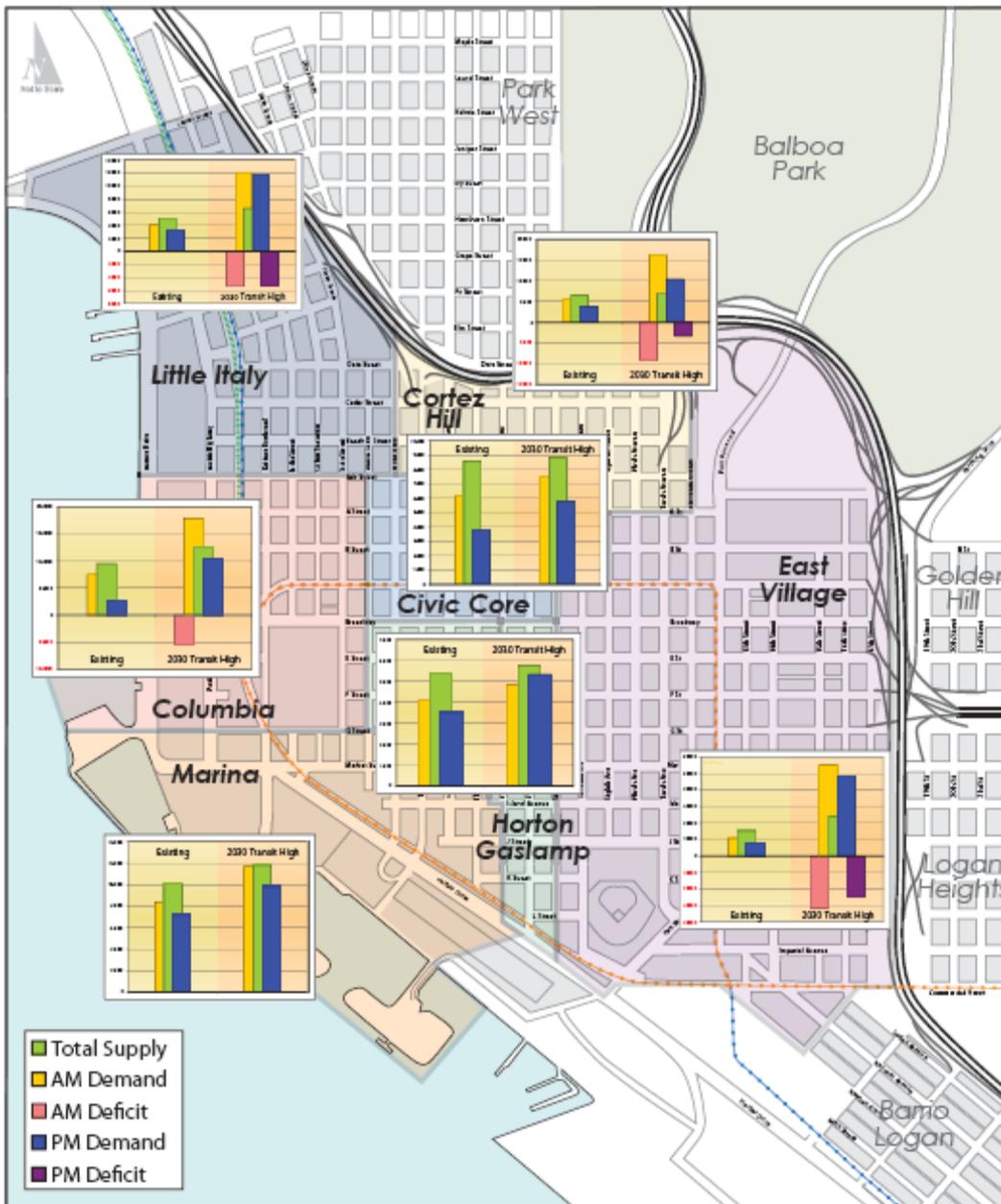
Source: Wilson & Co., Wilbur Smith Associates, 2008

Figure 4.4
Summary of Parking Supply versus Demand – Comparison of High Development Scenarios



Source: Wilson & Co., Wilbur Smith Associates, 2008

Figure 4.5
Summary of Parking Supply versus Demand – Comparison of Transit Scenarios



Source: Wilson & Co., Wilbur Smith Associates, 2008

4.3 Conclusions

The demand estimates show that under existing conditions and into the Year 2010 there is generally a surplus of parking in downtown San Diego. It is important to note, however, that this surplus is based on the assumption that all off-street public and commercial parking is open and available for public use during morning and evening conditions. This is currently not always the case in downtown San Diego, as some off-street parking structures (either stand-alone or subterranean structures under buildings) close after certain times of the day.

In addition to any changes in future parking demand, it is equally critical to consider changes in public parking supply in downtown. Ongoing and future development projects will add some additional parking supply but nevertheless result in the loss of existing surface parking lots on currently developable land. As indicated in the parking demand analysis, there will be an unmet overall demand for parking in downtown beginning from the Year 2015. Individual neighborhoods also indicate potential substantial parking deficiencies. Assessment of parking demand for different neighborhoods indicates that supplemental parking facilities could provide the required parking supply to meet additional demand. Additional parking facilities in the neighborhoods of East Village, Little Italy, Cortez Hill and Columbia could alleviate the supply shortfall predicted between the Years 2015 and 2030. By 2030, additional neighborhoods such as Marina and Civic Core could also experience deficiencies and could benefit from additional parking supply.

Although the demand analysis shows potential substantial deficiencies in future parking supply by neighborhood, it is important to recognize that changing market conditions will almost certainly result in changes to downtown parking conditions. Therefore, the future parking estimates presented are provided primarily as a reference. As market conditions are likely to change over time, future updates to this Plan should account for changing development patterns. The methodologies and strategies as described within this section should be applied to revise estimates for pipeline (0 to 2 years) conditions and update future demand scenarios.

The demand analysis also shows the long-term benefit of increased transit availability and usage. Parking demand estimates for the Year 2030 high buildout scenarios indicate that an increase in the transit mode share from 25 percent to 48 percent could result in a decrease in parking demand by more than 20,000 parking spaces during midday conditions. The Plan recognizes that increased transit usage and availability in downtown San Diego and the surrounding region is related to and affects the overall demand and use of parking in downtown San Diego. Therefore, the Plan supports ongoing efforts by CCDC, the City of San Diego, and SANDAG to increase the amount, usage, and availability throughout San Diego and the surrounding region.

The next section of the Plan will present recommendations to address the findings of the demand analysis.

RECOMMENDATIONS

5.0 Overview

This section presents the recommendations of the Plan; however, prior to discussing the recommendations, discussions of the case study investigations of the plan, a discussion of serving downtown parking needs, a summary issues to be addressed and a proposed implementation approach are presented. The purpose of these introductory discussions is to allow the reader to understand the thought process used to develop the recommendations of the Plan.

The recommendations presented in this section are separated between near-term, mid-term and long-term solutions. Throughout this document many existing programs, policies, or solutions are attributed to CCDC, the City of San Diego and other downtown stakeholders. The purpose of this document is to present recommendations that both address issues identified as a part of the Comprehensive Parking Plan for Downtown San Diego as well as complement or enhance existing activities already undertaken by CCDC or the City of San Diego.

5.1 Case Studies from Similar Cities

As a part of the Plan's development, three case studies were prepared. The purpose of the case studies was to both inform the public and stakeholders of successful implementation programs and to inform CCDC in the implementation of potential plan recommendations. The case studies highlight parking management; comprised of techniques, strategies and tools that impact location, cost, and supply and demand of parking. The case studies show that implementation of parking management strategies at a local level can enhance economic vitality, provide project mitigation and improve traffic circulation. These case studies show that parking management strategies result in a better use of parking and transportation resources. The key approach present in all case studies is the development of a parking management program tailored to the needs of the specific community.

Although there are many examples throughout the United States that follow some of these principles, the CCDC project team identified three case studies (Pasadena, Portland and Seattle) which can be compared for initial discussions about downtown San Diego. Table 5.1 shows how these programs relate to potential solutions.

**Table 5.1
 Case Studies and Downtown San Diego's Potential Solutions**

Case Study Location	Case Study Includes Potential Solutions that could apply to San Diego?					
	Parking Management: Maximize Effectiveness	Parking for New Development	Transit	Wayfinding	No One Size Fits All Approach	Special Events
Pasadena	✓	✓		✓		
Portland – Downtown	✓	✓	✓	✓		
Portland – Lloyd District	✓	✓	✓			✓
Seattle	✓	✓	✓		✓	✓

The case study findings are bound in a separate technical report. The case studies were used to develop and refine the specific recommendations contained in this section.

5.2 Serving Downtown Parking Needs

In order to understand the thought process used to develop the recommendations of the Plan, it is important to understand the various parking needs of downtown San Diego residents, workers, business owners, visitors and stakeholders. Currently the primary mode of transportation in downtown San Diego is the automobile with some transit usage on the San Diego Trolley and MTS buses. As the downtown area grows the demand for parking will increase and the available parking supply will need to be utilized more efficiently. Future parking needs will also be affected by changes in travel modes and market conditions. Ultimately downtown San Diego may see a greater reliance on transit, bicycles and pedestrians, or a change in the types of vehicles used (e.g., increased scooters, motorcycles, smaller vehicles). The growth and changes in downtown San Diego will require a change in the way the parking supply is utilized and managed. In addition, increased traffic congestion can affect driver response and demand for parking.

While there is sufficient existing total capacity to meet total demand, there are areas with a much higher utilization (where parking demand approaches or exceeds available supply). In these areas with a high utilization, there needs to be a system to identify priority users of parking spaces. This Plan presents a system to allocate parking resources by parking user.

In general, parking users are defined as customers, merchants/employees, or residents. In the case of a mixed-use environment like downtown San Diego, the type of user of available parking supply will vary by neighborhood and/or predominant land use. Therefore, identifying and understanding parking users will help understand how to best utilize parking supplies. The three types of parking users and the suggested systematic method for addressing parking usage are:

- Customers - In most of downtown San Diego, convenient on-street parking is typically provided for business customers for access to ground level businesses. In most cases the on-street spaces are those that are most convenient and within proximity to the retail or

commercial destinations. To ensure customer access to on-street parking spaces, all areas with high utilization of on-street parking (over 85 percent) and a need for customer parking should use paid parking or time limits to encourage turnover and manage supply.

- Merchants and Employees - Merchants (or tenants) and employees should have access to adequate all-day or long-term parking opportunities within downtown and near their place of employment. Employees and merchants should have access to off-street parking locations in the downtown area that are convenient and within convenient access to worksites. Employees and merchants should also be encouraged to use alternative modes, including transit, as a principle mode of reducing parking demand. Although many employers in downtown San Diego currently do this through Transportation Demand Management (TDM) programs, as many employers as possible should encourage transit use to reduce the approximately 40,000 daily commuter vehicles currently entering/leaving downtown San Diego.
- Residents - Downtown residents and their guests should be able to find parking spaces in proximity to their homes. This is particularly applicable in neighborhoods that are zoned for residential uses. Some residents may also require access to convenient parking for overnight parking of guests or personal vehicles, generally for temporary time periods.

5.3 Issues to be Addressed

The recommendations of the Plan are tailored to address the specific issues related to parking that downtown residents, visitors, customers, workers, and other stakeholders are facing. Therefore, in order to fully understand the recommendations, the following subsection outlines the parking demand and supply issues that will be addressed by the recommendations. The issues to be addressed are based on the findings documents in Sections 3 and 4 of this report.

Results from the data collection effort (described in Section 3) indicated the following:

- Generally, there is adequate overall available parking supply in downtown San Diego; however, the availability of off-street public parking varies by neighborhood and time-of-day.
- Parking utilization varies by neighborhood, time-of-day, and seasonal factors.
- There are "hot spots" and time periods in which parking demand is very high. For example, on-street parking is close to 85 percent occupied in the Gaslamp during average weekday midday and evening conditions.

Based upon the parking demand analysis (as presented in Section 4), the following points can be deduced:

- The existing parking surplus for all of downtown San Diego will likely last through 2010, while demand estimates begin to forecast possible shortages in parking supply by the Year 2015.
- There is a greater demand for parking during the midday hours than the evening hours.

- The market conditions in downtown San Diego have changed since adoption of the 2006 Downtown Community Plan.
- Recommendations, therefore, should focus on managing the existing and near-term surplus, potentially increasing the mid-term and long-term parking supply and encouraging transit use and alternative modes like biking and walking in order to reduce overall vehicle volumes and the associated need for parking.

It is important to note, however, that the parking surplus identified in this Plan is based on the assumption that all off-street public and commercial parking is open and available for public use during morning and evening conditions. This is currently not always the case in downtown San Diego, as some off-street parking structures (either stand-alone or subterranean structures under buildings) close after certain times of the day.

Longer term recommendations are based upon an increase in parking demand and the associated pricing of parking, resulting in the need for potentially more supply and improved management of the supply. As stated in the FEIR mitigation measures for the Downtown Community Plan, CCDC will periodically review the parking supply and determine what, if any, actions could be undertaken to reduce excessive demand. Section 4 documents a methodology that may be applied periodically to address potential changes to parking demand resulting from changes in market conditions. Therefore, the methodology included in the Plan should be periodically applied by CCDC.

5.4 Demand-Based Implementation Approach

The recommendations of the Comprehensive Parking Plan for Downtown San Diego (described in the following subsection) are based on an implementation approach that is systematic and yet customized to manage the parking both on an area-wide and neighborhood basis. The recommended approach directs the implementation of strategies in a step-by-step manner based upon addressing demand, location, time, price and supply, in that order.

The different types of recommendations described in the next subsection work together to manage demand, use primary and secondary locations of parking supply, set time limits and manage parking pricing and parking supply to best use existing parking resources before seeking to construct new parking resources. The recommendations described in the Plan can be viewed in broad categories as described on the following page.

The demand-based approach is designed to be an overall framework for the implementation of the Plan's recommendations. This is a step-by-step method for addressing and solving parking issues as they arise. This approach will manage parking and can also lead to increased use in non-vehicular transportation options such as transit.

DEMAND-BASED PARKING MANAGEMENT PROGRAM



1. **Demand management strategies that reduce parking demand in downtown and specific neighborhoods.** This includes establishment of an 85 percent trigger (discussed in the subsequent portion of the Plan), new enforcement and monitoring techniques and incentives to use or promote transit and non-vehicular travel modes. Any strategy that results in a reduced number of vehicles that require parking in downtown can be classified as a demand management technique.



2. **Location tools shift parking demand from primary to secondary parking resources.** This occurs when the primary parking spaces are full and parking users look for available secondary parking in the surrounding area. Throughout most of downtown San Diego the primary on-street parking spaces should be for the primary user - customers willing to pay for the most convenient on-street parking spaces. Customers looking for free parking will need to be directed to park-and-ride facilities before reaching downtown, public off-street and other lower utilized public on-street spaces (if available). Examples of location strategies include developing signage, wayfinding, universal valet, shared use, parking trade programs (parking requirements that support shared parking) and peripheral parking programs to increase usage of underutilized parking. It also includes new information technology (such as dynamic inventory and occupancy sensors) to better manage and direct patrons to available parking facilities across the downtown area.
3. **Time management strategies.** There are various time limits and parking restrictions that can be used to manage a parking system. In a downtown area, the primary purpose of time limits should be to maximize access and encourage turnover to better use parking resources. This includes the use of loading zones, combination zones, short-term and long-term parking time limits in a systemic approach that helps manage on-street parking. Longer term parkers (typically two hours or more) should be encouraged to use off-street facilities through on-street time restrictions.
4. **Pricing strategies.** If location and time management strategies do not alleviate demand issues, the next step is to implement pricing strategies. In some downtown San Diego areas, the on-street parking rates need to be increased to create an incentive for off-street parking operators to open their parking facilities. In other areas, the operating time of the on-street meter system needs to be extended into the evening. For example, free evening on-street parking (after 6:00 p.m.) near PETCO Park results in Padre fans cruising for free on-street parking and employees from Gaslamp District moving their cars to take advantage of free on-street parking, while there is ample available off-street parking closer to the desired destinations. As a result, many off-street facilities close in the evenings resulting in less parking supply to meet this demand (although not typically the case in the Gaslamp neighborhood). This results in on-street parking utilization at 100 percent and a shortage of available on-street parking for the primary user (customer). Applicable pricing

strategies include unbundling the costs of on-site parking from developments, on-street parking pricing, off-street parking pricing, variable pricing and extending meter hours.

5. **Increase parking supply.** If the demand, location, time and pricing strategies do not effectively manage parking demand, the next step is to increase parking supply. Parking supply can be added in areas with high current and future demand, reducing spillover and impacts on neighborhoods. In some cases, this can include additional on-street parking supply for bicycles, scooters and motorcycles. Parking supply includes building new parking (or new types of parking, such as motorcycle, scooter and bicycle), constructing parking under parks, restriping on-street parking (e.g., conversion to diagonal parking), robotic parking systems to maximize the amount of vehicles parked, changing parking rules and regulations (minimum parking requirements), or implementing parking trade programs (described in more detail in the next subsection).

The recommendations provided in the next subsection should be implemented in a consistent manner following the steps outlined above. When all the steps have been addressed, the Plan recommends returning to the beginning (i.e., demand management).

5.5 Near-Term Recommendations

Near-term parking recommendations are based upon the current examination of parking supply versus demand in downtown San Diego. These recommendations are for a period of up to five years from the date of this publication through the Year 2013. The analysis of existing and near-term parking demand has shown that overall there is sufficient supply to meet the demand of downtown San Diego; however, the location and availability of public parking supply is not consistent across neighborhoods and/or times-of-day. For example, there is a perceived lack of parking supply in Little Italy during midday and evening conditions, while some off-street parking facilities that could be used for public parking are not open for public use. Therefore, the near-term recommendations are designed to better balance the existing supply of public parking and the demand.

Initially it was anticipated that the Plan would review PDO parking requirements and possibly make recommendations to those requirements. Based on the analysis of existing and near-term parking demand in downtown San Diego the current PDO parking requirements adequately provide parking. Also, since the PDO parking requirements were implemented in 2006, there is a strong reluctance on the part of all downtown stakeholders to revisit these requirements. Therefore, the Plan does not recommend changes to the PDO parking requirements at this time.

The following recommendations complement strategies or proposals currently being investigated or implemented in downtown San Diego. In many ways the work done to-date on the Comprehensive Parking Plan for Downtown San Diego has served as verification of concerns already identified by CCDC, the City of San Diego, the DPMG, the Downtown Partnership and other downtown stakeholders. The recommendations and implementation approach have been designed to provide a comprehensive parking management plan for downtown San Diego. By following the implementation approach and proceeding with the near-term recommendations, CCDC and the

City of San Diego will be able to effectively implement parking solutions that complement each other and will therefore be able to provide a comprehensive parking management plan.

It is important to recognize that the recommendations of the Plan are complementary and the success of each recommendation is dependant on other recommendations and actions of the City of San Diego, CCDC and other downtown stakeholders. The way in which parking is planned, managed, or provided has a major impact on the urban environment, travel behavior and streetscape. The recommendations listed below are in sync with the goals and policies identified in recent planning documents including, but not limited to, the Downtown Community Plan, SANDAG's Regional Transportation Plan and the Draft Downtown Design Guidelines.

For instance, the Downtown Community Plan and the Draft Downtown Design Guidelines include innovative urban design characteristics such as "green streets" to enhance the downtown streetscape. These streets are extensions of existing street typologies with designed landscaping involving double rows of trees and expanded sidewalk widths; some of the streetscape enhancements would result in a slight reduction in available on-street parking. Green streets will serve as a link between parks and other downtown destinations for pedestrians, cars and transit. These streetscape enhancements will improve the overall walkability of downtown and will complement recommendations of this Plan. Therefore, the net loss of on-street parking should be minimal and offset by improved pedestrian walkability which will promote a "park once" mindset.

The Draft Downtown Design Guidelines propose changes to curb parking, such as bulb-outs at transit stops. These bulb-outs would remove parking and replace the area with additional sidewalk space for transit stops. The net loss of on-street parking will be minimal and the associated benefits to transit access should help to increase non-vehicular travel in downtown San Diego; which would then in turn reduce overall parking demand.

In summary, the various plans of CCDC, the City of San Diego and SANDAG as they relate to walkability, non-vehicular travel modes, increased transit, streetscape modifications, ridesharing and land use will complement the recommendations for parking included in this Plan.

STEP ONE: DEMAND MANAGEMENT

The first recommendation focuses on the management of parking demand. Enforcement of parking regulations during operating hours is currently strong in downtown San Diego. Businesses, commuters, visitors, and residents are also encouraged and/or able to choose from a variety of modes of travel, not just automobiles. Therefore, the first recommendation is as follows:

Establish 85 Percent On-Street Occupancy Trigger

This recommendation expands upon the current on-street parking utilization (or occupancy) goal of the DPMG, which supports the goal of establishing the 85 percent utilization rate for on-street parking. The Plan recommends that this utilization rate be defined as a "trigger" for the implementation of the other recommendations included in this Plan. At 85 percent utilization, the

result is approximately one vacant parking space per block face. At this utilization rate, the City is best using its parking resources to support the overall vision of a walkable, pedestrian-oriented and economically vibrant downtown San Diego. When on-street parking utilization exceeds the 85 percent rate, the recommendation is to implement a series of strategies to reduce parking demand and maintain the 85 percent rate. These steps follow the demand-based implementation approach described previously and the first step will be to implement demand management strategies, then to use location and time management strategies. If the utilization rate is still above 85 percent, then it is appropriate to price parking to reduce demand. When all of these strategies have been utilized, it becomes appropriate to look at ways to increase parking supply in the impacted area. The parking demand rate should be periodically reviewed and the demand-based implementation steps then completed in the same order if demand exceeds the 85 percent trigger.

The DPMG has been promoting 85 percent occupancy as a target for downtown, with the 85 percent occupancy figure seen as optimal for downtown activities. It is recommended that the 85 percent on-street utilization rate be viewed not only as a target, but also as a trigger. This recommendation implies that when the 85 percent on-street utilization rate threshold is exceeded, then other parking management strategies (as described later in this document) need to be implemented to reduce on-street demand back to 85 percent. Utilization greater than 85 percent, given the current inventory of parking in downtown San Diego, implies an imbalanced use of on- and off-street resources.

A primary example is during a baseball game at PETCO Park: On-street occupancy in downtown San Diego at or near 100 percent (sometimes even exceeding 100 percent through parking violations) surrounding the ballpark and in neighborhoods previously thought of as far from the ballpark; while off-street parking occupancy is typically less than 40 percent in parking lots and structures closer to the ballpark. Therefore, there is a need to develop parking management strategies to reduce on-street demand by better use of off-street parking facilities (generally by addressing location management, described below) and extending meter hours.

The management strategies and recommendations included in the Plan should be reviewed periodically (as resources and data are available) to monitor the 85 percent trigger. During these periodic reviews, on-street demands of greater than 85 percent can be used to justify investigation of additional parking demand management strategies.

STEP TWO: LOCATION MANAGEMENT

The second set of recommendations focuses on the management of the location of parking in downtown San Diego. Of the location management-type strategies, only various shuttles have been attempted, such as the Presto shuttle in Little Italy. Therefore, the recommendations are as follows:

Universal Wayfinding System

The Plan recommends implementing a universal wayfinding system for downtown San Diego because a significant issue related to finding and maximizing the use of off-street parking is related to developing and implementing a common means for various parking users to identify and locate available parking. The Plan recommends the implementation of a successful wayfinding program to deliver information in a timely and simple manner that is pleasing to the visitor and successfully directs them to parking spaces and to their ultimate destination within downtown San Diego. This can be accomplished through traditional signage, or through dynamic signage displaying real-time information.

The Plan recognizes that effective dynamic wayfinding systems use many communication tools, such as variable message signs, wireless transmission, and real-time parking information. Parking customers may also find parking information from the internet, maps and brochures. Initially the Plan does not recommend a full dynamic wayfinding system; however, the initial universal wayfinding system infrastructure should have the ultimate goal of becoming a fully dynamic system sometime in the long-term future.

The Plan recommends that the universal wayfinding system for downtown San Diego incorporate a "brand," as many other cities have developed wayfinding systems around a "brand" that directs drivers from the street system into specific parking facilities. For example, the City of Boulder, Colorado has its surface and structured parking identified by location with the brand "P" on a green background. In Boulder, the branded "P" is evidenced in all parking services programs and printed materials and is prominently featured at surface and structured parking locations. Downtown Los Angeles has recently installed multi-space parking meters for on-street parking which are branded with a "P" (as shown in the image to the right).



Source: Los Angeles Department of Transportation, 2008.

The primary reason for the recommendation of the universal wayfinding system is to maximize the use of the available parking resources in downtown San Diego. Wayfinding systems increase customer convenience; which increases walkability, reduces walking distances and promotes a "park once" strategy. A comprehensive wayfinding and signage system directs patrons both to and from parking facilities to destinations in the downtown activity center. Some examples of existing wayfinding systems in use across the US are provided on the following page.

The City of Des Moines, Iowa initially completed a wayfinding signage study that included maximizing access to parking garages most convenient to major downtown destinations and implementing wayfinding from garages to those destinations. In addition, the initial study included developing parking garage interior signage concepts that addressed vehicular and pedestrian wayfinding within the garages. Following completion of the study, a conceptual wayfinding signage system was designed. To facilitate a visitor-friendly signage system, the conceptual wayfinding signage system in Des Moines was designed to provide coordinated directional information in the form of vehicular and pedestrian wayfinding signage, parking garage identification signage and parking system gateway signage. The system has a garage interior sign system that is highly functional and flexible for use in the various parking garage types in the downtown parking system.

A key feature of the Des Moines wayfinding signage system will be the display of "real time" parking status at strategic locations. This system can be driven by a revenue control system at each garage, with data processed through the central control traffic operations center. It may also be linked to wireless detectors that count the number of cars entering and exiting a facility, thereby providing customers with information on where and how many parking spaces are available.

The wayfinding project in the City of Des Moines, Iowa is currently in final design including signage location plans, development of construction documents for gateway introductory signs, consultation with variable message sign (VMS) suppliers (regarding electrical and communication requirements for real time on-street signs) and developing a preliminary construction cost estimate for the signage and hardware. When implemented, the City of Des Moines will have a real-time parking information and wayfinding system that will guide visitors to the downtown from key gateways off freeway facilities into the downtown core and to available parking facilities.

The City of Burbank used a combination of priority parking and wayfinding for customers, shared parking, employee parking pricing and pedestrian improvements to revitalize its downtown area. This revitalization created an entertainment area with 35 restaurants, a downtown shopping center, movie theaters, anchor retailers and specialty retail shops. Pedestrian improvements created a core walkable environment and provided linkages to shared parking facilities.

The City of Santa Rosa has east-west pedestrian linkages to connect sides of the community divided by Highway 101. The pedestrian walkway project in Santa Rosa is within two blocks of the downtown transit mall, which serves a local and regional bus hub and is near the Santa Rosa bikeway system. The City of Santa Rosa also runs a trolley service through the area. The pedestrian walkway project in Santa Rosa is also being coordinated with an affordable housing redevelopment strategy and a cultural arts market.

The Plan recommends that the universal wayfinding system for downtown San Diego utilize some of the successful features of the wayfinding systems described above. The real-time parking information system is recommended as a mid-term solution.



Universal Valet Parking Program

The Plan recommends the implementation of universal valet parking programs in retail and entertainment areas of downtown San Diego in order to make use of existing and available off-street parking facilities. The universal valet program would be specific to a downtown neighborhood. The Plan recommends that this program be funded through downtown business associations. For example, in Old Town Pasadena, the business association has a parking operator that uses small, underutilized parking lots for valet parking. Patrons can visit any of the valet locations to pick up and drop off their car for a fee.

For the recommended universal valet program in downtown San Diego, customers will be able to park their car at one universal valet location and then walk throughout the downtown area to any other universal valet location to pick up their car. Thereby, the “park once” principle that reduces use of the car in downtown and establishes walking as the primary mode of transportation would be greatly reinforced in those neighborhoods where a universal valet program would be implemented.

Develop Shared Parking Database

This recommendation seeks to increase shared parking throughout downtown San Diego. Shared parking is defined by the use of the same parking space for multiple uses at different times of day. Shared parking is effective in urban downtowns and can significantly reduce the amount of land devoted to parking and the need to construct additional parking while improving the efficiency of the current parking and transportation system.

Shared parking may be used to meet immediate parking needs in a specific area. It may be used to alleviate parking shortages caused by unique or special events and should be encouraged to make better use of underutilized off-street parking facilities. Typically in a downtown, informal shared parking arrangements are used to provide parking resources to meet peak demand.

Currently, the Little Italy Association, through CCDC and the CPD, pays for the operation costs after 6:00 p.m. for a parking facility in Little Italy on Thursdays, Fridays and Saturdays. The Little Italy Association is working with CCDC to see if there are other similar opportunities with off-street parking facilities, where the Little Italy Association would negotiate with private operators and pay

the operating costs to leave the parking facilities open after 6:00 p.m. Initial feedback from CCDC staff is that the Little Italy parking facility is operating below optimal capacity. This is most likely due to the prevalence of free on-street parking throughout the neighborhood after 6:00 p.m. Off-street parking provided by other land uses like schools and churches should also be considered in this effort. CCDC is currently working with a school in Little Italy to make improvements to the surface lot in exchange for shared parking usage during non-school hours. Therefore, CCDC and the City of San Diego could exercise control over the on-street spaces to decrease on-street parking demand after 6:00 p.m. (through the extension of on-street parking meter hours of operation).

By implementing other complementary near-term recommendations (such as extending hours of operation for on-street paid parking systems, described on the following pages), shared parking arrangements would have better incentives to remain open after 6:00 p.m. and off-street parking occupancies would increase. By increasing the hours of operations for on-street paid parking systems, off-street facilities would be used to serve longer-term parking needs (e.g., greater than two hours for employees and residents).

The Plan recommends that CCDC and the City of San Diego expand existing informal shared parking programs and create a formal program for shared parking among existing and future uses. This may be accomplished by creating a database of parking resources that can show when and where excess parking supply is located for businesses in need of additional parking supply. This database may also be used to create a real-time parking information system that provides data to the ultimate recommended universal wayfinding system described previously in this section. This Plan itself can serve as the starting point for a shared use database, as available public parking resources in downtown San Diego were inventoried and have been provided to CCDC in an electronic format for GIS application.

STEP THREE: TIME MANAGEMENT

The third set of recommendations focuses on the management of the times-of-day parking is available in downtown San Diego. The City of San Diego is considering a report recommending variable pricing and extension of meter hours of operation by location throughout downtown. If this recommendation is implemented, the remaining strategies to manage the times-of-day for parking availability are as follows:

Combination Loading Zones

Currently in downtown San Diego, yellow curb loading zones are for commercial loading and unloading only. While necessary in many urban areas, these loading zones tend to be difficult to enforce and/or are underutilized compared to other parking spaces. Currently, commercial loading zones in downtown San Diego are typically operational from 8:00 a.m. to 6:00 p.m. The Plan recommends that commercial loading zones may be used as combination zones that are used for commercial loading (for trucks or deliveries only) for part of the day and for other uses during the rest of the day. The City is currently testing a form of this strategy in the Gaslamp neighborhood.

This recommendation includes the installation of parking meters (or similar paid-parking technologies) at spaces marked for commercial loading. In areas of high density mixed-use developments, these combination commercial zones can be provided for a certain fee during delivery hours and used for public parking other hours of the day. Currently variable/combination meters at loading zones in downtown San Diego are being considered by a task force.

Implementation of combination commercial loading zones would require an additional amount of enforcement and strictly enforced parking regulations to be successful, particularly to enforce paid parking by commercial vehicles and adherence to time-of-day restrictions for non-commercial vehicles. In addition, the signage of these combination zones must be clear enough to be used by both commercial and public vehicles. An example of signage used in other cities for combination zones is shown to the right.



Using combination zones could be a strategy tested in areas where there are capacity constraints during lunch time and evening peak hours; thereby, creating more on-street paid parking during the peak hours of lunch time and evenings. During peak hours (mid-day and evening) these combination zones could be utilized for public parking similar to any other regular meter charging per 30 minutes or one hour. This will not only lead to efficient use of these loading zones but will also contribute to parking meter revenue.

Refine Cortez Hill Residential Parking Permit Program

The current residential parking permit (RPP) program in Cortez Hill is well accepted by the local residents. Currently residents of Cortez Hill living within the RPP area can obtain up to three parking permits plus one visitor placards and two temporary permits per year. There is a maximum of one parking permit for non-resident property owners and qualifying commercial property addresses during a permit year. The cost of all permits yearly was \$15.00 prior to December 1, 2007 and is now reduced to \$7.00 since December 1, 2007. This is very low compared to many other communities, as shown in Table 5.2. As compared to the selected cities mentioned below, the Cortez Hill residential parking permit is the least expensive of the nine cities reviewed. In fact, the average cost for an annual permit is approximately \$30 compared to the \$7 charged by San Diego.

**Table 5.2
 Residential Parking Permit Program Costs in Selected Cities**

City	Cost
San Francisco, California	\$74 per year
Boulder, Colorado	\$17 per year
Santa Barbara, California	\$15 per year
Alexandria, Virginia	\$15 for first permit, \$20 for second permit and \$50 for third permit
Berkeley, California	\$30 per year
Ann Arbor, Michigan	\$40 per year
Phoenix, Arizona	\$10 per year
Seattle, Washington	\$35 per cycle (2 years) – some areas are only 1 year
Portland, Oregon	\$35 per year

Source: Michael R. Kodama Planning Consultants, 2008.

Note: Downtown Los Angeles and Manhattan do not have residential parking permit programs. Residents in these areas pay market price for off-street and on-street parking.

Currently, all applicants for the Cortez Hill RPP are required to show a valid driver’s license, California vehicle registration (unless an active military personnel or student under twenty three years of age) or proof of residency, tenancy or property ownership.

To prevent fraud, it is recommended that anyone caught falsifying information or reselling permits should be fined and immediately terminated from the residential parking permit program.

Another option includes changing the price of the residential permit to deter abuse and overuse. This could include a staggered price structure, where the price of a second permit is substantially greater than the first, and likewise for the third permit (similar to the RPP in Alexandria, Virginia). Since the price for the permit now is considered to recover only administrative costs at the City level, it is also recommended to include the initial capital costs of street construction, roadway maintenance, parking meter maintenance, enforcement and street cleaning. Some examples of cities that have increased their RPP fees are:

- In 2002, the City of Portland, Oregon conducted an assessment of its residential parking permit program and determined the full cost of a parking permit (operation and maintenance) is \$33.27 per permit per year, but had an established fee at \$32 per year. This indicates that the established fee of \$32 did not cover the operation and maintenance costs of the program. Since then, the City of Portland raised the fee to \$35 per year.
- Currently, the City of Seattle is updating and revising its program based upon the full cost of a parking permit. The City of San Diego should conduct an assessment of the residential parking permit program and determine if the current price should be increased to cover the full cost of a parking permit.

Based on the findings of the Cortez Hill Residential Permit Program Study (completed as a part of the preparation of the Plan), the Plan recommends the following in order to refine the existing Cortez Hill residential parking permit program:

1. Verify availability and sufficiency of on-site parking prior to issuing a neighborhood parking permit.
 - a. Residents of multifamily properties that meet or exceed the current PDO parking requirements would not be allowed to obtain permits. The purpose of this would be to prevent residents living in modern buildings that were built to code from obtaining permits just in order to avoid paying for parking.
2. Provide additional visitor permits at an additional fee.
 - a. Currently the City of San Diego limits each qualifying property to one visitor permit per year. Temporary permits that allow parking for up to two weeks are available and are limited to two per year.
3. Provide more on-street permit parking spaces as-needed within the permit area.
 - a. The metered parking spaces within the Cortez Hill residential parking permit area are at less-than desirable occupancy levels during weekdays. The parking meters could be removed to provide increased permit parking spaces, especially as resident totals increase with sales or rentals of vacant units.
 - b. Some residents have informed the CCDC project team that the permit allows them to park in metered spaces without paying and for unlimited time during normal hours of meter operation. Although this may occur, there is currently no clear signage that indicates this at the metered spaces. Therefore, an alternative to meter removal would be the installation of clear signage allowing free permit parking for unlimited durations during normal meter hours of operation.
 - c. Variable time meters, or meters allowing parking for longer than two hours, were discussed with Cortez Hill residents. CCDC and the City of San Diego have implemented the Downtown Varied Meter Rates and Time-Limits Pilot Project in areas of Cortez Hill to the west of the RPP area. Residents of Cortez Hill within the RPP area were extremely vocal in their opposition of extended meter hours, as they felt it would lead to increased commuter parking within the RPP area. Since the RPP was established based on the high use of parking in Cortez Hill by non-resident commuters, it is not recommended at this time to extend meter hours within the RPP or provide varied meter rate and time-limits within the RPP as it may lead to an increase in commuter parking.

STEP FOUR: PRICE MANAGEMENT

The fourth set of recommendations focuses on the management of parking prices. The City of San Diego is considering a recommendation to vary parking meter rates throughout downtown, as well as extending hours of meter operation as described below. Therefore, the recommendations focus on highlighting the actual cost of parking, so that the price of parking reflects the value attributed by different parking users.

Vary Parking Meter Rates and Extend Hours of Operation of On-Street Paid Parking System

As mentioned above, the City of San Diego is considering a recommendation to vary parking meter rates throughout downtown. The Plan recommends that all on-street parking should be priced according to the target market. If on-street parking is determined to be the desired parking for customers and visitors, on-street pricing should reflect market conditions to promote high turnover and short durations, so that the maximum amount of customers can use the on-street space in a given day. By following this recommendation, off-street long-term parking would cost less on a per-hour basis when compared to on-street spaces.

In the case of variable rate and time meters, a vehicle could choose to park on-street for a longer duration, and the rate would therefore reflect the longer duration. This includes motorcycle, moped and scooter parking. In the event of marked motorcycle, moped, or scooter parking, the parking rate should be equivalent to the size of the parking space (i.e., one-half the per-hour vehicle rate if the space is one-half the size of a vehicle space).

In retail and entertainment areas with a lack of available on-street parking after 6:00 p.m., it is appropriate to extend the hours of operation for the on-street paid parking system in order to increase parking turnover and ensure that on-street parking is serving the priority user (typically the customer). This can mitigate the impacts of overlapping peak activity times, reduce the impact of employee and other longer-term parking, and allow the primary parking user (usually short-term customers) to use on-street parking. It may be most useful in areas with evening retail activity such as the Horton/Gaslamp and Little Italy areas. There is currently a report awaiting the San Diego City Council's approval of variable pricing and extended hours of meter operation by location. If the City Council chooses to act on the report, it is possible that an ordinance allowing variable pricing and extended hours of meter operation would be enacted. There are a few issues to be clarified before this ordinance could be implemented, such as which entity would be responsible for monitoring the meters after 6:00 p.m. and who would be responsible for changing variable time limits. This report is based on the findings of the Downtown Varied Meter Rates and Time-Limits Pilot Project completed by the City of San Diego.

Therefore, the near-term recommendation of the Plan is for the City of San Diego to approve varying parking meter rates and extend hours of parking meter operation.

STEP FIVE: SUPPLY MANAGEMENT

The last recommendation focuses on the management of the supply of parking. In the near-term there is clearly a surplus of parking, so the greater issue becomes not the amount of parking but when and where it is available. Therefore, the recommendation proposes a method to efficiently utilize the existing supply of on-street spaces as a priority and, secondarily, recommends acquiring public parking spaces as new developments occur on a case-by-case basis.

Efficient use of Existing Parking

Efficient use of available parking spaces is the starting point for managing supply. As discussed in Sections 3 and 4, the parking demand estimates concluded that under existing conditions a surplus of parking exists during the midday and evening time periods for the overall downtown San Diego area. This is based on the assumption that all public parking is open at all hours. However, field surveys have indicated that some parking facilities in downtown are closed for parking after certain times.

Though the entire downtown indicates surplus, some neighborhoods seem close to capacity. In those cases rather than simply adding additional parking, potential restriping and conversion of parallel parking to diagonal parking could add more on-street spaces to the existing on-street supply. The Downtown Community Plan quotes a nearly 25 percent increase of parking spaces by converting parallel on-street parking to diagonal parking. The Draft Design Guidelines further indicate specific types of streets where existing parallel on-street parking could be converted to diagonal on-street parking. It is also recommended that the City of San Diego examine the efficient use of curb zones. This can address potential short-term parking needs, as future parking estimates show potential substantial deficiencies.

Therefore, the Plan recommends the continuation of exploring opportunities to modify and restripe on-street parking consistent with the policies and objectives of the Downtown Community Plan and the Draft Design Guidelines.

Acquiring Public Parking Spaces

The plan identifies locations in downtown San Diego where possible long-term parking deficits may exist. Therefore, it is recommended that CCDC seek opportunities to add public parking to new garages being planned in those neighborhoods where a long-term parking deficit has been identified in order to meet long-term demand for parking (see also the long-term recommendation section provided later in the Plan).

Summary of Recommendations by Neighborhood

The on-street occupancy survey results under existing conditions indicate that parking utilization varies by neighborhood; although overall there is a surplus of available parking in all of downtown San Diego. The parking demand analysis also helped identify the unique parking demand characteristics of each neighborhood in downtown San Diego. Survey results and field

observations indicate active interactions between certain neighborhoods, which provide the basis for tailoring specific recommendations by neighborhood.

As each neighborhood in downtown San Diego has unique characteristics and mixes of land-uses, the near-term recommendations included herein should be targeted by neighborhood and geared towards primary parking users. The following table summarizes recommendations for each neighborhood.

**Table 5.3
 Near-Term Recommendations by Neighborhood**

Recommendation		Columbia	Convention	Marina	Little Italy	Gaslamp	Horton Plaza	Cortez Hill	Civic Core	East Village
Primary User	On-street	Customers	Customers	Customers	Customers	Customers	Customers	Residents	Customers	Customers
	Off-street	Commuters	Residents	Residents	Residents	Commuters	Commuters	Residents	Commuters	Residents
Establish 85% On-Street Occupancy Trigger		X		X	X	X	X	X	X	X
Universal Wayfinding System		X	X	X	X	X	X		X	X
Universal Valet Parking Program		X			X	X	X			X
Develop Shared Parking Database		X		X	X	X	X	X	X	X
Combination Loading Zones		X			X	X	X		X	X
Refine Cortez Hill Residential Parking Permit Program								X		
Vary Parking Meter Rates and Extend Hours of Operation for On-Street Paid Parking System		X		X	X	X	X	X	X	X
Efficient use of Existing Parking		X		X	X	X	X	X	X	X
Acquiring Public Parking Spaces		X			X			X		X

Source: Wilbur Smith Associates, 2008.

5.6 Mid-Term Recommendations

Mid-term parking recommendations are based upon the current examination of parking supply versus demand in downtown San Diego (as described in Section 4). These recommendations are for a period of up to an additional five years from the Year 2013 (through 2018). As the Year 2015 approaches, the demand for parking is forecast to exceed supply in much of the downtown and though the recommendations mentioned below need to be considered now, parking supply and demand should be re-evaluated periodically (beginning five years from now) to make sure they reflect the corresponding market conditions. As noted previously, market conditions have changed

in San Diego since completion of the Downtown Community Plan and are likely to change in the future.

The following parking solutions complement the near-term recommendations described in the previous subsection, and will therefore be able to enhance the effectiveness of the Plan. These recommendations also follow the demand-based implementation approach described previously, and focus on specific elements of the demand-based approach.

Demand Management

New Parking Enforcement Techniques

One recommendation includes analyzing how pay stations can improve the efficiency of operations and reduce enforcement costs. For example, in Houston, the pay stations resulted in a 35 percent decrease in tickets and changed the role of parking enforcement officers into parking ambassadors, with the additional task of helping Houston visitors with parking and transportation issues.

The Plan recognizes that many of the new pay stations being installed across the US have the capability of providing real-time parking operation and revenue information. These pay stations can provide reports on performance that includes time of use and parking revenue per block face.

Another technology recommendation includes wireless sensors to monitor parking spaces and performance. This can be used to monitor parking operations in areas without pay stations to track peak parking utilization and time of use. Some of these systems can also use photo enforcement techniques or send information direct to enforcement personnel, thereby increasing staff efficiency and the number of citations.

Other recommended technologies exist to improve parking enforcement officer mobility and access. This includes Segways™ and other personal mobility devices. In addition, handheld devices can be used to improve the speed of parking enforcement.

The Plan notes that many of these new enforcement techniques have been investigated and described by the City of San Diego. The City presented its findings from the Downtown Multi-Space Parking Pay Station Pilot Project to the DPMG on April 4, 2007. The final report presents excellent information related to the new technologies discussed above. The Plan supports the findings of the City of San Diego and recommends the investigation of new enforcement techniques in the long-term.

Price Management

Unbundle Parking

This recommendation seeks to create incentives to separate, or unbundle, the cost of parking from residences and businesses. Unbundling parking is an essential first step towards getting people to understand the real economic cost of parking. Unbundling parking provides users with the opportunity to opt out of on-site parking and/or make alternative decisions regarding mode of

travel. Unbundled parking provides a foundation for additional on-street parking pricing policies; as the goal of unbundled parking is to reduce parking, not to subsidize residential parking through the provision of free on-street parking.

While it may already be used by the private market throughout many parts of downtown San Diego, it should still be encouraged for future development. This practice reduces the hidden cost of parking associated with residential or commercial units and allows tenants and users to make decisions based upon the market price of parking. Typically, parking is bundled or absorbed into tenant leases, hiding the true cost of parking. For illustration purposes, the price for an apartment with two parking spaces may be rented for \$1,200 per month. If the price for those parking spaces were unbundled, the price for rent for the apartment would be about \$1000 per month, plus \$100 per month for each parking space.

Similarly, if a business owner is interested in renting a downtown location which includes off-street parking, separating the cost of parking from the cost of rentable space will provide the business with the opportunity to reduce rent costs by only paying for the parking necessary. For example, small scale businesses whose employees bike or take transit, will not need parking on-site; and therefore with an unbundled parking system, the businesses would not have to pay additional rent for parking spaces that would not be used.

Currently, planned developments in downtown involving new dwelling units or commercial space would have developers selling units/space and parking spaces separately; that way someone who does not own a car and/or does not need a parking space would not be required to pay for one and would therefore result in one less vehicle in downtown. Some downtown residential developments already practice this, in terms of providing on-site parking for an additional cost.

Providing incentives for owners of residential and commercial property to unbundle parking will be evaluated further during the next Plan update.

Supply Management

Parking Trade Program

In the past, increasing parking supply was purely viewed as the need to construct additional parking, either in surface lots or parking structures (above and/or below ground). The cost for parking construction can be very expensive, with rates from \$45,000 to \$50,000 per space for structured parking, according to the Building Industry Association of San Diego County. Another consideration is the financial arrangements used to build parking supply; often lending institutions rely upon parking requirements as a means to justify loans to build the parking. However, this may result in the construction of single-purpose garages designed only to meet one use and left underutilized at other times of day.

Tables 5.4 and 5.5 displays the residential and non-residential parking requirements based upon the Centre City Planned District Ordinance (PDO). Based on current requirements, developers in

downtown San Diego are required to provide all parking on-site, which can be very expansive and lead to an increase in construction costs.

**Table 5.4
 Adopted Residential Off-Street Parking Requirements**

Use Category	Minimum	Notes
Dwelling unit	1 space per dwelling unit	
Living units	Market rate unit: 0.5/unit 50% AMI: 0.2/unit At or below 40% AMI: none	Parking based on the occupancy/rent restriction applied to specific unit
Group living	0.1% spaces/room	
Housing for senior citizens	Conditional permit review	
Live/work or shop keeper unit	1.0 space per unit	
Residential care facilities	1.0 spaces per every ten (10) beds	
Transitional housing facilities	Conditional permit review	

Source: Centre City Planned District Ordinance (PDO)

Notes:

- (1) Guest/service parking: for multiple-unit residential projects, additional parking spaces shall be provided at a ratio of one space for every 30 units. These spaces shall be permanently reserved and clearly marked for use by visitors/service only.
- (2) Off-street loading. The following standards shall apply for multiple-unit residential projects:
 - (A) 100 or more units – provide off-street loading bay.
 - (B) Loading area shall have direct access into internal circulation system and elevators.
 - (C) Loading bay shall share the parking access driveway and minimize traffic conflicts.
- (3) Motorcycle parking: one motorcycle parking space for every 20 dwelling units.
- (4) Bicycle storage: one secured storage area for every five dwelling units.

**Table 5.5
 Non-Residential Off-Street Parking Requirements**

Use	Minimum	Notes
Office	1.5 spaces per 1,000 sq ft	Less than 50,000 sq ft of office space are exempt
Commercial/retail	1.0 spaces per 1,000 sq ft	Less than 30,000 sq ft of commercial/retail are exempt
Warehouse & storage	1.0 spaces per 1,000 sq ft	
Hotel	0.3 spaces per room	Less than 25 guest rooms are exempt
Single room occupancy units	Market rate: 0.5/unit 50% AMI: 0.2/unit At or below 40% AMI: none	Based on occupancy/rent restriction applied to specific unit

Source: Centre City Planned District Ordinance (PDO)

Notes:

- (1) One motorcycle and one bicycle space provided for every twenty (20) required vehicle units.
- (2) 30,000 to 100,000 square feet of commercial space requires one off-street loading bay.
- (3) Over 100,000 square feet of commercial space requires one off-street loading area with direct access to an internal circulation system, shared parking access driveway (when feasible) and with minimal traffic conflict (wherever possible).
- (4) The North Embarcadero area (within the Port of San Diego's jurisdiction) has its own off-street parking requirements.
- (5) Existing buildings may convert from one land use to another without the provision of parking spaces (except the conversion of commercial buildings to residential land uses).

The parking requirements shown on Tables 5.4 and 5.5 could be modified to better account for transit and/or shared use. Recent downtown parking management plans in other cities recognize this cost of parking and how creative parking management strategies combined with diverse transit options can help downtowns to provide viable alternatives to the construction of new single-use parking facilities. Therefore, the plan recommends investigating the following option to modify the PDO's parking code requirements to create a parking trade program.

The recommended parking trade program would keep the current minimum parking requirements and allow for construction of a shared parking facility within 500 feet of the proposed project site. The recommendation is to also allow new development to fulfill up to 50 percent of its parking requirement through a shared parking agreement with existing buildings beyond 500 feet of the site. Shared parking facilities should be within a one-block to three-block walking distance of the proposed site (approximately 1/4 mile). Shared parking facilities may be entitled up to 1.5 spaces per off-site parking space and should be part of the conditional use permit with parking rights specified for a set period of time. For example, a parking facility with 500 parking spaces may enter into an agreement for purposes of providing parking spaces for other buildings/owners up to a total of 750 parking spaces. Therefore, if it provides parking for its own building (Building A for 500 spaces), it may only enter into a shared parking agreement(s) for an additional 250 parking spaces. This program would create incentives for new development to look for and enter agreements with existing buildings to meet their parking requirement.

5.7 Long-Term Recommendations

Long-term recommendations are based upon a need to meet future parking demand in downtown San Diego, a future parking demand that is highly dependant on changes in market conditions. Long-term recommendations address parking issues from 9 to 21 years after the date of report publication (Years 2018 to 2030). Based upon the results from the parking inventory, occupancy surveys and parking demand forecasts described previously in this document, there may be a need for additional parking supply in the long-term. As mentioned earlier in this document, these future estimates of parking supply and demand may change with market conditions. Therefore, these long-term recommendations should be evaluated and adjusted over time to address reasonably foreseeable changes in the market and associated parking characteristics.

These recommendations also follow the demand-based implementation approach and focus on specific elements of the demand-based approach.

Price Management

Implement Real-Time On-Street Variable Rate Systems

The Plan recognizes that the pay stations currently being implemented by the City of San Diego allow for variable rates. For many years, off-street facilities have used variable rates to maximize their revenue. Now, the new technology allow for variable on-street parking pricing. This can include variable rates that charge less for short-term customers and more for long-term customers. It may also be used for commercial vehicles, charging different rates for loading zones depending on time of day use. For example, New York currently uses on-street variable pricing for commercial vehicles in Manhattan to encourage quicker loading and unloading. It may also include developing on-street parking pricing programs with variable rates and no time limits. Variable rates can also have seasonal applications, charging different rates for residents and for visitors, or during a specific time of year. It may also be used to establish prices for special events. The Plan notes that the DPMG has been conducting a pilot program (described in previous sections of this report) to test varied rates and times for parking meters in selected areas of downtown San Diego. The City of San Diego is in the process of installing multi-space pay stations at the pilot study locations and other locations throughout downtown San Diego.

As a long-term strategy, the Plan recommends the implementation of variable rate systems that allow for changes to meter rates based on real-time changes to parking activity levels. This recommendation is similar to congestion pricing on roadway facilities, where the cost to use a facility is proportional to the demand or congestion level. In the long-term, multi-space meters and variable rate pricing plans can become dynamic pricing options. Dynamic pricing for on-street parking would allow the active management of on-street parking operations on a day-to-day and hour-by-hour basis. Therefore, if certain events occurred to sharply increase on-street parking demand (such as parades, sporting events, news media events, etc.), the on-street parking meter rates could be varied in order to manage the supply and demand of on-street parking. As a long-term recommendation, a dynamic on-street pricing system should be tied to a real-time off-street parking system in order to maximize the effectiveness of on- and off-street parking usage.

Additionally, issues such as real-time notification of parking rates must be clearly defined prior to implementation.

Supply Management

Increase Parking Supply when Necessary

The Plan notes that as demand increases, by using the demand-based parking management approach, CCDC and the City can maximize the use of existing parking supply; however, there may still be a need for future parking supply. Due to anticipated increases in land value and higher uses of land, it is also anticipated that surface lots will become new development opportunities and that future parking will be located in new parking structures or in underground facilities. Though additional parking spaces from these new developments will add to the existing parking supply, this may not be sufficient to meet the potential increasing demand. Therefore, there is a need to start planning for the strategic location of parking supply to meet this anticipated demand. New parking structures should become available to meet neighborhood demand when updated parking demand estimates show a substantial deficit in the near-term (zero to five years) horizon. As described in the parking demand analysis in Section 4, additional parking facilities in the neighborhoods of East Village, Little Italy, Cortez Hill and Columbia could be required to provide necessary supply for the Years 2015 and 2030. By 2030, the additional neighborhoods of Marina and Civic Core may also experience deficiencies.

The Plan recognizes that as indicated in the Downtown Community Plan and the Draft Downtown Design Guidelines, additional spaces could be generated by providing shared subterranean public parking under new and planned parks. As mentioned under the near-term recommendations section of the Plan it is also recommended that CCDC seek opportunities to add public parking to garages being built in those neighborhoods where a long-term parking deficit has been identified in order to meet long-term parking demand. In addition, exploring the use of innovative technology applications like robotic parking and parking lifts may help improve parking and cost efficiencies in new public garages. Another way to maximize on-street and off-street parking resources is to encourage modes that require less square footage per parking space; whenever possible, small spaces can be developed to serve bicycles, scooters and motorcycles.

The mode of travel for downtown residents, commuters and visitors will have a substantial impact on future parking needs. One way to reduce parking demand is to encourage increased use of transit and other non-vehicular modes in downtown San Diego. Improvements to the local and regional transit network could further reduce the number of vehicles requiring parking in downtown San Diego; as the demand analysis presented in Section 4 showed the long-term benefit of increases in transit availability and usage. Parking demand estimates for the Year 2030 high buildout scenarios showed that an increase in the transit mode share from 25 percent to 48 percent could result in a decrease in parking demand by more than 20,000 parking spaces during midday conditions. The Plan recognizes that increased transit usage and availability in downtown San Diego and the surrounding region is related to and affects the overall demand and use of parking in downtown San Diego. Therefore, the Plan supports ongoing efforts by CCDC, the City of San Diego, and SANDAG to increase the amount, usage, and availability throughout San Diego and the surrounding region.

As a part of the preparation of the Plan, an independent financial analysis was performed to determine the financial feasibility of constructing new parking facilities in downtown San Diego. The analysis examined constructing new parking structures providing up to 4,500 additional parking spaces and surface lots totaling 1,500 new parking spaces. This analysis was carried on the assumption that the Redevelopment Agency did not own land to construct the new parking structures. The financial analysis determined that it would be unfeasible for the Redevelopment Agency to purchase land, construct parking facilities and operate these facilities. The financial performance of surface lots resulted in smaller net loss than the structured facilities. The primary factor was the high cost of land in downtown San Diego. However, this cost can be ruled out if the Redevelopment Agency owned the land or if agreements exist with the property developer(s).

Therefore, as a long-term recommendation, the Plan recognizes the need to evaluate methods to increase parking supply. The near- and mid-term recommendations of the Plan stress the need to re-evaluate forecast parking demand and any potential parking deficits before constructing single-use off-street parking structures. In order to be proactive, CCDC or the Redevelopment Agency may identify potential locations where additional off-street parking may be required based on long-term forecasts and begin to work with land owners or property developers to plan for potential increased parking supply. The goals, policies and objectives of the Downtown Community Plan and Draft Design Guidelines will complement the recommendations of this plan and also address the long-term development of additional parking resources.

5.8 Summary of Recommendations

Recommendations to address near-term, mid-term and long-term parking issues, are summarized on Table 5.6.

Table 5.6
Summary of Recommendations

Method	Near-Term (2009 to 2013)	Mid-Term (2013-2018)	Long-Term (2018 to 2030)
Demand Management	Establish 85 Percent On-Street Occupancy Trigger	New Parking Enforcement Techniques	
Location Management	Universal Wayfinding System		
	Universal Valet Parking Program		
	Develop Shared Parking Database		
Time Management	Combination Loading Zones		
	Refine Cortez Hill Residential Parking Permit Program		
Price Management	Vary Parking Meter Rates and Extend Hours of Operation of On-Street Paid Parking System	Unbundle Parking	Implement Real-Time On-Street Variable Rate Systems
Supply Management	Efficient Use of Existing Parking	Parking Trade Program	Increase Supply when Necessary*
	Acquiring Public Parking Spaces		

Source: Michael R. Kodama and Wilbur Smith Associates, 2008

* Note: The Plan recognizes that the need for additional parking supply can be significantly reduced by an increase in the transit mode share for downtown San Diego commuters, visitors, and residents.

CONCLUSIONS

In the past five to seven years downtown San Diego has seen unprecedented growth in residential development and its associated boom in residential population. Combine this residential growth with thriving entertainment and dining districts (Gaslamp and Little Italy), the newly constructed PETCO Park baseball stadium, an expansion of the San Diego Convention Center, a burgeoning of hotel construction, and a continued presence of high-rise office towers for civic governance and corporate/private business operations, and it is clear that the renaissance of downtown San Diego is in full swing. While downtown San Diego has truly developed its own sense of place with a widening magnetic pull for commerce, entertainment and residential utilizations, this growth has resulted in more demand on the parking supply in the immediate term and will potentially lead to parking capacity issues in the long-term, assuming growth continues in the downtown area. As a result, this report, the Comprehensive Parking Plan for Downtown San Diego, has been commissioned by CCDC to: (1) Inventory the number of public parking spaces, on- and off-street, in downtown San Diego and within a quarter-mile radius of downtown, (2) Provide a blueprint to effectively manage and operate the existing parking supply and (3) Develop a strategic plan for the future via demand management mechanisms and selected capacity increases of parking as downtown matures in size and influence.

A variety of steps were taken in developing this report, which include an extensive surveying of the on-street and off-street parking inventory, collection of data, public outreach via workshops with stakeholders, a review of parking plan case studies from other localities in the United States and conducting a parking supply/demand analysis for the near, mid- and long-term. As a result, a broad implementation and approach strategy was developed. From this, a set of specific recommendations were carefully crafted to be consistent with the 2006 Downtown Community Plan and associated FEIR, as well as other recent planning documents addressing downtown San Diego's transportation system and infrastructure. It should be noted that improving and encouraging other means of transportation such as bus, light-rail, bike and foot to, from and within downtown should also be explored in addition to effectively managing the supply and demand for parking, which latently encourages more auto use. This Plan complements the ongoing multi-modal planning efforts of CCDC, the City of San Diego, SANDAG and other downtown stakeholders.

This Plan is a guiding document and implementation tool for use by CCDC, the City of San Diego, and other downtown stakeholders. By systematically approaching parking demand, first by understanding the users, second by applying a demand-based implementation approach and third through implementing these recommendations, CCDC and the City of San Diego will be able to effectively manage existing and near-term parking needs in downtown San Diego. Existing programs, new policies and new solutions that are currently being implemented or proposed by CCDC, the City of San Diego and other downtown stakeholders can be viewed as complementary and their relationship within the demand-based implementation approach can be seen. Therefore, the approach and recommendations should also assist CCDC and the City of San Diego to better understand and evaluate the effectiveness of the various strategies being planned and implemented.

CCDC and the City of San Diego have the ability to influence the parking system in downtown San Diego through the management of on-street parking. Therefore, this document strongly urges the City of San Diego to move forward with recommendations made by CCDC regarding meter rates, hours of operation and parking meter technologies (pay stations).

The single most influential recommendation for CCDC to positively impact parking in downtown San Diego would be the implementation of a universal wayfinding system. The Plan strongly urges CCDC to move forward with plans to design, construct and maintain a universal wayfinding system. The ultimate design of the system could be similar to other effective wayfinding systems, such as the system in Des Moines, Iowa described in this document.

Mid- and long-term recommendations have also been presented. As the Year 2015 approaches, downtown San Diego may face capacity constraints due to the demand for parking exceeding the supply. However, the nature of travel may evolve as the goals and objectives of the Downtown Community Plan are realized. If the availability, use, frequency, and connectivity of transit in downtown San Diego is increased according to goals and objectives of CCDC, the City of San Diego, and SANDAG, downtown San Diego could see a shift in travel modes from single occupancy vehicles to carpooling, transit, bicycling and walking. Therefore, this document also presents mid- and long-term recommendations that address parking supply, while also noting that surveying parking demands should be undertaken on a regular schedule (per the mitigation requirements of the 2006 Downtown Community Plan FEIR).

This Plan presents an approach and a set of recommendations that will address parking issues in downtown San Diego as the downtown continues to grow and change. This Plan will be revisited in five-year increments and the recommendations are likely to be refined as-needed. The guiding principles of this Plan, as well as complementary plans such as the Downtown Community Plan and the Draft Downtown Design Guidelines, will help downtown San Diego grow into a truly multi-modal and vibrant urban environment.