Downtown Palm Desert
DRAFT Parking Management Plan

Prepared for:
City of Palm Desert

Submitted by:

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EXECUTIVE SUMMARY

Like many similar downtown areas, Downtown Palm Desert currently is perceived to have issues related to parking. The perception is that there is insufficient parking in the city center and more parking is needed. The purpose of this study is to develop a Parking Management Plan for Downtown Palm Desert that includes near-term, mid-term, and long-term strategies to better use the existing parking and provide a mechanism to add parking as future growth occurs.

This report uses recent parking data collected by Fehr & Peers to study supply and demand and recommend future parking measures.

EXISTING CONDITIONS

Weekday data collected in July 2015 relating to parking demand, parking occupancy, and parking surveys was compiled and summarized. Key findings of our existing conditions analysis include:

- There is sufficient parking overall within Downtown Palm Desert, with approximately 45% of the spaces occupied at peak times.
- Peak on-street parking demand occurs between 12:00 PM and 1:00 PM; peak off-street parking demand occurs at 1:00 PM. Peak demand in the study area as a whole occurs between 12:00 PM and 1:00 PM.
- There are some locations, particularly along El Paseo, where there is insufficient parking at various times during the day.
- The average length of stay for on-street parking is approximately 1.8 hours. Approximately 65% of the vehicles parked on-street were parked for less than two hours. It is likely that many of these vehicles are used by retail and commercial visitors to Downtown Palm Desert.

PARKING FORECASTS

We utilized the Urban Land Institute (ULI) shared parking model and future land use growth in Downtown Palm Desert to estimate future parking demand. Under a shared parking arrangement, Downtown Palm Desert can accommodate substantial land use increases using the current excess parking supply. Areas on the western and eastern edges of Downtown Palm Desert would need additional parking supply even with shared parking, but can still have some growth before additional parking is necessary.

RECOMMENDATIONS

Based on existing and forecasted future parking conditions, we recommended eleven strategies that could be incorporated into a Parking Management Plan. Information is provide regarding the general background, local examples, pros and cons, and specific application in Downtown Palm Desert for each of the following strategies:

- Increased Parking Supply
- Shared Parking
- Parking In-Lieu Fees
- Parking Charges
- Parking Benefits District
- Urban Design
- Time Limits and Restrictions
- Employer Transportation Demand Management Programs
- Employer Parking Cash-Out
- Provide Facilities for Alternatives to Driving
- Intelligent Transportation Systems (ITS)

IMPLEMENTATION

For each of the recommended strategies we outline implementation in the near-term (1-2 years), mid-term (3-6 years), and long term (6+ years). Additionally, strategies are grouped together for more effective implementation.

INTRODUCTION

Downtown Palm Desert is a vibrant commercial and retail district located in the City of Palm Desert. This area successfully combines employment opportunities, stores, and restaurants in a walkable environment. The high level of activity in Downtown Palm Desert, while welcomed by the City, merchants, and property owners, is accompanied by a perception that there is insufficient parking within the city center.

RELATED STUDIES

CITY OF PALM DESERT GENERAL PLAN UPDATE

The City of Palm Desert is currently in the process of updating its General Plan, including the City's Mobility Element. Among its goals, the Mobility Element includes actively managing the City's system of public and private parking facilities in a way that supports future development. The suggested policies to reach this goal are as follows:

- Public Parking Facilities: Provide new public parking facilities only after applying appropriate techniques to manage parking demand and ensure efficient use of all public and private parking facilities.
- Parking Management: Actively manage public parking facilities to ensure that all potential users are benefitting from this civic resource. Continue to evaluate supply and demand and implement appropriate strategies to maximize use and cost effectiveness of public parking facilities.
- Public/Private Partnerships: Promote the use of joint public and private approaches to parking which might include leasing of private parking lots for short-term or long-term use, using public parking for temporary private functions, or the construction of joint-use facilities.
- Innovative Parking Approaches: Allow the use of innovative parking supply and demand strategies such as shared parking, unbundling parking, and other related items within privately owned parking facilities to allow an appropriate level of flexibility for these private land owners.
- Formal Parking Evaluations: Perform formal evaluations of parking capacity on a biannual basis to recognize areas where parking is under- or over-utilized.

The Mobility Element also includes the following goals:

- Livable Streets: A balanced transportation system that accommodates all modes of travel safely and efficiently. This includes policies such as considering all modes of travel in planning, design, and construction of transportation projects.

- Pedestrian Facilities: Integrated pedestrian pathways that connect residences, businesses, educational, and community uses. This includes policies such as providing adequate sidewalks along all roadways and providing pedestrians with facilities such as crosswalks, seating, buffers, shading, and other amenities.
- Bicycle Networks: Well-connected bicycle network that facilitates bicycling for commuting, school, shopping, and recreational trips. This includes policies such as requiring public and private developments to provide sufficient bicycle parking, providing bicycle facilities along roadways, and prioritizing transportation improvements that connect bicyclists to community facilities, supportive land use patterns, pedestrian routes, and transit stations.
- Transit Facilities: An integrated transportation system that supports opportunities to use public and private transit systems. This includes promoting transit service where appropriate, reviewing bus stop locations, encouraging private transit in an appropriate fashion, and maintaining safe access to transit stops for pedestrians and bicyclists.
- Sustainable Transportation: A transportation network that can be built, operated, and maintained within the City's resource limitations. This includes policies such as requiring new developments to pay for fair share of construction costs related to new and/or upgraded infrastructure needed to accommodate the development.
- Monitoring: A process to regularly monitor the performance of City transportation facilities. This applies to facilities such as major roadways, pedestrian facilities, bicycle lanes, and transit stops.
- Transportation Innovation: A transportation system which leverages emerging technologies to improve mobility for residents, employees, and visitors. This includes regularly monitoring and evaluating new vehicle technologies.
- Regional Coordination: The City transportation system operates as an integral element of the larger regional system.

The General Plan Update also includes the City Center Area Plan, an in-depth plan aimed at establishing a true city center by creating a framework, design objectives, and implementation techniques to future development. The Plan's goals are as follows:

- A vibrant, regionally significant downtown centered on the 111 corridor.
- A safe, multimodal City Center boulevard that ties the north and south sides of the downtown together into one cohesive center.
- A vibrant district that fosters an active and interesting pedestrian environment.
- An interconnected City Center that is easily accessible by the surrounding neighbors and the City at large.

Key strategies of the plan center around three areas:

- Access Improvements: These strategies include improving the pedestrian environment through improved pedestrian facilities and amenities and improving bicycle access, among other tools.
- Landscape and Urban Design Improvements: These strategies aim to improve the area's aesthetic appearance and pedestrian comfort.
- Parking Improvements: Parking in the City Center should be managed as a single system, such as through centralized shared parking structures. Additional supply should be built in an orderly fashion ahead of new development occurring as catalytic investments.

PURPOSE OF A PARKING MANAGEMENT PLAN

A parking management plan is intended to comprehensively address parking supply and demand, particularly in a downtown or mixed-use area. Historically, the tendency has been to address parking issues through an increase in supply. In many areas, the desire to increase parking supply results in constructing additional surface lots or parking structures. This approach can be very costly as a structure parking space may cost upwards of $30,000 to construct and parking structures may require hundreds of thousands of dollars to operate on a yearly basis.

Instead of addressing only supply, a parking management plan addresses the demand for parking, through both the management of existing parking and adding to the supply once it becomes necessary. In the case of Downtown Palm Desert, a parking management plan is appropriate since there is overall availability of supply within the city center at this time but there may be future shortfalls as additional development occurs. There are also existing parking shortfalls at selected locations (e.g. El Paseo) or during selected times of the day (lunchtime, mid-afternoon, or dinnertime).

REPORT OUTLINE

This report includes four subsequent chapters to address the various elements of a Parking Management Plan including:

- Review of Existing Conditions
- Parking Demand Forecasts
- Strategy Recommendations
- Strategy Implementation

EXISTING CONDITIONS

This chapter summarizes information regarding existing parking utilization and parking turnover for areas along the northern edge of Highway 111 and portions of Downtown Palm Desert south of Highway 111. Newly collected data is compiled and presented here. Figure 1 shows the study area context.

PARKING UTILIZATION

There are currently 6,851 parking spaces in Downtown Palm Desert. This includes 5,778 off-street parking spaces and 1,073 on-street parking spaces. Existing parking supply is shown on Figure 2.

Generally, parking demand peaks in the early afternoon at 1:00 PM, as shown on Figure 3. Peak demand for on-street parking spaces occurs at 12:00 PM and 1:00 PM, while peak demand for off-street spaces occurs at 1:00 PM. Table 1 summarizes the existing parking inventory and peak occupancy in Downtown Palm Desert. Chart 1 illustrates the percent of parking occupancy throughout the day.

We collected parking occupancy counts in July of 2015. Since the counts were conducted during the off-peak season for Palm Desert, an adjustment factor of 24% was applied to the counts, based on a comparison of on-peak and off-peak season observations.

TABLE 1 EXISTING PEAK HOUR PARKING OCCUPANCY

Location	Time	Inventory	%Occupancy
Study Area	1:00 PM	6,851	47%
Off-Street Parking	12:00 PM/ 1:00 PM	5,778	51%
On-Street Parking	1:00 PM	1,073	47%

Source: Fehr & Peers, 2015
Note: The data in this table includes the 24% adjustment factor.

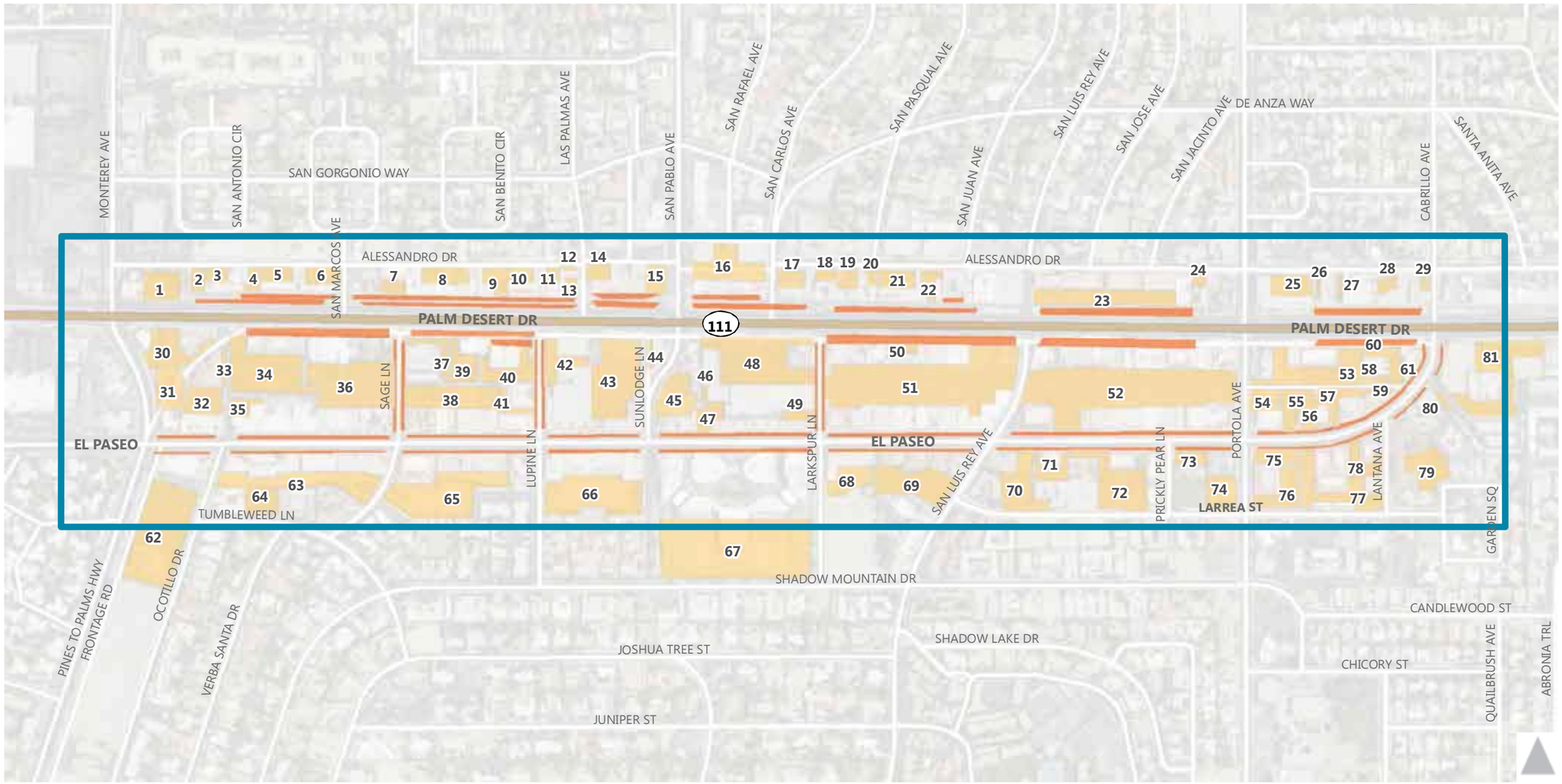


Figure 1

Context Map

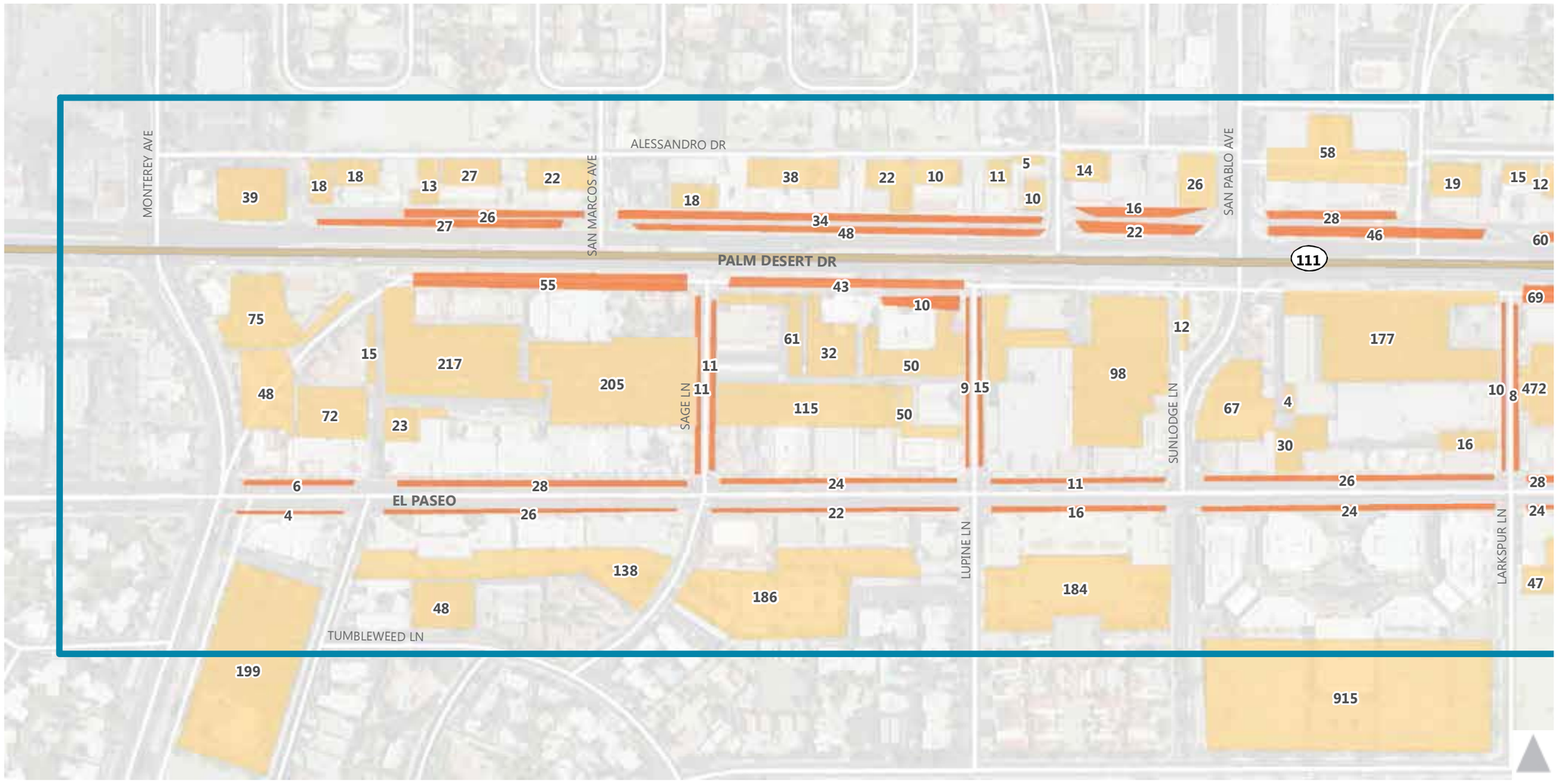
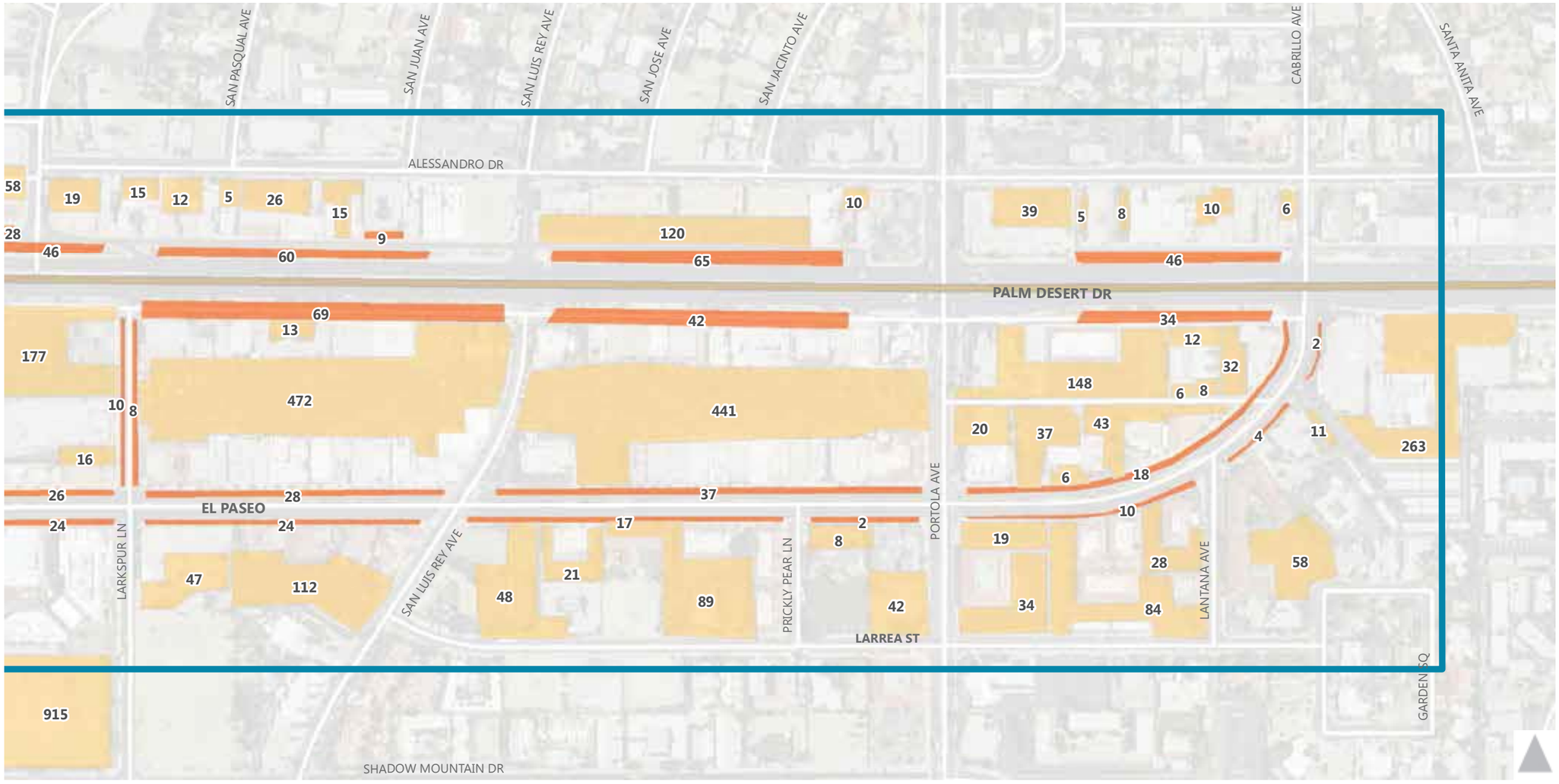


Figure 2a

Parking Supply West



Parking Lot Supply

Study Area

Parking Lot

Street Segment Parking

Figure 2b

Parking Supply East

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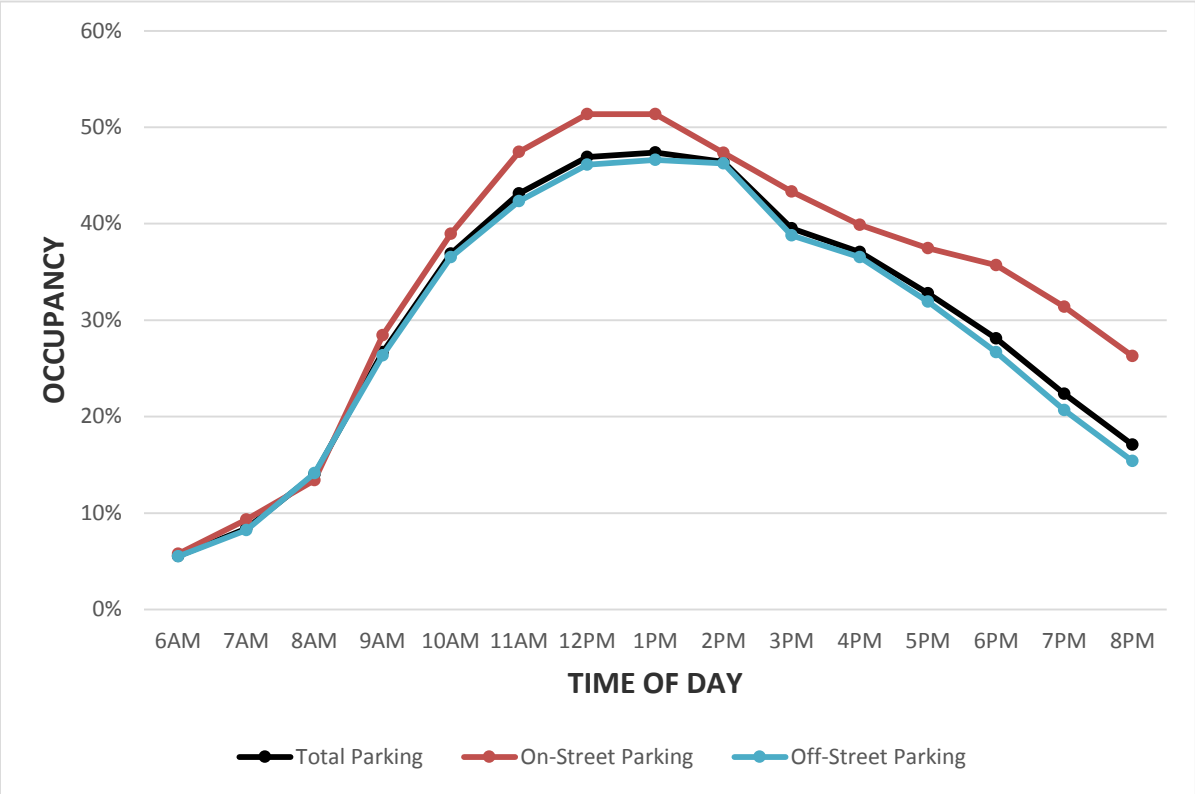
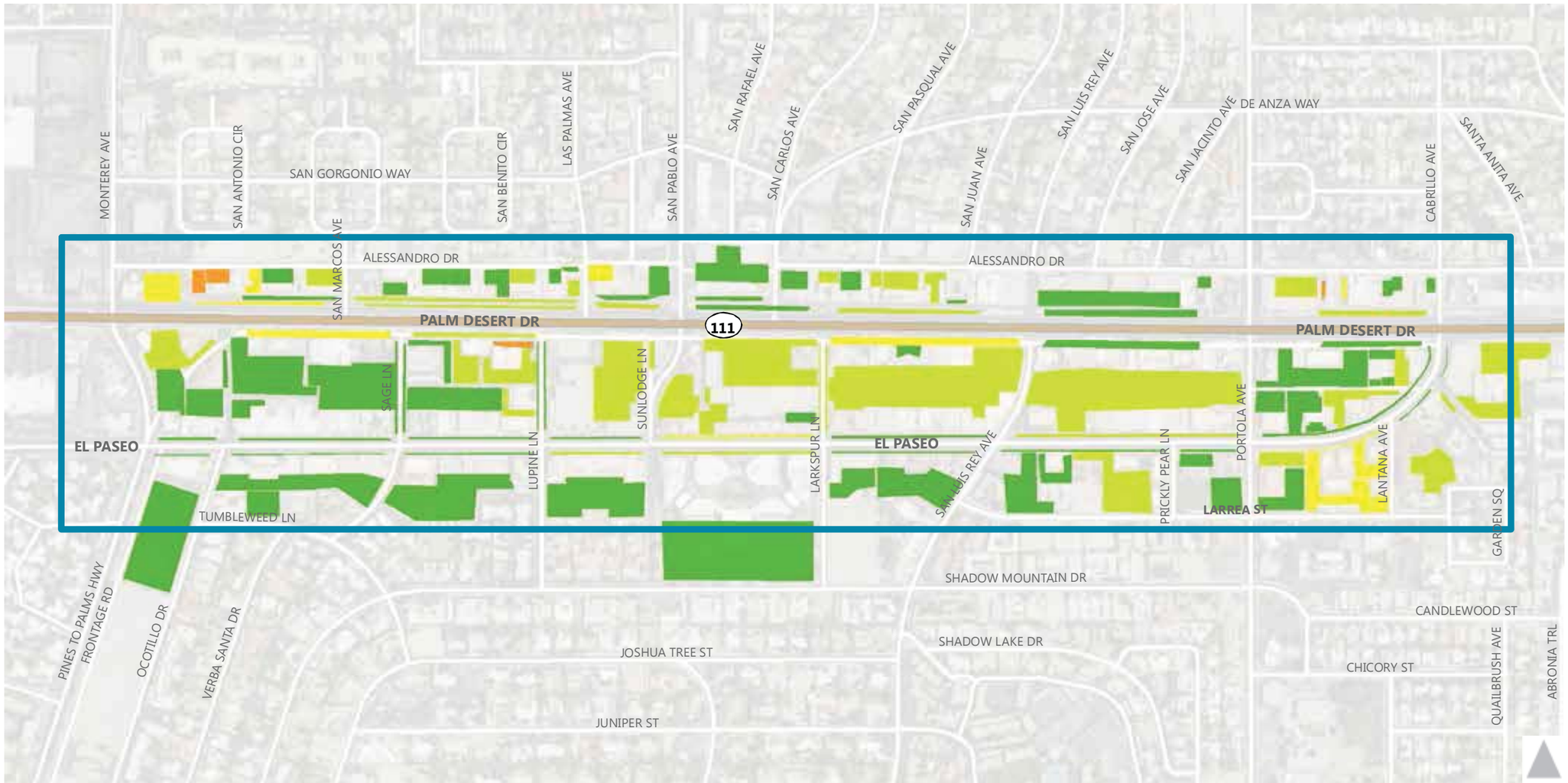
Chart 1: Weekday Hourly Occupancy



Figures 3 through 10 show observed and seasonally-adjusted parking occupancy in Downtown Palm Desert by parking lot and roadway segment. In the morning, parking utilization in the city center is generally low. Many locations experience utilization below 40%. Parking utilization increases by noon, with some parking lots and several segments along El Paseo experiencing occupancy above 80%. In the mid-afternoon

Underutilized parking in the study area.

parking utilization decreases from earlier peaks in several areas especially along El Paseo. At 7:00 PM, a large portion of off-street parking lots experience occupancy below 21%. Occupancy for on-street parking is generally low except for some segments of El Paseo which experience utilization above 80%.



Study Area

Parking Occupancy

- 0% - 20%
- 21% - 40%
- 41% - 60%
- 61% - 80%
- 81% - 100%

Figure 3

Parking Occupancy: 9 AM Observed

Figure 4

Parking Occupancy: 12 PM Observed

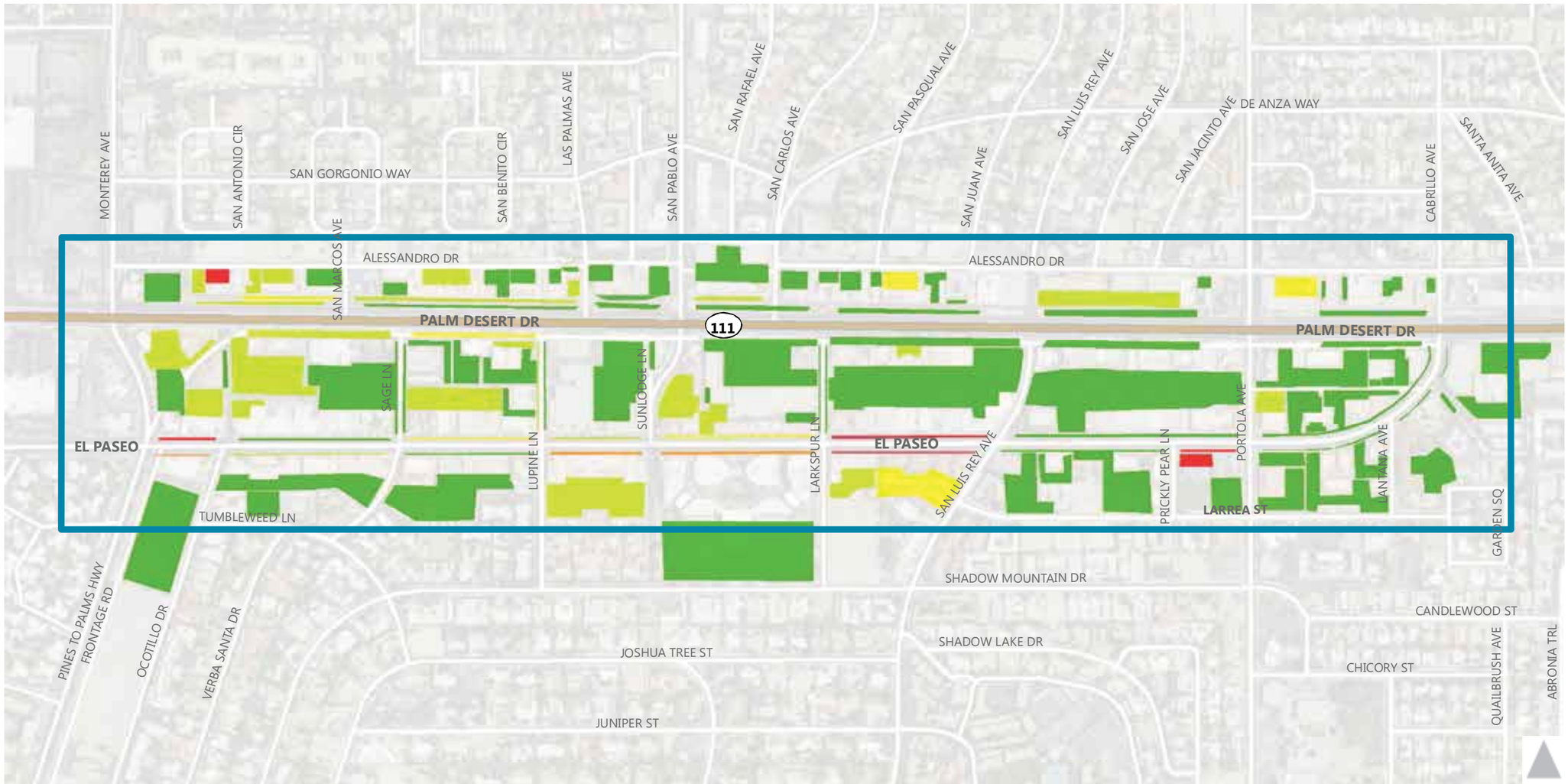
Study Area

Parking Occupancy

- 0% - 20%
- 21% - 40%
- 41% - 60%
- 61% - 80%
- 81% - 100%

Figure 5

Parking Occupancy: 3 PM Observed



Study Area

Parking Occupancy

- 0% - 20%
- 21% - 40%
- 41% - 60%
- 61% - 80%
- 81% - 100%

Figure 6

Parking Occupancy: 7 PM Observed

Study Area

Parking Occupancy

- 0% - 20%
- 21% - 40%
- 41% - 60%
- 61% - 80%
- 81% - 100%

Figure 7

Parking Occupancy: 9 AM Adjusted

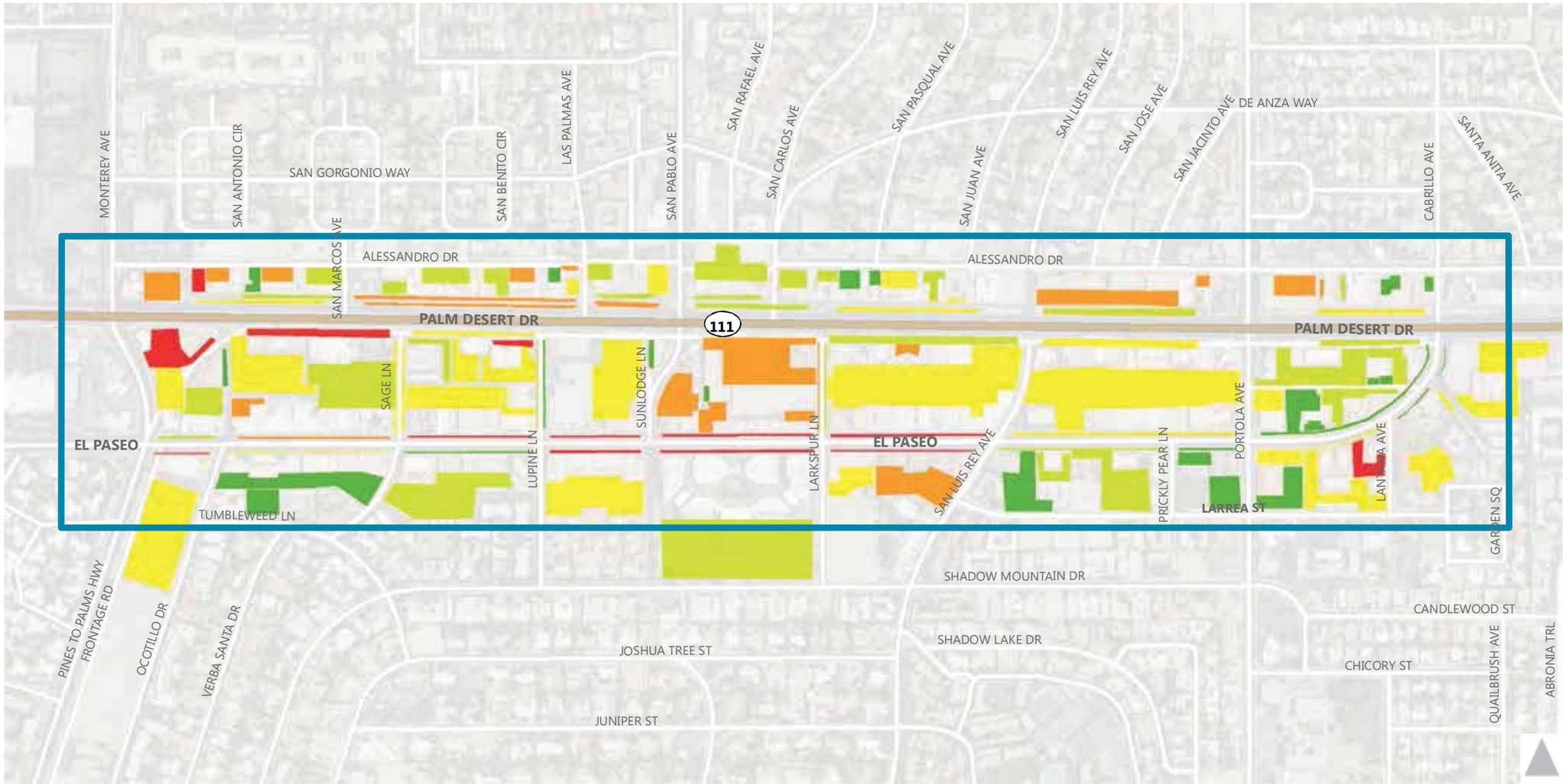


Figure 8

Parking Occupancy: 12 PM Adjusted

Figure 9

Parking Occupancy: 3 PM Adjusted

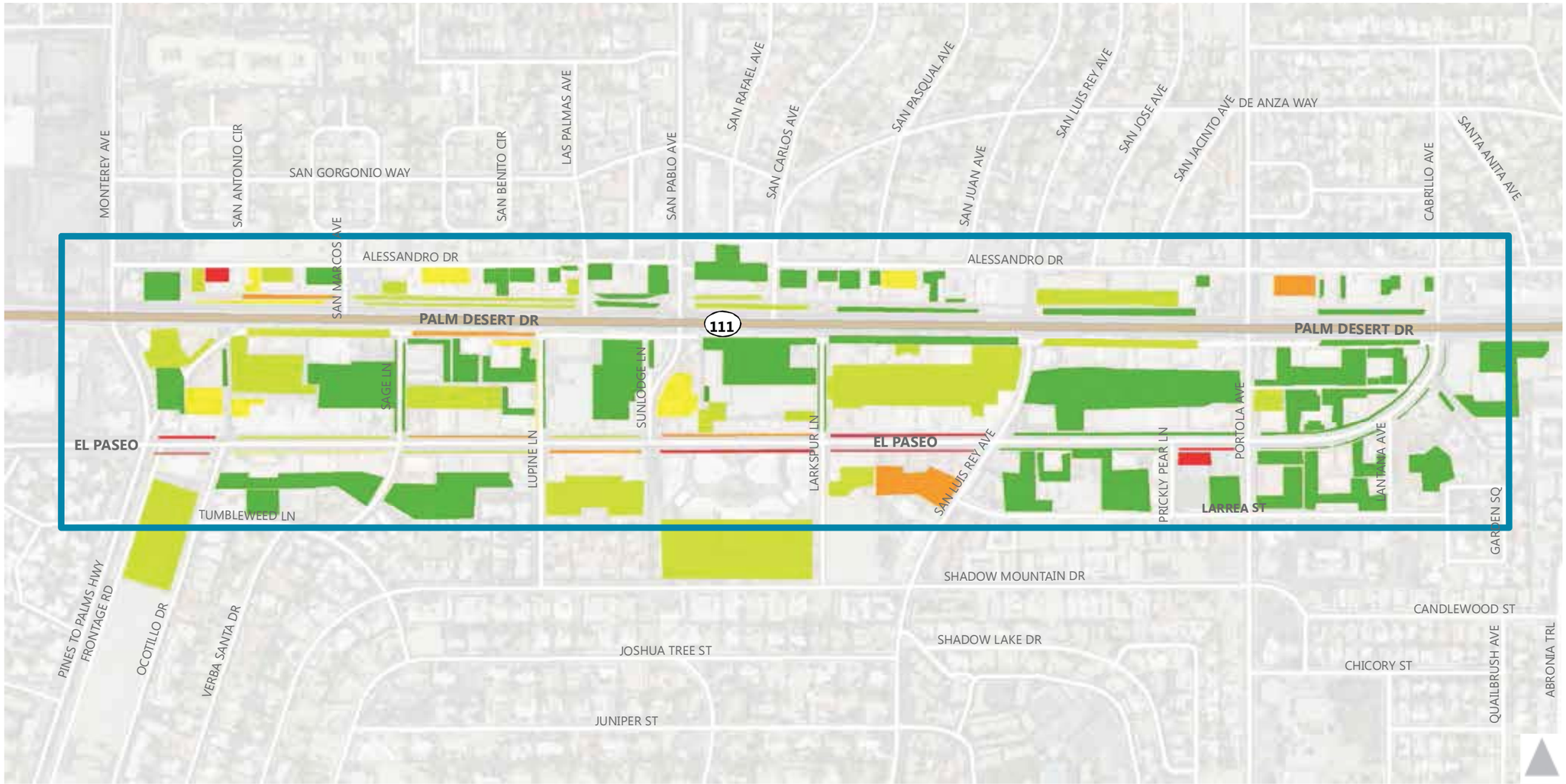


Figure 10

Parking Occupancy: 7 PM Adjusted

PARKING TURNOVER

We conducted parking turnover counts for on-street parking in the city center from 7:00 AM to 8:00 PM. The purpose of these counts was to identify the number of vehicles that remain parked over an extended period of time. To conduct this work, we recorded the license plate numbers for vehicles parked along El Paseo, Palm Desert Drive North, Palm Desert Drive South, and other streets. The average length of stay for on-street parking in the study area is shown on Figure 11.

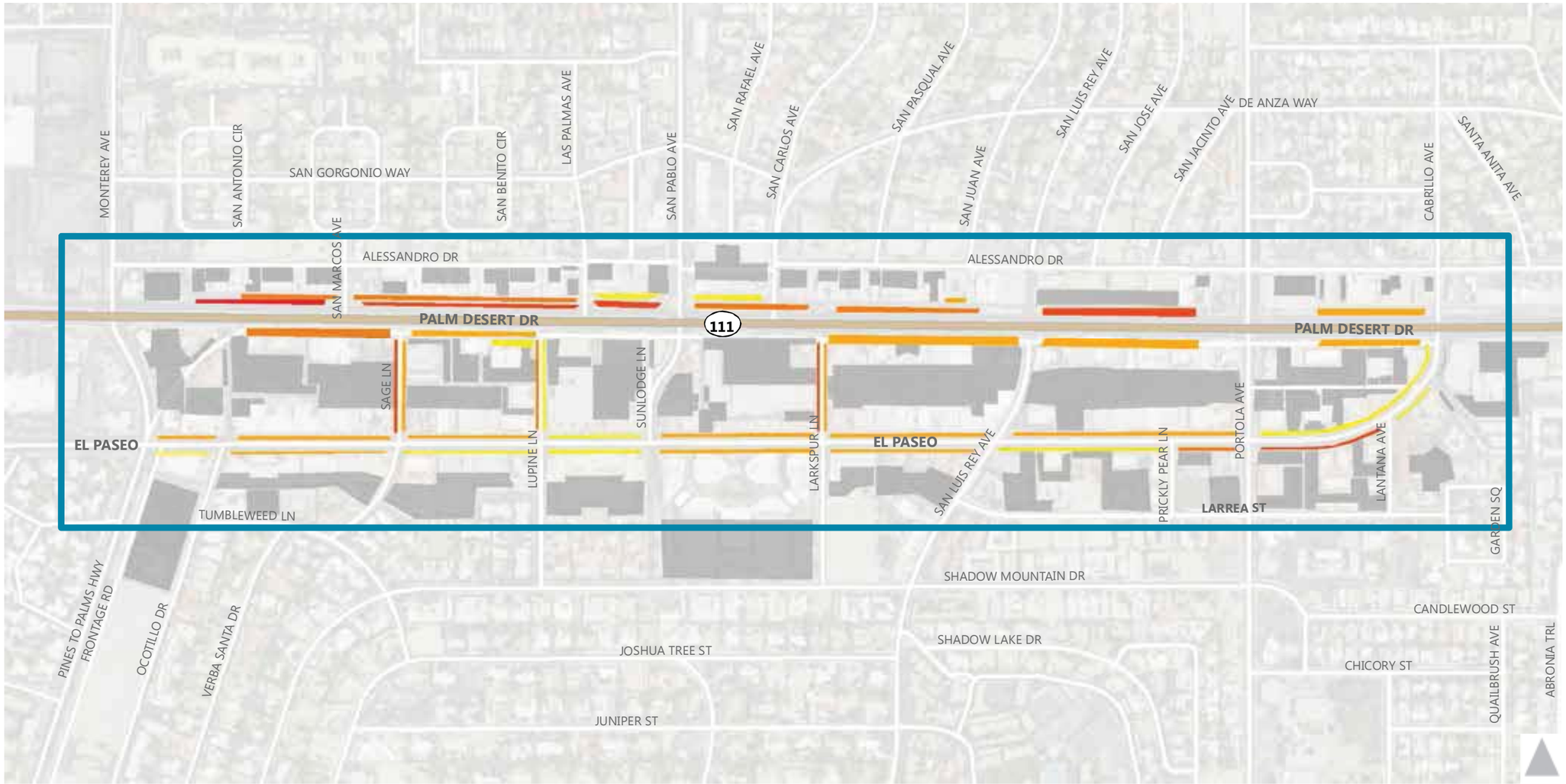
Heavily utilized on-street parking on El Paseo.

Across the entire Downtown Palm Desert, the average stay for cars utilizing on-street parking spaces is approximately 1.8 hours. 65% of vehicles stay less than two hours, and 84% stay less than three hours. Some roads have higher averages (e.g. more than three hours); these include portions of Palm Desert Drive North and the southeastern stretch of El Paseo. It is likely that that parking is utilized by employees of that area. Many sections of El Paseo have an average of less than 1.5 hours or between 1.5 and 2.0 hours. 66% are parked for less than two hours and 90% are parked less than three hours. It is likely that on-street parking on these portions of El Paseo is utilized by diners and retail shoppers.

SUMMARY OF EXISTING CONDITIONS

Based on the parking occupancy counts and parking turnover data, we can offer the following conclusions regarding existing parking operations for areas along the northern edge of Highway 111 and portions of Downtown Palm Desert south of Highway 111:

- There is sufficient parking overall within Downtown Palm Desert, with approximately 45% of the spaces occupied at peak times.
- Parking is highly utilized at some locations during certain hours of the day. For example, on-street parking along certain stretches of El Paseo experience very high occupancy during the noon lunchtime and evening dinnertime periods.
- The average length of stay at on-street parking spaces is less than two hours, most likely due to vehicles used by dining, retail, and commercial visitors to the city center, especially along El Paseo.



Study Area

Length of Stay

- Less than 1.5 hours
- 1.5 - 2.0
- 2.0 - 2.5
- 2.5 - 3.0
- More than 3 hours

Figure 11

Average Length of Stay

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FUTURE PARKING DEMAND ESTIMATES

FUTURE LAND USE AND PARKING REQUIREMENTS

Future land use projections for Downtown Palm Desert south of Highway 111 are shown in Table 2. For reference, existing land use densities and projected growth in each land use category are also included.

TABLE 2 LAND USE PROJECTIONS

Non-Residential Land Use	Existing (Sq. Ft.)	Future (Sq. Ft.)	Growth (Sq. Ft.)
General Retail	1,127,365	1,450,435	323,070
Fine/Casual Dining	234,868	352,348	117,480
Family Dining	156,578	274,059	117,481
Fast Food	46,974	76,343	29,369
Office (< 25 KSF)	11,408	59,568	48,160
Office (25 KSF – 100 KSF)	-	35,700	35,700
Medical/Dental Office	-	26,740	26,740
Bank with Drive-In	23,133	32,935	9,802
TOTAL	1,600,325	2,308,128	707,803
Residential Land Use	**Existing (DU)**	**Future (DU)**	**Growth (DU)**
Residential Rental	266	895	629
Residential Owned	386	679	293
TOTAL	652	1,574	922

Table 3 shows the minimum parking requirements for existing and future land use in Downtown Palm Desert, according to the City of Palm Desert municipal code. As shown in the table, based on existing land uses, the current minimum parking requirements in the area total 8,763 spaces. For comparison, based on future land uses and intensities in the study area the total minimum parking requirements in the area would total 14,468 spaces. This is an increase of 5,705 required spaces in the area with the projected increases in land use.

TABLE 3 STUDY AREA MINIMUM PARKING REQUIREMENTS PER EXISTING MUNICIPAL CODE

Land Use	Minimum Spaces	Required Spaces (Existing)	Required Spaces (Future)
Residential Uses			
Studio and one bedroom	2 per unit	255	616
Two and more bedrooms	2 per unit	262	633
Dwelling, single-family	2 per unit	786	1,899
Retail			
General Retail	3 per 1,000 sq. ft.	3,382	4,351
Fine/Casual Dining	8 per 1,000 sq. ft.	1,879	2,819
Family Dining	8 per 1,000 sq. ft.	1,253	2,192
Fast Food	8 per 1,000 sq. ft.	376	611
Office			
Office (< 25 KSF)	4 per 1,000 sq. ft.	46	238
Office (25 KSF – 100 KSF)	4 per 1,000 sq. ft.	-	143
Medical/Dental Office	5 per 1,000 sq. ft.	-	134
Bank with Drive-In	3 per 1,000 sq. ft.	69	99
TOTAL		8,308	13,735

DEVELOPMENT OF SHARED PARKING MODEL

We developed and calibrated a shared parking model for Downtown Palm Desert south of Highway 111. This area was chosen since it is conducive to shared parking due to its mix of land uses and can be divided into "subareas" that are walkable for people parking at centralized locations. Shared parking is the use of a parking space to serve two or more individual land uses without conflict or encroachment. The ability to share parking spaces is the result of two conditions:

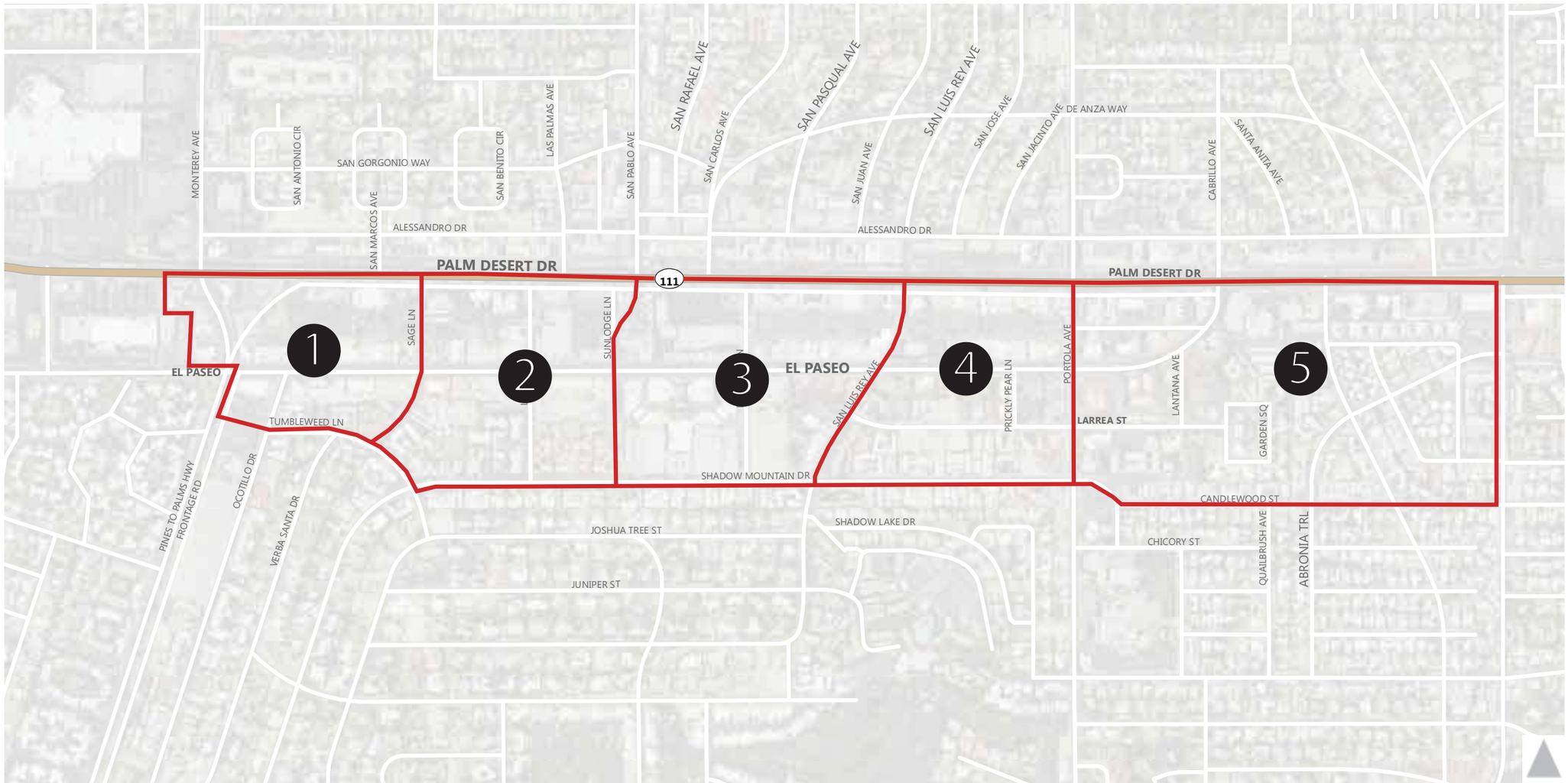
- Variation in the accumulation of vehicles by hour, by day, or by season at the individual land uses.
- Relationships among the land uses that result in visiting multiple land uses on the same auto trip.

Advantages of shared parking include being able to serve multiple land uses' parking needs with fewer parking facilities and the ability to increase development while taking advantage of existing parking supply. In other words, since different land uses would share parking spaces and less parking would be required, more development can take place in the Downtown using the existing parking supply instead of adding additional parking spaces.

The Urban Land Institute (ULI) Shared Parking Model was utilized for this task and calibrated for the study area.

FUTURE SHARED PARKING DEMAND

Existing and future land uses in the area were applied to the calibrated shared parking model for an assessment of shared parking demand under future land use intensities. This assessment was focused by dividing the area into subareas for shared parking analysis. This presents a more realistic analysis of shared parking demand since the distance people are willing to walk from parking to their destination is significantly less than the size of the total area. For this analysis, five subareas were created from the portions of the area south of Highway 111. These subareas were determined based on realistic shared parking areas as well as the structure of land use data derived from the City's traffic demand model. The five subareas are shown on Figure 12. The future land use in each subarea is shown in Table 4.



Subarea

Figure 12

Shared Parking Subareas

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TABLE 4 FUTURE SUBAREA LAND USE (TOTAL)

Land Use	Subarea 1	Subarea 2	Subarea 3	Subarea 4	Subarea 5	Total
Non-Residential (SF)						
General Retail	360,408	243,056	358,715	218,545	269,711	1,450,435
Fine/Casual Dining	104,259	58,012	78,632	50,886	60,559	352,348
Family Dining	92,276	44,432	55,464	38,104	43,783	274,059
Fast Food	24,267	12,466	16,183	10,804	12,623	76,343
Office <25k	15,520	19,200	800	2,880	21,168	59,568
Office 25 – 100	14,800	12,000	1,000	1,800	6,100	35,700
Office 100 – 500	0	0	0	0	0	0
Office > 500	0	0	0	0	0	0
Medical/Dental Office	6,640	12,000	200	1,800	6,100	26,740
Bank with Drive-In	6,467	9,427	4,627	5,347	7,067	32,935
TOTAL	**624,637**	**410,593**	**515,621**	**330,166**	**427,111**	**2,308,128**
Applied Shared Parking Ratio			2.1			
Total Non-Residential Spaces Required	**1,312**	**862**	**1,083**	**693**	**897**	**4,847**
Residential (DU)						
Residential Rental	230	90	227	179	169	895
Residential Owned	241	51	101	113	173	679
TOTAL	**471**	**141**	**328**	**292**	**342**	**1,574**
Applied Shared Parking Ratio			1.6			
Total Residential Spaces Required	**754**	**226**	**525**	**467**	**547**	**2,518**
Total						
Total Spaces Required	**2,065**	**1,088**	**1,608**	**1,161**	**1,444**	**7,365**

Table 5 shows the future shared parking demand in each subarea. For comparison, existing parking supply within each subarea is also shown, to examine whether future development within each subarea can be accommodated with existing parking supply and without the need to build additional facilities. It should be noted that this assumes direct replacement of any existing parking with new development. The shared parking ratios are 1.6 spaces per dwelling unit for residential land uses and 2.1 spaces per thousand square feet for non-residential land uses. In Subareas 3 and 5, the existing parking supply can accommodate future land use. In Subarea 2 an additional 32 spaces are needed. In Subareas 1 and 4, an additional 548 and 259 parking spaces are needed, respectively.

TABLE 5 FUTURE SHARED PARKING DEMAND AND SUPPLY NEEDED

	Future Shared Parking Demand	Existing Parking Supply	Additional Future Supply Needed
Subarea 1	2,065	1,506	559
Subarea 2	1,088	1,049	39
Subarea 3	1,608	2,068	0
Subarea 4	1,161	895	266
Subarea 5	1,444	1,557	0
TOTAL	7,366		864

Based on this subarea shared parking assessment, additional parking facilities would be required to meet shared parking demand in Subareas 1, 2, and 4 with the full buildout of assumed future land uses. However, partial buildout is possible without the need for additional parking spaces. Table 6 shows the percent of projected future land use increases that can be accommodated with existing parking for each subarea. In Subarea 2, most of the projected land use increases can be built. For Subareas 1 and 4, 58% and 50% of the projected increase can be built before more shared parking facilities are needed.

TABLE 6 FUTURE LAND USE ACCOMODATED WITH EXISTING PARKING SUPPLY

Subarea	Percent of Future Land Use Built
1	58%
2	93%
4	50%

STRATEGY RECOMMENDATIONS

Based on our review of the existing and future parking conditions in Downtown Palm Desert, we determined that there are several strategies that could be incorporated into a Parking Management Plan. The recommended strategies are listed below:

- Increased Parking Supply
- Shared Parking
- Parking In-Lieu Fees
- Parking Charges
- Parking Benefits District
- Urban Design
- Time Limits and Restrictions
- Employer Transportation Demand Management Programs
- Employer Parking Cash-Out
- Provide Facilities for Alternatives to Driving
- Intelligent Transportation Systems (ITS)

For each recommended strategy, the following information is provided:

- General Background
- Examples of Other Cities Applying This Technique
- Pros and Cons of the Approach
- Application in Downtown Palm Desert

Additional information regarding the timing and phasing for implementation of these strategies is provided in the next section.

RECOMMENDED STRATEGY #1: INCREASED PARKING SUPPLY

GENERAL BACKGROUND

Regardless of the various management techniques to reduce parking demand and the necessary parking supply, additional parking supply may be necessary if development continues to occur. If a substantial number of parking spaces are required, then either a parking lot or a parking structure would need to be constructed. Parking structures are sometimes funded through the issuance of bonds, which are then repaid

through revenue generated by the garage and other parking facilities and/or by parking in-lieu fees that developers pay as an alternative to supplying parking on-site. Currently, the City has substantial funds available due to existing bonds issued available for this strategy.

EXAMPLES OF OTHER CITIES APPLYING THIS TECHNIQUE

Examples of cities in Southern California building parking garages in response to increased parking demand are extensive. In fact this strategy has been the default response in many municipalities until recently. Cities with extensive networks of public parking garages include:

- Fullerton
- Santa Monica
- Riverside

PROS AND CONS OF THE APPROACH

One of the advantages of building additional supply is that increased parking demand due to increased development can be accommodated. Additional parking supply can help avoid potential issues from underestimating demand and suffering from too little supply, which can increase traffic looking for parking and turn business patrons away. Another positive aspect of building additional parking structures is that this method usually garners support from local business owners.

However, building additional parking structures does have its drawbacks. The main issue is cost. Parking garages can cost millions of dollars to construct and hundreds of thousands of dollars to maintain. One possible revenue source to address these costs would be funds the City has secured through issuing bonds. The also take up land that can otherwise go to denser retail development. Also, building additional supply can potentially encourage more driving to the district, creating additional vehicle traffic in the area.

APPLICATION IN DOWNTOWN PALM DESERT

The City of Palm Desert should increase parking supply in the Downtown in the long term in order to accommodate increased development. Shared parking should be implemented in the Downtown, however even with shared parking additional supply would be required in the analyzed subareas. The implementation of parking in-lieu fees (with developments participating in shared parking) can help fund the necessary additional supply in preparation of when increased development exhausts the existing shared parking supply. The future supply should be centrally located within each subarea. For example, the City can build a parking structure between Subareas 1 and 2 and a parking at the center of Subarea 4.

RECOMMENDED STRATEGY #2: SHARED PARKING

GENERAL BACKGROUND

Source: Urban Land Institute

Shared parking is the use of a parking space to serve two or more individual land uses without conflict or encroachment. The ability to share parking spaces is the result of two conditions:

- Variation in the accumulation of vehicles by hour, by day, or by season at the individual land uses.
- Relationships among the land uses that result in visiting multiple land uses on the same auto trip.

When a City or District decides to implement shared parking instead of enforcing dedicated minimum parking requirements on each individual land use, it is able to accommodate the various uses' demand with a lower parking supply. This means fewer dedicated facilities will need to be constructed in favor of fewer shared facilities that still serve the demand generated by all the uses in the area. Furthermore, a City or District that converts an area's parking to shared parking can continue increasing development while efficiently utilizing

existing supply; this means additional development can be accommodated with little or no additional parking, or with less parking than would otherwise have been built with dedicated parking requirements.

EXAMPLES OF OTHER CITIES APPLYING THIS TECHNIQUE

Shared parking has been studied and implemented in several cities in Southern California, including (but not limited to):

- Brea (Central Park Village)
- Long Beach (Downtown)
- Manhattan Beach (Downtown and North End districts)
- Palm Springs (Central Business District)
- Riverside (Downtown)
- Redlands

PROS AND CONS OF THE APPROACH

Shared parking can be a way to more efficiently use parking with many advantages. For example, more development can be accommodated, especially within the existing space that otherwise would have gone to build more parking, and without the need to build more (or as much) parking as development intensifies. This also results in less land being dedicated to parking. Without the need for as much expansive parking, development can be denser. It can also be cheaper, since the burden of building expensive parking structures can be somewhat reduced on developers.

Shared parking does have its limitations. For example, its usefulness is limited by the proximity of destinations that share parking facility. Shared parking can't be a blanket strategy applied to any district or area that wants to reduce parking requirements. Shared parking is only effective as far as people are willing to walk; this means pedestrian facilities can be a limiting factor as well. Furthermore, during analysis and implementation internal capture can be overestimated, especially for retail uses; this can result in an undersupply of parking. Also, there is the risk of inadequate capacity during unusual peak demand periods.

APPLICATION IN DOWNTOWN PALM DESERT

Shared parking can be implemented in Downtown Palm Desert in conjunction with the City Center Area Plan to accommodate increased development with reduced parking supply since various land uses would not need to provide dedicated parking facilities. According to existing parking supply and demand data,

there is excess supply throughout the area. By implementing shared parking, the City can use this excess supply to increase development. Based on the subarea analysis of shared parking for future development, shared parking can accommodate full land use buildout in portions of Downtown. For some subareas, additional supply is needed even with shared parking, but is still lower than if dedicated parking was built for each development. Recommended shared parking ratios are 1.6 spaces per dwelling unit (residential) and 2.1 spaces per thousand square feet (non-residential).

Parking demand should be monitored as development increases to make sure demand does not exceed supply. Also, as development increases, this strategy can be combined with parking in-lieu fees to fund the construction of the necessary additional shared supply at the subareas noted in the analysis ahead of those development thresholds. These fees can also be used to improve the pedestrian environment to and from parking to ensure that people are willing to park at more distant locations and walk to their Downtown destinations.

RECOMMENDED STRATEGY #3: PARKING IN-LIEU FEES

GENERAL BACKGROUND

In some areas, it isn't efficient or possible to require separate parking facilities for individual developments or uses. Rather, it makes more sense to have the parking at one or a few centralized locations in the district. This can improve the pedestrian environment, increase density, and reduce automobile traffic through the district especially due to drivers searching for open spaces. In order to accomplish this, the local municipality can give developers the option of paying a parking in-lieu fee to the city instead of supplying the necessary parking on-site. Then, the city can use this fund to build centralized public parking structures in the district. These in-lieu fee programs can either be voluntary or required for developers.

Source: Flickr.com

Although not always the case, parking in-lieu fees can be a method to fund and implement shared parking for a district. The local municipality would build the central public parking structure, but would adjust the parking supplied at each structure based on shared parking demand.

EXAMPLES OF OTHER CITIES APPLYING THIS TECHNIQUE

Parking in-lieu fees are offered in several cities in Southern California, including:

- Long Beach (Downtown)
- Sana Monica (Downtown)
- Hermosa Beach
- Palm Springs (Central Business District)
- Claremont (Claremont Village District)

PROS AND CONS OF THE APPROACH

Parking in-lieu fees offer several advantages over minimum on-site parking for developments. For example, districts that collect in-lieu fees and build centralized public parking structures improve the pedestrian environment, increase development density, and reduce automobile through traffic. In-lieu fees can also be a mechanism to fund and implement shared parking when the city builds public parking lots that accommodate reduced shared parking demand.

However, there can be a perceived difference in the attractiveness of various developments in a district if some developers choose to offer on-site parking while others pay into the in-lieu fees for a central parking structure, especially if those paying into the fund are significantly far from the parking (e.g. too far for walking). This can be solved by carefully positioning parking structures in a district or making in-lieu fees required for developers rather than optional. Also, the delay collecting the fees and building structures can result in parking undersupply in an area. Furthermore, if not paired with shared parking, the structures built from these fees can result in oversupply and inefficient parking use.

APPLICATION IN DOWNTOWN PALM DESERT

The City of Palm Desert should replace its minimum parking requirements with parking in-lieu fees for new developments, with developers participating in the shared parking supply instead of building on-site facilities. These funds can be put aside to help build the necessary future shared parking supply in parts of the Downtown as development outpaces existing supply. Funds can also go towards improving the pedestrian environment to ensure that people will utilize shared parking at locations more distant from their destinations. The City can use a standard price per space (for construction and maintenance) that would otherwise have been required of the development under its minimum parking requirements as a

basis for determining the parking in-lieu fees for new developments in Downtown Palm Desert to pay the City.

RECOMMENDED STRATEGY #4: PARKING CHARGES

GENERAL BACKGROUND

Parking charges for public parking serve a variety of uses. In some cases, charging for highly desired spaces, such as on-street spaces, serves to manage the demand and create parking space turnover. In other instances parking charges are a revenue source that can pay for streetscape improvement, maintenance, and the construction of parking garages. A key issue related to parking changes is setting the optimal level of the charges. Parking charges which are set too high may discourage parking and actually lead to less revenue than lower parking charges. Parking charges which are too low may not generate sufficient revenue and also may not be effective in managing demand.

There are several items related to parking charges which include pay stations, parking validation or variable rates, and discounted employee parking. Pay stations are replacing parking meters in many cities. A pay station might be placed every block instead of at each parking space. To make their usage more convenient, many pay stations accept credit cards, cash, and coins.

Historically, many parking garages and parking meters used set rates per hour which did not vary throughout the day. Some parking facilities use variable rates which might include the first 90 minutes free, and $2 per hour for each hour after that with a maximum per day of $16. By allowing the first 90 minutes to be free, there is no disincentive for casual shoppers and diners who might only be staying 30 minutes. Related to this variable pricing, some jurisdictions allow for restaurants and shops to validate parking whereby the first hour or two hours of parking are free. Validation programs are also oriented towards casual shoppers and diners.

EXAMPLES OF OTHER CITIES APPLYING THIS TECHNIQUE

Several cities in Southern California employ parking charges for on-street and off-street parking:

- Huntington Beach
- Los Angeles
- Pasadena

- Riverside
- Santa Monica

PROS AND CONS OF THE APPROACH

Charging for parking has many advantages. For example, the City can manage demand and generate revenues. Higher turnover can increase access to retail locations and increase retail sales. Also, revenues from parking can serve a variety of purposes. Revenues can go towards building additional supply (if deemed necessary) or improving the pedestrian environment and streetscape in the area.

Free parking in Downtown Palm Desert

Implementing parking charges in an area for the first time can be difficult. Residents, business owners, and other visitors to an area may not be receptive to the idea of paying for parking where they didn't have to before, regardless of any advantages that may come from charging to parking. Also, if the parking charges aren't monitored and adjusted to the proper price as needed they will not have the desired effect. Parking that is too inexpensive will not encourage turnover or generate enough revenue as intended. Parking that is too expensive would merely discourage patrons and make retail at a location less attractive. Prices must be variable and adjusted with regular monitoring.

APPLICATION IN DOWNTOWN PALM DESERT

There are potential benefits for Palm Desert to implement parking charges at locations in its Downtown as part of its Mobility Element policy of improved parking management. For example, parking meters can be installed at portions of El Paseo that currently experience high demand during certain hours of the day and low turnover. In addition to encouraging turnover and more efficient use of parking on El Paseo, this strategy can provide funds that can be used to improve the pedestrian environment or to build the needed parking supply for future development. The City should coordinate with the El Paseo Business Improvement District in deciding which locations are best suited for parking charges.

RECOMMENDED STRATEGY #5: PARKING BENEFITS DISTRICT

GENERAL BACKGROUND

A Parking District is an entity that is responsible for managing parking supply within a City, typically within a Downtown Area. Some tasks that a Parking District can perform would include:

- Setting parking limits
- Collecting parking revenues
- Building and maintaining parking facilities
- Operating information programs
- Applying parking revenues towards streetscape renovations and other improvements to the area

Parking Districts can be set up either as a body directly under the authority of a City or through a joint effort between a City and a Merchants Association or Business Improvement District. Parking Districts in California will require the City to enact an ordinance describing the boundaries, duties, and organization of the District. Revenues stay within the district, helping fund improvements.

EXAMPLES OF OTHER CITIES APPLYING THIS TECHNIQUE

Several cities in Southern California have Parking Districts, either managed by the City or by local businesses. These include:

- Brea (administered by City and local businesses)
- Pasadena (administered by Old Town businesses)
- Pomona (administered by City and local businesses)
- Santa Monica (administered by City)

PROS AND CONS OF THE APPROACH

Source: PalmSprings.com

One main benefit of a Parking District is that it creates a group who is focused solely on parking. Instead of tasking City Redevelopment Staff or Planning Staff with parking in addition to their regular duties, there is a single group focused on that issue. When a Parking District is composed mainly of merchants and business owners, they also have a vested interest in ensuring that there is sufficient parking and that the parking operates in an efficient manner. Also, the funds can be used for a variety of improvements including building additional parking supply, improving the pedestrian environment and streetscape in the area, security, building improvements, or anything else that local businesses deem necessary to bring patrons to the area. Also, guaranteeing that parking revenues stay within the District can help increase support for implementation.

The disadvantage of a Parking District is that there is a potential for conflicts to occur between City Staff and the Merchants. These conflicts might occur because of disagreements over when to add new parking facilities, changes to parking charges and time limits, and other related issues. Problems with Parking Districts can also arise when there is turnover among the business owners and merchants if one of these people is a major participant in the District. This issue is more likely to occur within Parking Districts for smaller downtown areas.

APPLICATION IN DOWNTOWN PALM DESERT

The City already has the El Paseo Business Improvement District established in its Downtown. The City should work with the BID to establish a parking district that can be used to implement strategies such as parking meters, pedestrian enhancements, and streetscape beautification. The BID can work with the City to decide where meters are ideal and how they should be priced; revenue would remain within the parking district to put towards these improvements. However, all decisions of the Parking District should be subject to final approval by the City Council. This measure will ensure that the City retains final authority over the Parking District's decisions and acts as an arbiter regarding any serious disagreements. Furthermore, the

BID's boundaries should be expanded or adjusted to include the areas of Downtown that will fall into strategies such as shared parking.

RECOMMENDED STRATEGY #6: URBAN DESIGN

GENERAL BACKGROUND

Urban design features can make more distant parking spaces known to commuters and enhance pedestrian connections to those spaces by making the walking trip more pleasant. This includes a variety of techniques such as:

- Improving sidewalk conditions (width, quality, shading, etc.)
- Implementing pedestrian-oriented wayfinding and information
- Improving pedestrian crosswalks
- Traffic calming

Improving the pedestrian environment encourages visitors to use parking spaces that are more distant from their destination, allowing a more efficient use of the local parking supply.

EXAMPLES OF OTHER CITIES APPLYING THIS TECHNIQUE

Old Town Pasadena, through its Parking District, uses parking revenues to improve pedestrian facilities including those to and from parking lots and structures.

PROS AND CONS OF THE APPROACH

Pedestrian scramble in Pasadena, CA.

An advantage of improving urban design for pedestrians is that it serves all users, not just those parking and visiting the area. Any improvement to sidewalks and other facilities also affects those that are walking to the district and visiting different shops.

Another advantage of improving the pedestrian environment is that it allows for a more efficient use of parking supply. Visitors can be encouraged to use more distant (perhaps underused) parking locations and walk to their destinations rather than try to find parking directly around their destination. Shared parking facilities can benefit from this. Circulation can also be improved by reducing traffic through the area, looking for parking at high-demand locations.

There can be barriers to significantly improving the pedestrian design of a district. First of all, improvements can be expensive depending on the extent of the area being improved. Also, any sidewalk or landscaping improvements that affect parking or storefronts may be met with resistance from local business owners.

APPLICATION IN DOWNTOWN PALM DESERT

Palm Desert can use urban design to implement its other strategies. For example, improved pedestrian facilities would walking a more attractive mode. This can help the City implement its shared parking program since people would be more willing to park at a central shared location and walk a little further to retail destinations. Potential revenue sources for this include parking in-lieu fees and parking meters; the City can work in conjunction with the El Paseo Business Improvement District to decide on the best possible urban design improvements. Recommended landscape and urban design improvements in the City Center Area Plan, which aim to improve the area's aesthetic appearance and pedestrian comfort, can be implemented as part of this strategy, although additional improvements can be implemented based on the location of future parking structures and connecting pedestrian paths. The Plan includes strategies such as median landscaping, buffered bicycle lanes, improved streetscape, intersection landscaping, and mid-block pedestrian crossings.

RECOMMENDED STRATEGY #7: TIME LIMITS AND RESTRICTIONS

GENERAL BACKGROUND

Time limits are employed to encourage parking turnover and are perhaps the simplest and cheapest way to control the uses of on-street parking facilities. Short-term time limits and restrictions during certain hours of the day discourage people from parking too long at on-street parking spaces directly in front of high-traffic retail locations and instead encourages them to park at other less-used parking facilities.

EXAMPLES OF OTHER CITIES APPLYING THIS TECHNIQUE

Parking time limits and restrictions are widely used in many Southern California cities such as Los Angeles and Riverside. This technique tends to be used in downtown districts, major retail districts, and along major corridors.

PROS AND CONS OF THE APPROACH

Time limits can be effective in generating turnover in more highly-desired or premium spaces. As often is the case in many downtown areas, parking issues most commonly occur only in selected areas. Time limits have the effect of encouraging employees and other long-term parkers to park in spaces without time limits, thereby freeing spaces for customers who do not require all day parking. High turnover can also have a positive impact on retail sales. Time limits are also a cheap and easy way to manage demand at certain locations.

Source: SafetySign.com

Implementing time limits at a location for the first time or adjusting existing time limits can be difficult. Residents, business owners, and other visitors to an area may be resistant to the idea of time limits where there was previously no restriction. The same can apply to more stringent restrictions at a location where time limits already exist. Business owners can feel that the time limits may discourage customers from visiting. Also, monitoring can be difficult, especially if workers or visitors attempt to evade the hourly limits through moving their car from one space to another throughout the day.

APPLICATION IN DOWNTOWN PALM DESERT

According to the existing conditions analysis, some on-street parking facilities in Downtown Palm Desert experience low turnover. For example, there are portions of Sage Lane, Larkspur Lane, and El Paseo east of Portola Avenue where the observed average length of stay was over three hours. Currently, there are a limited number of on-street parking spaces that have time restrictions. The City should work with local merchants to identify locations that can benefit from time restrictions, as well as decide on when time limits should be in effect and how restrictive they should be. Potential locations for time limits include those identified as having low turnover, with time limits focused on the time of day where demand was observed to be highest. The City should regularly monitor on-street parking with license plate surveys to see if there are changes in turnover that necessitate time limits at other locations.

RECOMMENDED STRATEGY #8: EMPLOYER TRANSPORTATION DEMAND MANAGEMENT (TDM) PROGRAMS

GENERAL BACKGROUND

One way to reduce parking demand itself is Travel Demand Management (TDM) which attempts to reduce the number of persons needing or wanting to drive, and hence reduces the number of parking spaces needed.

The majority of TDM strategies relate to work related trips, particularly on the employment end. TDM can be classified into three broad categories, which include:

- Informational: These types of strategies provide information about ride sharing and other alternative travel modes with the thought that when more information is available about travel choices, then commuters are more likely to use modes other than driving. Most TDM plans include some level of informational strategies.
- Incentives: These types of strategies provide financial incentives for the use of alternative travel modes. For example, providing free transit passes to employees is a typical TDM measure. Many TDM plans or programs have some level of financial incentives, but not all programs do so.
- Disincentives: Disincentive-based strategies involve charging or assessing fees for driving or using automobiles. These types of strategies aren't used very often, with the exception of parking charges, as previously described.

EXAMPLES OF OTHER CITIES APPLYING THIS TECHNIQUE

TDM strategies of various sorts are used throughout Southern California, although the level of implementation varies significantly. There also differences in whether Cities have mandatory or voluntary TDM programs for employers.

One example is the City of Santa Monica, which requires through a City Ordinance that new developments adopt plans to reduce vehicular trips and emissions. In the City of Irvine, property owners in the Irvine Spectrum district fund the Spectrumotion program which provides financial assistance to commuters who take alternative transportation modes to the single-occupant vehicle; the program also includes emergency ride home services in case an emergency arises.

Source: SunLine Transit Agency

With the passage of SB 743, automobile delay is being phased out as a level of service metric in favor of other measurements such as vehicle miles traveled (VMT). With this shift, recommendations are being made on thresholds and mitigations that will replace existing standards. TDM is seen as a way to reduce automobile use and thus reduce VMT impacts for new developments. With this change in level of service across California, TDM methods will likely become more popular in municipalities looking for ways to help developers mitigate impacts.

PROS AND CONS OF THE APPROACH

A significant positive aspect of TDM is that it provides a cost-effective way to reduce the need for parking spaces – fewer people parking has the same effect on providing sufficient parking as building additional spaces.

One negative issue related to TDM is one of administration – the most effective TDM programs are those with full-time staff who aggressively promote the benefits and use of TDM.

APPLICATION IN DOWNTOWN PALM DESERT

Currently, the City of Palm Desert municipal code requires TDM for non-residential developments which employ 100 or more people. In the Downtown, the City can extend this to all employers, including those with fewer than 100 employees. Additionally, the City should work with the El Paseo Business Improvement District to implement TDM in the downtown. Businesses will be able to pool their and the City's resources, including funds from parking charges, in-lieu parking fees, and other revenue sources. The businesses can

then implement TDM both informational strategies and incentive strategies such as transit passes. The City should also hire a dedicated TDM Coordinator or designate a staff person to fill that role. This staff person's responsibilities would include monitoring among businesses to analyze mode share and TDM effectiveness and assess if changes in strategies are necessary.

RECOMMENDED STRATEGY #9: EMPLOYER PARKING CASH-OUT

GENERAL BACKGROUND

Under a parking cash-out program, an employer offers to pay workers the cash value of the cost of a parking spaces that would otherwise have been provided to them, instead of offering them the parking space. Many employees choose to take this cash and commute to work with a carpool, transit, or other commute work. Generally, this strategy doesn't cost the employer anything additional since it would otherwise have gone to paying for employee parking.

Source: RGBStock.com

EXAMPLES OF OTHER CITIES APPLYING THIS TECHNIQUE

Currently, California has a parking cash-out law at the state level. The state requires certain companies, government agencies, and other employers to offer employees parking cash-out.

The South Coast Air Quality Management District, which manages the Los Angeles metropolitan air basin, has its own employer-based parking cash-out rules for workplaces with more than 50 employees. The SCAQMD differs in some ways from the state law, including additional mandatory record keeping for monitoring purposes.

PROS AND CONS OF THE APPROACH

A parking cash-out strategy would be easy to implement. It would encourage reduced employee parking without costing the employer anything that wouldn't have otherwise gone to paying for employee parking spaces. With the extra cash, employees can be encouraged to use other commute modes such as carpooling or public transit. It also doesn't force employees to pay for a parking space they wouldn't otherwise want.

However, it can be hard to monitor compliance and effectiveness. At the state level, it has been difficult to monitor how many employers and employees are participating, as well as how much money employers offer to cash-out. A city with such a program would need to monitor with data from employers, perhaps through workplace surveys. SCAQMD shows that one way to do this is by mandating keeping track of employees using the program and the dollar amount each employee cashes out.

APPLICATION IN DOWNTOWN PALM DESERT

We recommend the City require parking cash-out for all new non-residential developments in the Downtown. All new businesses, regardless of the number of employees they have, should offer them the option of taking the cash value of a parking space. Regular monitoring by the City will be necessary to assess this strategy's effectiveness.

RECOMMENDED STRATEGY #10: PROVIDE FACILITIES FOR ALTERNATIVES TO DRIVING

GENERAL BACKGROUND

A parking supply issue can be addressed by changing parking demand through incentives that explore incentivizing use of other modes, e.g. new shuttle bus services, bicycle lockers, financial incentives, etc. Also, strategies that improve walkability in an area could encourage lower automobile ownership and use.

EXAMPLES OF OTHER CITIES APPLYING THIS TECHNIQUE

The City of Santa Monica offers several alternative transportation facilities, especially for bicyclists. Amenities such as short and long term parking, repair facilities, secured parking, commuter lockers and showers, and others are included in the city, mainly in its downtown area. The Santa Monica Bike Center serves as a central location offering these amenities for bicyclists.

The City of Irvine offers its iShuttle service. Connections serve employees between the Tustin Metrolink Station and the Irvine Business Center and the Irvine Metrolink Station and the Irvine Spectrum district, providing a link between rail transit and employment centers.

PROS AND CONS OF THE APPROACH

One advantage of this strategy is that some facilities can be implemented relatively inexpensively, such as short-term bicycle parking and long-term secured bicycle lockers. If implemented correctly, it can reduce

the need for additional expensive parking. And these facilities can serve a variety of users, including employees and retail shoppers.

However, facilities might not be very effective if implemented in isolated instances, not in combination with other strategies. For example, additional bicycle parking facilities would be ineffective if bicycle lanes in an area are lacking or non-existent. Also, if parking is abundant and extremely free or cheap, people would see little reason to utilize these alternative transportation facilities.

APPLICATION IN DOWNTOWN PALM DESERT

The City's General Plan Mobility Element stresses Palm Desert's commitment to providing alternative transportation facilities. Goals include livable streets that accommodate all forms of travel, adequate pedestrian facilities, bikeways, sufficient bicycle parking at developments, and access to transit stops. The City should work with the El Paseo Business Improvement District to meet these goals and implement alternative transportation facilities where needed. Possible revenue sources for this strategy include parking meters and parking in-lieu fees. This can go hand-in-hand with the urban design strategy to improve pedestrian facilities. Potential alternative facility improvements in Downtown include additional bicycle parking and improving transit stops with shading and bus information.

Example of a lack of facilities on El Paseo.

Example of suitable bicycle parking facilities.

RECOMMENDED STRATEGY #11: INTELLIGENT TRANSPORTATION SYSTEMS (ITS)

GENERAL BACKGROUND

ITS can help guide drivers to available parking. ITS has been effectively been used both district wide and in large parking structures to provide "live information" about available spaces at each level and in different public parking facilities throughout a district. An example of ITS in a parking context is a smartphone app that tells users where there is available parking in a district, how many spaces there are at each location, and the cost to park there. With this information, drivers can proceed to available parking without circling blocks looking for open spaces.

EXAMPLES OF OTHER CITIES APPLYING THIS TECHNIQUE

The City of Los Angeles recently unveiled its LA Express Park program in a section of downtown Los Angeles. Electronic signs in the area display key information on available parking at structures, and smartphone app users can access that information directly on their phones. Sensors under parking spaces tell the system if they are currently occupied or not. At the same time, this real-time occupancy data is used to adjust parking meter rates rapidly based on current demand conditions.

Source: LAExpressPark.org

PROS AND CONS OF THE APPROACH

With real-time information in their hands, drivers can proceed immediately to available parking without searching along streets and lots and creating unnecessary traffic. Also with the increased proliferation of smartphone technology, smartphone apps can reach a wide population and make this strategy extremely effective.

However, this technology can be expensive to implement. For example, there is the issue of installing the occupancy sensor technology in existing parking structures. Also, real-time parking supply apps are still relatively new and experimental, with effectiveness hinging on the result of smaller-scale pilot programs.

APPLICATION IN DOWNTOWN PALM DESERT

ITS applications for real-time parking supply and cost are still relatively recent. We recommend that the City hold off on implementing any parking apps until the results of local pilot programs are made available in the next three years. The City should stay up to date on real-time parking app trends as part of its Mobility Element policy of regularly monitoring and evaluating new vehicle technologies.

STRATEGY IMPLEMENTATION

Downtown Palm Desert has significant excess parking supply. Therefore, the City shouldn't require additional parking for new developments for the near- and mid-term since the existing supply can accommodate significant additional demand under a shared parking arrangement. However, additional parking would eventually be necessary in some areas of Downtown Palm Desert. Therefore the City should anticipate this future need and build central shared parking structures or lots in the areas that will need it. Based on our analysis, potential parking additions include a parking structure located between Subareas 1 and 2 and a surface parking lot located in Subarea 4. However, the City should regularly monitor parking demand as development increases before making decisions on parking supply locations.

This section of the report outlines how the City can implement the recommended parking management strategies such as additional parking supply and shared parking. It should be noted that any one of the previously referenced strategies could be implemented individually; however, they are most effective if implemented as part of a comprehensive plan for the area and in a phased manner. As such, we have grouped the strategies together and recommended timeframes for implementation (organized as near-term, mid-term, and long-term).

NEAR-TERM (1-2 YEARS)

In the near-term, the City should focus on implementing shared parking and setting up several of the recommended parking management strategies. Specific details are given below.

- The City should begin implementation of shared parking in Downtown Palm Desert.
    - New developments should pay parking in-lieu fees instead of supplying minimum on-site parking, since current parking supply in the area is more than enough under a shared parking arrangement.
    - The City should also require employers to offer parking cash-out to their employees.
- The City should begin intensive coordination with the El Paseo Business Improvement District to more effectively implement many of the recommended strategies.
    - The City and the El Paseo BID can come to an agreement on where parking meters and time limits should be implemented, and how much the charges and limits should be. There should be biannual parking studies to see if there should be any adjustments to charges, limits, and locations.

  - The City and the El Paseo BID should create a Parking District, which would be enacted in a City ordinance. Part of this would involve coming to an agreement on how to collect parking revenues, how to distribute the revenues across the BID, and how to make decisions on applying funds to projects and improvements.
  - The City should encourage TDM for all non-residential developments in Downtown Palm Desert. A City-appointed TDM coordinator should work with the BID to create a program where businesses can pool their resources for a TDM program, which would be monitored by the coordinator for usage and effectiveness. Example strategies include SunLine transit passes and carpool assistance.
  - Consideration should be made towards expanding the BID's boundaries to incorporate more businesses into the Parking District and the pooled TDM resources.
- The City should make an effort to identify prime locations for pedestrian improvements and improved alternative facilities (e.g. bus stops that need shade, retail areas lacking bicycle parking, etc.). This can take place as a concerted citywide effort to address the General Plan Mobility Element's goals for improving pedestrian facilities, bicycle network connectivity and amenities, and access to transit stops, as well as City Center Area Plan strategies pertaining to pedestrian and bicycle facilities and amenities.

MID-TERM (3-6 YEARS)

In the mid-term, the City should focus on finding suitable locations for future parking structures or lots to accommodate future shared parking demand due to increased development. Also, the City should focus on monitoring the strategies previously implemented.

- The City should conduct bi-annual parking studies to make sure that shared parking is being utilized efficiently as an extension of citywide transportation facility monitoring laid out in the General Plan Mobility Element.
- The City should continue coordination with the El Paseo BID.
  - Conduct studies to see if parking charges and time limits are effective or if they need to be adjusted, either in location or amount.
  - The TDM coordinator should also monitor usage and effectiveness of TDM programs and monitor usage of the parking cash-out program.
  - The City and the BID should begin implementing pedestrian improvements around shared parking locations and alternative transportation improvements throughout Downtown, using funds such as parking charges and parking in-lieu fees.

  - The City and BID should begin identifying possible sites for future shared parking structures in areas that need additional future supply in anticipation of demand outstripping supply. Current funds can be used for initial steps such as any necessary studies and preliminary designs.

- With more information available in the mid-term, and with the results of pilot programs available, smartphone apps can be more closely studied for possible implementation. This can include a smartphone app that shows users parking supply and costs.
  - If implemented, the necessary sensors can be built into the cost of future parking structures. However, the cost of incorporating the technology into existing parking should be studied for financial feasibility.

LONG-TERM (6+ YEARS)

In the long-term, the City should focus on building additional parking supply where deemed necessary, with structures or lots centrally located in the subareas where demand exceeds the shared parking supply. Also, the City should continue to monitor the implemented parking management strategies. Biannual parking studies in the area will provide valuable information on whether there are any inefficiencies in parking demand or if more supply is necessary.

- Once development outpaces the shared parking supply in some Downtown areas, additional shared parking structures would be necessary.
  - The City should anticipate this with its parking studies and by monitoring development levels.
  - With collaboration from the El Paseo BID, the City should begin building the necessary centrally-located shared parking structures.
  - Recommended shared parking ratios for these future parking supply are 1.6 spaces per dwelling unit (residential) and 2.1 spaces per thousand square feet (non-residential).
  - Funds include parking charges and parking in-lieu fees.
  - Pedestrian improvements must be applied around these new structures to ensure effectiveness and ensuring people are willing to walk further to these structures.

APPENDIX A: PARKING COUNT DATA

Prepared by National Data & Surveying Services

PARKING LOT STUDY

Project #: 15-6102
City: Palm Desert

Day Wednesday
Date: 7/1/2015

TIME	LOT 1			LOT 2				LOT 3			LOT 4	LOT 5										
	Regular	♿	Subtotal	Regular	♿	Enterprise Customer Parking	Subtotal	Regular	♿	Subtotal	Regular	Regular	♿	Reserved Unit 1	Reserved Unit 2	Reserved Unit 3	Reserved Unit 4	Reserved Unit 5	Reserved Unit 6	Reserved Unit 7	Reserved Unit 8	Subtotal
Spaces	**37**	**2**	**39**	**12**	**2**	**4**	**18**	**17**	**1**	**18**	**13**	**12**	**1**	**1**	**2**	**2**	**2**	**2**	**1**	**2**	**2**	**27**
6:00	0	0	**0**	7	0	0	**7**	17	0	**17**	0	0	0	0	0	0	0	0	0	0	0	**0**
7:00	6	0	**6**	8	0	0	**8**	17	0	**17**	1	0	0	0	0	0	0	0	0	0	0	**0**
8:00	7	0	**7**	11	0	1	**12**	16	0	**16**	2	1	0	0	0	0	0	0	0	0	0	**1**
9:00	18	0	**18**	10	0	2	**12**	11	1	**12**	6	2	0	0	0	0	0	0	0	0	0	**2**
10:00	22	0	**22**	12	0	3	**15**	6	0	**6**	4	4	0	1	0	1	0	0	0	0	0	**6**
11:00	24	0	**24**	10	0	3	**13**	12	0	**12**	4	7	0	1	1	0	0	0	0	0	0	**9**
12:00	21	0	**21**	11	1	2	**14**	11	0	**11**	2	4	0	1	1	2	2	2	1	2	0	**15**
13:00	23	0	**23**	12	0	2	**14**	13	0	**13**	4	3	0	1	2	2	2	1	1	2	0	**14**
14:00	19	0	**19**	11	0	2	**13**	8	1	**9**	8	3	0	1	1	1	1	2	1	2	0	**12**
15:00	21	0	**21**	8	0	2	**10**	9	1	**10**	7	4	0	1	1	1	1	1	1	2	0	**12**
16:00	22	0	**22**	9	1	2	**12**	10	1	**11**	7	4	0	1	1	1	1	2	1	1	0	**12**
17:00	19	0	**19**	11	0	3	**14**	11	0	**11**	3	4	0	0	1	1	2	1	1	2	0	**12**
18:00	1	0	**1**	12	0	4	**16**	10	1	**11**	4	4	0	0	0	0	2	1	1	1	0	**9**
19:00	1	0	**1**	5	0	0	**5**	17	1	**18**	5	3	0	0	0	0	0	1	1	1	0	**6**
20:00	2	0	**2**	5	0	0	**5**	17	1	**18**	6	2	0	0	0	0	0	1	0	0	0	**3**

TIME	LOT 6				LOT 7			LOT 8					LOT 9			LOT 10	LOT 11			LOT 12	LOT 13		
	Regular	♿	Open Lot	Subtotal	Regular	♿	Subtotal	Regular	♿	No Parking	Open Lot	Subtotal	Regular	♿	Subtotal	Regular	Regular	♿	Subtotal	Regular	Regular	♿	Subtotal
Spaces	**15**	**1**		**16**	**17**	**1**	**18**	**26**	**2**	**1**	**9 Approx**	**38**	**20**	**2**	**22**	**10**	**10**	**1**	**11**	**5**	**9**	**1**	**10**
6:00	0	0	0	**0**	3	0	**3**	5	0	0	1	**6**	0	0	**0**	1	0	0	**0**	0	1	0	**1**
7:00	0	0	1	**1**	3	0	**3**	5	0	0	1	**6**	0	0	**0**	1	0	0	**0**	0	2	0	**2**
8:00	4	0	1	**5**	3	0	**3**	5	0	0	1	**6**	0	0	**0**	3	0	0	**0**	1	3	0	**3**
9:00	4	0	1	**5**	3	0	**3**	5	1	0	1	**7**	1	0	**1**	4	0	0	**0**	1	4	0	**4**
10:00	4	0	1	**5**	5	0	**5**	4	1	0	3	**8**	4	0	**4**	6	2	0	**2**	2	3	0	**3**
11:00	4	0	1	**5**	4	0	**4**	4	1	0	4	**9**	5	0	**5**	6	2	0	**2**	3	3	0	**3**
12:00	4	0	2	**6**	4	0	**4**	6	1	0	3	**10**	5	0	**5**	6	2	0	**2**	3	4	0	**4**
13:00	6	0	2	**8**	5	0	**5**	5	1	0	4	**10**	4	0	**4**	6	2	0	**2**	3	2	0	**2**
14:00	4	0	1	**5**	3	1	**4**	4	1	0	8	**13**	6	0	**6**	6	2	0	**2**	3	3	0	**3**
15:00	4	0	1	**5**	4	0	**4**	4	0	1	7	**12**	6	0	**6**	6	2	0	**2**	2	3	0	**3**
16:00	4	0	1	**5**	5	1	**6**	4	0	1	6	**11**	3	0	**3**	6	2	0	**2**	1	4	0	**4**
17:00	1	0	2	**3**	4	0	**4**	6	0	0	7	**13**	3	0	**3**	2	0	0	**0**	1	5	0	**5**
18:00	1	0	1	**2**	3	0	**3**	6	0	0	8	**14**	1	0	**1**	0	0	0	**0**	0	3	0	**3**
19:00	1	0	1	**2**	3	0	**3**	5	0	1	8	**14**	1	0	**1**	0	0	0	**0**	0	3	0	**3**
20:00	0	0	1	**1**	3	0	**3**	2	0	1	7	**10**	0	0	**0**	0	0	0	**0**	0	3	0	**3**

TIME	LOT 14			LOT 15			LOT 16					LOT 17			LOT 18	LOT 19	LOT 20			LOT 21			
	Regular	Matress Showroon Customer Parking	Subtotal	Regular	♿	Subtotal	Regular	♿	Reserved	Open Lot	Subtotal	Regular	♿	Subtotal	Regular	Open Lot	Regular	♿	Subtotal	Regular	♿	Private	Subtotal
Spaces	**13**	**1**	**14**	**22**	**4**	**26**	**41**	**3**	**2**		**46**	**18**	**1**	**19**	**15**		**4**	**1**	**5**	**23**	**2**	**1**	**26**
6:00	1	0	**1**	0	0	**0**	1	0	0	1	**2**	0	0	**0**	0	0	0	0	**0**	8	0	0	**8**
7:00	3	0	**3**	0	0	**0**	1	0	0	1	**2**	0	0	**0**	1	0	0	0	**0**	9	0	0	**9**
8:00	4	0	**4**	0	0	**0**	1	0	1	0	**2**	0	0	**0**	1	0	2	0	**2**	9	0	0	**9**
9:00	6	0	**6**	0	0	**0**	6	0	1	0	**7**	1	0	**1**	4	2	2	0	**2**	9	0	0	**9**
10:00	5	0	**5**	9	0	**9**	10	0	2	2	**14**	2	0	**2**	4	2	2	0	**2**	9	1	1	**11**
11:00	4	0	**4**	12	0	**12**	11	0	2	2	**15**	2	0	**2**	6	3	2	0	**2**	9	1	1	**11**
12:00	3	0	**3**	10	1	**11**	8	0	1	3	**12**	3	0	**3**	5	2	1	0	**1**	9	0	1	**10**
13:00	4	0	**4**	6	0	**6**	9	0	0	4	**13**	2	0	**2**	5	5	2	0	**2**	11	1	1	**13**
14:00	5	0	**5**	15	1	**1**	9	0	1	4	**14**	2	0	**2**	5	7	3	0	**3**	10	1	1	**12**
15:00	5	0	**5**	10	0	**10**	10	0	0	3	**13**	2	0	**2**	4	4	3	0	**3**	13	0	0	**13**
16:00	5	0	**5**	9	3	**12**	11	0	0	3	**14**	2	0	**2**	4	4	3	0	**3**	13	1	0	**14**
17:00	2	0	**2**	7	2	**9**	9	0	0	4	**13**	2	0	**2**	3	0	3	0	**3**	13	0	0	**13**
18:00	1	0	**1**	3	1	**4**	5	0	0	5	**10**	1	0	**1**	2	1	0	0	**0**	13	0	0	**13**
19:00	0	0	**0**	4	0	**4**	5	0	0	4	**9**	1	0	**1**	0	2	0	0	**0**	11	0	0	**11**
20:00	1	0	**1**	0	0	**0**	5	0	0	3	**8**	0	0	**0**	0	1	0	0	**0**	10	0	0	**10**

TIME	LOT 22	LOT 23				LOT 24	LOT 25				LOT 26	LOT 27			LOT 28			LOT 29	LOT 30				
	Regular	Regular	♿	Reserved	Subtotal	Regular	Regular	♿	Green	Subtotal	Regular	Regular	♿	Subtotal	Regular	♿	Subtotal	Regular	Wells Fargo Regular	Wells Fargo ♿	Regular	♿	Subtotal
Spaces	**15**	**113**	**5**	**2**	**120**	**10**	**20**	**2**	**17**	**39**	**5**	**6**	**2**	**8**	**9**	**1**	**10**	**6**	**16**	**1**	**55**	**3**	**75**
6:00	2	2	0	0	**2**	1	2	0	0	**2**	0	1	0	**1**	0	0	**0**	0	0	0	6	0	**6**
7:00	2	8	0	0	**8**	1	2	0	2	**4**	0	2	0	**2**	0	0	**0**	0	1	0	12	0	**13**
8:00	1	9	0	0	**9**	1	2	0	2	**4**	4	3	0	**3**	4	0	**4**	1	1	0	15	1	**17**
9:00	4	16	0	0	**16**	2	7	0	5	**12**	4	4	0	**4**	0	0	**0**	1	6	0	21	1	**28**
10:00	3	22	1	0	**23**	3	16	1	9	**26**	4	2	0	**2**	1	0	**1**	1	6	0	42	1	**49**
11:00	5	43	0	0	**43**	4	15	1	5	**21**	5	3	0	**3**	1	0	**1**	1	4	0	31	1	**36**
12:00	5	63	1	1	**65**	6	12	1	6	**19**	3	2	0	**2**	1	0	**1**	1	5	1	42	2	**50**
13:00	2	46	0	0	**46**	8	16	1	9	**26**	4	2	0	**2**	1	0	**1**	2	5	0	42	1	**48**
14:00	3	49	0	0	**49**	7	10	1	8	**19**	4	3	0	**3**	3	0	**3**	2	7	0	38	1	**46**
15:00	3	46	1	1	**48**	6	13	1	10	**24**	4	3	0	**3**	2	0	**2**	2	6	0	30	1	**37**

Prepared by National Data & Surveying Services

PARKING LOT STUDY

Project #: 15-6102
City: Palm Desert

Day Wednesday
Date: 7/1/2015

16:00	3	40	0	0	**40**	5	9	0	9	**18**	4	3	0	**3**	3	0	**3**	0	6	0	25	0	**31**
17:00	3	43	0	0	**43**	4	14	2	9	**25**	2	2	0	**2**	1	0	**1**	1	8	0	21	0	**29**
18:00	1	38	0	0	**38**	3	11	2	10	**23**	0	0	0	**0**	1	0	**1**	1	0	0	20	0	**20**
19:00	2	25	0	0	**25**	1	10	0	9	**19**	1	0	0	**0**	0	0	**0**	1	2	0	18	0	**20**
20:00	0	17	0	0	**17**	1	2	1	5	**8**	0	0	0	**0**	0	0	**0**	0	2	0	14	1	**17**

TIME	LOT 31			LOT 32				LOT 33			LOT 34				Lot 35			Lot 36					
	Regular	♿	Subtotal	Regular	♿	Curbside Service	Subtotal	Regular	♿	Subtotal	Regular	♿	10 Minutes	Subtotal	Regular	♿	Subtotal	Regular	♿	MYA Studio Salon	Electric Charging	Loading	Subtotal
Spaces	**42**	**6**	**48**	**64**	**4**	**4**	**72**	**13**	**2**	**15**	**209**	**7**	**1**	**217**	**21**	**2**	**23**	**182**	**14**	**2**	**1**	**6**	**205**
6:00	0	0	**0**	0	0	0	**0**	0	0	**0**	7	0	0	**7**	0	0	**0**	3	0	0	0	0	**3**
7:00	0	0	**0**	1	0	0	**1**	0	0	**0**	12	0	0	**12**	0	0	**0**	3	0	0	0	0	**3**
8:00	1	0	**1**	1	0	0	**1**	0	0	**0**	19	1	0	**20**	0	0	**0**	17	0	0	0	0	**17**
9:00	3	0	**3**	1	0	0	**1**	0	0	**0**	34	0	0	**34**	1	0	**1**	38	0	0	0	1	**39**
10:00	7	0	**7**	6	0	0	**6**	1	0	**1**	38	0	0	**38**	3	0	**3**	59	0	1	0	1	**61**
11:00	9	1	**10**	10	0	0	**10**	2	0	**2**	52	1	0	**53**	7	2	**9**	73	0	1	0	1	**75**
12:00	14	3	**17**	21	1	0	**22**	2	0	**2**	74	2	0	**76**	13	1	**14**	61	0	1	0	2	**64**
13:00	22	3	**25**	23	2	1	**26**	1	0	**1**	78	2	1	**81**	16	2	**18**	60	0	0	0	1	**61**
14:00	14	3	**17**	28	1	0	**29**	1	0	**1**	66	0	1	**67**	14	0	**14**	61	0	0	0	2	**63**
15:00	13	2	**15**	19	0	0	**19**	1	0	**1**	48	1	0	**49**	11	0	**11**	48	0	0	0	1	**49**
16:00	9	3	**12**	22	2	2	**26**	1	0	**1**	44	0	0	**44**	13	1	**14**	35	0	0	0	3	**38**
17:00	10	0	**10**	26	1	0	**27**	1	0	**1**	43	0	0	**43**	9	0	**9**	33	0	0	0	0	**33**
18:00	8	0	**8**	30	2	1	**33**	0	0	**0**	48	0	0	**48**	11	0	**11**	18	0	0	0	0	**18**
19:00	4	0	**4**	27	1	1	**29**	0	0	**0**	45	0	0	**45**	9	0	**9**	15	0	0	0	0	**15**
20:00	5	0	**5**	22	2	0	**24**	0	0	**0**	32	0	0	**32**	3	0	**3**	7	0	0	0	0	**7**

TIME	LOT 37				LOT 38					LOT 39			LOT 40	LOT 41				LOT 42	LOT 43			
	Regular	♿	Carport	Subtotal	Regular	♿	Loading	Uptown Diagnostics	Subtotal	Regular	♿	Subtotal	Regular	Regular	♿	Reserved	Subtotal	Under Construction	Regular	♿	Illegal	Subtotal
Spaces	**29**	**3**	**29**	**61**	**105**	**8**	**1**	**1**	**115**	**31**	**1**	**32**	**50**	**18**	**2**	**30**	**50**		**96**	**2**		**98**
6:00	0	0	0	**0**	3	0	0	0	**3**	0	0	**0**	1	1	0	6	**7**		12	0	0	**12**
7:00	0	0	1	**1**	6	1	0	0	**7**	0	0	**0**	4	1	0	7	**8**		12	0	0	**12**
8:00	0	0	2	**2**	10	0	0	0	**10**	1	0	**1**	6	1	0	13	**14**		23	0	0	**23**
9:00	0	0	10	**10**	22	0	0	0	**22**	11	0	**11**	15	3	0	15	**18**		30	0	0	**30**
10:00	2	0	13	**15**	34	0	0	0	**34**	11	0	**11**	16	6	0	15	**21**		36	0	0	**36**
11:00	2	0	14	**16**	46	3	0	0	**49**	12	0	**12**	23	3	0	14	**17**		35	0	0	**35**
12:00	4	0	12	**16**	53	0	0	0	**53**	12	0	**12**	19	5	1	13	**19**		40	0	0	**40**
13:00	1	0	11	**12**	53	0	0	0	**53**	8	0	**8**	13	8	0	12	**20**		42	0	0	**42**
14:00	3	0	10	**13**	47	0	0	0	**47**	11	0	**11**	17	5	0	13	**18**		39	0	0	**39**
15:00	1	0	10	**11**	31	0	0	0	**31**	8	0	**8**	16	6	0	12	**18**		30	0	0	**30**
16:00	2	0	7	**9**	30	0	0	0	**30**	6	0	**6**	15	5	0	10	**15**		23	0	0	**23**
17:00	1	0	7	**8**	31	0	0	0	**31**	2	0	**2**	14	5	0	6	**11**		25	0	0	**25**
18:00	1	0	2	**3**	27	0	0	0	**27**	2	0	**2**	12	4	0	4	**8**		23	0	0	**23**
19:00	0	0	2	**2**	30	0	0	0	**30**	2	0	**2**	8	4	0	3	**7**		12	0	1	**13**
20:00	0	0	0	**0**	24	0	0	0	**24**	1	0	**1**	9	1	0	3	**4**		6	0	1	**7**

TIME	LOT 44				LOT 45					LOT 46			LOT 47				LOT 48			LOT 49		
	Regular	♿	Illegal	Subtotal	Regular	♿	No Parking	Loading	Subtotal	Regular	20 Minutes	Subtotal	No Parking	♿	Hensen's Center	Subtotal	Regular	♿	Subtotal	Regular	♿	Subtotal
Spaces	**10**	**2**		**12**	**59**	**3**	**2**	**3**	**67**	**1**	**3**	**4**	**16**	**2**	**12**	**30**	**170**	**7**	**177**	**15**	**1**	**16**
6:00	0	0	0	**0**	4	0	1	0	**5**	0	0	**0**	0	0	6	**6**	18	0	**18**	0	0	**0**
7:00	0	0	0	**0**	11	0	1	0	**12**	1	1	**2**	1	0	6	**7**	24	0	**24**	1	0	**1**
8:00	1	0	0	**1**	16	1	1	0	**18**	1	0	**1**	1	0	7	**8**	38	1	**39**	1	0	**1**
9:00	3	0	0	**3**	17	1	1	0	**19**	1	0	**1**	1	0	9	**10**	58	3	**61**	3	0	**3**
10:00	3	0	1	**4**	28	1	1	1	**31**	1	0	**1**	4	0	8	**12**	74	2	**76**	6	1	**7**
11:00	4	0	0	**4**	27	1	1	0	**29**	1	0	**1**	7	0	9	**16**	90	2	**92**	8	1	**9**
12:00	0	0	0	**0**	32	0	1	2	**35**	0	0	**0**	8	0	8	**16**	91	3	**94**	8	1	**9**
13:00	0	0	0	**0**	29	0	1	1	**31**	0	0	**0**	8	2	10	**20**	89	2	**91**	6	1	**7**
14:00	1	0	0	**1**	29	1	1	0	**31**	0	0	**0**	6	1	10	**17**	77	3	**80**	7	1	**8**
15:00	1	0	0	**1**	26	0	1	1	**28**	0	0	**0**	9	1	8	**18**	76	4	**80**	7	1	**8**
16:00	1	0	0	**1**	25	1	1	1	**28**	0	0	**0**	6	0	7	**13**	65	3	**68**	7	1	**8**
17:00	1	0	0	**1**	17	0	1	2	**20**	0	0	**0**	5	0	8	**13**	50	2	**52**	3	1	**4**
18:00	1	0	0	**1**	21	0	1	3	**25**	0	0	**0**	2	0	8	**10**	35	1	**36**	3	0	**3**
19:00	1	0	0	**1**	22	0	1	3	**26**	0	0	**0**	1	0	6	**7**	21	1	**22**	3	0	**3**
20:00	2	0	0	**2**	24	0	1	1	**26**	0	0	**0**	1	0	6	**7**	25	0	**25**	3	0	**3**

TIME	LOT 50	LOT 51								LOT 52											
	Regular	Regular	♿	Loading	Electric Charging	No Parking 10pm-7am	Unmarked at Gas Station	Illegal	Subtotal	Regular	Green	10 Minutes	Eletric Charging	2 Hours	♿	Loading	Bank Regular	Bank ♿	Carport Regular	Carport ♿	Subtotal
Spaces	**13**	**450**	**15**	**2**	**1**	**4**			**472**	**370**	**3**	**3**	**2**	**8**	**9**	**5**	**32**	**2**	**6**	**1**	**441**
6:00	0	50	1	0	0	0	10	1	62	20	0	0	0	0	0	0	0	0	0	0	**20**
7:00	0	51	1	0	0	0	10	2	64	34	0	0	0	0	0	0	0	0	0	0	**34**
8:00	1	74	1	0	0	0	11	2	88	35	0	0	0	0	0	0	5	0	0	0	**40**
9:00	1	121	1	0	0	1	8	2	133	83	0	2	0	0	1	1	16	0	2	0	**105**
10:00	3	165	1	0	0	1	9	3	179	166	0	2	0	5	1	0	14	1	3	0	**192**
11:00	5	184	3	0	0	1	9	3	200	201	0	1	1	4	1	0	12	0	3	0	**223**

Prepared by National Data & Surveying Services

PARKING LOT STUDY

Project #: 15-6102
City: Palm Desert

Day Wednesday
Date: 7/1/2015

12:00	7	199	5	0	0	1	8	2	215	192	0	1	1	3	1	0	7	1	3	0	**209**
13:00	5	199	6	0	0	1	8	2	216	173	0	0	0	4	0	0	10	0	0	0	**187**
14:00	5	152	1	0	0	1	8	2	164	182	0	2	1	3	1	1	11	1	2	0	**204**
15:00	4	141	2	1	0	1	8	3	156	145	0	0	1	4	2	2	10	1	2	0	**167**
16:00	4	147	2	1	0	2	8	3	163	147	0	0	1	5	0	0	20	2	2	0	**177**
17:00	6	131	3	0	0	0	6	1	141	129	0	0	1	3	0	0	16	0	1	0	**150**
18:00	5	110	5	0	0	0	6	1	122	46	0	0	0	0	0	0	9	0	1	0	**56**
19:00	4	91	3	0	0	0	9	1	104	41	0	0	0	0	0	0	3	0	0	0	**44**
20:00	2	91	4	0	0	0	9	1	105	20	0	0	0	0	0	0	0	0	0	0	**20**

TIME	LOT 53						LOT 54			LOT 55			LOT 56			
	Regular	♿	Palm Desert Escrow	30 Minutes	Dawn Swajian	Subtotal	Regular	♿	Subtotal	Regular	♿	Subtotal	Regular	Compact	♿	Subtotal
Spaces	**122**	**13**	**7**	**5**	**1**	**148**	**19**	**1**	**20**	**35**	**2**	**37**	**4**	**1**	**1**	**6**
6:00	4	0	0	0	0	**4**	4	0	**4**	0	0	**0**	0	0	0	**0**
7:00	5	0	0	0	0	**5**	4	0	**4**	0	0	**0**	0	0	0	**0**
8:00	10	0	0	0	0	**10**	5	0	**5**	1	0	**1**	0	0	0	**0**
9:00	25	0	4	1	0	**30**	3	0	**3**	5	0	**5**	0	0	0	**0**
10:00	29	0	5	0	0	**34**	8	1	**9**	9	0	**9**	0	0	0	**0**
11:00	28	1	4	2	0	**35**	9	0	**9**	6	1	**7**	0	0	0	**0**
12:00	23	0	4	1	0	**28**	8	0	**8**	5	0	**5**	0	0	0	**0**
13:00	22	0	4	1	0	**27**	10	0	**10**	9	0	**9**	0	0	0	**0**
14:00	20	0	4	0	0	**24**	6	0	**6**	10	0	**10**	0	0	0	**0**
15:00	16	0	4	1	0	**21**	7	0	**7**	5	0	**5**	0	0	0	**0**
16:00	13	0	5	1	1	**20**	5	0	**5**	9	1	**10**	0	0	0	**0**
17:00	10	0	1	1	1	**13**	3	0	**3**	1	0	**1**	0	0	0	**0**
18:00	7	0	1	0	0	**8**	8	1	**9**	1	0	**1**	0	0	0	**0**
19:00	4	0	0	0	0	**4**	5	0	**5**	2	0	**2**	0	0	0	**0**
20:00	1	0	0	0	0	**1**	2	0	**2**	1	0	**1**	0	0	0	**0**

TIME	LOT 57											LOT 58	LOT 59	LOT 60			LOT 61					
	Regular	CPI	Optimal Health	PCA	Reserved	Gregory Swajian	♿	PRO	Phillip Podiatry	Dental Only	Subtotal	Regular	Regular	Regular	♿	Subtotal	Regular	♿	Green	20 Minutes	Yellow	Subtotal
Spaces	**25**	**5**	**3**	**3**	**2**	**1**	**1**	**1**	**1**	**1**	**43**	**6**	**8**	**11**	**1**	**12**	**23**	**2**	**1**	**5**	**1**	**32**
6:00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	**0**	0	0	0	0	0	**0**
7:00	1	0	0	0	1	0	0	0	0	0	**2**	0	0	0	0	**0**	0	0	0	0	0	**0**
8:00	2	0	0	0	1	0	0	0	0	1	**4**	1	0	0	0	**0**	2	0	0	0	0	**2**
9:00	9	0	1	0	1	0	0	1	0	1	**13**	1	0	0	0	**0**	4	0	1	3	1	**9**
10:00	11	0	1	0	2	1	1	1	0	1	**18**	1	0	3	0	**3**	5	0	1	1	0	**7**
11:00	10	0	1	0	2	1	0	1	1	1	**17**	1	0	3	0	**3**	6	0	1	2	1	**10**
12:00	9	0	1	0	2	1	0	1	0	0	**14**	1	0	3	0	**3**	5	0	1	2	1	**9**
13:00	10	0	1	0	2	1	0	1	1	1	**17**	2	0	7	0	**7**	6	0	1	2	0	**9**
14:00	7	0	0	0	2	1	1	1	1	1	**14**	1	0	6	0	**6**	5	0	1	1	0	**7**
15:00	7	0	2	0	1	0	0	1	1	1	**13**	1	0	3	0	**3**	4	0	1	3	0	**8**
16:00	4	0	2	0	1	1	0	1	0	0	**9**	0	0	4	0	**4**	3	0	1	4	0	**8**
17:00	3	0	0	0	1	1	0	0	0	0	**5**	0	0	1	0	**1**	4	0	1	0	0	**5**
18:00	2	0	0	0	1	0	0	0	0	0	**3**	0	0	1	0	**1**	1	0	0	0	0	**1**
19:00	0	0	0	0	1	0	0	0	0	0	**1**	0	0	0	0	**0**	0	0	0	0	0	**0**
20:00	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	**0**	0	0	0	0	0	**0**

TIME	LOT 62			LOT 63			LOT 64	LOT 65				LOT 66						LOT 67 Lower Level					
	Regular	♿	Subtotal	Regular	♿	Subtotal	Regular	Regular	♿	Reserved	Subtotal	Regular	♿	Golf	Low Emitting Fuel	Apple Store Customer Pick Up Only	Subtotal	Regular	♿	15 min	Golf Cart	Compact	Subtotal
Spaces	**195**	**4**	**199**	**132**	**6**	**138**	**48**	**169**	**9**	**8**	**186**	**153**	**7**	**12**	**10**	**2**	**184**	**322**	**26**	**1**	**44**	**78**	**471**
6:00	1	0	**1**	2	0	**2**	0	2	0	1	**3**	4	0	0	0	0	**4**	26	0	0	0	1	**27**
7:00	1	0	**1**	4	0	**4**	0	2	0	1	**3**	3	0	0	0	0	**3**	33	0	0	0	3	**36**
8:00	12	0	**12**	10	0	**10**	3	5	0	1	**6**	10	0	0	0	0	**10**	58	0	0	0	5	**63**
9:00	28	0	**28**	10	1	**11**	4	24	1	1	**26**	26	0	0	0	0	**26**	120	0	0	0	13	**133**
10:00	39	0	**39**	16	0	**16**	6	41	1	1	**43**	50	0	0	1	0	**51**	175	1	0	0	17	**193**
11:00	46	1	**47**	19	0	**19**	6	42	3	1	**46**	81	2	0	1	1	**85**	183	4	1	0	20	**208**
12:00	66	2	**68**	18	0	**18**	4	43	2	1	**46**	79	2	0	1	1	**83**	225	3	0	0	19	**247**
13:00	79	2	**81**	28	1	**29**	4	40	2	1	**43**	100	1	0	2	2	**105**	240	2	0	0	19	**261**
14:00	82	1	**83**	26	0	**26**	6	36	1	1	**38**	94	2	0	3	1	**100**	321	3	0	0	21	**345**
15:00	55	1	**56**	27	2	**29**	5	43	2	1	**46**	98	2	0	4	1	**105**	204	1	0	0	17	**222**
16:00	48	0	**48**	20	0	**20**	5	38	2	1	**41**	105	1	0	4	2	**112**	184	2	1	0	20	**207**
17:00	52	2	**54**	21	1	**22**	3	29	1	1	**31**	93	2	0	3	2	**100**	173	2	1	0	21	**197**
18:00	43	2	**45**	20	1	**21**	1	27	1	1	**29**	78	3	0	2	1	**84**	157	3	1	1	15	**177**
19:00	34	2	**36**	20	1	**21**	1	18	0	1	**19**	40	1	0	1	0	**42**	86	2	1	1	6	**96**
20:00	20	1	**21**	26	0	**26**	1	16	2	1	**19**	25	0	0	1	0	**26**	53	0	0	1	4	**58**

TIME	LOT 67 Upper Level						LOT 68			LOT 69						LOT 70			LOT 71			LOT 72		
	Regular	♿	15 Minutes	Golf Cart	Compact	Subtotal	Reg	♿	Subtotal	Regular	Customer Parking	♿	Reserved	Self Parking	Subtotal	Reg	♿	Subtotal	Reg	♿	Subtotal	Reg	♿	Subtotal
Spaces	**337**	**13**	**5**	**8**	**81**	**444**	**45**	**2**	**47**	**78**	**6**	**3**	**4**	**21**	**112**	**45**	**3**	**48**	**20**	**1**	**21**	**86**	**3**	**89**
6:00	3	0	0	0	0	**3**	1	0	1	2	1	0	0	0	**3**	0	0	**0**	0	0	**0**	1	0	**1**
7:00	7	0	1	0	0	**8**	2	0	**2**	1	1	0	0	1	**3**	1	0	**1**	0	0	**0**	1	0	**1**

Prepared by National Data & Surveying Services

PARKING LOT STUDY

Project #: 15-6102
City: Palm Desert

Day Wednesday
Date: 7/1/2015

8:00	13	0	1	0	0	**14**	1	0	**1**	5	2	0	0	0	**7**	1	0	**1**	0	0	**0**	3	0	**3**
9:00	24	0	0	0	0	**24**	9	0	**9**	12	1	0	1	3	**17**	3	0	**3**	3	0	**3**	22	0	**22**
10:00	28	0	1	0	0	**29**	15	0	**15**	19	1	0	1	5	**26**	3	0	**3**	3	0	**3**	22	0	**22**
11:00	29	2	1	0	0	**32**	15	0	**15**	30	2	1	2	5	**40**	2	0	**2**	5	0	**5**	27	2	**29**
12:00	43	4	1	0	0	**48**	16	0	**16**	38	3	2	2	12	**57**	2	0	**2**	5	0	**5**	27	1	**28**
13:00	47	1	0	0	0	**48**	20	0	**20**	31	2	0	0	16	**49**	1	0	**1**	4	0	**4**	26	0	**26**
14:00	44	2	0	0	0	**46**	23	0	**23**	29	2	0	3	9	**43**	2	0	**2**	4	0	**4**	26	0	**26**
15:00	31	1	0	0	0	**32**	21	0	**21**	26	2	1	3	5	**37**	1	0	**1**	5	0	**5**	26	0	**26**
16:00	35	0	0	0	0	**35**	14	1	**15**	30	3	1	3	10	**47**	1	0	**1**	5	0	**5**	20	0	**20**
17:00	45	2	0	0	0	**47**	11	1	**12**	24	3	2	3	11	**43**	1	0	**1**	2	0	**2**	12	0	**12**
18:00	69	6	0	0	0	**75**	13	0	**13**	47	5	3	0	16	**71**	1	0	**1**	0	0	**0**	5	0	**5**
19:00	73	5	0	0	0	**78**	11	0	**11**	43	3	2	0	17	**65**	0	0	**0**	0	0	**0**	5	0	**5**
20:00	43	2	0	0	0	**45**	10	0	**10**	41	1	1	1	12	**56**	0	0	**0**	0	0	**0**	7	0	**7**

TIME	LOT 73			LOT 74			LOT 75			LOT 76			LOT 77									
	Regular	♿	Subtotal	Regular	♿	Subtotal	Regular	♿	Subtotal	Regular	Authorized Vehicles Only	Subtotal	Regular	♿	Carport	RSVD PK Only	RSVD For DLI	RSVD For Managment	RSVD James P.H.	RSVD Dennis H.	RSVD APS	Subtotal
Spaces	**7**	**1**	**8**	**40**	**2**	**42**	**17**	**2**	**19**	**21**	**13**	**34**	**54**	**5**	**17**	**2**	**1**	**1**	**1**	**1**	**2**	**84**
6:00	0	0	**0**	2	0	**2**	0	0	**0**	0	0	**0**	2	0	0	0	0	0	0	0	0	**2**
7:00	0	0	**0**	2	0	**2**	1	0	**1**	0	1	**1**	3	0	0	0	0	0	0	0	0	**3**
8:00	0	0	**0**	5	0	**5**	1	0	**1**	0	2	**2**	11	0	10	0	0	0	0	0	1	**22**
9:00	0	0	**0**	4	0	**4**	3	1	**4**	1	3	**4**	21	1	12	0	0	1	1	0	1	**37**
10:00	0	0	**0**	5	0	**5**	3	0	**3**	2	4	**6**	21	1	12	0	0	1	1	0	1	**37**
11:00	3	1	**4**	5	0	**5**	2	0	**2**	4	4	**8**	26	0	11	1	0	1	1	1	0	**41**
12:00	1	0	**1**	6	0	**6**	6	1	**7**	3	2	**5**	20	0	12	1	0	1	0	0	1	**35**
13:00	0	1	**1**	3	0	**3**	8	2	**10**	5	2	**7**	20	0	7	1	0	1	1	0	1	**31**
14:00	0	1	**1**	3	0	**3**	3	1	**4**	1	2	**3**	26	0	8	1	1	0	1	0	1	**38**
15:00	1	0	**1**	4	0	**4**	5	0	**5**	1	2	**3**	26	1	8	1	1	0	1	1	1	**40**
16:00	1	0	**1**	4	0	**4**	5	0	**5**	4	2	**6**	18	0	7	1	1	0	1	1	1	**30**
17:00	6	1	**7**	10	2	**12**	2	0	**2**	1	2	**3**	6	0	4	1	1	0	0	1	1	**14**
18:00	7	1	**8**	10	1	**11**	1	0	**1**	1	0	**1**	6	0	1	1	0	0	0	1	1	**10**
19:00	7	0	**7**	4	1	**5**	0	0	**0**	0	0	**0**	4	0	1	1	0	0	0	1	0	**7**
20:00	5	0	**5**	0	0	**0**	0	0	**0**	1	0	**1**	1	0	0	0	0	0	0	0	0	**1**

TIME	LOT 78				LOT 79			LOT 80	LOT 81					
	Regular	♿	Driveway	Subtotal	Reg	♿	Subtotal	Regular	Reg	♿	Visitor	Carport	Illegal	Subtotal
Spaces	**24**	**2**	**2 Approx**	**28**	**54**	**4**	**58**	**11**	**29**	**10**	**59**	**165**		**263**
6:00	0	0	0	**0**	1	0	**1**	0	1	0	1	9	0	11
7:00	1	0	0	**1**	6	0	**6**	1	2	0	7	22	0	31
8:00	4	0	1	**5**	13	0	**13**	3	8	1	11	42	0	62
9:00	12	0	2	**14**	14	1	**15**	3	8	2	18	63	2	93
10:00	10	0	2	**12**	23	1	**24**	4	8	2	19	65	0	94
11:00	11	0	2	**13**	23	1	**24**	4	12	1	21	71	1	106
12:00	20	0	2	**22**	24	0	**24**	4	13	2	41	68	0	124
13:00	16	1	3	**20**	25	0	**25**	6	14	2	43	59	0	118
14:00	17	1	3	**21**	25	0	**25**	6	14	1	33	59	1	108
15:00	14	0	2	**16**	16	0	**16**	4	9	1	23	50	0	83
16:00	15	2	2	**19**	9	0	**9**	3	6	0	23	32	0	61
17:00	5	0	2	**7**	3	0	**3**	3	3	2	28	19	0	52
18:00	1	0	0	**1**	1	0	**1**	2	2	2	23	15	1	43
19:00	2	0	0	**2**	1	0	**1**	0	5	1	25	11	0	42
20:00	0	0	0	**0**	1	0	**1**	0	0	1	19	12	0	32

Prepared by National Data & Surveying Services

STREET PARKING STUDY

Project #: 15-6102
City: Palm Desert

Day Wednesday
Date: 7/1/2015

TIME	001N		001S	002N	002S	003N		003S	004N			004S		005N		005S		006			007	008	
	Regular	Green	Regular	Regular	Regular	Regular	♿	Regular	Regular	♿	2 Hour	Regular	♿	Regular	♿	Regular	♿	Regular	2 Hour 7am-6pm	♿	Regular	Regular	♿
Spaces	**26**	**0**	**27**	**34**	**48**	**15**	**1**	**22**	**23**	**3**	**2**	**44**	**2**	**8**	**1**	**59**	**1**	**62**	**2**	**1**	**46**	**52**	**3**
6:00	3	0	3	4	8	0	0	0	0	0	0	2	0	0	0	1	0	0	0	0	0	6	0
7:00	4	0	5	5	9	0	0	2	0	0	0	2	0	0	0	2	0	5	0	0	2	13	0
8:00	7	0	11	6	10	1	0	3	0	0	0	4	0	0	0	6	0	5	0	0	7	10	0
9:00	4	0	13	13	15	3	0	7	0	0	0	8	0	0	0	15	0	8	0	0	10	30	0
10:00	8	0	13	13	21	7	1	13	0	0	0	8	0	0	1	18	0	8	0	0	16	26	0
11:00	6	0	12	22	21	9	1	12	3	0	0	11	0	3	1	24	0	14	0	0	12	29	0
12:00	5	0	13	17	25	3	1	12	5	0	0	11	0	3	1	26	0	14	0	0	17	43	0
13:00	12	0	13	13	20	6	1	13	3	0	0	14	0	7	0	20	0	19	0	0	15	34	0
14:00	7	0	13	14	20	8	1	19	5	0	0	14	0	4	0	27	0	16	0	0	14	22	1
15:00	9	0	12	17	14	8	1	14	2	0	0	15	0	3	0	23	0	18	0	0	14	17	0
16:00	8	0	15	13	15	6	1	13	2	0	0	13	0	3	0	20	0	14	0	0	13	17	0
17:00	7	0	13	13	8	2	1	5	1	0	0	8	0	1	0	8	0	10	0	0	7	16	0
18:00	12	0	12	12	8	1	0	6	4	0	0	5	0	0	0	6	0	9	0	0	2	9	0
19:00	14	0	10	10	8	0	0	3	7	0	0	9	0	0	0	3	0	7	0	0	1	12	0
20:00	13	0	8	7	5	0	0	0	6	0	0	11	0	0	0	3	0	6	0	0	1	12	0

TIME	009N		009S		010		011		012		012E	012W	013E	013W		014E		014W	015	16
	Regular	♿	Regular	♿	Regular	♿	Regular	♿	Regular	♿	Regular	Regular	Regular	Regular	Green	Regular	Yellow	Regular	Regular	Regular
Spaces	**41**	**2**	**8**	**2**	**66**	**3**	**38**	**4**	**33**	**1**	**11**	**11**	**15**	**8**	**1**	**6**	**2**	**10**	**6**	**28**
6:00	3	0	2	0	8	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0
7:00	1	0	4	0	10	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
8:00	5	0	7	0	12	0	1	0	0	0	0	1	0	0	0	1	0	0	0	0
9:00	10	0	7	0	35	0	7	0	4	0	0	2	0	0	0	2	0	3	0	2
10:00	16	0	9	0	23	0	11	0	3	0	3	4	0	1	0	0	0	6	0	9
11:00	16	0	8	1	24	0	18	0	4	0	5	4	1	2	0	1	0	9	0	12
12:00	15	0	7	1	16	0	18	0	6	0	4	4	0	2	0	2	0	6	2	17
13:00	19	0	6	0	23	0	22	0	6	0	4	4	1	1	0	2	0	6	3	16
14:00	6	0	7	0	16	0	28	0	4	0	5	5	1	1	0	2	0	6	3	13
15:00	17	0	8	0	12	0	25	1	4	0	5	5	1	1	0	0	0	4	2	11
16:00	14	0	3	1	21	0	14	0	4	0	3	4	0	2	0	0	0	3	1	6
17:00	30	0	7	0	13	0	16	0	3	0	4	2	0	2	0	2	0	5	3	6
18:00	28	0	6	0	15	0	11	0	3	0	3	2	0	2	0	3	0	4	5	6
19:00	25	0	4	0	11	0	8	0	0	0	2	0	0	3	0	1	0	1	5	5
20:00	23	0	5	0	5	0	4	0	0	0	2	2	0	2	0	2	0	1	5	3

TIME	017	018	019		020		021		022	023	024	025	026	027	028	029	030	031	032	033
	Regular	Regular	Regular	20 Minutes Green	Regular	20 Minutes Green	Regular	Yellow	Regular	Regular	Regular	Regular	Regular	Regular	Regular	Regular	Regular	Regular	Regular	Regular
Spaces	**24**	**11**	**25**	**1**	**26**	**2**	**35**	**2**	**18**	**4**	**26**	**22**	**16**	**24**	**24**	**17**	**2**	**10**	**4**	**2**
6:00	0	2	3	0	0	1	0	0	0	0	0	0	2	2	0	0	0	0	0	0
7:00	0	3	3	0	1	1	1	0	0	0	0	0	5	3	1	0	1	0	0	0
8:00	0	2	5	0	0	1	2	0	0	0	1	0	2	7	0	1	0	1	0	0
9:00	1	1	14	0	1	0	9	0	2	0	1	0	4	8	3	1	0	5	0	0
10:00	10	8	20	0	7	0	13	0	3	1	3	2	8	11	7	2	0	5	0	0
11:00	11	6	13	1	8	0	18	0	6	2	12	1	15	22	13	1	0	5	1	0
12:00	17	8	18	0	20	1	16	0	0	4	10	2	14	22	17	3	0	4	0	0
13:00	16	7	22	0	21	0	9	0	3	4	7	5	12	20	14	2	0	1	2	0
14:00	14	7	18	0	15	0	14	0	0	3	8	4	13	21	10	2	0	5	0	0
15:00	7	8	15	0	10	0	12	0	2	2	7	4	14	20	9	1	1	4	0	0
16:00	9	4	10	0	9	0	12	0	3	3	6	7	12	19	14	3	1	5	1	0
17:00	13	5	11	0	16	1	14	0	1	4	7	3	11	26	25	2	2	5	1	0
18:00	13	8	12	0	26	0	9	0	1	4	6	7	12	21	21	2	2	1	0	0
19:00	14	3	13	0	27	0	6	0	0	3	10	4	10	16	22	2	2	0	0	0
20:00	11	0	10	0	22	0	2	0	0	2	8	7	8	12	21	1	2	0	0	0

APPENDIX B: SUBAREA LAND USE

FUTURE SUBAREA LAND USE (TOTAL)

Land Use	Subarea 1	Subarea 2	Subarea 3	Subarea 4	Subarea 5	Total
Non-Residential (SF)						
General Retail	360,408	243,056	358,715	218,545	269,711	1,450,435
Fine/Casual Dining	104,259	58,012	78,632	50,886	60,559	352,348
Family Dining	92,276	44,432	55,464	38,104	43,783	274,059
Fast Food	24,267	12,466	16,183	10,804	12,623	76,343
Office <25k	15,520	19,200	800	2,880	21,168	59,568
Office 25 – 100	14,800	12,000	1,000	1,800	6,100	35,700
Office 100 – 500	0	0	0	0	0	0
Office > 500	0	0	0	0	0	0
Medical/Dental Office	6,640	12,000	200	1,800	6,100	26,740
Bank with Drive-In	6,467	9,427	4,627	5,347	7,067	32,935
TOTAL	**624,637**	**410,593**	**515,621**	**330,166**	**427,111**	**2,308,128**
Applied Shared Parking Ratio			2.1			
Total Non-Residential Spaces Required	**1,312**	**862**	**1,083**	**693**	**897**	**4,847**
Residential (DU)						
Residential Rental	230	90	227	179	169	895
Residential Owned	241	51	101	113	173	679
TOTAL	**471**	**141**	**328**	**292**	**342**	**1,574**
Applied Shared Parking Ratio			1.6			
Total Residential Spaces Required	**754**	**226**	**525**	**467**	**547**	**2,518**
Total						
Total Spaces Required	**2,065**	**1,088**	**1,608**	**1,161**	**1,444**	**7,365**