

CITY OF PHOENIX

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Planning & Development
Department

The Phoenician

Parking Study

6000 East Camelback Road
Scottsdale, AZ 85251

October 2016
Project No. 15-1543

Prepared For:

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THE PHOENICIAN RESORT PARKING STUDY

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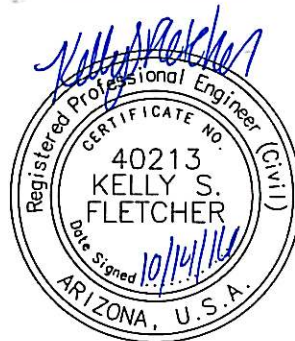
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EXECUTIVE SUMMARY

The Phoenician Resort is an existing resort hotel located at 6000 East Camelback Road at the base of Camelback Mountain in Phoenix, Arizona. The owner of The Phoenician Resort proposes to develop and/or redevelop certain parcels resulting in rezoning the property to a PUD. Overall the project proposes an additional 61 units over the already approved density. This parking study addresses the parking for the resort only. The parking for the proposed single family residences and condominiums will be addressed separately. A parking study has been prepared to analyze the needs of The Phoenician Resort with the updated hotel programming and removal of existing parking. The following conclusions and recommendations have been documented in this study:

- Within its property, the resort proposes to develop or redevelop certain parcels/areas that are distributed throughout the property. Improvements to the resort include 20 new resort casitas and the addition of two hotel keys. With the development of the residential parcels, the golf course will be decreased from 27 holes to 18 holes. The tennis center is being relocated and will consist of 8 courts with amenities such as pickleball and basketball. The square footage of the restaurants, meeting spaces, and ballrooms will remain the same. The spa building is increasing to 36,725 SF, however the number of treatment rooms will remain at 24, therefore there is no effect. Only the new resort casitas and two hotel keys will increase parking requirements.
- With the development of residential parcels, the employee/overflow lot near Camelback Road will be removed and replaced with condominiums. The employee/overflow lot is mostly utilized for large events and sits vacant the remainder of the year.
- After applying applicable reductions accounting for internal capture and alternate mode to the City of Phoenix's base requirements and utilizing a shared parking model, 1,133 parking spaces are required for the peak parking demand of the resort based on 100% occupancy and average events (65% utilization).
- Based on 100% room occupancy and an event of 2,000 people, the estimated peak parking demand would be 1,498 spaces (700+798). This correlates with the shared parking model when assuming 100% utilization of the event space, which results in 1,483 parking spaces.
- In the proposed conditions, the resort will provide 1,174 permanent parking spaces, with another 160 temporary spaces by utilizing valet parking on the internal drives and the golf driving range tee box for a total of 1,334 parking spaces. With the proposed changes to the resort, the proposed on-site parking will be sufficient for 100% occupancy and average events. For the large events that occur approximately five times a year, off-site parking needs to be secured for approximately 150 parking spaces. The resort has informal agreements with several area churches and businesses to use for overflow parking for employees when needed.

INTRODUCTION

CivTech has been retained to prepare a Parking Study for The Phoenician Resort during the rezoning process. The owner of The Phoenician Resort proposes to develop and/or redevelop certain parcels resulting in rezoning the property to a PUD. This parking study addresses the parking for resort only. The parking for the proposed single family residences and condominiums will be addressed separately.

A parking study has been prepared to analyze the needs of The Phoenician Resort with the updated hotel programming and removal of existing parking, as part of redevelopment.

The Phoenician is an existing resort hotel located at 6000 East Camelback Road at the base of Camelback Mountain in Phoenix, Arizona. A location map is provided in **Figure 1**.

EXISTING CONDITIONS

EXISTING LAND USE

The Phoenician Resort is a luxury destination resort within close proximity to Phoenix and Scottsdale. The resort opened in 1986 at the base of Camelback Mountain. It currently offers 643 rooms, ballrooms, meeting rooms, outdoor space, restaurants, pools, spa, tennis courts and a golf course. The existing hotel programming is summarized in **Table 1**. A site plan of the existing resort is included in **Appendix B**.

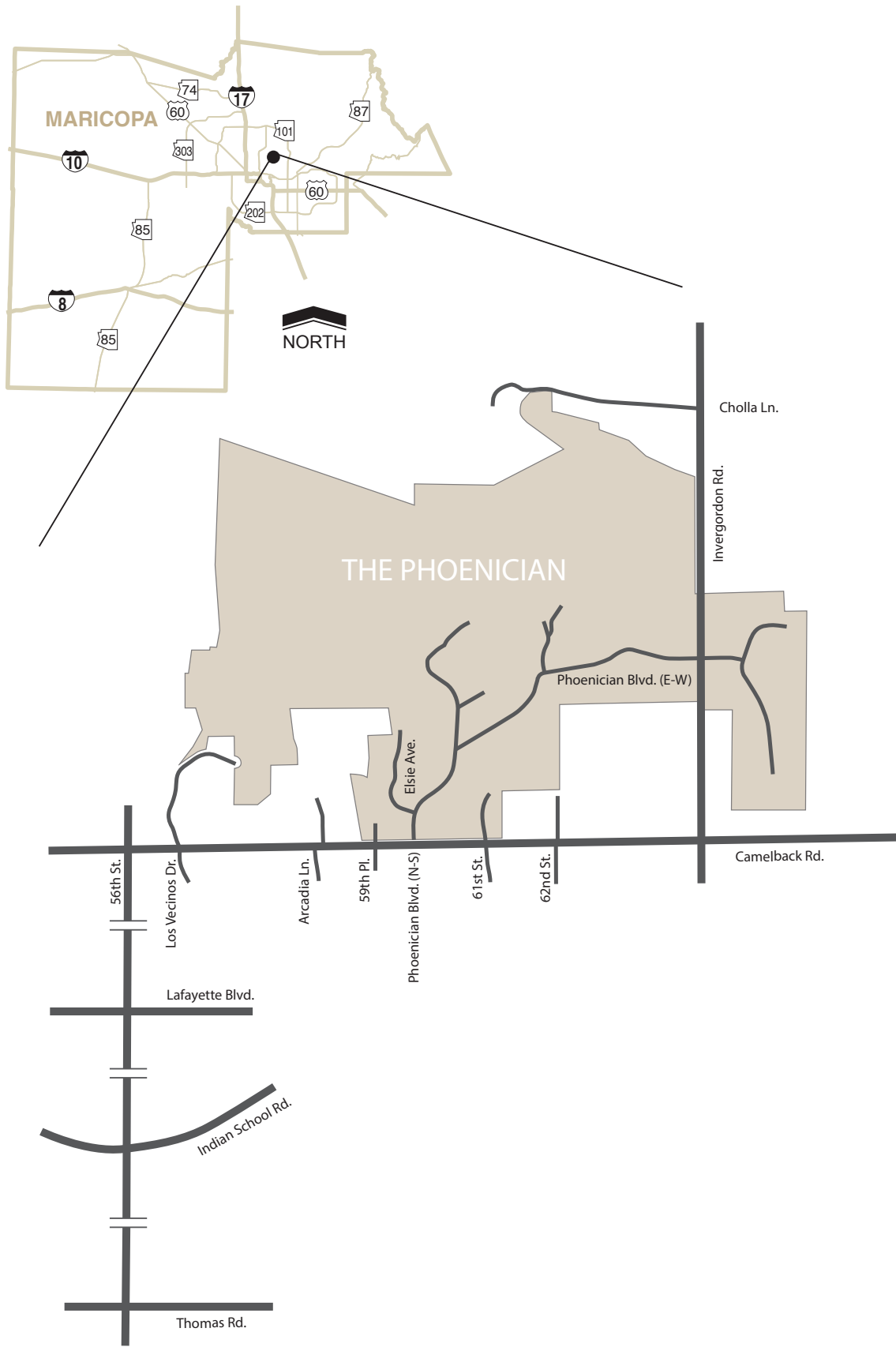


Figure 1: Vicinity Map

Source: CivTech 2016

Table 1: Existing Hotel Programming

Facility	Size
Guestrooms	
<i>Main Building</i>	464 keys
<i>Casitas</i>	119 keys
<i>The Canyon Suites</i>	60 keys
Total	643 keys
Ballrooms (Main Building)	
<i>Phoenician Grand (Salon A-G)</i>	20,533 SF
<i>Camelback (Salon H-N)</i>	14,344 SF
<i>Estrella Theatre</i>	5,822 SF
Total	40,699 SF
Meeting Rooms	
<i>Main Building</i>	17,646 SF
<i>The Canyon Suites</i>	3,465 SF
Total	21,111 SF
Outdoor Space	
<i>Jokake Inn Outdoor Function</i>	29,532 SF
<i>Main Building Outdoor Function</i>	48,664 SF
Total	78,196 SF
Restaurants	
<i>J&G Steakhouse</i>	5,142 SF
<i>Il Terrazzo</i>	8,062 SF
<i>patio</i>	5,511 SF
<i>Thirsty Camel Lounge</i>	2,180 SF
<i>patio</i>	3,736 SF
<i>Lobby Tea Court</i>	660 SF
<i>Relish Burger Bistro</i>	2,622 SF
<i>19th Hole</i>	3,452 SF
<i>Oasis Pool Bar & Grill</i>	1,735 SF
<i>Café & Ice Cream Parlor</i>	876 SF
<i>Canyon Bar & Grill</i>	1,058 SF
Total	35,034 SF
Total Restaurant Area for Parking Calculations	
(The restaurant indoor area has been reduced 35% to account for non-public spaces. The 19 th Hole, Oasis Pool Bar & Grill, Café & Ice Cream Parlor, and Canyon Bar & Grill have been excluded, since they'll be utilized by golfers and guests only.)	21,611 SF
Spa	
<i>Treatment Rooms</i>	24 rooms
Tennis	
<i>Courts</i>	11 courts
Golf Course	
<i>Three 9-hole courses</i>	27 holes

EXISTING PARKING

The Phoenician Resort currently has 1,613 potential parking spaces. These parking spaces are summarized in **Table 2**.

Table 2: Existing Parking

Parking Lot	Number of Parking Spaces
Garage #1	366
Garage #2	317
Garage #3	268
Garage #4	88
L-Lot (Valet)	60
Canyon Suites	50
Vacation Ownership Lot	85
Old Employee/Overflow Lot (near Camelback Rd)	379
Total	1,613

EXISTING PARKING COUNTS

Existing parking counts were conducted on various days in April 2016. Counts were conducted on Thursday April 13 (with a large event) and on Thursday April 21 (without a large event). Counts were also conducted on Saturday April 23 (with a large event) and Sunday April 24 (without an event). The occupancy rates and event size were also recorded on the day of the counts. The parking counts are included in **Appendix C**, and summarized in **Table 3**.

Table 3: Existing Parking Counts

Day of Count and Details	Peak Parking During Day:	Peak Parking During Event:
<i>Date:</i> Thursday April 14, 2016	674 spaces at 12:00 PM	658 spaces At 7:00 PM
<i>Occupancy:</i> 4/13- 98%, 4/14- 100%		
<i>Event:</i> 500 people (5 PM-9 PM)		
<i>Date:</i> Thursday April 21, 2016	574 spaces at 1:00 PM	n/a
<i>Occupancy:</i> 4/20- 90%, 4/21- 98%		
<i>Event:</i> No large event		
<i>Date:</i> Saturday April 22, 2016	941 spaces at 12:00 PM	941 spaces At 12:00 PM
<i>Occupancy:</i> 4/22- 66%, 4/23- 61%		
<i>Event:</i> 1,036 people (10 AM-2PM)		
<i>Date:</i> Sunday April 24, 2016	546 spaces at 2:00 PM	n/a
<i>Occupancy:</i> 4/23- 61%, 4/24- 49%		
<i>Event:</i> No large event		

A simple ratio was calculated to reflect resort operations without a large event. The approximate parking ratio was estimated to be 1.2 parking spaces per room. The peak parking demand during non-event days occurred around midday. This accounts for guests leaving and checking out around the same time and utilization of the hotel amenities. Based on these ratios, the peak parking demand with 100% room occupancy is estimated to be 772 spaces.

Based on the existing parking counts, it was estimated that approximately 0.35 spaces per person are required during events. Per The Phoenician, the maximum event capacity is approximately 2,000 people. Utilizing a ratio of 0.35 spaces per person, the peak parking demand for a large event of 2,000 people would be 700 spaces. Thus, a weekend with 100% room occupancy and a large event of 2,000 people would result in an estimated peak parking demand of 1,472 spaces (700+772). Per the resort, the on-site parking is only fully utilized approximately 5 times per year for large events. The old employee/overflow lot is mostly utilized for large events and sits vacant the remainder of the year. During these large events, additional valet parking is provided along the drives within the resort.

EXISTING PARKING MODEL

City of Phoenix Base Parking Requirements per Zoning Ordinance

Base parking requirements were calculated per the City of Phoenix's Zoning Ordinance (Section 702) for the existing hotel programming and is summarized in **Table 4**. Per the base requirements, the existing resort requires 3,597 parking spaces.

Parking Reductions

For a hotel resort with amenities such as restaurants, golf, and event space, reductions need to be considered for alternate modes of transportation and internal capture. A hotel resort is unique in that some of the patrons of the events, restaurants, and other hotel amenities are already guests at the hotel. The base parking requirements do not account for this on-site interaction. In addition, a portion of hotel guests will arrive by taxi, shuttle, or ride share companies. The parking reductions are summarized in **Table 5**.

Internal Capture

Some of the resort uses such as event space, restaurants, golf, and spa will attract guests already at the resort, thus reducing the parking demand. **Table 5** provides a reduction within the primary destination column to account for this internal capture.

Alternate Mode Reduction

The mode split is the percentage of persons arriving at a destination in different modes of transportation. A portion of hotel guests and employees will arrive by taxi, shuttle, or ride share companies and need to be accounted for in the parking model. **Table 5** provides a reduction within the personal vehicle column to account for the alternate mode use.

Utilization

During a typical day, the resort will not utilize all of its function space at one time. The utilization column of **Table 5** provides a reduction to account for the utilization of the event space. In addition, not all employees will be present at the same time. A reduction is also provided in the utilization column to account for the different work shifts of the employees.

Table 4: City of Phoenix Base Requirements per Ordinance-Existing

Facility	Land Use	Size	Required Ratio	Required Spaces	
Guest Rooms	Motels, Hotels, Resort Hotels	643 rooms	1 space per 1 unit	643.00	
Ballrooms	Public Assembly-General	40,699 SF	1 space per 60 SF	678.32	
Meeting Rooms	Public Assembly-General	21,111 SF	1 space per 60 SF	351.85	
Outdoor Function	Public Assembly-General	78,196 SF	1 space per 60 SF	1,303.27	
Restaurants	Restaurants, Bars, Taverns, Night Clubs, or Similar Drinking Establishment	21,611 SF	1 space per 50 SF	432.22	
Golf Course⁽¹⁾					
	Hole	27 holes	1 space per 0.5 hole	54.00	
	Tee time spacing	9 minutes	1 space per 1.35 min	6.67	
	Station on driving range tee area	14 stations	1 space per 0.5 sta	28.00	
	Golf course facility staff	63 employees	1 space per 1 emp	63.00	
	Putting and chipping green	10,000 SF	1 space per 500 SF	20.00	
				Golf Course Total	171.67
				Golf Course Reduced (30%)⁽²⁾	120.17
Spa	Tanning, Health, and Beauty Salon	24 stations	1 space per 1 sta	24.00	
		3,000 SF office	1 space per 300 SF	10.00	
				Spa Total	34.00
Tennis Courts	Tennis Courts	11 courts	1 space per 0.33 court	33.33	
				3,597	

1. The golf course land use sizes are from the original 'The Phoenician' Parking study (dated January 17, 2008)
2. Reduction is based on the City of Phoenix Ordinance, which states: "For golf course facilities located adjacent to or within a resort to and from which the golf course facility provides free motorized transportation (e.g. golf cart), the 'course' golfer, range user, diner and customer parking requirements above will be reduced by 30%."

Table 5: Reduction in Peak Parking Demand - Existing

Facility	Standard Required Parking	% Using Personal Vehicles ⁽¹⁾	% Utilization ⁽²⁾	% Primary Destination ⁽³⁾	Vehicle Occupancy Rate ⁽⁴⁾	Peak Parking Demand
Guest Rooms	643.00	75%	100%	100%	1.10	438.41
Employees	950.00	75%	65%	100%	1.25	370.50
Ballrooms	678.32	90%	65%	70%	1.30	213.67
Meeting Rooms	351.85	90%	65%	50%	1.30	79.17
Outdoor Function	1,303.27	90%	65%	70%	1.30	410.53
Restaurants	432.22	90%	100%	25%	1.50	64.83
Golf Course	120.17	100%	100%	100%	1.00	120.17
Tennis Courts	33.33	100%	100%	0%	1.00	0.00
Spa	34.00	100%	100%	25%	1.00	8.50
Total	3,597 plus 950 for employees					Total 1,706

1. Using personal vehicles accounts guests and employees arriving via other modes of transportation such as taxi, ride sharing companies, or shuttle.
2. Utilization accounts for employees having different shifts, and for not all meeting/banquet spaces being utilized at one time.
3. Primary Destination accounts for internal capture, which are trips that are not generated off-site such as hotel guests attending events and using amenities. Golf course is already reduced by 30% in the Phoenix base requirement. The Tennis Courts are expected to not attract off-site trips.
4. Vehicle occupancy rate accounts for carpooling, and 1.3 is cited in Urban Land Institute's (ULI) Shared Parking, 2nd Edition for hotel banquets. The City of Phoenix rate for hotels is 1 space per room, already accounting for carpooling per room. A rate of 1.1 has been assumed to account for car sharing between rooms.
5. Employee numbers do not include golf employees, which are included in the Phoenix base requirements for the golf course.

With the reductions, the peak parking demand is reduced to 1,706 parking spaces. The required amount of parking spaces assumes that the land uses are standalone developments with no opportunity for shared parking. Therefore, a shared parking analysis was conducted.

Shared Parking

Shared parking is defined as a parking space that can be used for two or more individual land uses without conflict. For instance, the individual land uses will have peaks at different times of the day and therefore can share parking spaces. To determine the total number of shared parking spaces required between different land uses, a shared parking model may be developed. Hourly percentages for each individual land use are utilized to estimate the overall peak parking demand accumulated for each hour of the day.

The shared parking model utilized for The Phoenician is included in **Appendix D**. The percentages in the model are from the original *'The Phoenician' Parking study (dated January 17, 2008)*. Per the shared parking model, 1,116 parking spaces are required for the peak parking demand of the resort based on 100% occupancy and average events (65% utilization).

The resort currently has 1,613 parking spaces. Per the resort, the resort parking is only fully utilized 3-5 times per year for maximum size events. The old employee lot is mostly utilized for large events. As previously discussed, simple ratios were estimated based on the existing parking counts. Utilizing a ratio of 0.35 spaces per person for an event, the peak parking demand for a maximum event of 2,000 people would be 700 spaces. Utilizing the ratio for the resort based on rooms without an event (1.2 parking space per room), the peak parking demand with 100% room occupancy is estimated to be 772 spaces.

Thus, based on 100% room occupancy and a maximum event of 2,000 people, the estimated peak parking demand is 1,472 spaces (700+772). The existing resort can currently accommodate this maximum parking on-site.

The Phoenician parking model developed for this parking study also correlates with the Institute of Transportation Engineers (ITE) *Parking Generation, 4th Edition*. *Parking Generation* contains data collected by various transportation professionals for a wide range of different land uses. The data summarized in the report include average rates and equations that have been established correlating the relationship between an independent variable that describes the development size and parking demand for each categorized land use. **Table 6** summarizes the ITE rates for a resort hotel and corresponding peak parking demand. Per *Parking Generation*, resort hotels cater to the tourist and vacation industry, often providing a wide variety of recreational facilities. All the study sites reported the availability of conference facilities, with meeting/banquet rooms and an on-site restaurant. However, no information on conference facility size was provided.

Table 6: ITE Weekday Peak Period Parking Generation-Existing

Land Use	Size	Peak Period Parking Demand	
		85 th Percentile (1.59 vehicles per occupied room)	Maximum (2.16 vehicles per occupied room)
Resort Hotel (Land Use Code 330)	643 Occupied Rooms	1,023 parking spaces	1,389 parking spaces

Per **Table 6**, the 85th percentile peak parking demand for 643 occupied rooms, is estimated to be 1,023 parking spaces. Utilizing the maximum ITE rate for a resort hotel, the peak parking demand is estimated to be 1,389 parking spaces. The result (1,116 parking spaces) from the shared parking model prepared for The Phoenician in this parking study exceeds the 85th percentile ITE rate. As previously discussed, this result is for 100% room occupancy and average events. The maximum events occurring a few times a year require special consideration.

PROPOSED HOTEL PROGRAMMING

The Phoenician is located at 6000 East Camelback Road in Phoenix, Arizona at the base of Camelback Mountain. The owner (Host Hotels & Resorts, L.P.) of The Phoenician Resort proposes to develop and/or redevelop certain parcels resulting in rezoning the property to a PUD. This parking study addresses the parking for The Phoenician resort only. The parking for the proposed single family residences and condominiums will be addressed separately.

PROPOSED SITE PLAN AND LAND USE

Improvements to The Phoenician resort include 20 new resort casitas and the addition of two hotel keys. With the development of the parcels, the golf course will be decreased from 27 holes to 18 holes. The tennis center is being relocated and will consist of 8 courts with amenities such as pickleball and basketball. The square footage of the restaurants, meeting spaces, and ballrooms will remain the same. The spa building is increasing to 36,725 SF, however the number of treatment rooms will remain at 24. Only the new resort casitas and two hotel keys will increase parking requirements. **Table 8** on the following page summarizes the proposed hotel programming.

PROPOSED PARKING

With the development of the parcels, the old employee/overflow lot near Camelback Road will be removed and replaced with multi-family residences. The old employee/overflow lot is mostly utilized for large events and sits vacant the remainder of the year. The relocated Tennis Center will provide approximately 25 new parking spaces, and the existing garages will remain.

With the proposed project, the resort will have 1,174 parking spaces. **Table 7** summarizes the proposed parking.

Table 7: Proposed Parking

Parking Lot	Number of Parking Spaces	
	Existing	Proposed
Garage #1	366	366
Garage #2	317	317
Garage #3	268	268
Garage #4	88	88
L-Lot (Valet)	60	60
Canyon Suites	50	50
Vacation Ownership Lot ⁽¹⁾	85	0
New Tennis Center ⁽²⁾	0	25
Old Employee Lot (near Camelback Rd) ⁽³⁾	379	0
Total	1,613	1,174

1. The vacation ownership lot will be removed and replaced with condos.

2. The Tennis Center is being relocated and will provide approximately 25 new parking spaces.

3. The old employee lot near Camelback Road will be removed and replaced with multi-family residential.

Table 8: Proposed Hotel Programming

Facility	Size
Guestrooms	
<i>Main Building (2 additional rooms are PROPOSED)</i>	466 keys
<i>Casitas (20 additional are PROPOSED)</i>	139 keys
<i>The Canyon Suites</i>	60 keys
Total	665 keys
Ballrooms (Main Building)	
<i>Phoenician Grand (Salon A-G)</i>	20,533 SF
<i>Camelback (Salon H-N)</i>	14,344 SF
<i>Estrella Theatre</i>	5,822 SF
Total	40,699 SF
Meeting Rooms	
<i>Main Building</i>	17,646 SF
<i>The Canyon Suites</i>	3,465 SF
Total	21,111 SF
Outdoor Space	
<i>Jokake Inn Outdoor Function</i>	29,532 SF
<i>Mountain Side Retreat-PROPOSED</i>	12,000 SF
<i>Hoe Down Show Down-PROPOSED</i>	15,000 SF
<i>Orchid Lawn</i>	24,000 SF
Total	80,532 SF
Restaurants	
<i>J&G Steakhouse</i>	5,142 SF
<i>Il Terrazzo</i>	8,062 SF
<i>patio</i>	5,511 SF
<i>Thirsty Camel Lounge</i>	2,180 SF
<i>patio</i>	3,736 SF
<i>Lobby Tea Court</i>	660 SF
<i>Relish Burger Bistro</i>	2,622 SF
<i>19th Hole</i>	3,452 SF
<i>Oasis Pool Bar & Grill</i>	1,735 SF
<i>Café & Ice Cream Parlor</i>	876 SF
<i>Canyon Bar & Grill</i>	1,058 SF
Total	35,034 SF
Total Restaurant Area for Parking Calculations	
(The restaurant indoor area has been reduced 35% to account for non-public spaces. The 19 th Hole, Oasis Pool Bar & Grill, Café & Ice Cream Parlor, and Canyon Bar & Grill have been excluded, since they'll be utilized by golfers and guests only.)	
21,611	SF
Spa	
<i>Treatment Rooms</i>	24 rooms
Tennis	
<i>Courts</i>	8 courts
Golf Course	
<i>Two 9-hole courses</i>	18 holes

PROPOSED PARKING MODEL

City of Phoenix Base Parking Requirements per Zoning Ordinance

Base parking requirements were calculated per the City of Phoenix's Zoning Ordinance (Section 702) for the proposed hotel programming and is summarized in **Table 9**. Per the base requirements, the proposed resort condition requires 3,636 parking spaces.

Table 9: City of Phoenix Base Requirements per Ordinance-Proposed

Facility	Land Use	Size	Required Ratio	Required Spaces
Guest Rooms	Motels, Hotels, Resort Hotels	665 rooms	1 space per 1 unit	665.00
Ballrooms	Public Assembly-General	40,699 SF	1 space per 60 SF	678.32
Meeting Rooms	Public Assembly-General	21,111 SF	1 space per 60 SF	351.85
Outdoor Function	Public Assembly-General	80,532 SF	1 space per 60 SF	1,342.20
Restaurants	Restaurants, Bars, Taverns, Night Clubs, or Similar Drinking Establishment	21,611 SF	1 space per 50 SF	432.22
Golf Course⁽¹⁾				
	Hole	18 holes	1 space per 0.5 hole	36.00
	Tee time spacing	9 minutes	1 space per 1.35 min	6.67
	Station on driving range tee area	14 stations	1 space per 0.5 sta	28.00
	Golf course facility staff	63 employees	1 space per 1 emp	63.00
	Putting and chipping green	10,000 SF	1 space per 500 SF	20.00
Golf Course Total				153.67
Golf Course Reduced (30%)⁽²⁾				107.57
Spa	Tanning, Health, and Beauty Salon	24 stations	1 space per 1 sta	24.00
		3,000 SF office	1 space per 300 SF	10.00
Spa Total				34.00
Tennis Courts	Tennis Courts	8 courts	1 space per 0.33 court	24.24
				3,636

1. The golf course land use sizes are from the original 'The Phoenician' Parking study (dated January 17, 2008)
2. Reduction is based on the City of Phoenix Ordinance, which states: "For golf course facilities located adjacent to or within a resort to and from which the golf course facility provides free motorized transportation (e.g. golf cart), the 'course' golfer, range user, diner and customer parking requirements above will be reduced by 30%."

Parking Reductions

The same parking model developed for the existing conditions was utilized for the proposed hotel programming. The methodology is previously described under the existing parking model. The reductions with the proposed hotel programming are summarized in **Table 10**.

Table 10: Reduction in Peak Parking Demand - Proposed

Facility	Standard Required Parking	% Using Personal Vehicles ⁽¹⁾	% Utilization ⁽²⁾	% Primary Destination ⁽³⁾	Vehicle Occupancy Rate ⁽⁴⁾	Peak Parking Demand
Guest Rooms	665.00	75%	100%	100%	1.10	453.41
<i>Employees</i>	<i>950.00</i>	<i>75%</i>	<i>65%</i>	<i>100%</i>	<i>1.25</i>	<i>370.50</i>
Ballrooms	678.32	90%	65%	70%	1.30	213.67
Meeting Rooms	351.85	90%	65%	50%	1.30	79.17
Outdoor Function	1,342.20	90%	65%	70%	1.30	422.79
Restaurants	432.22	90%	100%	25%	1.50	64.83
Golf Course	107.57	100%	100%	100%	1.00	107.57
Tennis Courts	24.24	100%	100%	0%	1.00	0.00
Spa	34.00	100%	100%	25%	1.00	8.50
Total	3,636 plus 950 for employees					Total 1,721

1. Using personal vehicles accounts guests and employees arriving via other modes of transportation such as taxi, ride sharing companies, or shuttle.
2. Utilization accounts for employees having different shifts, and for not all meeting/banquet spaces being utilized at one time.
3. Primary Destination accounts for internal capture, which are trips that are not generated off-site such as hotel guests attending events and using amenities. Golf course is already reduced by 30% in the Phoenix base requirement. The Tennis Courts are expected to not attract off-site trips.
4. Vehicle occupancy rate accounts for carpooling, and 1.3 is cited in Urban Land Institute's (ULI) Shared Parking, 2nd Edition for hotel banquets. The City of Phoenix rate for hotels is 1 space per room, already accounting for carpooling per room. A rate of 1.1 has been assumed to account for car sharing between rooms.
5. Employee numbers do not include golf employees, which are included in the Phoenix base requirements for the golf course.

With the reductions, the peak parking demand is reduced to 1,721 parking spaces. The required amount of parking spaces assumes that the land uses are standalone developments with no opportunity for shared parking. Therefore, a shared parking analysis was conducted.

Shared Parking

Shared parking is defined as a parking space that can be used for two or more individual land uses without conflict. For instance, the individual land uses will have peaks at different times of the day and therefore can share parking spaces. To determine the total number of shared parking spaces required between different land uses, a shared parking model may be developed. Hourly percentages for each individual land use are utilized to estimate the overall peak parking demand accumulated for each hour of the day.

The shared parking model utilized for the proposed conditions is included in **Appendix E**. Per the shared parking model, 1,133 parking spaces are required for the peak parking demand of the resort based on 100% occupancy and average events (65% utilization). The proposed conditions will provide 1,174 parking spaces.

As previously discussed, simple ratios were estimated based on the existing parking counts. Utilizing a ratio of 0.35 spaces per person for an event, the peak parking demand for a large event of 2,000 people would be 700 spaces. Utilizing the ratio for the resort without an event (1.2 parking spaces per room), the peak parking demand during with 100% room occupancy is estimated to be 798 spaces. Thus, based on 100% room occupancy and a large event of 2,000 people, the estimated peak parking demand would be 1,498 spaces (700+798). This correlates with the shared parking model when assuming 100% utilization of the event space, which results in 1,483 parking spaces.

In the proposed conditions, the resort will provide 1,174 permanent parking spaces, with another 160 temporary spaces by utilizing valet parking on the internal drives and the golf driving range tee box for a total of 1,334 parking spaces. With the proposed changes to the resort, the proposed on-site parking will be sufficient for 100% occupancy and average events. For the large events that occur approximately five times a year, off-site parking needs to be secured for approximately 150 parking spaces. The resort has informal agreements with several area churches and businesses to use for overflow parking for employees when needed.

The proposed parking model developed for this parking study also correlates with the Institute of Transportation Engineers (ITE) *Parking Generation, 4th Edition*. **Table 11** summarizes the ITE rates for a resort hotel and corresponding peak parking demand. Per *Parking Generation*, resort hotels cater to the tourist and vacation industry, often providing a wide variety of recreational facilities. All the study sites reported the availability of conference facilities, with meeting/banquet rooms and an on-site restaurant. However, no information on conference facility size was provided.

Table 11: ITE Weekday Peak Period Parking Generation-Proposed

Land Use	Size	Peak Period Parking Demand	
		85 th Percentile (1.59 vehicles per occupied room)	Maximum (2.16 vehicles per occupied room)
Resort Hotel (Land Use Code 330)	665 Occupied Rooms	1,057 parking spaces	1,437 parking spaces

Per **Table 11**, the 85th percentile peak parking demand for 665 occupied rooms, is estimated to be 1,057 parking spaces. Utilizing the maximum ITE rate for a resort hotel, the peak parking demand is estimated to be 1,437 parking spaces. The result (1,133 parking spaces) of the shared parking model prepared for The Phoenician in this parking study exceeds the 85th percentile ITE rate. As previously discussed, this result is for 100% room occupancy and average events. The large events occurring a few times a year require special consideration.

CONCLUSIONS AND RECOMMENDATIONS

The following conclusions and recommendations have been documented in this study:

- Within its property, the resort proposes to develop or redevelop certain parcels/areas that are distributed throughout the property. Improvements to the resort include 20 new resort casitas and the addition of two hotel keys. With the development of the residential parcels, the golf course will be decreased from 27 holes to 18 holes. The tennis center is being relocated and will consist of 8 courts with amenities such as pickleball and basketball. The square footage of the restaurants, meeting spaces, and ballrooms will remain the same. The spa building is increasing to 36,725 SF, however the number of treatment rooms will remain at 24, therefore there is no effect. Only the new resort casitas and two hotel keys will increase parking requirements.
- With the development of residential parcels, the employee/overflow lot near Camelback Road will be removed and replaced with condominiums. The employee/overflow lot is mostly utilized for large events and sits vacant the remainder of the year.
- After applying applicable reductions accounting for internal capture and alternate mode to the City of Phoenix's base requirements and utilizing a shared parking model, 1,133 parking spaces are required for the peak parking demand of the resort based on 100% occupancy and average events (65% utilization).
- Based on 100% room occupancy and an event of 2,000 people, the estimated peak parking demand would be 1,498 spaces (700+798). This correlates with the shared parking model when assuming 100% utilization of the event space, which results in 1,483 parking spaces.
- In the proposed conditions, the resort will provide 1,174 permanent parking spaces, with another 160 temporary spaces by utilizing valet parking on the internal drives and the golf driving range tee box for a total of 1,334 parking spaces. With the proposed changes to the resort, the proposed on-site parking will be sufficient for 100% occupancy and average events. For the large events that occur approximately five times a year, off-site parking needs to be secured for approximately 150 parking spaces. The resort has informal agreements with several area churches and businesses to use for overflow parking for employees when needed.

LIST OF REFERENCES

Parking Generation, 4th Edition, Institute of Transportation Engineers, Washington, D.C., 2010.

Smith, Mary S. *Shared Parking, Second Edition*, Washington, D.C.: ULI-the Urban Land Institute and the International Council of Shopping Centers, 2005.

The Phoenician' Parking Study, Morrison-Maierle, January 17, 2008.

City of Phoenix Zoning Ordinance Section 702

TECHNICAL APPENDICES

- APPENDIX A: REVIEW COMMENTS (RESERVED)**
- APPENDIX B: SITE PLAN**
- APPENDIX C: EXISTING PARKING COUNTS**
- APPENDIX D: SHARED PARKING MODEL - EXISTING**
- APPENDIX E: SHARED PARKING MODEL - PROPOSED**

APPENDIX A

REVIEW COMMENTS (RESERVED)

APPENDIX B

SITE PLAN



APPENDIX C

EXISTING PARKING COUNTS

	Night of 4/13	Night of 4/14
Occupancy	98%	100%

	Date <u>14-Apr</u>									
	Lot # 1 (East)	Lot # 1 (West)	Lot # 1 Total	Lot # 2	Lot # 3	Lot # 4	Casitas	L-Lot	TOTAL	
8:00	23	78	101	305	37	35	19	17	514	8:00
9:00	27	78	105	309	67	65	18	15	579	9:00
10:00	33	86	119	313	85	70	18	17	622	10:00
11:00	41	85	126	315	88	75	22	12	638	11:00
12:00	39	84	123	314	117	78	25	17	674	12:00
13:00	34	91	125	318	119	62	23	17	664	13:00
14:00	32	86	118	314	107	58	23	20	640	14:00
15:00	29	80	109	318	107	58	21	24	637	15:00
16:00	23	95	118	311	123	61	20	24	657	16:00
17:00	15	96	111	292	138	53	20	19	633	17:00
18:00	17	98	115	274	141	42	23	27	622	18:00
19:00	68	94	162	268	146	33	23	26	658	19:00
20:00	84	96	180	243	138	27	24	28	640	20:00
21:00	123	97	220	227	129	27	22	23	648	21:00
22:00	102	92	194	211	131	26	23	24	609	22:00
23:00	12	88	100	130	23	7	23	16	299	23:00
	PEAK								674	

} Arizona Christian
University (500
ppl)

	Night of 4/20	Night of 4/21
Occupancy	90%	98%

	Lot # 1 (East)	Lot # 1 (West)	Lot # 1 Total	Lot # 2	Lot # 3	Lot # 4	Casitas	Date <u>21-Apr</u>		TOTAL	
								L-Lot			
8:00	33	93	126	187	38	36	16	12		415	8:00
9:00	40	87	127	230	44	46	18	14		479	9:00
10:00	50	92	142	261	51	57	13	16		540	10:00
11:00	46	97	143	268	60	61	16	17		565	11:00
12:00	47	95	142	261	68	66	17	17		571	12:00
13:00	51	104	155	258	65	65	16	15		574	13:00
14:00	55	100	155	267	55	60	16	15		568	14:00
15:00	61	105	166	248	46	52	19	18		549	15:00
16:00	52	100	152	207	56	45	21	23		504	16:00
17:00	41	109	150	200	53	37	18	26		484	17:00
18:00	47	111	158	171	64	22	19	38		472	18:00
19:00	42	108	150	162	58	19	19	34		442	19:00
20:00	35	102	137	151	46	16	17	30		397	20:00
21:00	28	95	123	123	32	10	17	28		333	21:00
22:00	25	89	114	108	26	5	16	25		294	22:00
23:00	23	86	109	96	19	2	15	23		264	23:00
PEAK										574	

	Night of 4/22	Night of 4/23
Occupancy	66%	61%

	Lot # 1 (East)	Lot # 1 (West)	Lot # 1 Total	Lot # 2	Lot # 3	Lot # 4	Casitas	L-Lot	TOTAL	
8:00	14	82	96	182	46	66	27	29	446	8:00
9:00	9	80	89	182	48	71	28	29	447	9:00
10:00	15	79	94	184	81	76	26	26	487	10:00
11:00	13	95	108	214	200	74	28	34	658	11:00
12:00	126	123	249	280	269	78	29	36	941	12:00
13:00	126	129	255	268	263	72	27	31	916	13:00
14:00	121	131	252	257	259	71	31	36	906	14:00
15:00	25	114	139	188	72	56	30	41	526	15:00
16:00	26	129	155	146	43	43	32	37	456	16:00
17:00	31	137	168	139	37	34	36	39	453	17:00
18:00	27	126	153	141	34	32	34	40	434	18:00
19:00	29	123	152	119	27	29	35	35	397	19:00
20:00	25	111	136	108	23	25	35	28	355	20:00
21:00	23	109	132	105	25	19	38	29	348	21:00
22:00	23	105	128	91	18	14	36	26	313	22:00
23:00	23	97	120	86	16	11	34	27	294	23:00
PEAK									941	

Panda 17th
Annual Children
Helping Children
Luncheon (1036
ppl)

	Night of 4/23	Night of 4/24
Occupancy	61%	49%

	Lot # 1 (East)	Lot # 1 (West)	Lot # 1 Total	Lot # 2	Lot # 3	Lot # 4	Casitas	L-Lot	TOTAL		
								Date	24-Apr		
8:00	29	95	124	133	34	55	33	28	407	8:00	
9:00	31	96	127	157	36	55	32	28	435	9:00	
10:00	33	93	126	174	63	68	32	24	487	10:00	
11:00	33	86	119	189	61	68	29	28	494	11:00	
12:00	35	85	120	194	59	67	38	20	498	12:00	
13:00	32	91	123	210	71	67	25	26	522	13:00	
14:00	40	96	136	218	71	66	26	29	546	14:00	
15:00	39	100	139	161	62	59	22	32	475	15:00	
16:00	31	86	117	150	62	56	24	25	434	16:00	
17:00	26	70	96	139	50	54	24	21	384	17:00	
18:00	21	71	92	126	49	52	22	18	359	18:00	
19:00	12	71	83	105	25	30	23	17	283	19:00	
20:00	18	66	84	102	14	13	24	18	255	20:00	
21:00	16	62	78	75	3	3	23	19	201	21:00	
22:00	14	57	71	69	3	2	23	19	187	22:00	
23:00	14	53	67	64	3	2	23	20	179	23:00	
									PEAK	546	

APPENDIX D

SHARED PARKING MODEL - EXISTING

Project: The Phoenician (15-1543)
Location: 6000 East Camelback Rd-Phoenix, AZ
Date: September 8, 2016
Scenario: Existing Hotel Programming

THE PHOENICIAN SHARED PARKING MODEL DEMAND MODEL - EXISTING HOTEL PROGRAMMING

Land Use	Guest Rooms & Villas		Employees		Ballrooms		Outdoor Function		Meeting Rooms		Restaurants		Golf Course		Tennis Courts		Spa		Total Req'd Parking	Parking Provided:
	Size	643 Keys	950 Emp	40,699 SF	78,196 SF	21,111 SF	21,611 SF	27 Holes	11 Courts	24 Stations	438.41	370.50	213.67	410.53	79.17	64.83	120.17	0.00		
Req'd Spaces	438.41		370.50		213.67		410.53		79.17		64.83		120.17		0.00		8.50		1705.77	1,613
Beginning Hour	Percent of Peak Demand	No. of Parking Spaces	Percent of Peak Demand	No. of Parking Spaces	Percent of Peak Demand	No. of Parking Spaces	Percent of Peak Demand	No. of Parking Spaces	Percent of Peak Demand	No. of Parking Spaces	Percent of Peak Demand	No. of Parking Spaces	Percent of Peak Demand	No. of Parking Spaces	Percent of Peak Demand	No. of Parking Spaces	Percent of Peak Demand	No. of Parking Spaces	Total Shared Parking Demand	
6:00 AM	100%	438	5%	0	0%	0	0%	0	0%	0	20%	13	100%	120	45%	0	100%	9	580	1033.00
7:00 AM	85%	373	20%	0	0%	0	0%	0	20%	16	80%	52	100%	120	45%	0	100%	9	570	1043
8:00 AM	65%	285	60%	0	50%	107	50%	205	50%	40	100%	65	100%	120	35%	0	20%	2	824	789
9:00 AM	55%	241	80%	0	50%	107	50%	205	50%	40	30%	19	95%	114	45%	0	20%	2	728	885
10:00 AM	45%	197	100%	0	50%	107	50%	205	50%	40	5%	3	90%	108	50%	0	20%	2	662	951
11:00 AM	35%	153	100%	0	50%	107	50%	205	50%	40	30%	19	90%	108	45%	0	20%	2	634	979
12:00 PM	30%	132	100%	0	50%	107	50%	205	80%	63	70%	45	85%	102	45%	0	100%	9	663	950
1:00 PM	30%	132	100%	0	50%	107	50%	205	80%	63	90%	58	90%	108	45%	0	100%	9	682	931
2:00 PM	35%	153	80%	0	50%	107	50%	205	20%	16	50%	32	95%	114	40%	0	20%	2	629	984
3:00 PM	40%	175	100%	0	50%	107	50%	205	20%	16	10%	6	95%	114	40%	0	20%	2	625	988
4:00 PM	50%	219	100%	0	20%	43	20%	82	20%	16	5%	3	95%	114	70%	0	40%	3	480	1133
5:00 PM	60%	263	67%	0	20%	43	20%	82	20%	16	10%	6	95%	114	100%	0	100%	9	533	1080
6:00 PM	70%	307	56%	0	60%	128	60%	246	20%	16	40%	26	80%	96	100%	0	100%	9	828	785
7:00 PM	80%	351	54%	0	100%	214	100%	411	20%	16	70%	45	60%	72	85%	0	80%	7	1116	497
8:00 PM	90%	395	54%	0	100%	214	100%	411	20%	16	70%	45	5%	6	75%	0	20%	2	1089	524
9:00 PM	95%	416	52%	0	80%	171	80%	328	10%	8	20%	13	5%	6	20%	0	0%	0	942	671
10:00 PM	100%	438	42%	0	20%	43	20%	82	0%	0	10%	6	2%	2	15%	0	0%	0	571	1042
11:00 PM	100%	438	35%	0	0%	0	0%	0	0%	0	0%	0	2%	2	5%	0	0%	0	440	1173
12:00 AM	10%	44	11%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	44	1569
PEAK																			1116	497

APPENDIX E

SHARED PARKING MODEL - PROPOSED

Project: The Phoenician (15-1543)
Location: 6000 East Camelback Rd-Phoenix, AZ
Date: September 8, 2016
Scenario: Proposed Hotel Programming

THE PHOENICIAN SHARED PARKING MODEL DEMAND MODEL - PROPOSED HOTEL PROGRAMMING

Land Use	Guest Rooms & Villas		Employees		Ballrooms		Outdoor Function		Meeting Rooms		Restaurants		Golf Course		Tennis Courts		Spa		Total Req'd Parking	Parking Provided:
	Size	665 Keys	950 Emp	40,699 SF	80,532 SF	21,111 SF	21,611 SF	18 Holes	8 Courts	24 Stations	1720.44	1,174								
Req'd Spaces	453.41		370.50		213.67		422.79		79.17		64.83		107.57		0.00		8.50		1720.44	1,174
Beginning Hour	Percent of Peak Demand	No. of Parking Spaces	Percent of Peak Demand	No. of Parking Spaces	Percent of Peak Demand	No. of Parking Spaces	Percent of Peak Demand	No. of Parking Spaces	Percent of Peak Demand	No. of Parking Spaces	Percent of Peak Demand	No. of Parking Spaces	Percent of Peak Demand	No. of Parking Spaces	Percent of Peak Demand	No. of Parking Spaces	Percent of Peak Demand	No. of Parking Spaces	Total Shared Parking Demand	
6:00 AM	100%	453	5%	0	0%	0	0%	0	0%	0	20%	13	100%	108	45%	0	100%	9	583	591.00
7:00 AM	85%	385	20%	0	0%	0	0%	0	20%	16	80%	52	100%	108	45%	0	100%	9	570	604
8:00 AM	65%	295	60%	0	50%	107	50%	211	50%	40	100%	65	100%	108	35%	0	20%	2	828	346
9:00 AM	55%	249	80%	0	50%	107	50%	211	50%	40	30%	19	95%	102	45%	0	20%	2	730	444
10:00 AM	45%	204	100%	0	50%	107	50%	211	50%	40	5%	3	90%	97	50%	0	20%	2	664	510
11:00 AM	35%	159	100%	0	50%	107	50%	211	50%	40	30%	19	90%	97	45%	0	20%	2	635	539
12:00 PM	30%	136	100%	0	50%	107	50%	211	80%	63	70%	45	85%	91	45%	0	100%	9	662	512
1:00 PM	30%	136	100%	0	50%	107	50%	211	80%	63	90%	58	90%	97	45%	0	100%	9	681	493
2:00 PM	35%	159	80%	0	50%	107	50%	211	20%	16	50%	32	95%	102	40%	0	20%	2	629	545
3:00 PM	40%	181	100%	0	50%	107	50%	211	20%	16	10%	6	95%	102	40%	0	20%	2	625	549
4:00 PM	50%	227	100%	0	20%	43	20%	85	20%	16	5%	3	95%	102	70%	0	40%	3	479	695
5:00 PM	60%	272	67%	0	20%	43	20%	85	20%	16	10%	6	95%	102	100%	0	100%	9	533	641
6:00 PM	70%	317	56%	0	60%	128	60%	254	20%	16	40%	26	80%	86	100%	0	100%	9	836	338
7:00 PM	80%	363	54%	0	100%	214	100%	423	20%	16	70%	45	60%	65	85%	0	80%	7	1133	41
8:00 PM	90%	408	54%	0	100%	214	100%	423	20%	16	70%	45	5%	5	75%	0	20%	2	1113	61
9:00 PM	95%	431	52%	0	80%	171	80%	338	10%	8	20%	13	5%	5	20%	0	0%	0	966	208
10:00 PM	100%	453	42%	0	20%	43	20%	85	0%	0	10%	6	2%	2	15%	0	0%	0	589	585
11:00 PM	100%	453	35%	0	0%	0	0%	0	0%	0	0%	0	2%	2	5%	0	0%	0	455	719
12:00 AM	10%	45	11%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	45	1129
PEAK																			1133	41