

# Parking Demand and Utilization Assessment – Resort Lifestyle Communities

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July 10, 2018

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As requested, Bowman Consulting has completed a parking demand and utilization assessment at two fully occupied Resort Lifestyle Communities to determine average parking utilization rates.

# Background

Cameron General Contractors (CGC) develops and constructs Resort Lifestyle Communities (RLC) throughout the country. Resort Lifestyle Communities are 55+ luxury independent living facilities that cater to local clientele that have typically lost a spouse, lost the ability to drive, or downsized. Each facility provides residents with an all-inclusive service, amenities, and dining arrangement, diminishing the normal need to travel outside the home for goods and services.

The design and operations of Resort Lifestyle Communities are prototypical and thus each of the 22 current nation-wide facilities are nearly identical in terms of floorplan layout and number of units (128-130 units). The number of parking spaces at each facility varies due to local regulations and site constraints. In addition to surface parking, a limited number of garaged parking spaces are typically available at every RLC location.

The purposes of this parking assessment are to:

- 1- Determine the average number of parking spaces utilized per unit for a fully occupied and operational Resort Lifestyle Community facility. This data will then be used as a guide for parking demand and planning purposes at RLC developments.
- 2- Determine if results are consistent with a limited parking analysis prepared in March 2017 by RLC.

#### **Site Selection**

For the preparation of this assessment, two Resort Lifestyle Communities were selected that represent a typical and prototypical facilities. The two sites evaluated are:

## Sherrill Hills - Knoxville, Tennessee (271 Moss Grove Boulevard)

This 128-unit community is currently fully occupied and operational. The community has 145 residents (1.13/unit) that are supported by a total staff of 36 employees on a multi-shift basis. The total number of parking spaces available for at this community is 163 spaces (42 garaged spaces and 121 surface spaces).

## Capital Oaks - Raleigh, North Carolina (6498 Ray Road)

This 128-unit community is currently fully occupied and operational. The community has 156 residents (1.22/unit) that are supported by a total staff of 45 employees on a multi-shift basis. The total number parking spaces available at this community is 164 spaces (44 garaged spaces and 120 surface spaces).

## Study Methodology

The methodology utilized for this study was based on determining existing parking demand and utilization rates at each fully occupied community during an average week. The procedures and evaluation for this assessment are in accordance with the Institute of Traffic Engineers (ITE) Parking Generation Manual 4<sup>th</sup> Edition, publication. ITE manuals are the leading resource for such data and provides traffic and parking related data for numerous land use and building types. Over 4,000 studies were aggregated for the data presented in current manual editions. ITE data is normally accepted by most city, county, state and other jurisdictions as the method used to model traffic and parking related data for growth management and project approvals.

## **Parking Demand Data Collection**

Field survey observations were completed from Saturday June 9<sup>th</sup>, 2018 to Sunday June 17<sup>th</sup>, 2018. This study period enabled data collection for a total of seven days, including two Saturdays, two Sundays, and three weekdays. The observations were completed for each day during a 15-hour period (6:00 AM to 8:00 PM). The total number of parking spaces occupied during these hours was recorded for the seven noted days. This period enabled data collection to occur during peak employee shift times (11:00 AM to 2:30 PM) as well as the evening meal service shift. It is important to note that parking data was collected on Father's Day at each facility. Whereas visitation may be expected to be higher on such a holiday, results demonstrate that no significant increase in parking demand and utilization occurred at either location on this date. The parking data collected was summarized and is presented at the end of this document as an attachment.

Questionnaires were distributed to each facility to also collect resident, staffing, and visitor data to ascertain vehicle ownership, relate parking demand to peak employee shift times as well as assess the significance of visitation on parking demand.

#### **Data Summary and Evaluation**

Based on data collected and the results of the parking demand assessment, the following results can be highlighted.

#### <u>Sherrill Hills - Knoxville, Tennessee (271 Moss Grove Boulevard)</u>

- Average number of vehicles parked per unit: 0.70 (maximum was 0.79)
- Average number of vehicles parked per unit from 6:00 PM to 8:00 PM: 0.68
- Daily average of vehicles parked per unit variation: 0.67 to 0.76
- Parking utilization rate: 0.55 (# of occupied spaces/total available spaces)
- % of residents that do not own a vehicle: 52%
- Lowest # of spaces occupied during study period: 63 out of 163 spaces (37%)
- Highest # of spaces occupied during study period: 112 out of 163 spaces (69%)
- Provided representative peak staffing glimpse for a fully occupied location; ranged from 13 to 18 staff at peak; primarily on weekdays only; primarily from 11:00 am to 2:30 pm

#### Capital Oaks - Raleigh, North Carolina (6498 Ray Road)

- Average number of vehicles parked per unit: 0.64 (maximum was 0.68)
- Average number of vehicles parked per unit from 6:00 PM to 8:00 PM: 0.63
- Daily average of vehicles parked per unit variation: 0.59 to 0.68
- Parking utilization rate: 0.50 (# of occupied spaces/total available spaces)
- % of residents that do not own a vehicle: 67%
- Lowest # of spaces occupied during study period: 67 of 164 spaces (41%)
- Highest # of spaces occupied during study period: 95 out of 164 spaces (58%)
- Provided representative service provider and vendor visitation; very limited (1-3) visitors per day; primarily between 9am and 4 pm; primarily on weekdays

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### **Comparative Data**

Comparative parking generation and utilization data is available through the ITE Parking Generation Manual, 4<sup>th</sup> Edition. The ITE manual provides such data under Land Use 252 (Senior Adult Housing), as follows:

- Average weekday\* parking generation rate = 0.59 vehicles/unit (128 units = 76 total stalls occupied)
  - \* Saturday and Sunday data not available in the ITE manual

A limited parking study conducted by RLC in March 2017 (attached hereto for reference) examined 14 occupied and operational RLC facilities after 6:00PM on a week night. The March 2017 study concluded that the average number of vehicles parked per unit after 6:00PM was 0.54 (highest was 0.73 and lowest was 0.25).

The June 9-17, 2018 study results compare to the data referenced above as follows:

Average Parking Utilization (vehicles/unit):

	Weekday	Weekend	Weekday (6-8 PM)
ITE Manual*	0.59	n/a	n/a
Sherrill Hills *	0.74	0.68	0.72
Capital Oaks *	0.65	0.63	0.64
RLC 2017 Study **	n/a	n/a	0.54

<sup>\*</sup> Basis = 128 units \*\* 14 locations, # of units vary

The June 9-17, 2018 study results provided herein are relatively comparative and relatively consistent with published ITE data for weekday parking generation rates per unit, likewise, are relatively comparative and consistent with the referenced March 2017 study for weekday 6-8 PM parking generation rates per unit.

### **Conclusions**

The primary conclusion of this study, including the assessment of comparative parking data for senior adult housing, is that the average demand number of vehicles parked per unit at a fully occupied Resort Lifestyle Community is below 1.0, and can be estimated to be significantly lower, typically 0.63 to 0.74 occupied spaces per unit or approximately 25-35% less than the number of units in the community. The results are consistent with ITE published data which suggests a somewhat lower average weekday parking utilization rate of 0.59 parked vehicles per unit for planning purposes.

Additional conclusions based on the data collected in this study are:

- Average hourly parking utilization rate (per space basis): 50% to 55% for the two sites.
- Typical peak employee staffing period at an operational facility is on a weekday and does not significantly affect parking demand (11:00 AM and 2:00 PM; 12-18 staff).
- Total number of RLC employees (typically 30-45) does not materially affect parking demand due to the use of multiple and staggered shift times, primarily established around meal services.
- Typical daily visitation by vendors, independent service providers, friends and family at an operational facility does not significantly affect parking demand.
- On average, 40% or more RLC residents do not own vehicles, do not drive and do not contribute to parking demand.

Lastly, the average of vehicles parked per unit from 6:00 PM to 8:00 PM was determined to be between 0.63 to 0.68 for the two sites. This data falls within the threshold of the parking analysis prepared in March 2017 by Resort Lifestyle Communities. Therefore, the analysis prepared in 2017 is validated by the data/analysis prepared in this document.

Sherrill Hills - Knoxville, TN

128 Units 128 Units occupied

145 residents 36 Total Staff (multiple shifts)

100% Occupany

121 Parking Spaces 42 Garage Spaces 163 Total Spaces

70 Residents Own a

70 Residents Own a Vehicle

Total Number of Parking & Garage Spaces Occupied @ Date/Time Shown Parked Vehicles Sat Sun Tue Wed Thu Sat Sun \* Hourly Low - High Average Average Average Dates: 9-Jun 10-Jun 12-Jun 13-Jun 14-Jun 16-Jun 17-Jun Range Per Hour Per Resident Per Unit Time AM 80.0 0.55 0.63 84.9 0.59 0.66 88.6 0.61 0.69 90.3 0.62 0.71 90.0 0.62 0.70 88.7 0.61 0.69 PM 100.7 0.69 0.79 97.0 0.67 0.76 91.9 0.63 0.72 92.1 0.64 0.72 90.6 0.62 0.71 92.0 0.63 0.72 90.3 0.62 0.71 88.4 0.61 0.69 84.1 0.58 0.66 

 Avg/unit
 0.67
 0.66
 0.72
 0.74
 0.76
 0.70
 0.67
 Parking utilization rate per available space = 90/163 = 0.55

KEY: HOURLY LOW \* Fathers 63 low 112 high 89.97 0.62 0.70

HOURLY HIGH Day Final averages as a result of 7-day study

Capital Oaks - Raleigh, NC

128 Units

**HOURLY HIGH** 

156 residents

128 Units occupied

100% Occupany

45 Total Staff (multiple shifts)

52 Residents Own a Vehicle

Final averages as a result of 7-day study

33%

0.68

48%

		120 Parking Spaces 44 Garage Spaces 164 Total Spaces					THE RESIDENCE				f .			
	ſ	Total Number of Parking & Garage Spaces Occupied @ Date/Time Shown					Parked Vehicles							
	Dates:	Sat 9-Jun	Sun 10-Jun	Tue 12-Jun	Wed 13-Jun	Thu 14-Jun	Sat 16-Jun	Sun * 17-Jun		.ow - High nge	Average Per Hour	Average Per Resident	Average Per Unit	
	Time													1
MA	6	74		74	77	68	77	74	68	77	74.0	0.47	0.58	
	7	78	72	79	83	73	79	76	72	83	77.1	0.49	0.60	
	8	80	71	81	80	80	82	78	71	82	78.9	0.51	0.62	
	9	81	73	84	88	82	84	83	73	88	82.1	0.53	0.64	
	10	80	76	87	89	79	80	85	76	89	82.3	0.53	0.64	
	11	78	78	90	83	81	82	85	78	90	82.4	0.53	0.64	
РМ	12	80	92	93	80	84	86	86	80	93	85.9	0.55	0.67	
	1	88	89	94	78	86	88	88	78	94	87.3	0.56	0.68	
	2	82	87	94	86	84	86	90	82	94	87.0	0.56	0.68	
	3	67	79	93	86	87	82	78	67	93	81.7	0.52	0.64	
	4	72	84	91	80	85	85	79	72	91	82.3	0.53	0.64	
	5	74	85	95	79	88	82	86	74	95	84.1	0.54	0.66	
	6	75	83	88	78	86	84	83	75	88	82.4	0.53	0.64	
	7	75	79	85	76	83	81	74	74	85	79.0	0.51	0.62	
	8	78	78	83	76	85	81	70	70	85	78.7	0.50	0.61	
	_	77	75	87	81	82	83	81			82			

 Avg/unit
 0.61
 0.59
 0.68
 0.63
 0.64
 0.65
 0.63
 Parking utilization rate per available space = 82/164 = 0.50

 KEY:
 HOURLY LOW
 \* Fathers
 67 low
 95 high
 81.69
 0.52
 0.64

Day



Resort Lifestyle Communities conducted a survey in March, 2017, to calculate the number of vehicles in the parking lot of each RLC community after 6:00 PM on a week night, the results of which are below.

Community Parking Survey - March 2017										
Community	Number of Units	Number of residents	Total Parking Stalls	Number of Parking Stalls Per Unit	Number of Vehicles on Site	Percentage of parking stalls used	Number of Vehicles on Site Per Unit			
Stone Oak	125	132	162	1.30	81	50%	0.65			
Lakeline Oaks	128	142	154	1.20	76	49%	0.59			
Capital Oaks	128	136	162	1.27	93	57%	0.73			
Maple Ridge	129	110	165	1.28	40	24%	0.31			
Savannah Pines	119	145	129	1.08	75	58%	0.63			
Provident Crossings	128	141	160	1.25	56	35%	0.44			
Reflection Ridge	119	119	166	1.39	55	33%	0.46			
Bradford Square	128	40	160	1.25	32	20%	0.25			
Oak Park	128	25	132	1.03	58	44%	0.45			
River Stone	116	126	170	1.47	80	47%	0.69			
Sherrill Hills	128	148	163	1.27	90	55%	0.70			
Emerald Oaks	128	137	162	1.27	75	46%	0.35			
Robinwood	142	138	154	1.08	100	65%	0.70			
Walnut Grove	129	110	105	0.81	45	43%	0.35			
AVERAGE	127	118	153	1.21	68	45%	0.54			

## Additional Information:

- Approximately 40% of all RLC community residents do not drive or do not own a vehicle upon the commencement of occupancy.
- During the peak usage period of 11:00 am to 3:00 PM when approximately 20 employees are located on site, average parking stall usage increases but remains less than one vehicle per unit.