

Parking Supply Analysis for The Reserve at Spencer

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Executive Summary

TWG proposes to build the Reserve at Spencer (“subject property”), a 192-unit building with a mix of one, two-, and three-bedroom apartments restricted to households earning 60 percent of area median income or less. The subject property will be located on Veterans Memorial Parkway in the City of Saint Peters, Saint Charles County, Missouri.

During its permitting process, the City asked TWG to conduct a parking analysis to justify the subject property’s proposed surface parking program, and TWG subsequently hired John Hersey to recommend an appropriate parking supply. Based on data from the American Community Survey, comparable properties, and best practices for off-street parking management for multi-family properties, this report recommends a parking supply of 275 parking spaces at the subject property, the Reserve at Spencer.

Analysis

This analysis compares data provided in the 2015-2019 ACS Five-Year Data estimate regarding St Peters with information gathered from contacting management staff at properties in surrounding St Charles County comparable to the subject property. The analysis also considers best practices for estimating off-street parking supply to set a range of parking supply and further considers the subject property’s income program before recommending a parking provision.

2015-2019 American Community Survey Five-Year Data Estimate

ACS annually estimates data on a broad range of topics about social, economic, demographic, and housing characteristics of the US population. The 2015-2019 ACS Five-Year Data estimate represents data collected over a period of time, increasing statistical reliability of the data for less populated areas and small population subgroups, like St Peters.¹ For the purpose of this analysis, the 2015-2019 ACS usefully estimates household income, household size, number of bedrooms per household, and vehicle availability.

Household size among St Peters renter households is important to understand relative to the subject property’s development program, including the number of one, two-, and three-bedroom units. Table 1 reproduces the 2015-2019 ACS Tenure by Household Size estimate for renter households in St Peters, finding a majority of one person per household and an average of 1.99 persons per household.

¹ United States Census Bureau. “American Community Survey Five-Year Data.” November 10, 2021.

Table 1: Tenure by Household (HH) Size among Renters in St Peters, MO

Number of Persons per HH	1	2	3	4	5	6	7	Sum
Percent of HH	49.5%	25.3%	11.5%	11.5%	2.2%	0.5%	0.5%	
Average Number of Persons per HH	0.49	0.51	0.35	0.46	0.11	0.04	0.04	1.99

Source: 2015-2019 ACS Dataset B25009

After determining the majority and average numbers of persons per household, it is useful to determine the number of bedrooms per household. Table 2 reproduces the 2015-2019 ACS Tenure by Bedrooms estimate for renter households in St Peters, finding that a majority of renter households in St Peters live in two-bedroom units, with an average of 2.06 bedrooms per unit.

Table 2: Tenure by Bedrooms among Renters in St Peters, MO

Number of Bedrooms	0	1	2	3	4	5	Sum
Percent of HH	1.1%	23.1%	52.2%	17.0%	6.0%	0.5%	
Average Number of Bedrooms per HH	0.00	0.23	1.04	0.51	0.24	0.03	2.06

Source: 2015-2019 ACS Dataset B25042

The number of vehicles available in St Peters renter households in particular is relevant to this parking analysis in order to anticipate parking demand at the subject property. Table 3 reproduces the 2015-2019 ACS Tenure by Vehicles Available estimate for renter households in St Peters, finding an average of 1.44 vehicles per household.

Table 3: Tenure by Vehicles Available among Renters in St Peters, MO

Number of Vehicles per HH	0	1	2	3	4	5	Sum
Percent of HH	8.8%	51.1%	28.6%	10.4%	1.1%	0.0%	
Average Number of Vehicles per HH	0.00	0.51	0.57	0.31	0.04	0.00	1.44

Source: 2015-2019 ACS Dataset B25044

In summary, the 2015-2019 ACS Five-Year Estimate finds that an average renter household in St Peters includes 1.99 persons in 2.06-bedroom units with 1.44 vehicles available.

Survey of Comparable Properties in St Charles County, MO

A survey of ten multifamily properties in St Charles County confirmed ACS findings and informed the estimate of parking supply for the subject property. Table 4 summarizes pertinent details about the comparable properties.

Table 4: Summary of Comparable Properties' Development and Parking Programs

	Units	Bedrooms	Residents	Parking Supply	Utilization Rate	Parking Demand	Parking Demand per Unit
5300 Centre	265	525	315	158	95%	151	0.57
Falcons Way Townhomes	40	80	67	88	100%	88	2.20
Pinewood Place Apartments	72	144	120	80	97%	78	1.08
PURE Apartments	143	184	154	217	98%	213	1.49
Ridgewood Village	252	386	322	520	95%	494	1.96
Southernside	220	404	337	208	97%	202	0.92
Townhomes at Homefield	48	96	82	50	100%	50	1.04
Triangle Apts	96	168	140	184	94%	173	1.80
Turnberry Place Apartments	354	588	490	400	95%	380	1.07
Vanderbilt Apartments	304	432	360	655	94%	616	2.03
TOTAL	1,794	3,007	2,387	2,560	-	2,445	-
AVERAGE	-	-	-	-	96.5%	-	1.36

The ten comparable properties include 1,794 units with 3,007 bedrooms. Per management staff, these units include 2,387 residents. The comparable properties provide 2,560 surface parking spaces, of which management staff determine 96.5% utilization at peak-hour, on average. This suggests a peak demand for 2,445 surface parking spaces or 1.36 parking spaces per unit.

Comparable properties exhibit similar characteristics as the 2015-2019 ACS Five-Year Data estimate anticipates. Whereas ACS data find that an average renter household in St Peters includes 1.99 persons in 2.06-bedroom units with 1.44 vehicles available, a survey of comparable properties finds 1.33 persons living in 1.68 bedrooms per unit with 1.36 vehicles available per household.

Best Practices for Estimating Off-Street Parking Supply

The American Planning Association, the Urban Land Institute, and the Victoria Transport Policy Institute recommend that multi-family residential properties supply sufficient parking to regularly accommodate 90 percent demand in order to allow for additional and irregular demand.^{2 3 4} Consistent with best practices and dividing the 100 percent demand ratio by 90 percent, an appropriate parking supply ranges from 1.36 to 1.51 parking spaces per unit.

Estimate of Appropriate Parking Supply at the Subject Property

Applying a parking supply ratio of 1.36 to 1.51 parking spaces per unit to the subject property yields a parking supply of 262 to 309 parking spaces. (Table 5)

Table 5: Range of Appropriate Parking Supply at the Subject Property

	Units	100% Per Unit Supply Ratio	100% Surface Parking Demand	90% Per Unit Supply Ratio	90% Surface Parking Demand
Reserve at Spencer	192	1.36	262	1.51	291

The subject property's income program further informs an appropriate range. The subject property will restrict residents' income to 60 percent of area median income - approximately \$45,000 for a four-person household in St Peters.⁵ According to ACS, lower-income households generally are smaller than higher-income households (Table 6), suggesting that the subject property will include fewer adults and their vehicles than data from ACS or comparable properties exhibit, reducing the number of drivers.

Table 6: Median Household Income by Household Size in St Peters, MO

Persons per HH	1	2	3	4	5	6	7
Median HH Income	\$39,330	\$79,461	\$96,897	\$113,219	\$124,309	\$108,571	\$109,219

Source: 2015-2019 ACS Dataset B19019

Therefore, considering specific income and household characteristics and in line with data from ACS, comparable properties, and relevant best practices, this analysis recommends that a maximum supply of 275 parking spaces would be appropriate for the subject property, the Reserve at Spencer.

² Shoup, Donald. *The High Cost of Free Parking*. American Planning Association. 2004.

³ Smith, Mary. *Shared Parking: Third Edition*. Urban Land Institute. 2020.

⁴ Littman, Todd. "Parking Management: Comprehensive Guide." Victoria Transport Policy Institute. April 22, 2021.

⁵ Missouri Housing Development Commission. "Area Median Income Limits, Fiscal Year 2020." November 10, 2021.