

# Memorandum

City of Santa Rosa  
Planning & Economic  
Development Department  
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Date: June 26, 2020  
To: Keith Rogal, SRDT Holdings and Jack Robertson, Tableau Development  
From: Kari McNickle and Ian Barnes, Fehr & Peers  
Subject: **Parking Demand Analysis for the One Santa Rosa Avenue Project**

WC20-3727

This memorandum documents the results of a parking demand and supply analysis conducted for the One Santa Rosa Avenue project. The proposed project includes a seven-story, mixed-use, multifamily residential building with 120 residential dwelling units and a 500 square foot café on the ground floor. The project will be constructed at the southwest corner of Santa Rosa Avenue/Third Street and will be located approximately one-half mile from the Santa Rosa Downtown SMART station and immediately adjacent to the downtown Santa Rosa transit mall. The strategy to satisfy the City's parking requirements for the project includes the utilization of spare parking capacity in the existing, City-owned Garage 12 at 555 First Street (located across the transit mall from the proposed project). The City of Santa Rosa's residential parking minimum for the Downtown area is one (1) space per dwelling unit.

The parking demand analysis summarized in this memorandum answers the following questions:

1. What is the project's projected residential parking demand relative to the City's specified residential parking minimum for the Downtown area?
2. Does Garage 12 have enough capacity to satisfy parking demand for One Santa Rosa Avenue?

To answer these question, Fehr & Peers conducted the following analysis:

- Literature review of parking demand in suburban mixed-use, commercial and multifamily residential transit-oriented developments (TODs)
- Guidance from the Institute of Transportation Engineer's (ITE) *Parking Generation Manual, 5<sup>th</sup> Edition* and the Urban Land Institute's (ULI) *Shared Parking, 3<sup>rd</sup> Edition*.
- Analysis of Garage 12's existing parking capacity and occupancy



## Literature Review

A literature review was conducted to study parking demand characteristics for mixed-use, multifamily residential and commercial projects located near high quality transit in suburban mixed-use/downtown environments compared with other suburban settings. The research suggests the following:

- A survey of several mixed-use, commercial and multifamily suburban TOD sites in Denver, Los Angeles, the San Francisco Bay Area, Seattle, and Washington, D.C. finds that parking demand at the sites were well below published data (Ewing, et. Al, 2017)
- A survey of suburban multifamily residential TODs finds an oversupply of residential parking by as much as 25-30 percent (Arrington and Cervero, 2008)
- An oversupply of parking at suburban multifamily residential TODs positively correlates with increased vehicle ownership (Cervero, et al, 2010)
- Proximity to transit, along with a walkable design and a mix of uses, significantly reduces parking demand (Cervero and Guerra, 2013)

The research indicates that suburban multifamily residential TODs generate lower parking demand than other suburban settings, particularly when accompanied with a pedestrian-oriented design and a mix of uses nearby. As compared to the baseline research numbers in the ITE *Parking Generation Manual*, these factors can reduce parking demand by 8 percent to 73 percent for multifamily residential uses.

## ITE Parking Generation

Parking demand data in previous versions of the ITE *Parking Generation Manual* were based on sites that were “primarily isolated, suburban sites” that did not account for the presence of high-quality transit or a mix of nearby compatible uses such as employment, retail and restaurants. Therefore, ITE guidance often overestimates parking demand for suburban multifamily residential TODs.

However, the 5<sup>th</sup> Edition of the ITE *Parking Generation Manual* (published in 2019), studied suburban TODs specifically and differentiated parking demand within one-half mile of rail transit from parking demand outside of the one-half mile catchment area. The *Parking Generation Manual*, 5<sup>th</sup> Edition provides an 18 percent reduction factor for projects located within one-half mile of rail transit; no data on reduction factors are provided for projects located immediately adjacent to major transit hubs.

The research presented previously indicates that projects similar to One Santa Rosa Avenue typically result in parking demand that is less than the ITE guidance. Based on the research, Fehr & Peers estimates that parking demand for One Santa Rosa Avenue will be fifteen percent below the ITE 5<sup>th</sup> Gen published rates based on the project’s context, distance to compatible land uses,



and immediate proximity to a major transit hub (the Downtown transit mall). **Table 1** summarizes the parking demand calculation for the project.

**Table 1: Project Parking Generation**

Land Use Code	Land Use Name and Context	Dwelling Units	Day	Peak Demand Time	Unadjusted Demand Generated per unit	Estimated Unadjusted Parking Demand	Estimated Parking Demand with 15% reduction
221	Mid-rise Multifamily; General Urban/Suburban	120	Weekday	10 PM – 5 AM	1.12	134	114
			Saturday	11 PM – 7 AM	1.15	138	117
			Sunday	11 PM – 7 AM	1.00	120	102

Source: ITE Parking Generation Manual, 5<sup>th</sup> Edition; Fehr & Peers, 2020.

The City's residential parking minimum of 1 space per dwelling unit for the Downtown area would result in a residential parking requirement of 120 spaces for the One Santa Rosa Avenue project. Providing this amount of parking would provide additional flexibility in case parking demand is slightly higher than estimated. Also, the changes envisioned in the Downtown Station Area Specific Plan could result in even more interactions between the project and other nearby sites, thus reducing the need for parking supply even further.

For the ground-floor café, an estimated three (3) spaces should be provided for employees. It is assumed that patrons will mostly likely be tenants who live in the building, along with visitors and employees already doing business in the Downtown area.

## ULI Shared Parking

The *ULI Shared Parking Manual, 3<sup>rd</sup> Edition*, was employed to estimate when peak demand would occur for each land use and whether the mix in land uses would result in competing parking demand. Based on ULI guidance, peak parking demand for the café would occur between 12:00pm and 2:00pm while peak demand for residential units occurs overnight. Non-residential uses typically generate peak parking demand during the midday and early evening. This indicates that the mix of uses proposed by the project would not result in competing parking demand.

## Garage 12 Occupancy

A review of Garage 12 parking occupancy data was conducted to verify whether Garage 12 has sufficient spare capacity to satisfy the project's residential parking demand, along with existing parking demand. Garage 12 is a City-owned parking garage with 688 total parking spaces located at 555 First Street. The City of Santa Rosa provided Fehr & Peers with parking occupancy data for



Garage 12 from March 2019 to March 2020 (i.e. before the Covid-19 shelter-in-place order was issued).

In the one-year time period of data provided, the highest observed one-hour occupancy in Garage 12 over the entire data set was 58 percent, or 399 spaces occupied. Therefore, even at the peak maximum of observed occupancy for Garage 12, there would be 289 spaces available, which would be more than sufficient to accommodate the parking needs of the One Santa Rosa Avenue project (120 vehicles for residential and three café employees). This scenario assumes that the peak of One Santa Rosa Avenue demand and general public parking demand are in-line with one another. However, these peak periods would generally not be in alignment, as the peak demand hours for residential parking are overnight (ranging from 10:00pm to 7:00am, per ITE and ULI), and as such there is little impact expected during the current peak occupancy hours at the garage, which are from 12:00pm to 5:00pm.

## Conclusions

Based on our analysis, Fehr & Peers concludes the following:

- Project parking demand can be satisfied by providing supply in-line with the City's residential parking minimum for the Downtown area of one (1) space per dwelling unit (120 total spaces for the project) and approximately three (3) employee spaces for the café.
- Garage 12 has enough capacity to accommodate the project's residential and commercial parking demand with room to spare, even at peak maximum occupancy (per data provided by the City).

Research suggests that suburban, multifamily residential TODs generate lower parking demand due to their proximity to transit, walkable design, and mix of uses nearby. Furthermore, a survey of suburban, multifamily residential TOD sites reveals an oversupply of parking. The findings of these research studies are confirmed by the latest edition of ITE's *Parking Generation Manual*, which accounts for parking demand at suburban sites within one-half mile of a rail station. ITE finds that mid-rise, multifamily residential parking demand within one-half mile of transit falls within the range of 0.85 – 1.15 spaces per unit. Garage 12 parking occupancy data provided by the City of Santa Rosa indicates that the facility has the spare capacity to accommodate the range of parking demand for the project (plus additional spaces to accommodate future parking demand from other nearby uses), even at existing peak occupancy.

If you have any questions, please contact Kari McNickle and Ian Barnes at (925) 930-7100.