

MEMORANDUM

To: Dawn Thomas, Community Development Director, Town of Riverhead
From: Sam Schwartz Consulting Project Team
Re: Town of Riverhead Parking Generation and Analysis
Date: October 13, 2022

Introduction

The Town of Riverhead, NY has asked Sam Schwartz Consulting to update their Strategic Parking Plan completed in 2020 to include three new developments that are planning/proposed for the Town. These developments are:

- The Town Square Site
- The Transit-Oriented Development Transformation
- The Suffolk Theater Residential/Green Room Renovation

Additionally, there are other sites within the Town of Riverhead that are potential redevelopment parcels. These lots have been accounted for by providing a miscellaneous category within the analysis.

This memorandum summarizes the methodology used and the results of a parking demand analysis. The parking demand analysis will provide the Town with a parking demand estimate that will inform the development of two potential parking garages at Griffing Avenue and Railroad Avenue and Roanoke Avenue and 1st Street.

Future Parking Supply

In the future condition available parking will be reduced as the previously mentioned developments will be constructed on existing parking lots. To calculate the total number of spaces to be removed by the developments, the utilization analysis from the Strategic Parking Plan completed by Sam Schwartz in 2020 was referenced. The existing parking supply in Riverhead was also obtained through data previously collected for the 2020 Strategic Plan and includes both on-street and off-street parking for a total of 2,881 spaces. The maximum parking loss due to planned development was calculated and subtracted from the current parking supply, shown in, **Figure 1**. It is assumed that the development would encroach Lots C, H, L, and U, shown in **Figure 2**, resulting in the loss of 728 parking spaces. The labeling system from the original Strategic Parking Plan was utilized for consistency.

Parking Loss due to Development	
Lot Name	Inventory
C	237
H	119
L	287
U	85
Total Spaces Lost	728

Figure 1: Parking Loss

Figure 2: Study Area



Future Parking Demand

The 2020 Strategic Parking Plan Addendum was also referenced to establish the current parking demand (1,671 parking spaces). The future parking demand for the downtown area of Riverhead is based on the plans for three upcoming development projects. The new land uses, and the respective square footages or estimated number of units (where available) were compiled. When the number of development units were not available, assumptions were documented (listed below) as part of the calculations. The ITE Park Generation Manual, 5th Edition was utilized to estimate parking demand for each land use category (LUC).

Initial parking generation numbers were presented to the Parking Committee at their Thursday, July 28, 2022 meeting. Based on feedback from members a miscellaneous (or buffer) category was added to the Park Generation to account for developments still in the planning stages. An additional 5,000 SF of retail space and 5,000 SF of residential space were included in the calculations to account for those developments.

Several assumptions were made based on the current development plans:

1. Given the 100'x100' ground dimensions of the residential condominium ownership building at the future town square site, it was assumed that each unit would average 850 square feet, and the building would consist of three residential floors, totaling 30 residential units.
2. Based on a visual representation of the future town square kiosk plaza, 20 kiosks, with each kiosk requiring one employee, were included in the calculations.
3. To estimate the parking demand created by the new amphitheater, the comparably sized Richard Rogers Amphitheater in New York City was referenced for seat estimation.
4. The square footage of the café in the transit-oriented development was estimated using the average square footage of a Dunkin' Donuts location without a drive-through.
5. The expansion of the Suffolk Theater's backstage will not impact the parking demand.
6. Assuming all 5,000 SF of the miscellaneous residential space would be livable, the square footage would equate to a low rise building with 6 residential units

The additional parking demand generated by the three developments and additional miscellaneous uses total 1,129 parking spaces. A detailed breakdown of the parking generation calculations is provided in **Figure 3** on the following page. The superscript within **Figure 3** corresponds to the above assumptions.

Development	LUC	Description	Units	Quantity	ITE Parking Generation
Future Town Square Site					
Hotel, General Urban/Suburban, Person Trips	310	Hotel	Rooms	80	59
High-Turnover (Sit-Down) Restaurant, General Urban/Suburban, Assumed Person Trips	932	High-Turnover (Sit-Down) Restaurant	KSF GFA	3.85	36
Museum (First Floor Hotel), General Urban/Suburban, Person Trips	580	Museum	KSF GFA	4.175	3
Retail Shops, General Urban/Suburban, Person Trips	820	Shopping Center	KSF GFA	12.7	119
Museum (Firehouse), General Urban/Suburban, Person Trips	580	Museum	KSF GFA	0.8	1
Communal Office Rentals, General Urban/Suburban, Person Trips	710	General Office Building	KSF GFA	5.083	46
Residential Condominium Ownership Building, General Urban/Suburban, Person Trips - ¹	221	Mid-Rise Residential	Units	30	4
Plaza, General Urban/Suburban, Person Trips ²			Employees	20	20
Amphitheater, General Urban/Suburban, Person Trips ³	444	Movie Theater	Seats	1,324	129
Youth Recreational Area, General Urban/Suburban, Person Trips	495	Rec Community Center	KSF GFA	30	62
			Total Parking Spaces	479	
Transit Oriented Development					
Retail, General Urban/Suburban, Person Trips	820	Shopping Center	KSF GFA	2.34	104
Flex/Commercial, General Urban/Suburban, Person Trips	820	Shopping Center	KSF GFA	12.8	119
Residential Units, Studio and 1-Bedroom, General Urban/Suburban, Assumed Person Trips	221	Mid-Rise Residential	Units	243	179
Cafe, General Urban/Suburban, Person Trips ⁴	936	Coffee/Donut Shop w/o Drive-Through	KSF GFA	2.6	27
			Total Parking Spaces	429	
Suffolk Theater Renovation					
Suffolk Theater, General Urban/Suburban, Assumed Person Trips ⁵⁶	444	Movie Theater	Seats	950	-
Residential Units, Studio and 1-Bedroom, General Urban/Suburban, Assumed Person Trips	221	Mid-Rise Residential	Units	28	3
Retail Shops, General Urban/Suburban, Person Trips (PM Only)	820	Shopping Center	KSF GFA	3	105
			Total Parking Spaces	108	
Miscellaneous/Buffer Developments					
Retail, General Urban/Suburban, Person Trips	820	Shopping Center	KSF GFA	5	108
Mid-Rise Apartments, General Urban/Suburban, Person Trips ⁷	220	Low-Rise Residential	Units	6	5
			Total Person Trips	113	
			Total Spaces	1,129	

Figure 3: Parking Generation Details

Based on the current number of parking spaces available in Riverhead (2,881), and the 728 parking spaces estimated to be removed, a total of 2,118 parking spaces would remain ($2,881 - 728 = 2,153$). The existing demand of 1,671 parking spaces along with the estimated new demand from developments (1,129) provides a new total parking demand of 2,800 parking spaces.

This calculation is also shown in Figure 4 below.

Existing Parking Infrastructure		Parking Demand	
Existing Parking Spaces	2,881	Existing Demand	1,671
Parking to be Removed	728	New Demand	1,129
Total Parking Spaces	2,153	New Parking Demand	2,800

Figure 4: Parking Demand

Therefore, the existing demand (2,800) less the existing total spaces (2,153) leaves a total new parking demand of 647 spaces.

Parking Needs Sensitivity Analysis

The 647-parking space demand assumes 100% capacity at all times and is the minimum number of parking spaces needed to meet the calculated demand. 100% capacity assumes every spot will be available and utilized. The effective and efficient turnover of convenient parking spaces is most successful when the facility reaches an 85% occupancy rate, meaning that 10% to 15% of spaces are not occupied at any given time and are available for incoming parkers. This is also called 'functional capacity.' Accordingly, it is recommended that the Town of Riverhead aim to provide enough parking so that the standard occupancy rate is equal to 85% or functional capacity. For this instance, functional capacity would be equivalent to 761 parking spaces.

Recommendation

Assuming 333 parking spaces in the Griffing Avenue and Railroad Avenue parking garage (data previously provided by the Town of Riverhead) it is recommended that the proposed Roanoke Avenue and 1st Street Garage hold approximately 428 vehicles. If that parcel is unable to host a garage of that size it is recommended that the Griffing Avenue and Railroad Avenue parking garage size be adjusted accordingly. As the majority of the new developments are closer to Roanoke Avenue and 1st Street, parking garage capacity should favor this location.