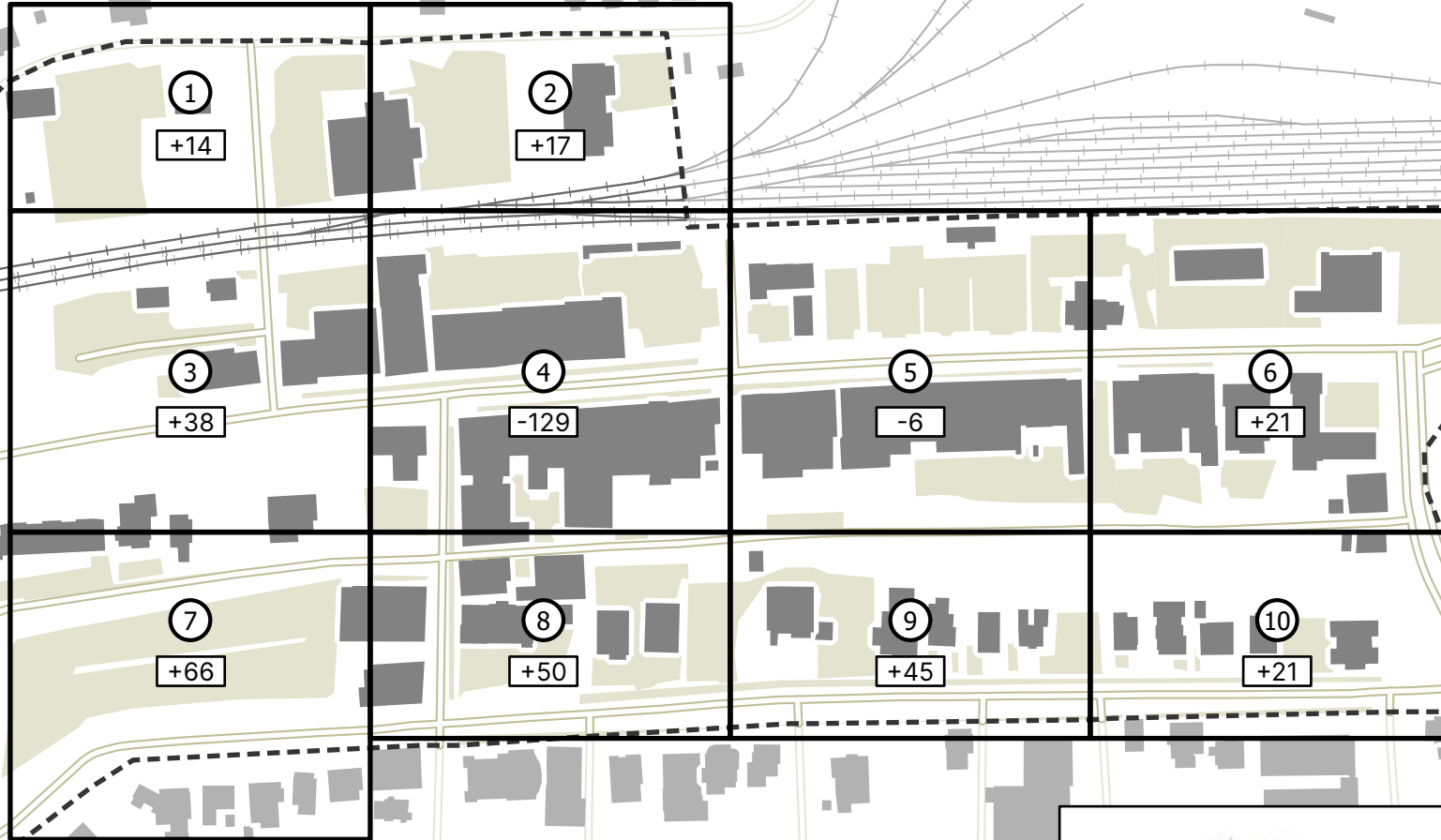


Parking Study Map



RADFORD
THE NEW RIVER CITY

- 10 Zone Number
- +21 Surplus/Shortage
- Study Area
- Railroad
- Roads
- Buildings
- Parking Areas

0 0.01 0.03 0.05 Miles

N

East Main Downtown Plan

Parking Inventory and Analysis

Introduction

Parking facilities play an important role in the success of downtowns. Understanding the supply and demand of parking helps cities support the needs of businesses, employees, residents, and visitors. As part of improving the downtown experience and promoting economic growth in the area, the City of Radford incorporated the parking inventory and analysis in the *East Main Downtown Plan*. The details of the study and the analysis are provided in this document.

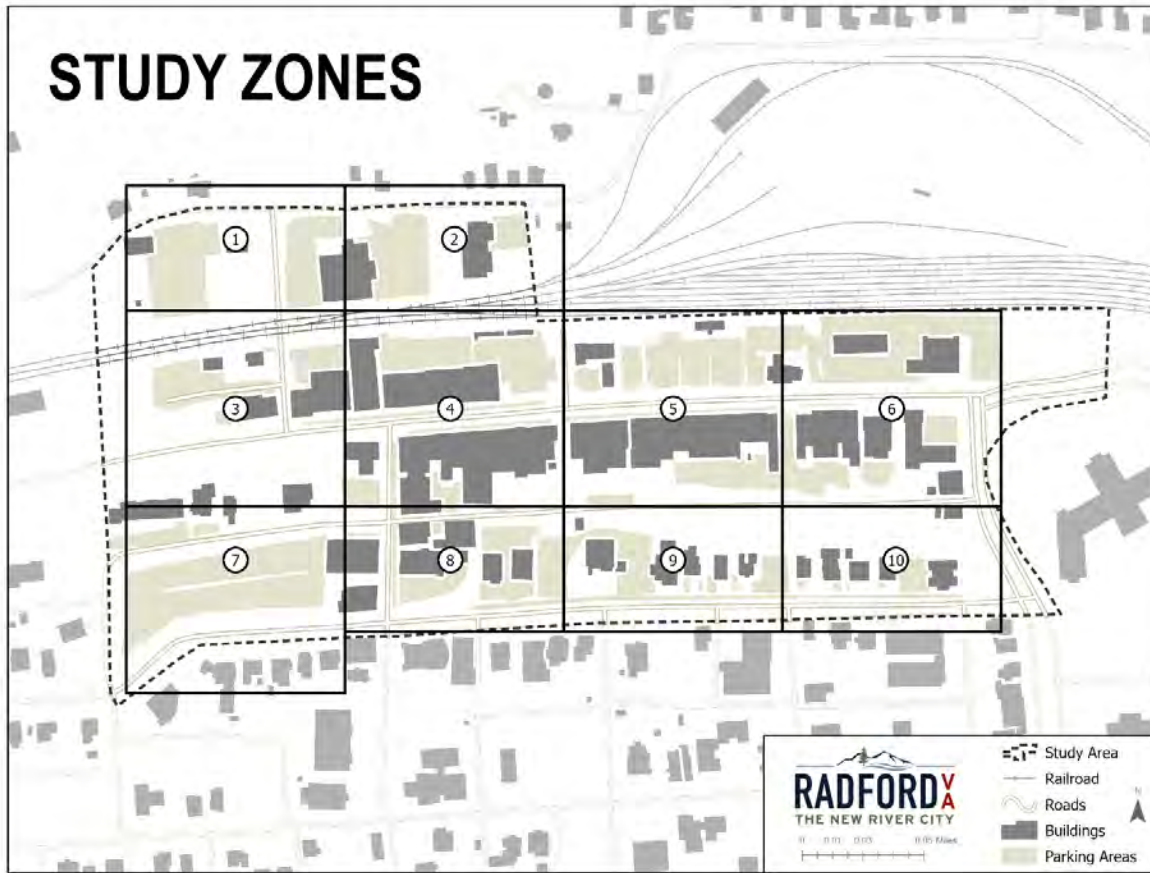
Study Area

The East Main Downtown area is the focus of this study, and the map of the area is shown in Figure 1. The area was subdivided into ten zones, which are shown in Figure 2.

Figure 1. Study Area Map



Figure 2. Zone Map



The parking zones and their approximate dimensions are listed in Table 1.

Table 1. Parking zones of the study area and their approximate dimensions.

Zones	Dimensions
Zones 3, 4, 5, 6 7	470 ft. x 420 ft
Zones 1, 2, 8, 9, 10	470ft.X 270 ft

Methodology

A different approach was taken in studying the parking supply and demand as the project coincided with the COVID-19 pandemic. Normally, physical counts of occupied parking spaces would be made during busy hours, but due to the increased shutdowns and work-at-home environments during the pandemic, these numbers would not reflect the true parking demands during normal years. Therefore, parking numbers were extracted from the building and land-use data in the area.

The following approach was taken:

- Parking generation of each building and land use was considered.
- Projects that are in the planning phases and potential projects for vacant buildings were also included.
- For vacant buildings:
 - 2nd and 3rd floors were assumed to be residential apartments,
 - 1st floor was assumed to have businesses such as retail, restaurants, and offices.
- Inventory data of parking spaces included:
 - Number of spaces
 - Type of parking spaces: on-street, off-street, public/private, handicapped
 - Time limits of parking spaces, when applicable.

Data Collected and Analysis

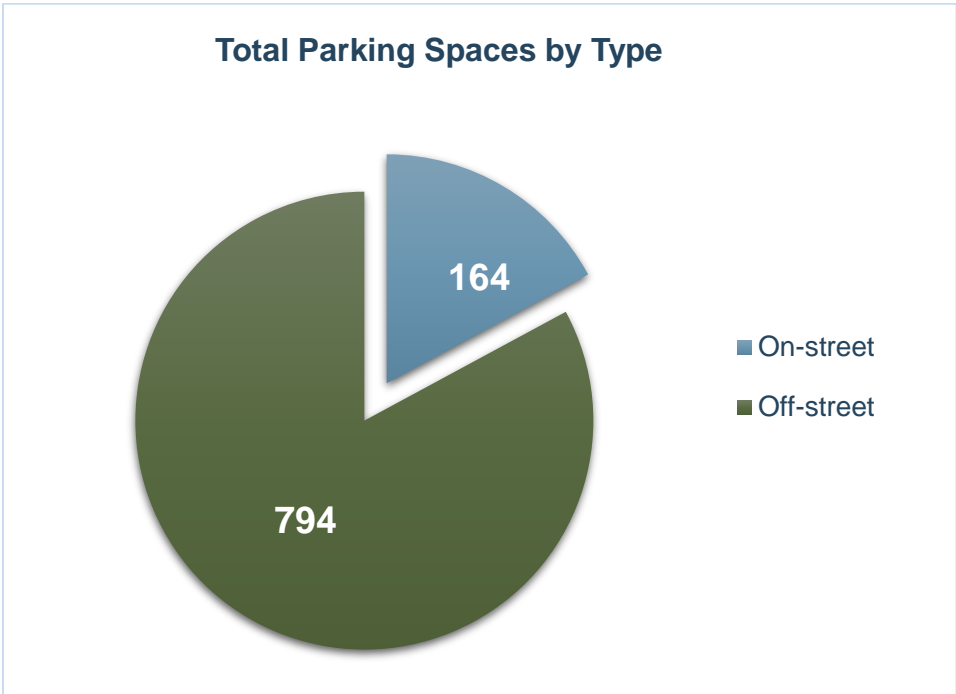
The parking supply within the study area includes a mix of on-street and off-street parking spaces. The on-street parking is mainly publicly owned. The off-street parking spaces included privately owned properties, City owned parking lots and publicly owned and/or leased properties.

Parking Inventory

The distributions of parking supply by type and ownership are shown in the following tables and graphs:

Total Parking Spaces by Type (All Zones)

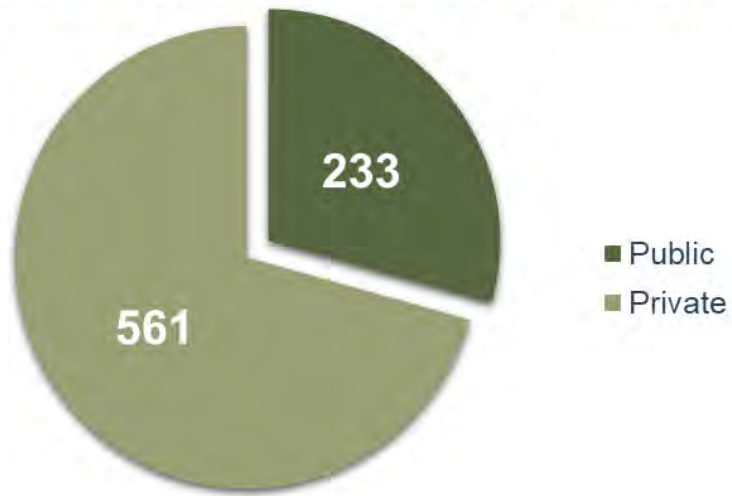
Type	Total
On-street Parking	164
Off-street Parking	794
Total	958



Total Off-street Parking Spaces by Ownership (All Zones)

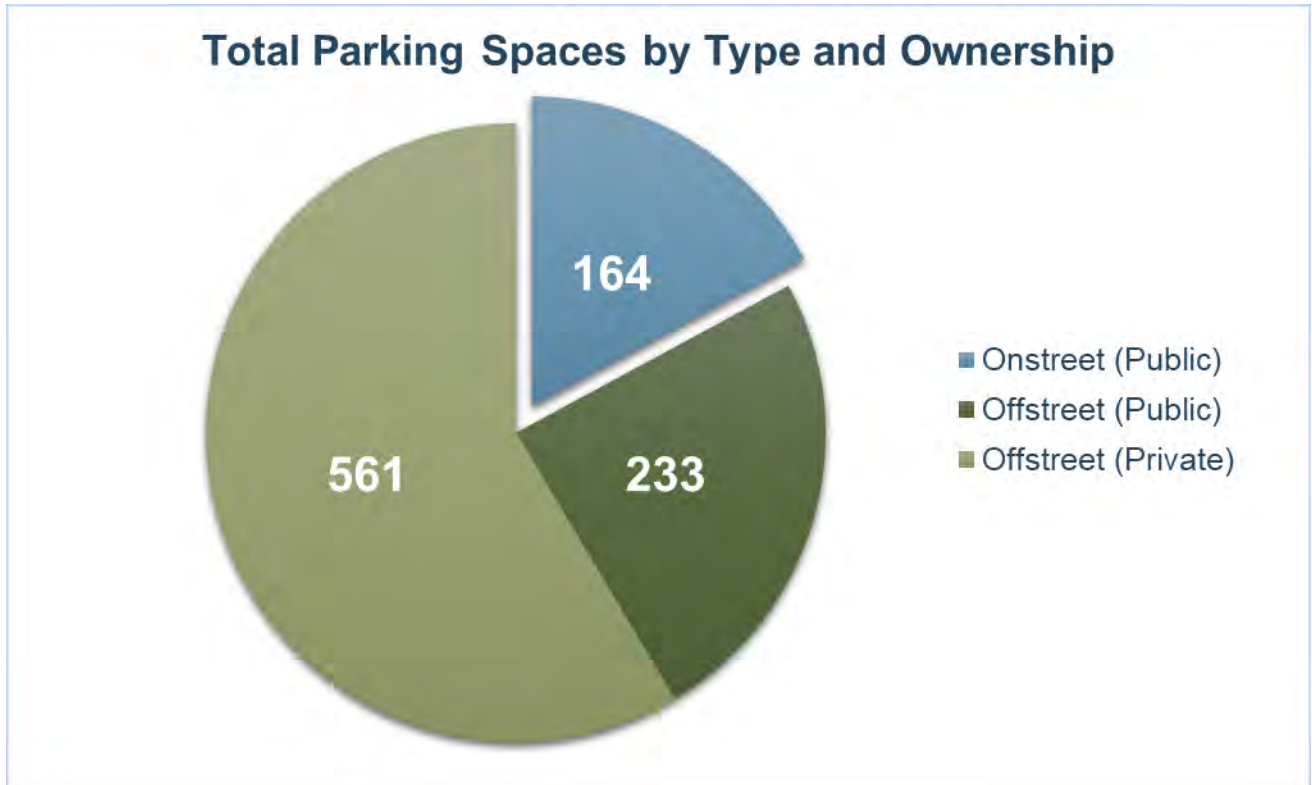
Type (off-street only)	Total
Public	233
Private	561

Total Offstreet Parking Spaces by Ownership



Total Off-street Parking Spaces by Type and Ownership (All Zones)

Type (off-street only)	Total
On-street (Public)	164
Off-street (Public)	233
Off-street (Private)	561



Inventory by Zones

Zones	Parking Type and Ownership		
	On-street Public	Off-street Public	Off-street Private
Zone 1	0	0	56
Zone 2	0	0	25
Zone 3	4	0	71
Zone 4	34	32	73
Zone 5	20	56	68
Zone 6	5	19	107
Zone 7	9	126	30
Zone 8	31	0	62
Zone 9	32	0	48
Zone 10	29	0	21
Total	164	233	561

Parking Demand

To estimate the parking demand for the study area the parking generation rates for individual land uses were used. The following table provides the estimated parking generation rates that reflect the characteristics of the areas.

Land Use Category	Unit	Generation Rates
Auto Repair	Per 1000 square feet	5 spaces
Assembly Facility (Churches, Funeral homes etc)	Per 1000 square feet	6 spaces
Personal Service	Per 1000 square feet	3
Medical Office	Per 1000 square feet	5
Office and Financial Institution	Per 1000 square feet	3
Residential, Single Family	Per unit	2 spaces
Residential, Apartments	Per unit	1.25 spaces
Restaurant	Per 1000 square feet	6
Retail	Per 1000 square feet	4
Storage/Warehouse/Light Industrial	Per 1000 square feet	2 spaces

Existing Demand

Parking demand analysis was conducted for all zones within the study area. After evaluating the parking availability in the East Main Downtown area, the following were observed:

- There are approximately 958 parking spaces available in the study area
- Parking demand for all the existing uses is approximately 766 parking spaces
- Overall, there is a surplus of approximately 190 parking spaces.

Analysis was also conducted for each of the individual zones within the study area, and the findings indicate the following:

- There are potentially parking deficiencies within two zones: Zone 4 (129 spaces), and Zone 5 (6 parking spaces).
- Some deficiencies can be mitigated by the surplus of spaces that are in adjacent zones.
- Multiple uses within same zone having different peak demand periods can reduce the overall deficiency in a zone.

Future Demands

Two redevelopment projects are currently underway in the area, and the vacant commercial and residential units are expected to be filled. Assuming that these areas will contain a mix of retail, personal service, office and restaurant on the ground floor and multifamily in the upper stories, there will be a need for 124 parking spaces. This does not mean that there will be an overall lack of parking spaces, but there could be some localized deficiencies that the city should monitor. Improvements and redesign of existing public parking can help increase parking availability and foster ease and efficiency of its use.

Recommendations

In order to improve perceptions of parking availability and mitigate the current and future shortage of parking, the following guidelines and recommendations can be considered:

1. Review parking regulations as part of the zoning ordinance rewrite to identify policies that are a barrier to meeting development and redevelopment goals.
2. Redesign public parking lot on 3rd Avenue to foster more efficient use accessibility to public parking.
3. Continue to improve and enhance landscaping around parking facilities to enhance visual appearance of parking lots.
4. Improved wayfinding signage to inform the public of locations of parking areas and time restrictions.
5. Improved pedestrian environment and lighting to encourage walking and ease navigation from parking areas to destinations.
6. Enforce time limit restrictions on applicable on-street parking locations.
7. Enhance the appearance and efficiency of publicly owned parking lots
8. Continue current policy of free parking as it is desirable to many survey respondents.
9. Continue to monitor parking demand with new redevelopment projects and increase in business activity in the area.
10. Consider pursuing/acquiring parking spaces or entering into additional partnerships to address future parking demands.