



REPORT

CITY OF
Keene
NEW HAMPSHIRE

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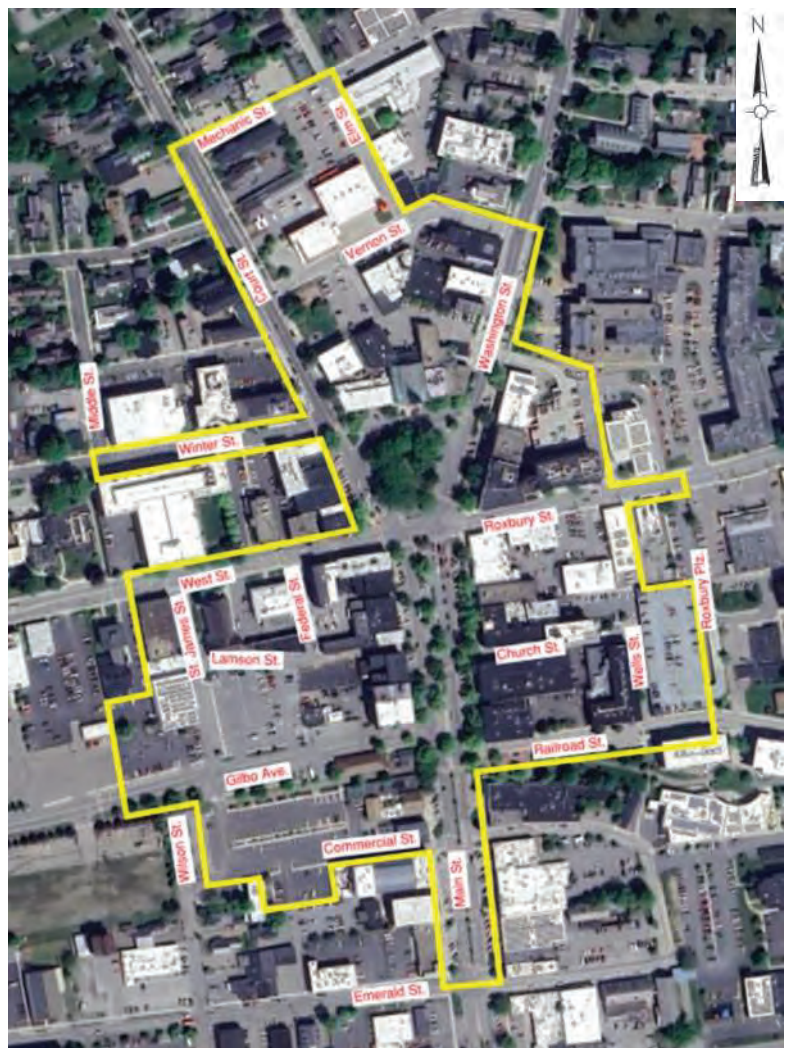
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1.0 INTRODUCTION

Weston & Sampson, in collaboration with THA Consulting, was retained by the City of Keene to provide engineering services for the programmatic and conceptual design of a downtown parking structure. As part of these engineering services, a parking demand and needs analysis was conducted. This report summarizes the findings of that analysis, which projects future parking requirements to support the parking garage. The goal is to strengthen support for local businesses, enhance residential quality of life, and promote future economic development. The projected parking needs consider current demand, anticipated growth, potential redevelopment of an adjacent parking lot, and increased occupancy of nearby land uses.

The study area for the downtown parking assessment was defined in coordination with City staff and encompasses a portion of the city's Central Business District. Specifically, it is bounded by Emerald Street and Eagle Court to the south, Mechanic Street to the north, School Street to the west, and Roxbury Plaza to the east. Within this area, the assessment includes public on-street parking, permit restricted on-street parking, and public and private off-street parking lots. Figure 1 illustrates the boundaries of the study area.

Figure 1 – Study Area



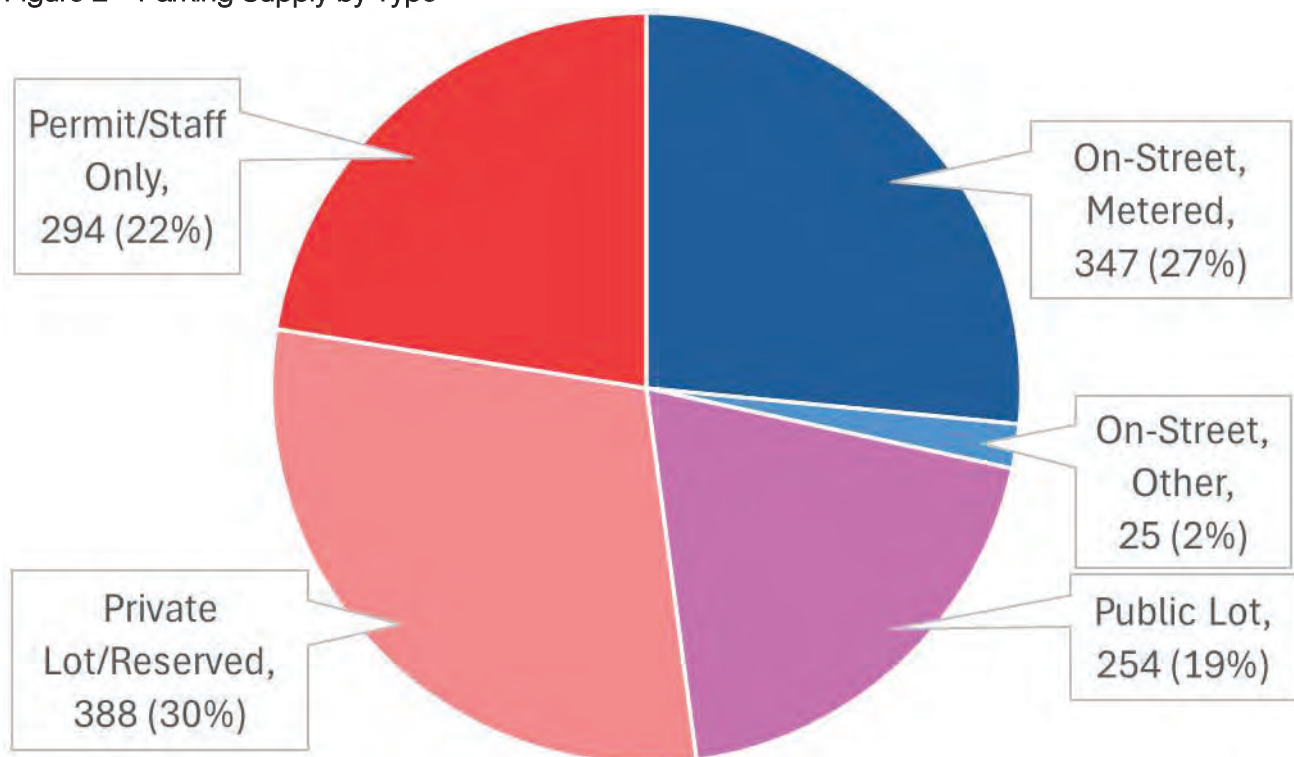
2.0 EXISTING PARKING SUPPLY

The existing parking supply within the study area includes approximately 1,308 parking spaces, distributed across various types of facilities:

- **On-Street Parking:**
 - o 347 metered public spaces
 - o 25 other on-street spaces, including:
 - 11 free spaces
 - Approximately 8 loading zone spaces
 - 2 reserved spaces
 - 4 permit-required spaces
- **Off-Street Parking:**
 - o 299 spaces in paid parking lots
 - o 108 spaces in a private lot that allows paid public parking
 - o 235 spaces in private lots reserved for associated private land uses
 - o 294 spaces requiring a permit or reserved for staff.

Figure 2 illustrates the distribution of parking spaces across the various types of parking facilities within the study area. All parking count data is provided in Appendix A.

Figure 2 – Parking Supply by Type



Most on-street parking is paid and managed via meters, kiosks, or mobile apps. Free on-street parking

is limited and primarily found on Gilbo Avenue and St. James Street. During multiple observations, these areas had more parked vehicles than striped spaces due to double parking or angled parking in areas marked for parallel parking. Two streets within the study area include loading zones, and two others offer reserved or permit-required spaces. Table 1 provides a detailed breakdown of available on-street parking. Table 2 lists parking spaces available within public parking lots.

Free and paid on-street parking is limited to a 2-hour duration. In addition, several off-street parking lots have specific duration regulations:

- **Commercial Street Lot**, (south side of Gilbo Avenue, west of Main Street), **Gilbo Avenue East Lot** (north side of Gilbo Avenue, west of Main Street), and **Wells Street Lot** (at Wells Street and Church Street) allow overnight parking, but not for more than five sequential days.
- **Elm Street Lot** (at Elm Street and Mechanic Street) prohibits parking from 12:01 AM to 6:00 AM on Tuesday, Thursday, and Saturday.
- Approximately 25 parking spaces in the Commercial Street Lot and 24 perpendicular parking spaces on the south side of Gilbo Avenue are reserved for Farmer's Market vendors on Saturdays from 8:00 am to 2:00 pm between April 22nd and October 28th.

Table 1 – On-Street Parking Supply by Street

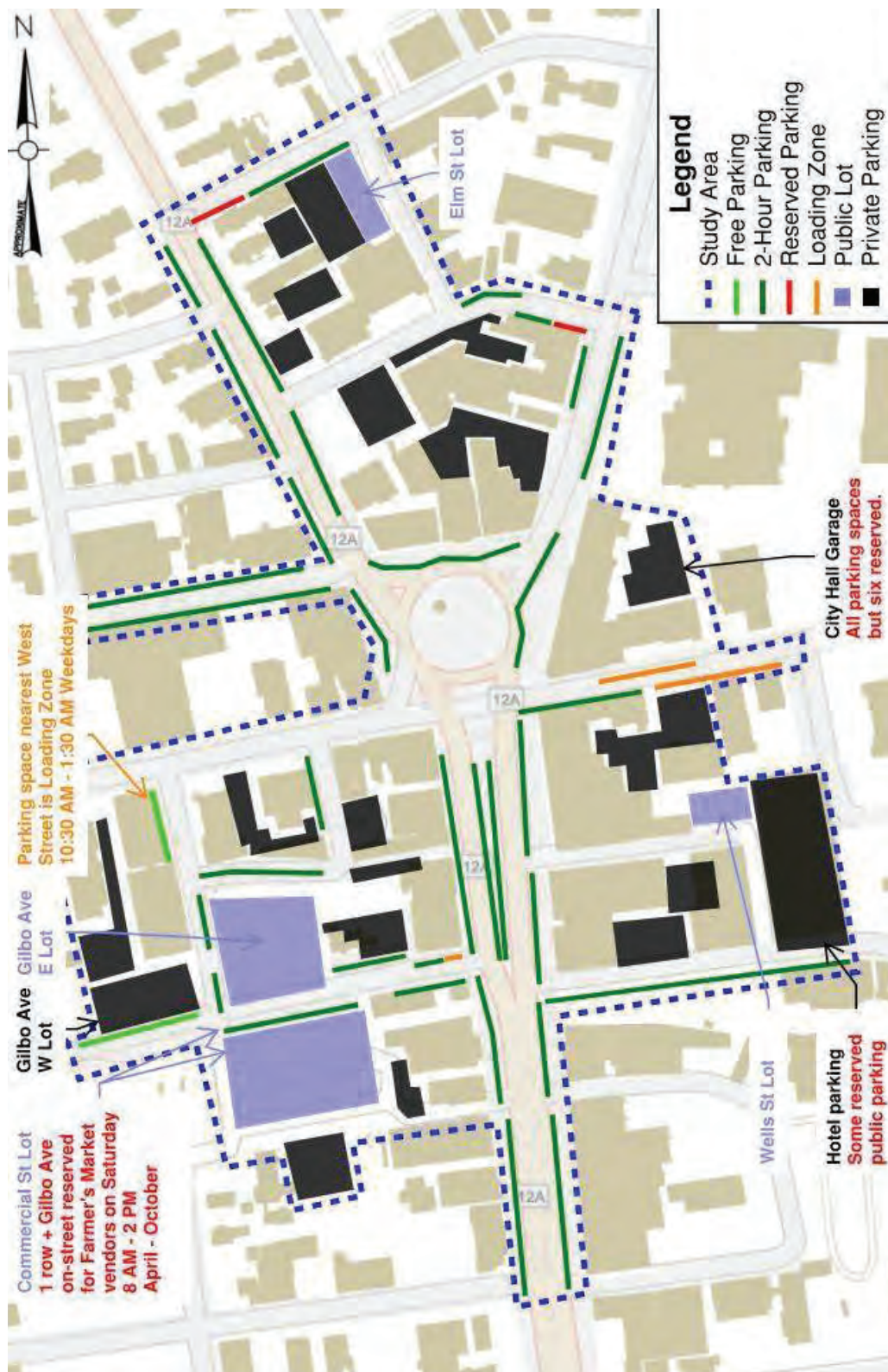
Location		Free	Metered	Loading	Reserved /Permit	Totals
Central Square/Main Street	Central Square		43			43
	Main Street		110			110
North of Central Square	Court Street		30	1		31
	Elm Street		0			0
	Mechanic Street		4		4	8
	Vernon Street		4		2	6
	Washington Street		32			32
	Winter Street		25			25
Southeast of Central Square	Church Street					0
	Railroad Street		22			22
	Roxbury Street		7	6		13
	Wells Street					0
Southwest of Central Square	Commercial Street					0
	Federal Street		8			8
	Gilbo Avenue	8	42			50
	Lamson Street		4			4
	St James Street	4	16			20
	West Street					0
All	Totals	12	347	7	6	372

Table 2 – Off-Street Public Parking Supply by Public Lot

Location	Limited Overnight	Overnight	Totals
Commercial Street Lot		116	116
Gilbo Avenue East Lot		92	92
Wells Street Lot		19	19
Elm Street Lot	27		27
Totals	46	208	254

Figure 3 illustrates the locations of on-street parking, public parking lots, and private parking lots within the study area.

Figure 3 – On-Street and Off-Street Parking Map



3.0 PARKING DEMAND

3.1 Parking Counts

Weston & Sampson conducted parking occupancy counts and observations on the following dates:

- Thursday, October 17, 2024 – 8:00 am to 9:00 pm
- Friday, October 18, 2024 – 8:00 am to 9:00 pm
- Saturday, October 19, 2024 – 10:00 am to 6:00 pm

Weather conditions during these observation periods were typical for the season, with no precipitation or other factors that would negatively impact parking demand or usage.

A significant portion of the observations were completed using video footage captured by a commercial unmanned aerial vehicle and supplemented by in-person field observations. During early morning and late evening hours, occupancy counts in private parking lots were limited to areas visible from the public Right-of-Way. Parking demand and utilization data presented in this report are based on the available observations.

3.2 Parking Observation Notes

No significant weather events occurred during the observation periods that would have influenced travel behavior or parking demand. Some fog was noted during early morning hours but dissipated shortly after sunrise, with no apparent impact on parking activity.

Parking demand along Main Street – particularly adjacent to restaurants and retail establishments – was consistently higher than the average demand observed across the study area. Instances of illegal parking were noted, including vehicles occupying crosshatched passenger loading zones adjacent to ADA van accessible parking spaces.

On Saturday, Farmer's Market vendors began packing up and departing around 1:00 pm. As free parking spaces on Gilbo Avenue became available at the close of the Farmers Market, some patrons were observed relocating their vehicles from metered parking spaces to the newly vacated free spaces.

Additionally, a gathering at the United Church of Christ of Keene took place on Saturday morning. Participants, including sign-holding pedestrians, were observed standing in or blocking an unspecified number of parking spaces in front of the church at Central Square. The gathering, which dispersed around 10:00 am, resulted in a temporary decrease in parking utilization in that area. This localized disruption may have contributed to an overall increase in parking demand elsewhere in the study area compared to a typical Saturday morning without special events or demonstrations.

Access to off-street public parking within the study area — particularly the Commercial Street Lot — is limited by right-in/right-out (RI-RO) restrictions, which may deter unfamiliar drivers from utilizing these facilities. Existing parking conditions along Main Street, where demand is consistently high, could be alleviated if clearer and more prominent signage directed drivers to nearby public lots. Currently, signage is minimal, often small or poorly placed, making it difficult for visitors to identify available off-street parking options. Enhancing wayfinding through larger, strategically located signs — especially at key intersections and entry points — could improve traffic circulation and reduce congestion on Main

Street. Additionally, designated rideshare passenger or food delivery service loading zones could help manage curbside activity and reduce instances of illegal parking in loading areas or ADA accessible parking spaces.

3.3 Parking Utilization Rates – Time-of-Day Graphs

Parking utilization, or utilization rate, is calculated by dividing the number of parked vehicles by the total number of available parking spaces, expressed as a percentage. Utilization rates are a useful metric for evaluating parking demand and assessing the adequacy of parking distribution, lot sizes, time restrictions, and access permissions. Graphs illustrating these rates are provided in several figures, beginning with Figure 4.

Across all observation periods, the highest recorded utilization rate within the study area was 62 percent, or 808 occupied spaces, which was observed on Friday at 9:00 pm. On Thursday, the peak utilization rate was 46 percent or 600 occupied spaces, at 1:00 pm, while Saturday saw a peak of 43 percent or 561 occupied spaces, at 1:00 pm. The lowest utilization rate was 15 percent or 199 parking spaces, recorded on Friday at 8:00 am.

3.3.1 Utilization Rates per Day

Hourly parking utilization rates for all parking spaces on Thursday, Friday and Saturday are presented in Figure 4, along with separate rates for on-street public parking and public parking lots. Figure 5 presents hourly utilization rates for private parking spaces (excluding permit-required lots) and for permit-only and staff-designated parking areas.

The utilization graphs for on-street parking show distinct peaks during midday (lunchtime hours) and evening (dinnertime hours) across all three days. On-street parking demand was generally higher on Friday compared to Thursday. Saturday morning and early afternoon utilization exceeded both Thursday and Friday.

Changes to parking demand throughout the day were more gradual within public parking lots than on-street parking, likely due to vehicles being parked for longer periods of time on average. The highest demand at public parking lots occurred around midday. Notably, midday utilization rates for public lots were higher on Saturday than on the other two weekdays. Private parking lots also showed gradual changes in parking utilization throughout the day, but overall utilization was lower on Saturday than on Thursday and Friday. Permit-only lots associated with business employees showed the highest utilization on Thursday during typical working hours, with the lowest usage observed on Saturday.

Figure 4 – Parking Utilization by Day: All, On-Street, Public Lots

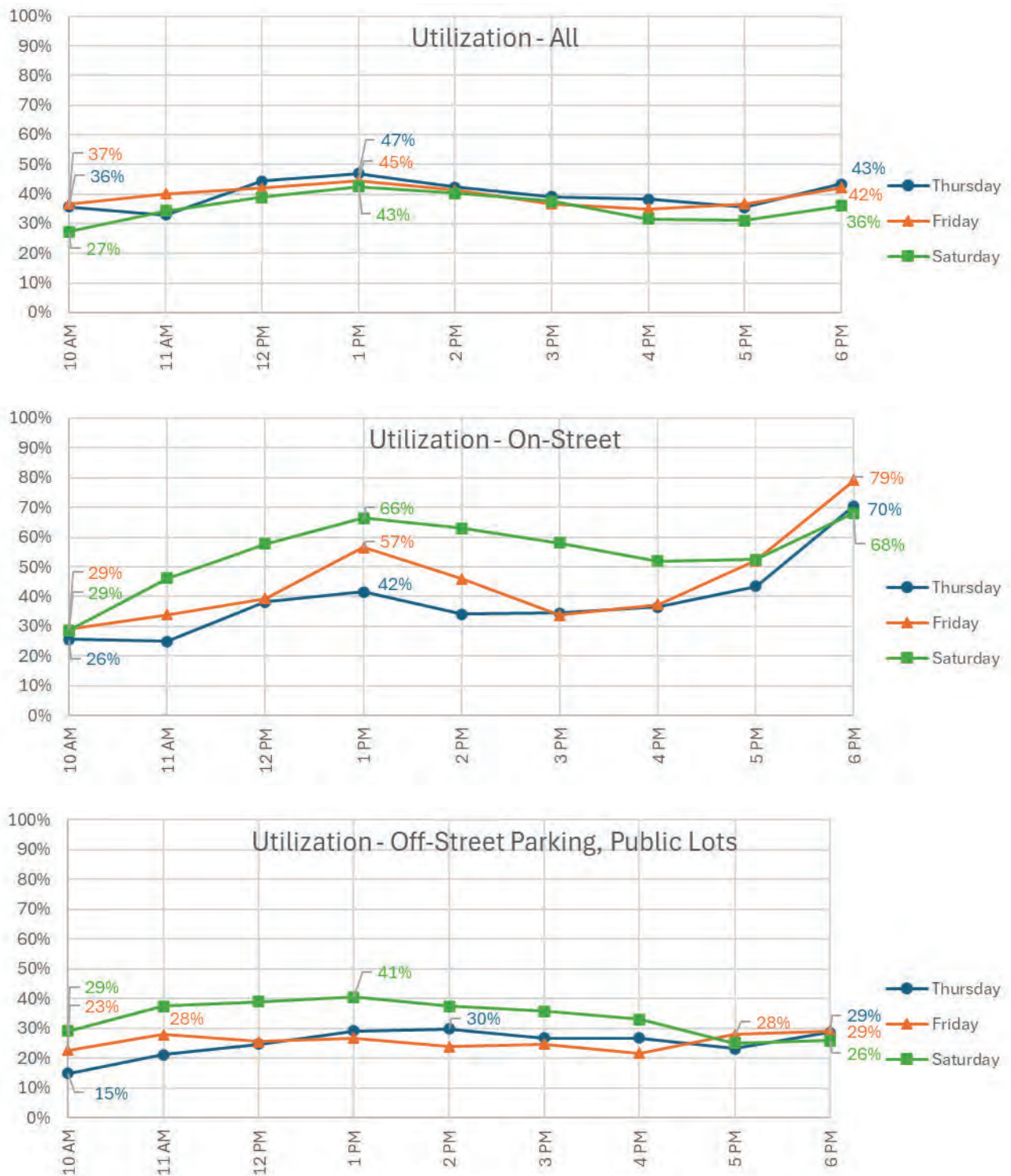
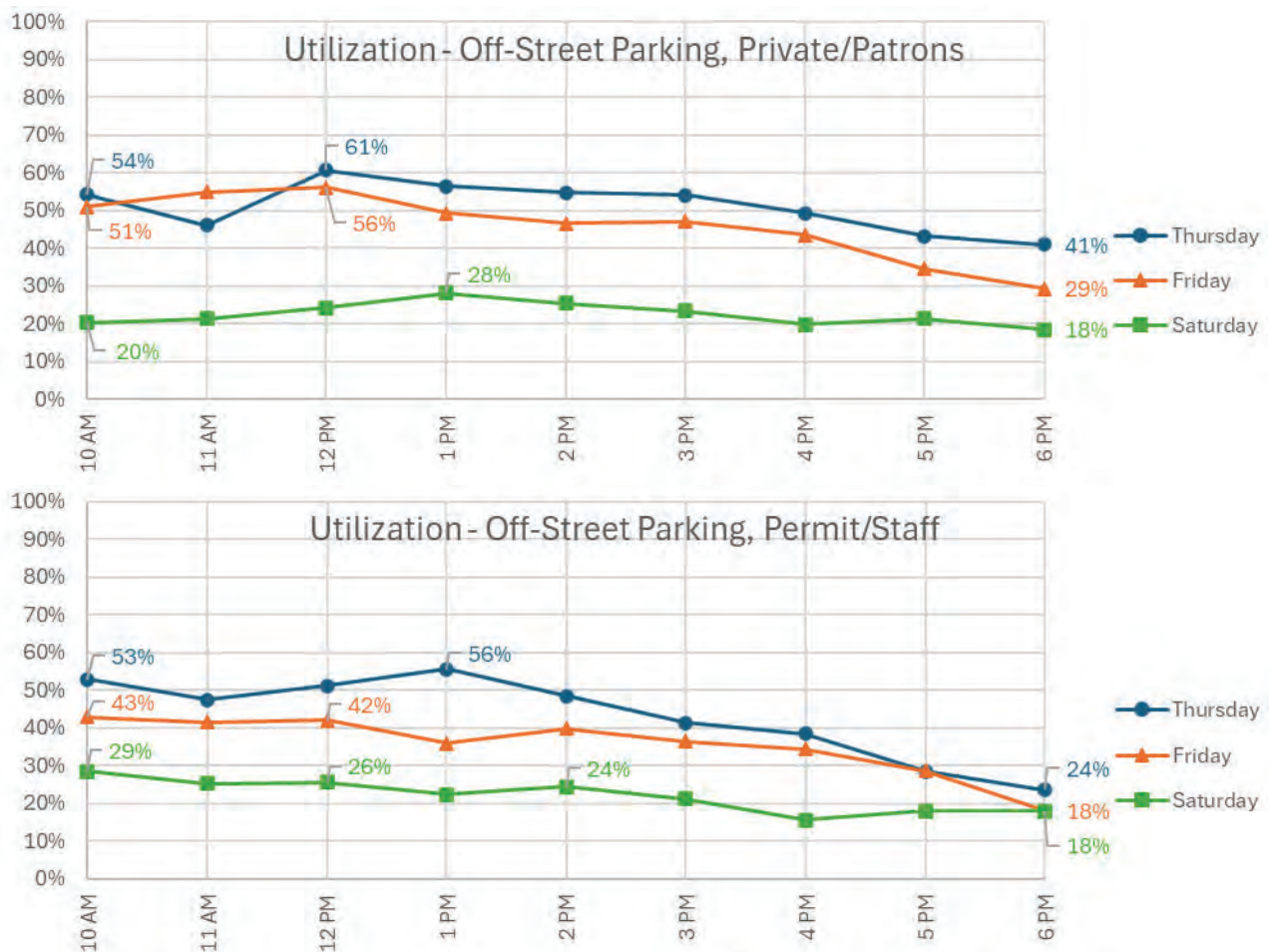


Figure 5 – Parking Utilization by Day: Private Lots, Permit Lots

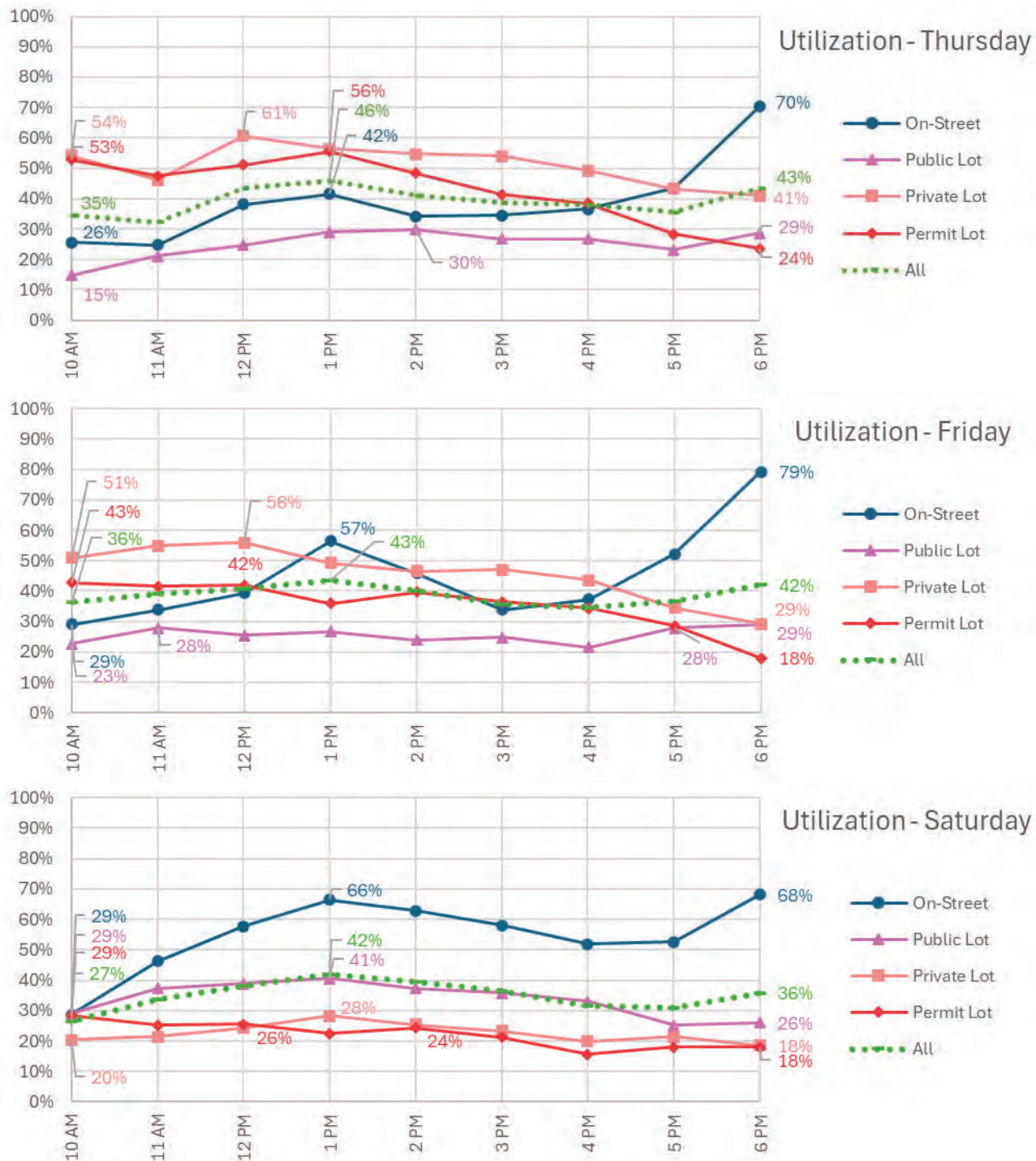


3.3.2 Utilization Rate Comparisons by Type

To emphasize differences in demand across parking types, hourly utilization rates are presented by parking space type in the three charts in Figure 6, covering Thursday, Friday and Saturday. These charts display utilization rates for all parking types, along with subtotals for on-street parking spaces, public parking lots, private parking lots, and permit-required or staff-only parking lots.

The peaking characteristics of utilization rates are more pronounced for on-street parking than for off-street parking lots. Public parking lot utilization rates were generally lower than other parking types during daylight hours on Thursday and Friday but increased relative to other off-street parking during weekday evenings and on Saturday. In contrast, private parking lots experienced relatively high utilization during daylight hours on Thursday and Friday, but lower utilization on Saturday and during evening hours, which is a reflection opening hours of affiliated businesses. Permit-required lots associated with business employees exhibited above average utilization on Thursday during the day, average utilization on Friday during the day, and low utilization on Saturday, as well as all observed evenings.

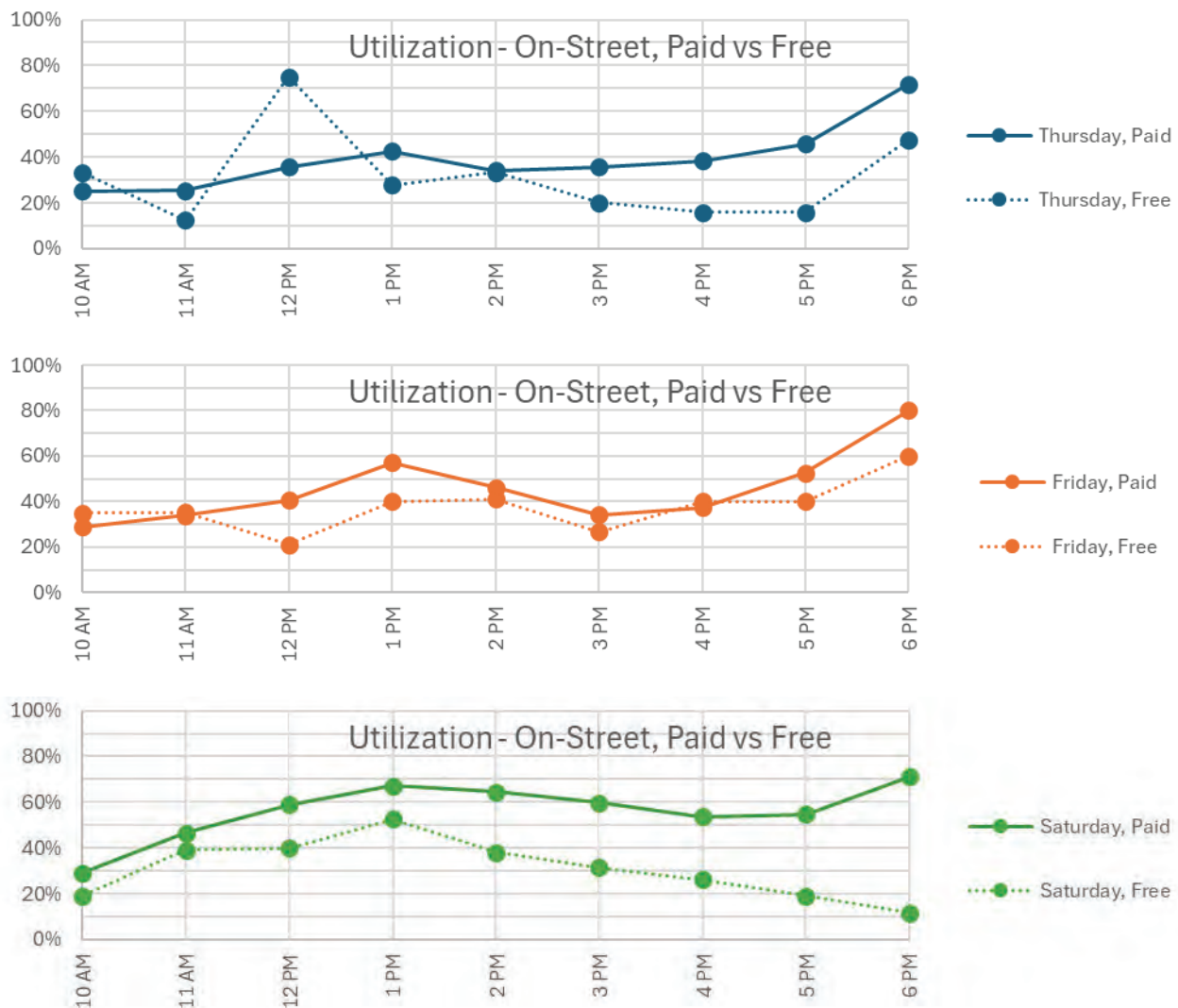
Figure 6 – Parking Utilization Comparison by Parking Space Type: Thursday, Friday, Saturday



3.3.3 On-Street Paid vs Free

To compare differences in on-street parking demand between paid and free parking spaces, hourly utilization rates are presented in the charts within Figure 7. All free parking spaces are located relatively far from the center of downtown Keene. The graphs show that free parking is generally less utilized than paid parking, suggesting that the public tends to prioritize convenience and proximity over saving on parking fees and walking longer distances. Because the number of free on-street parking spaces within the study area is limited, variations in utilization rates are more pronounced - individual vehicle arrivals and departure have a greater impact on the overall rate.

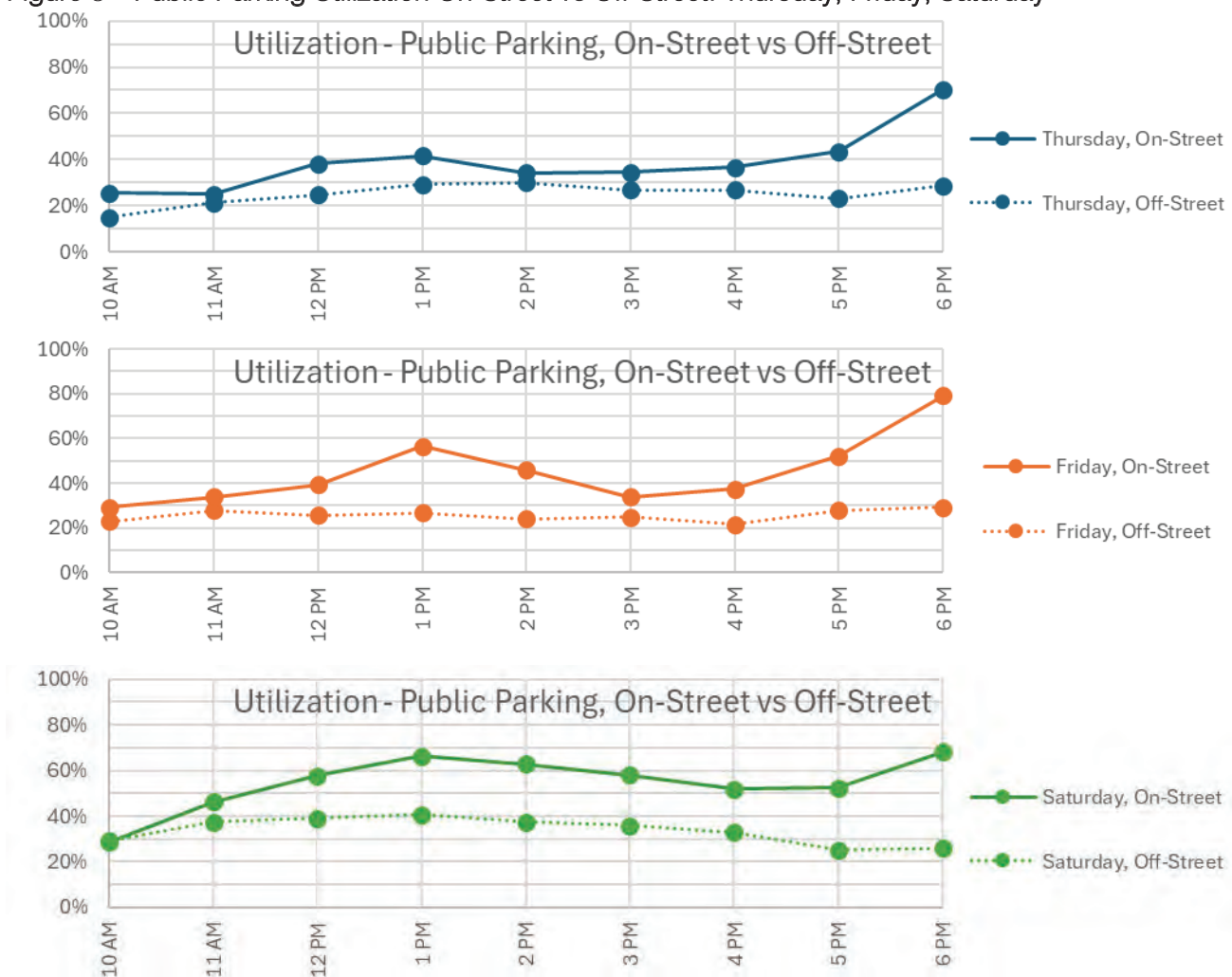
Figure 7 – On-Street Parking Utilization Paid vs Free: Thursday, Friday, Saturday



3.3.4 Public Parking On-Street vs Off-Street in Public Lots

To compare public parking demand between on-street and off-street parking spaces in public lots, hourly utilization rates are presented in the charts within Figure 8. Differences in utilization rates between on-street and off-street parking are more pronounced during midday and evening peak hours on Thursday, Friday, and throughout most of Saturday. During non-peak weekday hours, differences in utilization rates between on-street and off-street parking less pronounced. This pattern suggests a balance between the public's preference for proximity to destinations and the need for longer-duration visits, or access to multiple destinations within the downtown area. Some patrons of retail, restaurant, or some entertainment destinations may be satisfied with shorter visits, while others seek extended stays, contributing to varied demand across parking types.

Figure 8 – Public Parking Utilization On-Street vs Off-Street: Thursday, Friday, Saturday

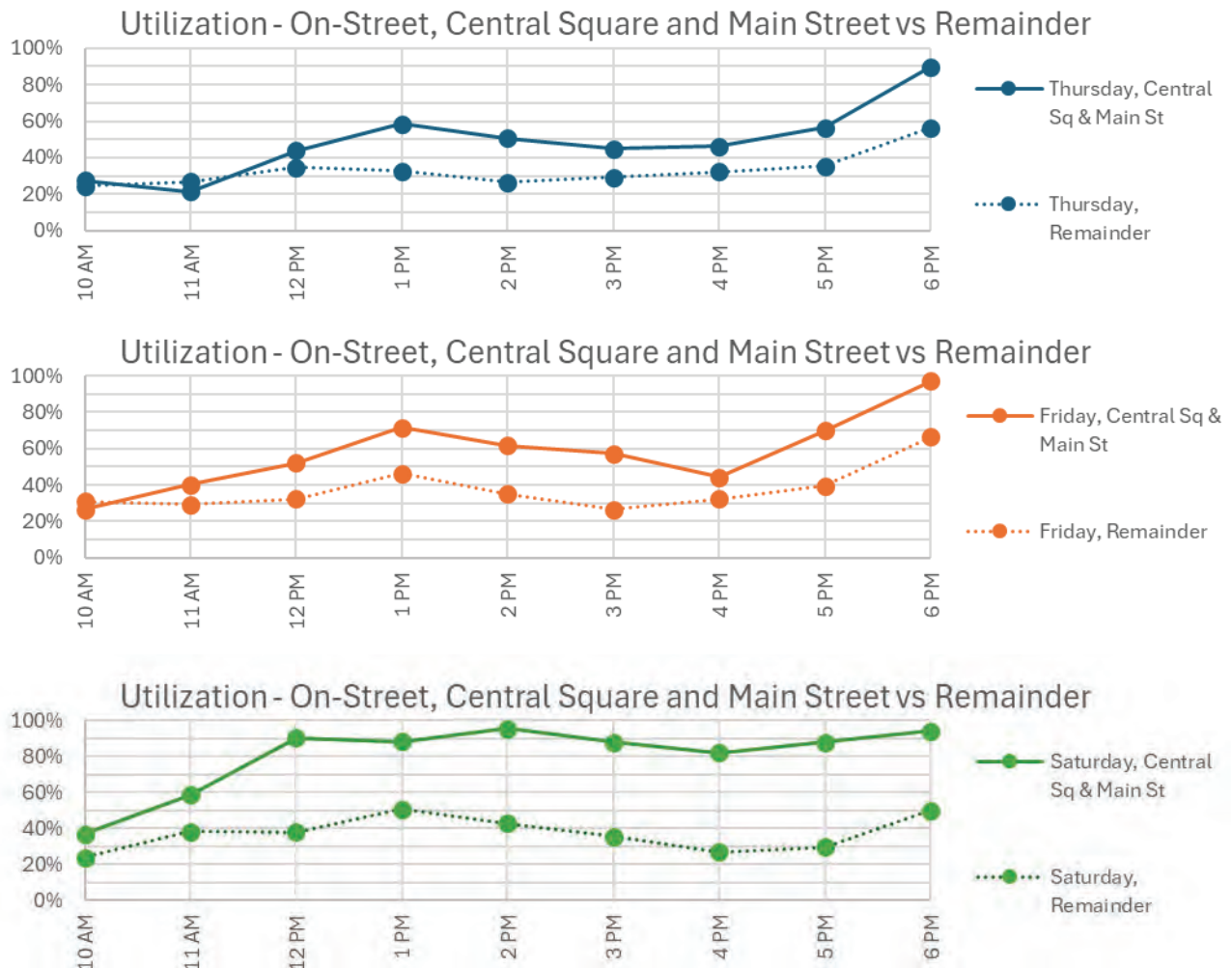


3.3.5 On-Street Parking Comparison of Downtown Core

To assess demand differences between core downtown on-street and other on-street parking within the study area, hourly utilization rates for Central Square and Main Street versus the remainder of the study area are presented in the charts within Figure 9. Utilization rates for on-street parking are consistently

higher on Central Square and Main Street, particularly on Saturdays and during evening hours. This reflects the intensity of patronage in the core downtown area and the strong demand for parking near high-density commercial destinations. Parking on Central Square and Main Street frequently approaches capacity, in contrast to nearby on-street parking that remains underutilized. These trends should be considered in evaluating the potential location and design of a future parking garage, with emphasis on proximity and access to Main Street, as well as visibility and wayfinding for arriving visitors.

Figure 9 – On-Street Parking Utilization Downtown Core vs Remainder: Thursday, Friday, Saturday



3.4 Parking Utilization Rates – Heat Maps

Parking utilization rates at specific times can be effectively illustrated using heat maps. Figures 10-13 depict utilization rates for four key time periods: 1:00 pm on a weekday, 6:00 pm on a weekday, 1:00 pm on Saturday, and 6:00 pm on Saturday. The heat maps use visualizations to highlight spatial patterns of parking demand across the study area, providing insight into peak usage locations and helping to inform future parking management strategies.

Figure 10 – Parking Utilization Heat Map – Weekday at 1:00 pm

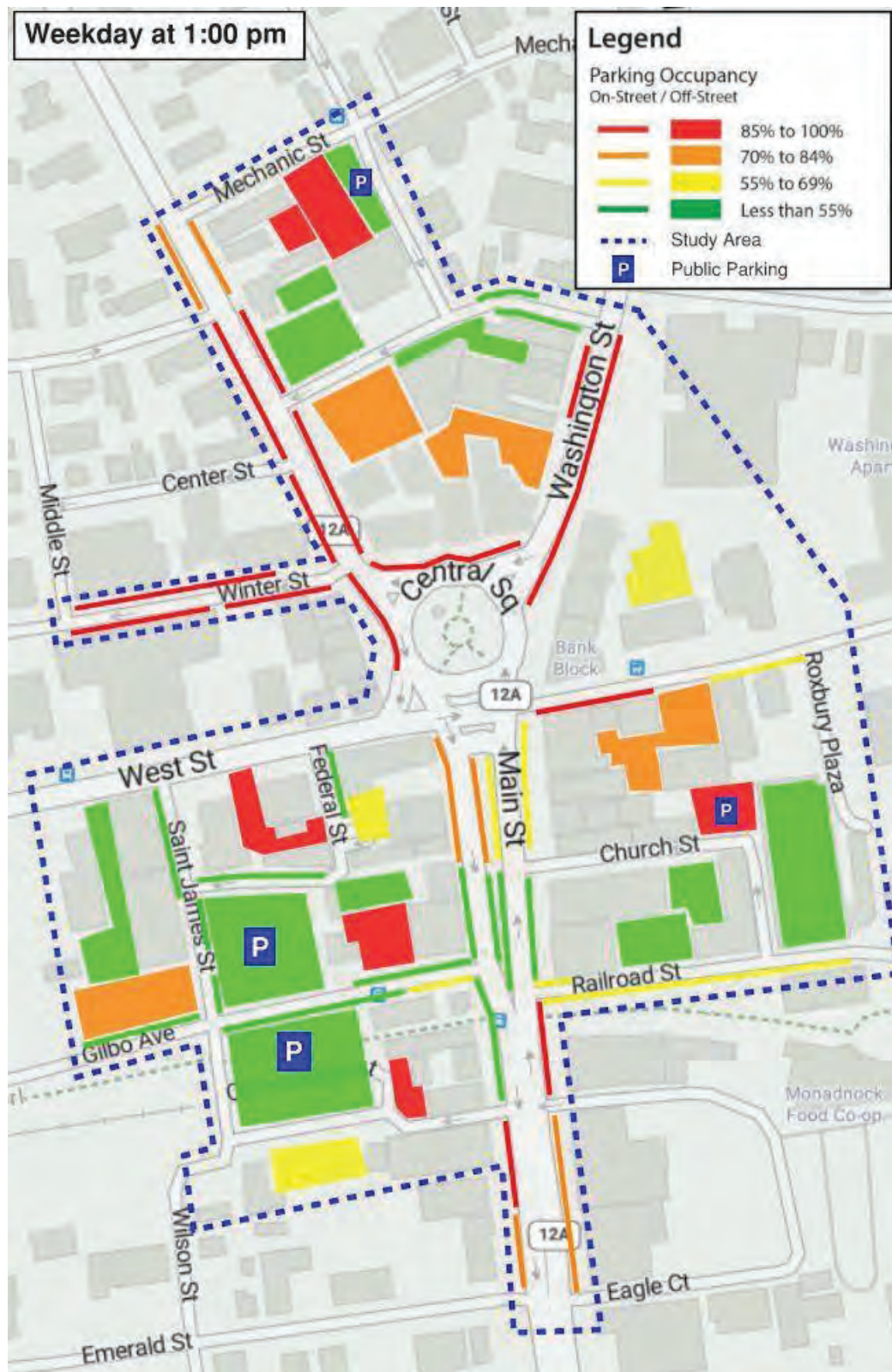


Figure 11 – Parking Utilization Heat Map – Weekday at 6:00 pm

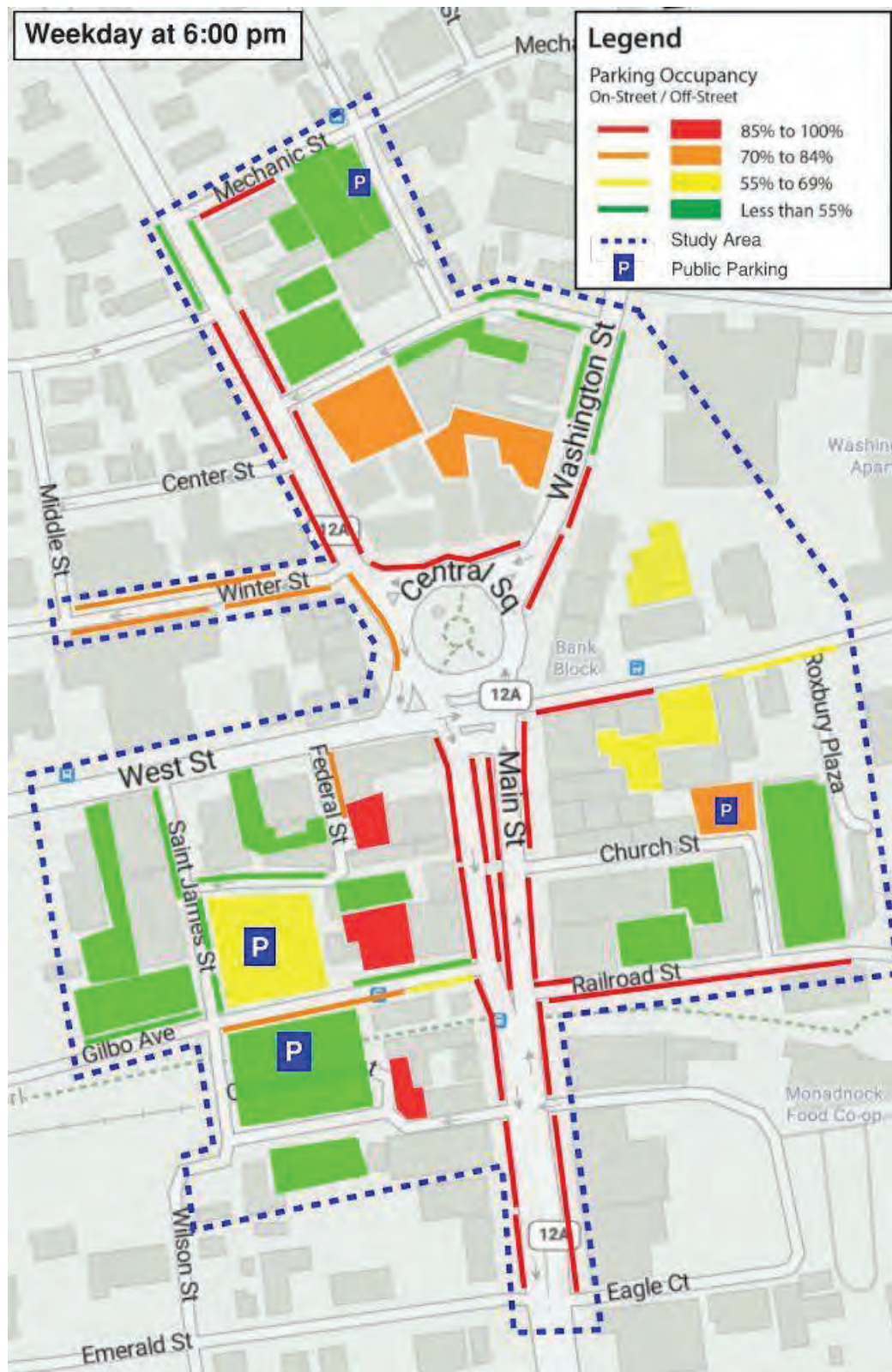


Figure 12 – Parking Utilization Heat Map – Saturday at 1:00 pm

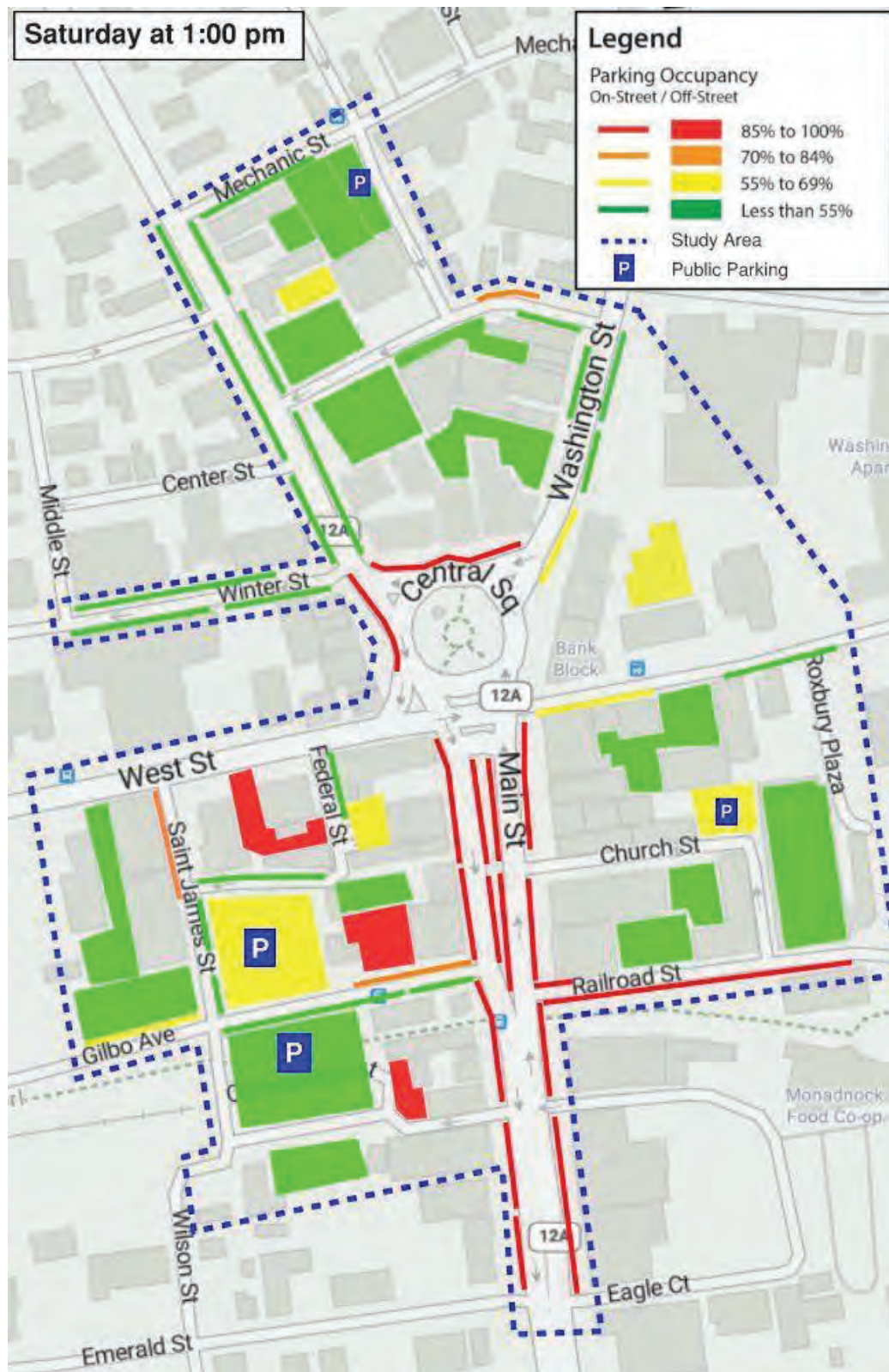
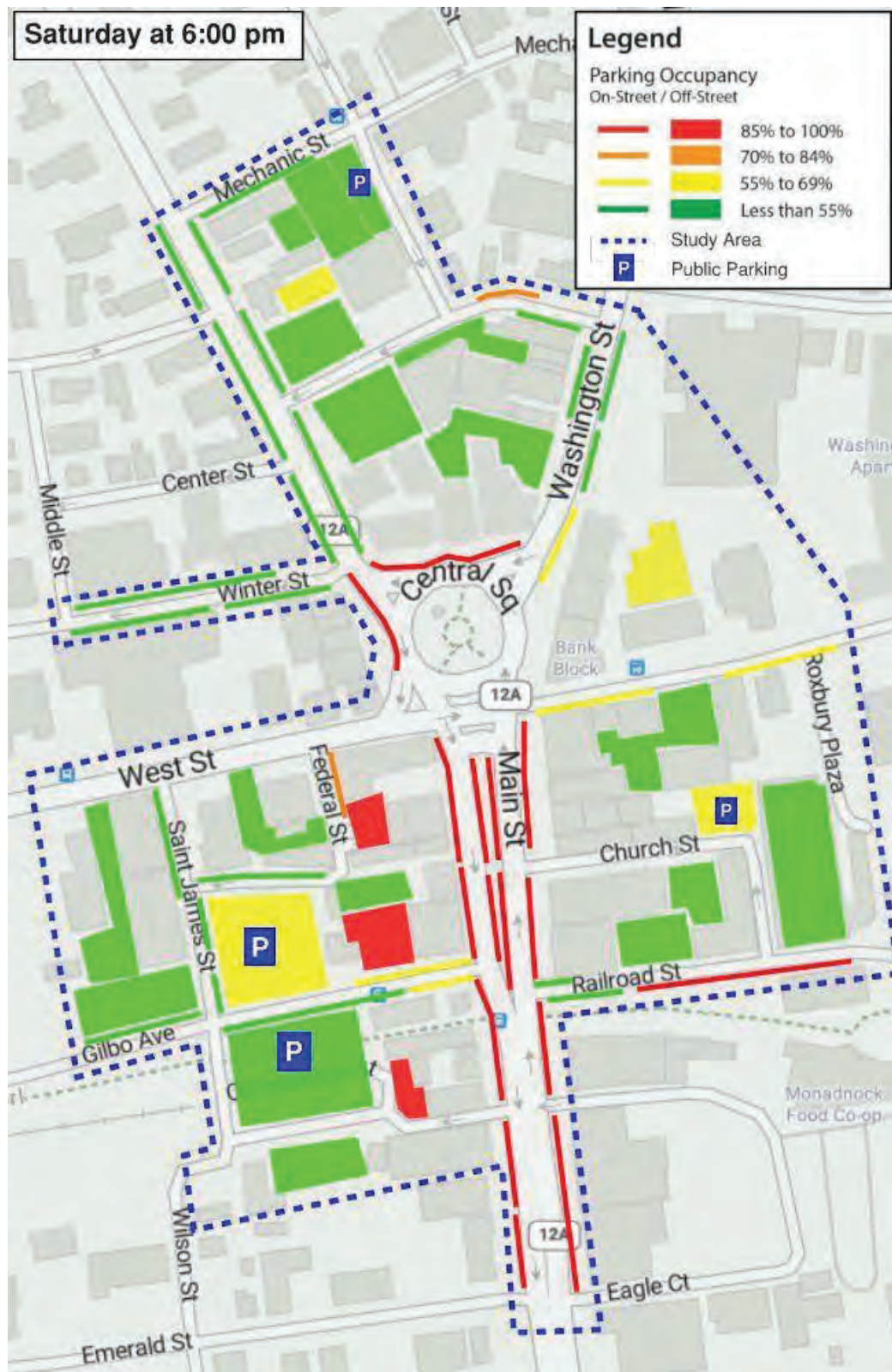


Figure 13 – Parking Utilization Heat Map – Saturday at 6:00 pm



3.5 Parking Utilization Rates – Locations Near Capacity

High overall parking utilization rates may indicate insufficient parking supply. During periods of elevated utilization, illegal parking becomes more likely, including unpermitted use of accessible, reserved, or permit-only spaces; parking in crosshatched passenger loading zones; overstaying posted time limits; parking in loading zones beyond active loading activities; and double parking or loading/unloading passengers in travel lanes. Persistent high utilization across the downtown area can also hinder downtown economic growth as some potential visitors may choose to avoid the area during busy times, resulting in reduced patronage for local businesses and diminished revenue for landowners and tenants.

Maximum on-street parking utilization rates for each street within the study area are presented in Table 3. Instances where the maximum calculated utilization rate is 85 percent or higher are highlighted in bold to indicate locations at or near capacity. Streets identified as reaching or nearing capacity during at least one recorded observation include Main Street, Court Street, Washington Street, Winter Street, Railroad Street, and Roxbury Street. At these locations, two or fewer parking spaces - including accessible spaces – were available during at least one instance during the observations. Table 4 lists the specific hourly instances by street when parking utilization rates were at or approaching capacity.

Table 3 – Maximum On-Street Utilization Rates by Street

Location		Thursday		Friday		Saturday	
		Max Utiliz.	Time	Max Utiliz.	Time	Max Utiliz.	Time
Central Square/ Main Street	Central Square	74%	6:00 pm	56%	1:00 pm	47%	12:00 pm
	Main Street	90%	6:00 pm	99%	9:00 pm	96%	1:00 pm
North of Central Square	Court Street	71%	6:00 pm	94%	9:00 pm	71%	6:00 pm
	Elm Street	N/A - No Parking on Street					
	Mechanic Street	75%	6:00 pm	13%	9:00 am	38%	2:00 pm
	Vernon Street	83%	3:00 pm	50%	2:00 pm	17%	2:00 pm
	Washington Street	53%	3:00 pm	100%	7:00 pm	41%	1:00 pm
	Winter Street	88%	9:00 am	100%	9:00 pm	68%	6:00 pm
Southeast of Central Square	Church Street	N/A - No Parking on Street					
	Railroad Street	109%¹	6:00 pm	91%	6:00 pm	95%	6:00 pm
	Roxbury Street	85%	6:00 pm	92%	7:00 pm	69%	2:00 pm
	Wells Street	N/A - No Parking on Street					
Southwest of Central Square	Commercial Street	N/A - No Parking on Street					
	Federal Street	38%	5:00 pm	75%	6:00 pm	75%	1:00 pm
	Gilbo Avenue	30%	5:00 pm	62%	6:00 pm	68%	11:00 am
	Lamson Street	50%	12:00 pm	25%	11:00 am	50%	10:00 am
	St James Street	10%	8:00 am	10%	8:00 am	50%	11:00 am
	West Street	N/A - No Parking on Street					

Notes:

¹ More vehicles were parked on road than total striped spaces.

Table 4 – On-Street Utilization Rates Above 85 Percent

Location		Instances above 85% Utilization		
		Thursday	Friday	Saturday
Central Square/ Main Street	Central Square	1:00 pm	10:00 am, 11:00 am, 2:00 pm, 3:00 pm, 5:00 pm, 6:00 pm, 7:00 pm	11:00 am, 1:00 pm, 2:00 pm, 3:00 pm, 4:00 pm, 5:00 pm, 6:00 pm
	Main Street	6:00 pm	6:00 pm, 7:00 pm, 9:00 pm	12P:00 pm, 1:00 pm, 2:00 pm, 3:00 pm, 5:00 pm, 6:00 pm
North of Central Square	Court Street		9:00 pm	
	Elm Street	N/A - No Parking on Street		
	Mechanic Street			
	Vernon Street	1:00 pm	3:00 pm, 6:00 pm	11:00 am, 12:00 pm, 3:00 pm, 4:00 pm
	Washington Street		7:00 pm, 9:00 pm	
	Winter Street	9:00 am	6:00 pm, 7:00 pm, 9:00 pm	
Southeast of Central Square	Church Street	N/A - No Parking on Street		
	Railroad Street	6:00 pm	6:00 pm, 7:00 pm	6:00 pm
	Roxbury Street		7:00 pm	
	Wells Street	N/A - No Parking on Street		
Southwest of Central Square	Commercial Street	N/A - No Parking on Street		
	Federal Street			
	Gilbo Avenue			
	Lamson Street			
	St James Street			
	West Street	N/A - No Parking on Street		

The maximum on-street parking utilization rates for each public parking lot within the study area are shown in Table 5. Locations where the maximum calculated utilization rate is at or above 85 percent are highlighted in bold to indicate that they are at or nearing capacity. Among these, only the Wells Street Lot was identified as having reached or approached capacity during at least one recorded observation period. Specifically, the Wells Street Lot reached full capacity - including accessible spaces - at 2 PM on Friday and had only one available parking space for arriving or circulating vehicles at 5 PM on Thursday. Table 6 provides a detailed list of hourly instances by public parking lot, when the parking lots were at or near capacity.

Table 5 – Maximum Public Off-Street Utilization Rates by Public Lot

Location	Thursday		Friday		Saturday	
	Max Utiliz.	Time	Max Utiliz.	Time	Max Utiliz.	Time
Commercial Street Lot	26%	6:00 pm	77%	9:00 pm	35%	1:00 pm
Gilbo Avenue East Lot	34%	12:00 pm	70%	9:00 pm	68%	11:00 am
Wells Street Lot	95%	5:00 pm	100%	2:00 pm	84%	3:00 pm
Elm Street Lot	74%	2:00 pm	41%	7:00 pm	[Data collection error]	

Table 6 – Public Off-Street Utilization Rates Above 85 Percent

Location	Instances above 85% Utilization		
	Thursday	Friday	Saturday
Commercial Street Lot			
Gilbo Avenue East Lot			
Wells Street Lot	1:00 pm, 5:00 pm	2:00 pm, 3:00 pm, 5:00 pm, 6:00 pm	
Elm Street Lot			

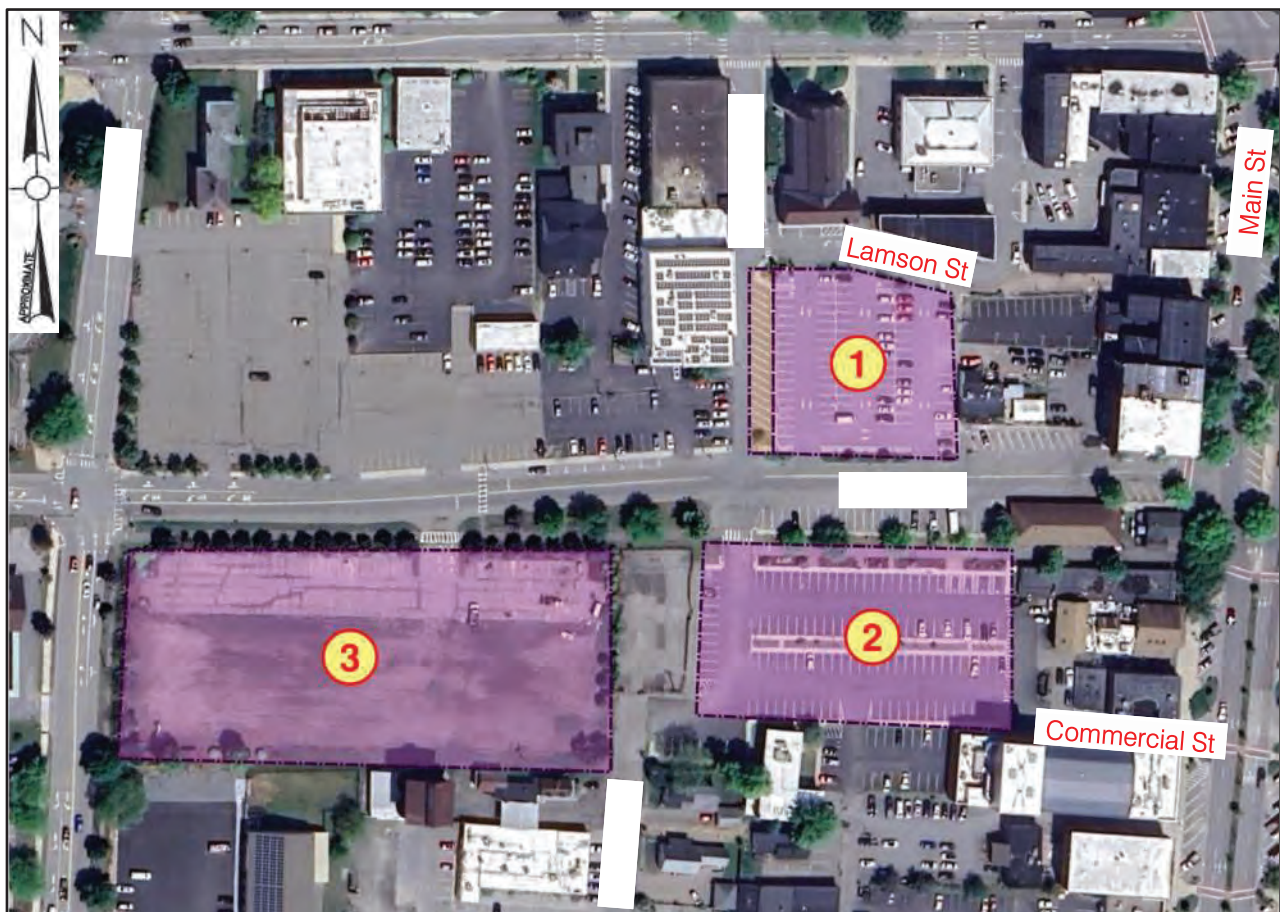
As this parking needs study is being conducted in consideration of a potential new parking garage intended to support public parking, the analysis of future parking needs will focus on the existing demand for non-reserved, publicly available parking only. This is appropriate since the proposed parking garage would be accessible for public use. The city could also consider options for a portion of the parking garage to be reserved by permit to support redevelopment and sale of a parcel(s) currently owned by the city. The maximum utilization rate for on-street parking and public parking lots was 81 percent, representing a peak demand of 523 occupied spaces out of a total supply of 626 spaces. This peak parking demand occurred at 9:00 pm on Friday, aligning with the highest overall parking demand observed within the study area. The maximum parking utilization rate across all parking types was 62 percent, corresponding to a total of 808 occupied spaces out of the full supply of 1,308 parking spaces.

4.0 FUTURE PARKING NEEDS

4.1 Potential Future Parking Garage Sites

A new parking garage is being considered to support public parking demand and/or potentially used to supplement parking for potential redevelopment. The City is evaluating multiple properties as possible sites for a future parking garage. One option is the city-owned Gilbo Avenue East Lot, located north of Gilbo Avenue, east of St. James Street, and south of Lamson Street. A second option is the city-owned Commercial Street Lot, located south of Gilbo Avenue, east of Wilson Street, and west of Commercial Street. A third site under consideration is a privately owned parking lot and field located south of Gilbo Avenue, east of School Street, and west of Wilson Street. The three locations are depicted in Figure 14.

Figure 14 – Locations Considered for Potential Parking Garage



All three (3) sites currently consist of asphalt surface parking lots of varying sizes. This makes them advantageous for construction, as development would have minimal impact on adjacent buildings and properties. Currently, the preferred location for the future parking garage is the Commercial Street Lot. Its size and configuration are well-suited for efficient garage ramp and parking space layout design, and it is already owned by the city. Conceptual site layouts for all three (3) locations are provided in Appendix C. The existing parking demand at the Commercial Street Lot reached a recorded maximum of 89 occupied parking spaces out of 116 available, representing a peak utilization rate of 77 percent.

Although neither the Commercial Street Lot nor the downtown area overall were observed to be at or near full capacity, the City is exploring the development of a public parking garage as part of a broader strategy to stimulate downtown urban development, support nearby local businesses, and potential residential development. The cost of constructing a garage to replace one parking lot could be offset by proceeds from the sale or redevelopment of another public lot or possible public/private partnerships for commercial or residential development. Additionally, the new garage could accommodate higher-intensity development within the downtown area.

4.2 Future Parking Demand

Under future conditions, parking demand is expected to exceed the maximum levels recorded under existing conditions. This increase may result from factors such as population growth supporting downtown land uses, the leasing of currently vacant spaces, and new developments. Additionally, potential changes to parking infrastructure – such as modifications to the available supply - will influence future parking needs.

4.2.1 Current Parking Demand and Normal Growth

The proposed parking garage is expected to help accommodate public parking demand. The maximum recorded demand for existing on-street and off-street public parking lots was 523 spaces, which will be used as the baseline for evaluating existing parking demand.

Population growth in the city is anticipated to increase resulting in increased patronage of downtown land uses. To determine an appropriate growth rate, this assessment reviewed U.S. Census data, population projections, and historical traffic counts.

Census data was obtained from a publicly available U.S. Census Bureau¹ webpage. It indicates that Keene had a population of 23,409 in 2010, 23,047 in 2020, and an estimated 23,034 in 2024. This data reflects a slight population decline, with an equivalent annual growth rate of -0.2 percent from 2010 to 2020 and -0.01 percent from 2020 to 2024.

Traffic count data was sourced from a publicly available webpage published by the New Hampshire Department of Transportation.² Data from count location ID 82237140 - located on Main Street, south of Gilbo Avenue – shows an Average Daily Traffic (ADT) of 21,871 in 2016, 18,627 in 2019, 19,948 in 2022, and an estimated 20,490 in 2024. This data indicates variable traffic volume trends, with equivalent annual growth rates of -0.8 percent between 2016 and 2024, 1.9 percent between 2019 and 2024, and 1.3 percent between 2022 and 2024.

Even though the general population within Keene has not grown according to census and estimated data, traffic volumes in Downtown Keene have increased, which could mean that downtown Keene is continuing to attract more people from within Keene and/or is attracting visitors from outside of Keene. Based on the historical data reviewed, this assessment applies an annual growth rate of 1.5 percent over five years to project future parking demand. Applying this rate to the existing parking demand of 523 parking spaces results in a projected increase of 40 parking spaces.

¹ U.S. Census Bureau, *Census QuickFacts, Keene*.

<<https://www.census.gov/quickfacts/fact/table/keenecitynewhampshire/PST045224>>

² New Hampshire Department of Transportation, *Traffic Count (TCDS)*.

<<https://nhdot.public.ms2soft.com/tcds/tsearch.asp?loc=Nhdot&mod=TCDS>>

4.2.2 *Vacancy Lease Up*

Several buildings and building suites within the study area are currently unoccupied. It is anticipated that some of these vacant spaces may be occupied in the future. To assess potential future demand, a publicly available website maintained by Wohler Realty Group³ - which lists advertised commercial properties - was reviewed. Within the study area, six properties were identified, comprising a mix of office, restaurant, and retail uses, totaling approximately 52,224 square feet.

For analysis purposes, future conditions assume 50 percent occupancy of this available square footage. This results in the projected addition of 1,500 square feet of restaurant space, 1,286 square feet of retail space, and 23,326 square feet of office use. An evaluation of parking demand, including conversion ratios and shared parking adjustments as a result of these future building occupancies will be addressed in a subsequent section.

4.2.3 *Gilbo East Lot Redevelopment Concept*

If the Commercial Street Lot is selected as the site for a new parking garage, the Gilbo Avenue East Lot could be sold or redeveloped and be supported by parking spaces created by the new parking garage. The new net parking capacity provided by the garage would help support the additional demand generated by redevelopment of the Gilbo Avenue East Lot. A conceptual redevelopment plan for the Gilbo Avenue East Lot envisions a mixed-use building with approximately 80 multifamily dwelling units, ground-floor commercial space, and limited off-street parking. An evaluation of parking demand, including conversion ratios and shared parking adjustments, as a result of this potential future development will be presented in a subsequent section.

4.2.4 *Main Street at Emerald Street and Davis Street*

The City previously analyzed catalysts for future development along the Gilbo Avenue corridor. As part of that analysis, two parcels were identified as viable candidates for inclusion in future parking demand considerations. One parcel is located at the corner of Main Street and Emerald Street, and the other at the corner of Main Street and Davis Street. These two properties currently consist of off-street parking for Athens Pizza & Family Restaurant and a portion of the existing building. The conceptual redevelopment envisions 70 multifamily dwelling units and 20,300 square feet of new commercial space, with no specified amount of off-street parking. Due to their proximity to the Commercial Street Lot, it is anticipated that this parking facility would service users of the projected development. An evaluation of parking demand, including conversion ratios and shared parking demand adjustments as a result of this potential future development, will be addressed in a later section.

4.2.5 *Keene State College*

The project team met with representatives from Keene State College to discuss their existing parking facilities and the potential to increase their parking supply. While the college indicated that student parking demand was high and that parking during campus events presents challenges, the preferred parking garage site on the Commercial Street Lot was deemed too far from campus to be a viable solution for addressing the college's parking needs. As such, the future parking needs of Keene State College are not included in this study's demand analysis.

³ Wohler Realty Group, Keene, NH Commercial Properties for Rent. <<https://wohlerrealtygroup.com/home-search/listings/v2/rentals/nh/keene/commercial>> Retrieved 12 August 2025.

4.2.6 *Parking Ratios and Shared Parking Model*

Each land use type considered in this assessment is expected to generate distinct parking demand rates. The City's Zoning Regulations does not currently provide parking ratios specific to downtown parking demand. In consultation with THA Consulting, the following parking ratios have been applied to each land use type across the proposed concepts and potential future developments for evaluation purposes:

- Restaurant: 8 spaces per 1,000 square feet
- Retail: 4 spaces per 1,000 square feet
- Office: 3.5 spaces per 1,000 square feet
- Multifamily Residential/Apartments: 1.25 spaces per 1,000 square feet

Applying these ratios results in the following estimated parking demand by land use:

- Restaurant: 26 spaces
- Retail: 36 spaces
- Office: 88 spaces
- Multifamily Residential/Apartments: 122 spaces

These parking space requirements are calculated separately for each land use. However, each land use exhibits different parking demand characteristics throughout the day. When parking is shared among multiple land uses with varying peak demand times, the total combined demand is typically lower than the sum of individual peak demands. This reduction is achieved by applying time-of-day and day-of-week adjustment factors to reflect the differing usage patterns of each land use.

The resulting parking needs are then aggregated across all land uses, and the highest combined peak is used to determine the overall parking demand. This methodology is known as the shared parking model.

For this assessment, the shared parking model developed by the Victoria Transport Policy Institute, available through a publicly available website,⁴ was utilized. Application of this model indicates a need to plan for a maximum 214 parking spaces, with peak demand occurring between 8:00 am and 5:00 pm, Monday through Friday.

It is also noteworthy that the shared parking model estimates a demand of 195 parking spaces during the 5:00 pm to 12:00 am period on weekdays, which coincides with the observed peak in existing public parking demand within the study area (notably at 9:00 pm).

4.3 **Future Parking Supply**

Under future conditions, parking supply is expected to change due to the addition of new parking spaces and the removal of existing ones, beyond the recorded maximum demand observed under current conditions. The existing parking supply of on-street and off-street public parking lots within the study area totals 626 parking spaces.

⁴ Victoria Transport Policy Institute, *Online TDM Encyclopedia – Shared Parking*.
<<https://vtpi.org/tdm/tdm89.htm>>

If a new parking garage is constructed to replace the Commercial Street Lot, the existing 116 parking spaces at that location would be removed. The number of spaces to be provided in the new garage will be determined based on an evaluation of future parking adequacy.

Additionally, the potential redevelopment of the existing Gilbo Avenue East Lot would eliminate all 108 existing parking spaces currently available at that site. The preliminary redevelopment concept proposes to include 36 new parking spaces, resulting in a net loss of 72 parking spaces.

4.4 Future Parking Adequacy

Future parking adequacy is summarized in Table 7. Based on existing parking counts, current public parking demand is 523 parking spaces. Anticipated normal growth over five years is expected to increase demand by 40 spaces, while new demand from vacancy lease-up and planned developments/redevelopments is projected to increase by 214 parking spaces. This results in a combined peak future parking demand of 777 spaces, prior to applying a buffer for variability in actual conditions.

To account for fluctuations and uncertainties, a 5 percent buffer is applied to the peak demand, bringing the total projected future parking demand to 816 public parking spaces. This projected parking demand reflects all observed parking counts, evaluated development scenarios, and projected future conditions within the study area.

The existing public parking supply is 626 spaces, with 188 spaces projected to be removed due to the potential redevelopment projects included within the evaluation - excluding any new spaces that would be provided by the potential parking garage. As a result, the total future public parking adequacy, excluding the proposed garage, is a deficit of 378 parking spaces.

Based on these projections, it is recommended that the potential parking garage provides a minimum of 378 parking spaces to adequately meet the future parking needs of the downtown area. All calculations for future parking supply and future parking demand projections as described above are included in Appendix B.

Table 7 – Future Parking Adequacy

Future Parking Demand	Parking Spaces
Current Parking Demand	523
Normal Growth (1.5% annual over 5 years)	40
New Demand from Vacancy Lease Up, Developments/Redevelopments	214
Parking Adequacy Cushion - 5%	39
<i><u>Total Demand</u></i>	<i><u>816</u></i>
Future Parking Supply	Parking Spaces
Current Public Parking Supply	626
Displaced Parking Supply - Commercial Street Lot	-116
Net Parking Supply Change - Gilbo East Lot	-72
<i><u>Total Supply</u></i>	<i><u>438</u></i>
Future Parking Adequacy (Excluding New Parking Garage)	<i><u>-378</u></i>

4.5 Potential Future Garage Concepts

A preliminary concept design for a new parking garage replacing the Commercial Street Lot indicates that the facility could provide approximately 376 parking spaces if constructed with three supported floors, or 479 parking spaces if constructed with four supported floors. The conceptual site layout for the parking garage is included in Appendix C.

The preliminary concept design incorporates the following components:

- Garage security infrastructure (i.e., lighting / call boxes / access gates)
- Parking Access and Revenue Control System (PARCS) and associated payment kiosks.
- Pedestrian access points from the street to the entrances and vice versa.
- Elevator and stair locations that aid in accessibility.

It is assumed that the garage would be classified as an open garage that would not require mechanical ventilation. Additionally, an automatic sprinkler system may be included if required by building code and/or if incorporating mixed uses (i.e., commercial spaces).

4.5.1 Architecture

The exterior architecture of the parking garage draws inspiration from the vernacular of the surrounding buildings within the Keene area. The intent of the façade design is to incorporate appropriately scaled and proportioned building elements that relate to the immediate context, while also being mindful of adjacent properties. Conceptual designs, including elevations and various architectural elements, are provided in Appendix D.

The parking structure's site placement, key circulation elements, ground-tier Keene Market, and prominent façade components are all thoughtfully orientated in response to the existing streets that border the site. The inclusion of the Keene Market acknowledges the weekly Farmer's Market that currently operates on the site.

The façade is comprised of precast concrete elements that serve as both structural and aesthetic functions. A combination of light grey spandrels, form liner, outbound columns, and thin brick are strategically arranged to create focal points and achieve a balanced, symmetrical design.

The Gilbo Avenue elevation offers a pedestrian-friendly experience, featuring roll-up aluminum and glass doors, metal canopies, and wall sconces. The vertical stair and elevator towers act as prominent architectural anchors along this elevation. An aluminum-framed glass curtainwall system provides visibility into the stairwells, enhancing passive security. The Commercial Street elevation incorporates artwork at the pedestrian level, offering visual interest and serving as a backdrop to the adjacent surface lot. All elevations contribute to a cohesive architectural expression while maintaining a strong connection to neighboring properties and street frontages.



4.5.2 Safety and Security

Safety is a top priority in the design of the parking garage. A range of active and passive security features will be incorporated into the structure. Below are some of the most common safety strategies.

Passive security features are integrated into the design to enhance safety and security. These include:

- Maximizing visibility and openness through increased lighting levels, glass-backed stair and elevator towers, and generous floor-to-ceiling heights to create a sense of openness.
- Minimizing interior walls to improve sightlines, implementing access control measures, and ensuring the structure has a safe and inviting appearance.
- Promoting openness and clear lines of sight between parking levels, within stairwells, elevator lobbies, and parking areas to reduce hiding places.
- Designing stairwells to be visible from the exterior, with sufficient glass enclosures to enhance passive security.
- Utilizing glass-backed elevator shafts and cars to improve visibility where appropriate.
- Installing ornamental fencing at grade-level precast openings to guide pedestrian traffic through designated entry points.

Active security features are systems and accessories added after construction. These include:

- Emergency phone systems, CCTV cameras, and security patrols.
- CCTV monitoring at elevator lobbies, receiving areas, and entry/exit points.
- Providing necessary conduits for data and power to support the security system infrastructure.

4.5.3 *Parking Control System*

To ensure convenient and secure access, an automated, gated PARC (Parking Access and Revenue Control) system is recommended. This system offers multiple options for vehicular entry, including Automatic Vehicle Identification (AVI) and License Plate Recognition (LPR) technology for employee permit parking. The gated system enables the City of Keene to monitor occupancy and control access as needed. More information on parking control is provided in Appendix D.

4.5.4 *Durability Design & Maintenance*

Parking structures are unique facilities, designed to withstand extremely harsh conditions, including weather extremes, water infiltration, thermal expansion and contraction, vehicular traffic, and, particularly in the Northeast, de-icing salts and snow removal strategies. A parking structure that is not properly designed and maintained may experience detrimental consequences, including structural deficiencies, premature concrete deterioration, and safety hazards for users.

The design of this parking structure will incorporate durability features intended to extend its useful life, including:

- High-strength concrete with a low water-cement ratio
- Concrete admixtures to strengthen the cast-in-place concrete
- Corrosion inhibitors to protect reinforcing steel
- Air-Entrainment
- Positive drainage slopes and drain locations would be established to prevent water ponding
- Cast-in-place washes and toppings would help ensure appropriate drainage of the garage
- Penetrating silane sealers
- The garage design would not require an expansion joint in the driving areas, which would reduce future replacement and maintenance costs.
- Plumbing fixtures would be included for facility wash-downs & maintenance

Eleven (11) months after the garage receives its certificate of occupancy, the facility should be assessed to identify any workmanship or construction deficiencies and notify the City and contractor prior to the expiration of the contractor and workmanship warranties.

Structured facilities must be routinely maintained to prevent premature deterioration, unsightly conditions, and potential personal injuries. A comprehensive maintenance checklist—covering daily, monthly, and yearly activities—is recommended to ensure the facility remains in good condition.

5.0 FINANCIAL ANALYSIS

A Preliminary Order of Magnitude Cost Estimate was prepared and totaled approximately \$24 million for the construction of the parking garage on the Commercial Street Lot. This estimate assumed four supported floors, as described above, as well as proceeds from the sale of the Gilbo Avenue East Lot. This estimate includes major construction components such as precast concrete structure, façade enhancements, parking access systems, fire protection, security features, and EV charging stations.

A Preliminary Financial Analysis was conducted and outlines projected revenues and expenses associated with the proposed parking garage, including the maintenance, previously described above. Revenue assumptions include phased increases in permit and meter rates, alongside parking violation fines.

Detailed Financial information is included in Appendix E.

6.0 MUNICIPAL SERVICES FACILITIES AND INFRASTRUCTURE COMMITTEE

Weston & Sampson and THA presented the preliminary results of the parking assessment to the Keene Municipal Services Facilities and Infrastructure Committee during a meeting on August 27, 2025. A copy of the PowerPoint presentation is included in Appendix F.

Following a unanimous vote of 5-0, the committee recommended accepting the preliminary results for information only. Formal committee findings are included in Appendix G.

7.0 CONCLUSIONS AND RECOMMENDATIONS

The parking supply within the study area consists of approximately 1,308 parking spaces, broken down as follows:

- 347 on-street metered public parking spaces
- 25 other on-street parking spaces, including:
 - o 11 free spaces
 - o Approximately 8 loading zone spaces
 - o 2 reserved spaces
 - o 4 permit required spaces
- 299 off-street parking spaces in paid parking lots
- 108 off-street parking spaces in a private lot that allows paid public parking
- 235 off-street parking spaces in private parking lots reserved for associated private land uses
- 294 off-street parking spaces that require a permit or are reserved for staff

All paid parking within the study area is facilitated via meters, kiosks, or cellphone app. Free and paid on-street parking is limited to a 2-hour duration.

Commercial Street Lot, (south side of Gilbo Avenue, west of Main Street), Gilbo Avenue East Lot (north side of Gilbo Avenue, west of Main Street), and Wells Street Lot (at Wells Street and Church Street) allow overnight parking, but not for more than five sequential days. Elm Street Lot (at Elm Street and Mechanic Street) prohibits parking from 12:01 AM to 6:00 AM on Tuesday, Thursday, and Saturday.

The northern-most row of 25 spaces in the Commercial Street Lot and the adjacent row of 24 perpendicular spaces on the south side of Gilbo Avenue are reserved for Farmer's Market vendors on Saturdays from 8 AM to 2 PM, between April 22nd and October 28th. On the Saturday observed, vendors were largely packed up and leaving by 1 PM. As free parking spaces on Gilbo Avenue became available, some patrons were observed relocating from metered spaces.

No significant weather events occurred during the parking count periods that would have influenced travel modes. Some fog was noted in the early mornings but dispersed after sunrise.

Main Street, adjacent to various restaurants and shops, consistently showed higher parking demand than study area average. Instances of illegal parking were observed, particularly in crosshatched passenger loading zones adjacent to van accessible parking spaces.

Changes to parking demand throughout the day were more gradual within public parking lots than on-street parking, likely due to vehicles being parked for longer periods of time on average. The highest demand at public parking lots occurred around midday. Notably, midday utilization rates for public lots were higher on Saturday than on the other two weekdays. Private parking lots also showed gradual changes in parking utilization throughout the day, but overall utilization was lower on Saturday than on Thursday and Friday. Permit-only lots associated with business employees showed the highest utilization on Thursday during typical working hours, with the lowest usage observed on Saturday.

Free parking spaces, which are generally located farther from the downtown core, were less utilized than paid parking. This suggests that the public prioritizes proximity and convenience over saving on parking fees.

The difference in utilization between on-street and off-street parking reflects a balance between proximity to destinations and the need for longer-duration visits. Patrons of retail, restaurant, and entertainment venues may be content with shorter stays, while others seek longer visits.

Utilization rates for on-street parking were highest on Central Square and Main Street, especially on Saturdays and during evenings, indicating strong demand for parking near high-density commercial areas.

High overall utilization rates may reflect insufficient parking supply or latent demand. Illegal parking tends to increase during peak utilization periods. Persistent high utilization may also have economic implications and should be considered in relation to mode share and alternative transportation infrastructure.

The following locations were identified as having reached or neared capacity during at least one observation period:

- Main Street
- Court Street
- Washington Street
- Winter Street
- Railroad Street
- Roxbury Street
- Wells Street Lot

The current peak demand for public parking, based on observed counts, is 523 spaces, occurring on Friday at 9:00 pm. Future parking needs, based on observed counts, evaluated developments, and projected conditions, are estimated at 816 public parking spaces.

The existing public parking supply is 626 spaces, with 188 spaces projected to be removed due to the potential redevelopment projects included in the evaluation (excluding new spaces from a potential parking garage).

This results in a future public parking deficit of 378 spaces, excluding the potential garage based on included projections, and it is recommended that the proposed parking garage provides a minimum of 378 spaces to adequately meet future downtown parking needs.

A Preliminary Order of Magnitude Cost Estimate was prepared and totaled approximately \$24 million for the construction of the parking garage on the Commercial Street Lot.

Following a unanimous vote of 5-0, the committee recommended accepting the preliminary results for information only.

APPENDICES

APPENDIX A	Parking Counts
APPENDIX B	Parking Demand Adjustments
APPENDIX C	Site Study Options
APPENDIX D	Architectural Design
APPENDIX E	Financial Analysis
APPENDIX F	MSFI Presentation Slides
APPENDIX G	City Council Documentation

APPENDIX A

Parking Counts

Type					Logistics	Cost	Total	Thursday, October 17, 2024													
[Unofficial reference locations designations for data collection purposes only]						Spaces	8AM	9AM	10AM	11AM	12PM	1PM	2PM	3PM	4PM	5PM	6PM	7PM	8PM	9PM	
Gilbo Avenue West Lot		Private Lot	Permit Only	Permit	42 SW			22 52%	24 57%	29 69%	26 62%	29 69%	31 74%	29 69%	24 57%	16 38%	13 31%				
Gilbo Avenue	3	On-Street	Free	Free	7 SW			0	1 14%	1 14%	1 14%	2 29%	1 14%	2 29%	3 43%	1 14%	1 14%				
Gilbo Avenue	2	On-Street	Metered	Pole Meter	24 SW			1 4%	0	1 4%	0	1 4%	0	1 4%	2 8%	3 13%	7 29%				
Commercial Street Lot		Public Lot	Paid Public Lot	Kiosk	91 SW			5 5%	4 4%	5 5%	8 9%	12 13%	14 15%	13 14%	14 15%	14 15%	25 27%				
Commercial Street Lot (Rese		Public Lot	Reserved	Kiosk/Reserved	25 SW			1 4%	2 8%	2 8%	2 8%	9 36%	2 8%	3 12%	2 8%	2 8%	5 20%				
Unnamed Street	1 b	On-Street	Metered	Pole Meter	16 SW			0	0	0	0	0	1 6%		0	0					
Gilbo Avenue East Lot		Public Lot	Paid Public Lot	Kiosk	92 SW	11 12%	29 32%	25 27%	28 30%	31 34%	28 30%	27 29%	27 29%	28 30%	23 25%	28 30%					
Subway		Staff	Card Entry	Free	16 SW	1 6%	5 31%	4 25%	4 25%	4 25%	6 38%	6 38%	4 25%	5 31%	3 19%	3 19%					
Diner/Grille		Staff	Staff	Free	0 SW		5 n/a	10 n/a	4 n/a	10 n/a	12 n/a	13 n/a	5 n/a	2 n/a	0	0					
Margaritas		Private Lot	Reserved	Free	0 SW		2 n/a	1 n/a	2 n/a	2 n/a	3 n/a	5 n/a	5 n/a	7 n/a	7 n/a	3 n/a					
Gilbo Avenue	1 a	On-Street	Metered	Pole Meter	7 SW		2 29%	2 29%	3 43%	4 57%	3 43%	2 29%	1 14%	1 14%	2 29%	1 14%					
Gilbo Avenue	1 b	On-Street	Metered	Pole Meter	11 SW		9 82%	6 55%	6 55%	8 73%	4 36%	5 45%	2 18%	4 36%	9 82%	2 18%					
Gilbo Avenue	1 c	On-Street	Loading	Free	1 SW		0	1 100%	0		0	1 100%	0	0	0	0					
Unnamed Street	1 a	On-Street	Free	Free	4 SW	2 50%	1 25%				2 50%		1 25%	0	0						
Federal Street		On-Street	Metered	Pole Meter	8 SW		1 13%				2 25%		1 13%	1 13%	3 38%	3 38%					
34 West		Private Lot	Reserved	Free	23 SW	1 4%	7 30%				9 39%		9 39%	8 35%	4 17%	4 17%					
Bank West		Private Lot	Reserved	Free	8 SW	3 38%					6 75%	5 63%	7 88%	4 50%	7 88%	7 88%					
Lamson Street		On-Street	Metered	Pole Meter	4 SW		0	0	0		2 50%	0		0	0	0					
St George		Private Lot	Reserved	Free	37 SW		14 38%				13 35%	15 41%		14 38%	14 38%	8 22%	3 8%				
Theater	1	Permit Lot	Permit Only	Permit	25 SW		11 44%	9 36%	9 36%	14 56%	16 64%	11 44%	12 48%	11 44%	10 40%	9 36%					
Path 1		Path	No Parking	No Parking	0 SW						-			0	0						
Path 2		Path	No Parking	No Parking	0 SW						-			0	0						
Main Street	1 a N	On-Street	Metered	Pole Meter	28 S	5 18%	5 18%	5 18%			8 29%	15 54%	10 36%	7 25%	7 25%	6 21%	27 96%				
Main Street	1 b N	On-Street	Metered	Pole Meter	16 S		0	4 25%				12 75%	13 81%	12 75%	8 50%	8 50%	16 100%				
Main Street	2 a N	On-Street	Metered	Pole Meter	5 S		0	0	0		4 80%	1 20%	2 40%	3 60%	2 40%	4 80%	5 100%				
Main Street	2 b N	On-Street	Metered	Pole Meter	6 S		0	1 17%	2 33%	5 83%	4 67%	3 50%	5 83%	3 50%	5 83%	6 100%					
Main Street	2 c N	On-Street	Metered	Pole Meter	6 S		0	3 50%	3 50%	5 83%	4 67%	6 100%	2 33%	5 83%	5 83%	5 83%					
Main Street	1 a S	On-Street	Metered	Pole Meter	19 S	3 16%	0	4 21%	6 32%	9 47%	10 53%					12 63%	14 74%				
Main Street	1 b S	On-Street	Metered	Pole Meter	14 S		0	0	1 7%	2 14%					4 29%	13 93%					
Main Street	2 a S	On-Street	Metered	Pole Meter	5 S		0	0	0	1 20%	0	2 40%	3 60%	4 80%	5 100%	4 80%					
Main Street	2 b S	On-Street	Metered	Pole Meter	7 S		0	2 29%	0	4 57%	7 100%	2 29%	1 14%	2 29%	4 57%	6 86%					
Main Street	2 c S	On-Street	Metered	Pole Meter	4 S		3 75%	2 50%	2 50%	3 75%	3 75%	1 25%	1 25%	2 50%	3 75%	3 75%					
Railroad Street	1 a	On-Street	Metered	Pole Meter	8 SE		1 13%	1 13%	3 38%	2 25%	2 25%	2 25%	5 63%	6 75%	3 38%	6 75%					
Railroad Street	1 b	On-Street	Metered	Pole Meter	14 SE		9 64%	10 71%	9 64%	5 36%	5 36%	8 57%	7 50%	9 64%	11 79%	18 129%					
Salon Railroad		Private Lot	Reserved	Free	24 SE		2 8%	9 38%		8 33%	8 33%	7 29%	6 25%	8 33%	7 29%	8 33%					
32 Church		Permit Lot	Permit Only	Free	8 SE		3 38%			5 63%	4 50%	4 50%	2 25%	1 13%	1 13%						
Hotel Lot Upper		Permit Lot	Permit Only	Permit	115 SE		55 48%	57 50%	51 44%	45 39%	46 40%	47 41%	34 30%	34 30%	26 23%	18 16%					
Hotel Lot Lower		Public Lot	Paid Public Lot	Kiosk	108 SE																
Wells Street Lot		Public Lot	Paid Public Lot	Kiosk	19 SE		12 63%		15 79%	11 58%	17 89%	13 68%	12 63%	11 58%	18 95%	15 79%					
Hannah Grimes		Private Lot	Reserved	Free	47 SE	5 11%	15 32%			31 66%	26 55%	32 68%		22 47%	33 70%	27 57%					
Wells Street		On-Street	No Parking	No Parking	0 SE						-			0	0						
Church Street		On-Street	No Parking	No Parking	0 SE						-			0	1 n/a						
Roxbury Street	2	On-Street	Loading	Free	6 E	1 17%	0	3 50%			2 33%		3 50%	0	0	2 33%	4 67%				
Roxbury Street	1	On-Street	Metered	Pole Meter	7 E		2 29%	2 29%			3 43%	4 57%	6 86%		7 100%						
Town Hall Lot Upper		Public Lot	Paid Public Lot	Kiosk	45 E	17 38%	29 64%	34 76%		35 78%	27 60%	34 76%	37 82%	34 76%	11 24%	11 24%					
Town Hall Lot Lower		Permit Lot	Permit Only	Permit	44 E																
Washington Street	1	On-Street	Metered	Kiosk	13 C	3 23%	0				4 31%						13 100%				
Washington Street	2 a	On-Street	Metered	Pole Meter	9 N	1 11%	3 33%		3 33%	6 67%		4 44%	2 22%	5 56%	2 22%	8 89%					
Washington Street	2 b	On-Street	Metered	Pole Meter	10 N	1 10%	3 30%	4 40%	3 30%	3 30%	8 80%	3 30%	5 50%	2 20%	2 20%	4 40%					
Washington Street	2 c	On-Street	Metered	Pole Meter	13 N	2 15%	2 15%	3 23%		6 46%	8 62%	7 54%	10 77%	9 69%	6 46%	4 31%					
Bank Washington		Private Lot	Reserved	Free	21 N				8 38%	16 76%	17 81%	12 57%	12 57%	7 33%	8 38%	15 71%					
Vernon Street	3	On-Street	Reserved	Private	2 N	2 100%	2 100%	2 100%		2 100%	1 50%	2 100%	2 100%	1 50%	0	0					
Vernon Street	2	On-Street	Metered	Pole Meter	4 N	0	1 25%	0		0	1 25%	2 50%	3 75%	2 50%	0	1 25%					
Vernon Street	1	On-Street	No Parking	No Parking	0 N	0	0	0			-		0	0	0	0					
Fire 1		Private Lot	Reserved	Free	19 N	6 32%	15 79%	13 68%		6 32%	10 53%	7 37%	15 79%	13 68%	14 74%	10 53%					
Elm Street		On-Street	No Parking	No Parking	0 N	0	4 n/a				-		0	0							
Elm Street Lot		Public Lot	Paid Public Lot	Kiosk	27 N	3 11%		4 15%	4 15%	11 41%	8 30%	20 74%	13 48%	13 48%	2 7%	0					
Condos		Permit Lot	Permit Only	Permit	44 N	14 32%	31 70%	34 77%	22 50%	34 77%	38 86%	22 50%	21 48%	20 45%	15 34%	15 34%					
Funeral		Private Lot	Reserved	Free	8 N	2 25%	3 38%	3 38%	3 38%	4 50%	3 38%	4 50%	3 38%	5 63%	3 38%	3 38%					
Endodontics		Private Lot	Reserved	Reserved	10 N		10 100%	7 70%	5 50%	7 70%	10 100%	7 70%	8 80%	7 70%	5 50%	1 10%					
Mechanic Street	2	On-Street	Metered	Pole Meter	4 N	2 50%	1 25%	2 50%	2 50%	2 50%	2 50%	1 25%	2 50%	2 50%	1 25%	1 25%					
Mechanic Street	1	On-Street	Permit Only	Permit	4 N	0	2 50%	0		2 50%	0	0	0	0	1 25%	5 125%					
Fire 2		Private Lot	Reserved	Free	6 N	2 33%	1 17%	2 33%		2 33%	1 17%	2 33%	1 17%	0	0	0					
Church Vernon		Private Lot	Reserved	Free	32 N		4 13%	9 28%		26 81%	24 75%	6 19%	9 28%	9 28%	14 44%	23 72%					
Court Street	1 a	On-Street	Metered	Pole Meter	12 N	0		0		1 8%	1 8%	1 8%	0	1 8%	1 8%	6 50%					
Court Street	1 b	On-Street	Metered	Pole Meter	18 N	3 17%	2 11%	5 28%	0	0	13 72%	6 33%	4 22%	4 22%	15 83%	16 89%					
Court Street	1 c	On-Street	Loading	Free	1 N	0		0		8 800%		0	0	0	0	0					
Court Street	2	On-Street	Metered	Pole Meter	14 C			13 93%		8 57%		7 50%	5 36%		10 71%	10 71%					
Traffic Circle		On-Street	No Parking	No Parking	0 C						-										
Winter Street	2 a	On-Street	Metered	Pole Meter	9 C		0						7 78%	7 78%	9 100%	9 100%					
Winter Street	2 b	On-Street	Metered	Pole Meter	7 C		0						2 29%	3 43%							
Winter Street	1	On-Street	Metered	Pole Meter	25 W		22 88%			15 60%		3 12%	7 28%	13 52%	13 52%	18 72%					
West Street		On-Street	No Parking	No Parking	0 W	7 n/a					-										
Totals						97 20%	357 37%	327 38%	236 34%	479 46%	497 47%	424 42%	406 39%	419 39%	401 36%	490 45%	0	0	0	0	

		Type	Logistics	Cost	Total	Direction	Friday, October 18, 2024													
<i>(Unofficial reference locations designations for data collection purposes only)</i>						Spaces	8AM	9AM	10AM	11AM	12PM	1PM	2PM	3PM	4PM	5PM	6PM	7PM	8PM	9PM
Gilbo Avenue West Lot		Private Lot	Permit Only	Permit	42	SW	7 17%	14 33%	20 48%	20 48%	22 52%	22 52%	25 60%	25 60%	19 45%	10 24%	8 19%			
Gilbo Avenue	3	On-Street	Free	Free	7	SW	0	0	3 43%	5 71%	2 29%	2 29%	2 29%	2 29%	2 29%	2 29%	2 29%			
Gilbo Avenue	2	On-Street	Metered	Pole Meter	24	SW	1 4%	0	0	0	1 4%	4 17%	8 33%	1 4%	4 17%	8 33%	20 83%			
Commercial Street Lot		Public Lot	Paid Public Lot	Kiosk	91	SW	3 3%	6 7%	10 11%	13 14%	1 1%	10 11%	13 14%	14 15%	14 15%	27 30%	26 29%	67 74%		89 98%
Commercial Street Lot (Rese		Public Lot	Reserved	Kiosk/Reserved	25	SW	2 8%	2 8%	3 12%	2 8%	13 52%	2 8%	1 4%	1 4%	0	2 8%	5 20%			
Unnamed Street	1 b	On-Street	Metered	Pole Meter	16	SW	2 13%			2 13%	2 13%	0	1 6%	0	0	0	0			
Gilbo Avenue East Lot		Public Lot	Paid Public Lot	Kiosk	92	SW	23 25%	22 24%	32 35%	44 48%	39 42%	34 37%	28 30%	30 33%	27 29%	24 26%	25 27%	56 61%		64 70%
Subway		Staff	Card Entry	Free	16	SW	1 6%	3 19%	3 19%	4 25%	3 19%	3 19%	3 19%	2 13%	3 19%	0	0			
Diner/Grille		Staff	Staff	Free	0	SW	5 n/a	8 n/a	5 n/a	10 n/a	11 n/a	12 n/a	11 n/a	9 n/a	2 n/a	1 n/a	0			
Margaritas		Private Lot	Reserved	Free	0	SW	1 n/a	1 n/a	4 n/a	5 n/a	5 n/a	6 n/a	6 n/a	7 n/a	9 n/a	8 n/a	5 n/a			
Gilbo Avenue	1 a	On-Street	Metered	Pole Meter	7	SW	1 14%	1 14%	1 14%	3 43%	3 43%	4 57%	1 14%	2 29%	2 29%	5 71%	4 57%			
Gilbo Avenue	1 b	On-Street	Metered	Pole Meter	11	SW	10 91%	8 73%	9 82%	9 82%	5 45%	3 27%	4 36%	2 18%	1 9%	4 36%	4 36%			
Gilbo Avenue	1 c	On-Street	Loading	Free	1	SW	0	0	0	0	1 100%	0	0	0	0	0	1 100%			
Unnamed Street	1 a	On-Street	Free	Free	4	SW		1 25%	1 25%											
Federal Street		On-Street	Metered	Pole Meter	8	SW			1 13%	0		1 13%	0	1 13%	4 50%	4 50%	6 75%			
34 West		Private Lot	Reserved	Free	23	SW		8 35%	9 39%			9 39%	6 26%	6 26%	7 30%	7 30%	1 4%			
Bank West		Private Lot	Reserved	Free	8	SW		5 63%	5 63%	4 50%	5 63%	5 63%	8 100%	5 63%	5 63%	2 25%	7 88%			
Lamson Street		On-Street	Metered	Pole Meter	4	SW		0	0	1 25%	1 25%	0	0	0	0	0	0			
St George		Private Lot	Reserved	Free	37	SW		9 24%	9 24%	8 22%	9 24%	6 16%	7 19%	5 14%	7 19%	7 19%	4 11%			
Theater	1	Permit Lot	Permit Only	Permit	25	SW		9 36%	14 56%	14 56%	14 56%	10 40%	7 28%	6 24%	8 32%	8 32%	8 32%			
Path 1		Path	No Parking	No Parking	0	SW								-	-	-	-			
Path 2		Path	No Parking	No Parking	0	SW								-	-	-	-			
Main Street	1 a N	On-Street	Metered	Pole Meter	28	S		6 21%	6 21%	9 32%	13 46%	16 57%	15 54%		4 14%	14 50%	28 100%	28 100%		27 96%
Main Street	1 b N	On-Street	Metered	Pole Meter	16	S		4 25%	3 19%	7 44%	11 69%	15 94%	10 63%	13 81%	8 50%	16 100%	16 100%	16 100%		16 100%
Main Street	2 a N	On-Street	Metered	Pole Meter	5	S		0	1 20%	2 40%	3 60%	4 80%	4 80%	5 100%	2 40%	4 80%	4 80%	1 20%		5 100%
Main Street	2 b N	On-Street	Metered	Pole Meter	6	S		0	3 50%	4 67%	4 67%	5 83%	6 100%	4 67%	2 33%	5 83%	5 83%	6 100%		6 100%
Main Street	2 c N	On-Street	Metered	Pole Meter	6	S		5 83%	6 100%	6 100%	5 83%	5 83%	6 100%	5 83%	5 83%	6 100%	5 83%	6 100%		6 100%
Main Street	1 a S	On-Street	Metered	Pole Meter	19	S		2 11%	7 37%	6 32%	9 47%	13 68%	12 63%		12 63%	10 53%	18 95%	19 100%		19 100%
Main Street	1 b S	On-Street	Metered	Pole Meter	14	S		0	4 29%	3 21%		7 50%	7 50%		9 64%	11 79%	14 100%	14 100%		14 100%
Main Street	2 a S	On-Street	Metered	Pole Meter	5	S		0	0	3 60%	2 40%	3 60%	1 20%	2 40%	5 100%	5 100%	5 100%	5 100%		5 100%
Main Street	2 b S	On-Street	Metered	Pole Meter	7	S		2 29%	0	3 43%	2 29%	6 86%	5 71%	1 14%	2 29%	6 86%	7 100%	2 29%		7 100%
Main Street	2 c S	On-Street	Metered	Pole Meter	4	S		2 50%	0	4 100%	1 25%	2 50%	1 25%	1 25%	0	3 75%	4 100%	4 100%		4 100%
Railroad Street	1 a	On-Street	Metered	Pole Meter	8	SE		1 13%	2 25%	0	4 50%	5 63%	1 13%	4 50%	5 63%	4 50%	8 100%	8 100%		5 63%
Railroad Street	1 b	On-Street	Metered	Pole Meter	14	SE		3 21%	3 21%	4 29%	7 50%	8 57%	2 14%	5 36%	3 21%	10 71%	12 86%	12 86%		14 100%
Salon Railroad		Private Lot	Reserved	Free	24	SE		0	4 17%	8 33%	7 29%	8 33%	7 29%	5 21%	6 25%	4 17%	6 25%			
32 Church		Permit Lot	Permit Only	Free	8	SE		4 50%	6 75%	2 25%	4 50%	3 38%	4 50%	2 25%	3 38%	0	0			
Hotel Lot Upper		Permit Lot	Permit Only	Permit	115	SE		48 42%	48 42%	44 38%	42 37%	38 33%	41 36%	36 31%	31 27%	27 23%	15 13%	24 21%		26 23%
Hotel Lot Lower		Public Lot	Paid Public Lot	Kiosk	108	SE							29 27%			26 24%	29 27%			36 33%
Wells Street Lot		Public Lot	Paid Public Lot	Kiosk	19	SE		11 58%	11 58%	11 58%	12 63%	16 84%	19 100%	18 95%	13 68%	18 95%	17 89%			
Hannah Grimes		Private Lot	Reserved	Free	47	SE		30 64%	31 66%	35 74%	37 79%	32 68%	27 57%	35 74%	29 62%	24 51%	32 68%			
Wells Street		On-Street	No Parking	No Parking	0	SE						0								
Church Street		On-Street	No Parking	No Parking	0	SE						0								
Roxbury Street	2	On-Street	Loading	Free	6	E		1 17%	3 50%	1 17%	1 17%	4 67%	3 50%	2 33%	3 50%	4 67%	5 83%	6 100%		3 50%
Roxbury Street	1	On-Street	Metered	Pole Meter	7	E		5 71%	4 57%		5 71%	7 100%	6 86%	5 71%	2 29%	6 86%	6 86%	6 86%		6 86%
Town Hall Lot Upper		Public Lot	Paid Public Lot	Kiosk	45	E		29 64%	32 71%	33 73%	32 71%	27 60%	31 69%	35 78%	31 69%	30 67%	6 13%	5 11%		4 9%
Town Hall Lot Lower		Permit Lot	Permit Only	Permit	44	E							16 36%			18 41%		22 50%		21 48%
Washington Street	1	On-Street	Metered	Kiosk	13	C		6 46%	2 15%	2 15%	7 54%		5 38%		5 38%	?	13 100%	3 23%		0
Washington Street	2 a	On-Street	Metered	Pole Meter	9	N		1 11%	1 11%	3 33%	6 67%	6 67%	4 44%	5 56%	7 78%	5 56%	8 89%	9 100%		7 78%
Washington Street	2 b	On-Street	Metered	Pole Meter	10	N		4 40%	4 40%	3 30%	2 20%	8 80%	5 50%	5 50%	3 30%	3 30%	7 70%	10 100%		10 100%
Washington Street	2 c	On-Street	Metered	Pole Meter	13	N		2 15%	2 15%	2 15%	3 23%	6 46%	3 23%	2 15%	2 15%	3 23%	4 31%	13 100%		13 100%
Bank Washington		Private Lot	Reserved	Free	21	N		10 48%	12 57%	15 71%	13 62%	25 119%	11 52%	6 29%	7 33%	4 19%	4 19%			
Vernon Street	3	On-Street	Reserved	Private	2	N			0	0		1 50%								
Vernon Street	2	On-Street	Metered	Pole Meter	4	N		1 25%	0	0		2 50%	1 25%	2 50%	2 50%		1 25%			
Vernon Street	1	On-Street	No Parking	No Parking	0	N			1 n/a	0	2 n/a	1 n/a	-	-	0	-	-			
Fire 1		Private Lot	Reserved	Free	19	N		16 84%	17 89%	18 95%	15 79%	9 47%	17 89%	17 89%	12 63%	10 53%	9 47%			
Elm Street		On-Street	No Parking	No Parking	0	N			-	-	-	-	-	-	0	-	-			
Elm Street Lot		Public Lot	Paid Public Lot	Kiosk	27	N		5 19%	2 7%	1 4%	0	6 22%	0	0	1 4%	0	1 4%	11 41%		11 41%
Condos		Permit Lot	Permit Only	Permit	44	N		18 41%	16 36%	20 45%	20 45%	14 32%	21 48%	20 45%	22 50%	21 48%	14 32%			
Funeral		Private Lot	Reserved	Free	8	N		3 38%	4 50%	4 50%	4 50%	4 50%	5 63%	3 38%	4 50%	3 38%	2 25%			
Endodontics		Private Lot	Reserved	Reserved	10	N		3 30%	3 30%	3 30%	3 30%	2 20%	2 20%	3 30%	1 10%	1 10%	0			
Mechanic Street	2	On-Street	Metered	Pole Meter	4	N		0	0	0	0		0	0	1 25%	1 25%				
Mechanic Street	1	On-Street	Permit Only	Permit	4	N		1 25%			0									
Fire 2		Private Lot	Reserved	Free	6	N		0	1 17%	1 17%	0	0	10 167%	0	0	4 67%	1 17%			
Church Vernon		Private Lot	Reserved	Free	32	N		5 16%	12 38%	7 22%	14 44%	5 16%	5 16%	4 13%	4 13%	5 16%				
Court Street	1 a	On-Street	Metered	Pole Meter	12	N		0	0	2 17%	3 25%	1 8%	3 25%	2 17%	4 33%	2 17%	8 67%	8 67%		12 100%
Court Street	1 b	On-Street	Metered	Pole Meter	18	N		9 50%	7 39%	8 44%	9 50%	16 89%	11 61%	10 56%	10 56%	10 56%	17 94%	17 94%		16 89%
Court Street	1 c	On-Street	Loading	Free	1	N		0	0	0	0	0	1 100%	0	1 100%	0	1 100%	1 100%		1 100%
Court Street	2	On-Street	Metered	Pole Meter	14	C		2 14%	5 36%	9 64%		11 79%	9 64%	5 36%	8 57%	13 93%	14 100%	14 100%		14 100%
Traffic Circle		On-Street	No Parking	No Parking	0	C			-	-			-	-			-	-		
Winter Street	2 a	On-Street	Metered	Pole Meter</																

		Type	Logistics	Cost	Total	Direction	Saturday, October 18, 2024														
<i>(Unofficial reference locations designations for data collection purposes only)</i>						Spaces	8AM	9AM	10AM	11AM	12PM	1PM	2PM	3PM	4PM	5PM	6PM	7PM	8PM	9PM	
Gilbo Avenue West Lot		Private Lot	Permit Only	Permit	42	SW			15 36%	17 40%	19 45%	10 24%	10 24%	9 21%	3 7%	6 14%	4 10%				
Gilbo Avenue	3	On-Street	Free	Free	7	SW			2 29%	7 100%	4 57%	5 71%	3 43%	2 29%	0	0	0	0	1 14%	1 14%	
Gilbo Avenue	2	On-Street	Metered	Pole Meter	24	SW			10 42%	12 50%	10 42%	11 46%	7 29%	9 38%	10 42%	5 21%	10 42%	14 58%	12 50%	9 38%	
Commercial Street Lot		Public Lot	Paid Public Lot	Kiosk	91	SW			20 22%	20 22%	30 33%	41 45%	33 36%	31 34%	36 40%	26 29%	22 24%				
Commercial Street Lot (Rese		Public Lot	Reserved	Kiosk/Reserved	25	SW			10 40%	10 40%	10 40%	12 48%	1 4%	0	4 16%	2 8%	3 12%				
Unnamed Street	1 b	On-Street	Metered	Pole Meter	16	SW			1 6%	10 63%	2 13%	3 19%	0	0	1 6%	0	0				
Gilbo Avenue East Lot		Public Lot	Paid Public Lot	Kiosk	92	SW			45 49%	63 68%	60 65%	49 53%	47 51%	44 48%	31 34%	24 26%	25 27%				
Subway		Staff	Card Entry	Free	16	SW			2 13%	1 6%	0	2 13%	2 13%	2 13%	2 13%	1 6%	0				
Diner/Grille		Staff	Staff	Free	0	SW			8 n/a	10 n/a	9 n/a	8 n/a	10 n/a	6 n/a	0	1 n/a	2 n/a				
Margaritas		Private Lot	Reserved	Free	0	SW			6 n/a	7 n/a	9 n/a	8 n/a	9 n/a	9 n/a	9 n/a	9 n/a	3 n/a				
Gilbo Avenue	1 a	On-Street	Metered	Pole Meter	7	SW			3 43%	5 71%	3 43%	6 86%	4 57%	2 29%	3 43%	3 43%	2 29%	4 57%	4 57%	3 43%	
Gilbo Avenue	1 b	On-Street	Metered	Pole Meter	11	SW			8 73%	9 82%	9 82%	9 82%	7 64%	2 18%	4 36%	2 18%	7 64%	22 200%	24 218%	20 182%	
Gilbo Avenue	1 c	On-Street	Loading	Free	1	SW			0	1 100%	0	1 100%	1 100%	0	1 100%	1 100%	1 100%				
Unnamed Street	1 a	On-Street	Free	Free	4	SW			?	0	0	3 75%		?		?					
Federal Street		On-Street	Metered	Pole Meter	8	SW			3 38%	4 50%	3 38%	6 75%	4 50%	1 13%	0	4 50%	3 38%				
34 West		Private Lot	Reserved	Free	23	SW			5 22%	4 17%	5 22%	6 26%	0	5 22%	0	5 22%	6 26%				
Bank West		Private Lot	Reserved	Free	8	SW			2 25%	2 25%	2 25%	0	5 63%	0	6 75%	0	0				
Lamson Street		On-Street	Metered	Pole Meter	4	SW			2 50%	2 50%	1 25%	0	1 25%	0	0	0	0				
St George		Private Lot	Reserved	Free	37	SW			1 3%	3 8%	3 8%	?	1 3%	1 3%	0	0	1 3%				
Theater	1	Permit Lot	Permit Only	Permit	25	SW			6 24%	6 24%	9 36%	13 52%	11 44%	10 40%	6 24%	7 28%	8 32%				
Path 1		Path	No Parking	No Parking	0	SW						-		-	-	-					
Path 2		Path	No Parking	No Parking	0	SW						-		-	-	-					
Main Street	1 a N	On-Street	Metered	Pole Meter	28	S			9 32%	15 54%	28 100%	28 100%	28 100%	27 96%	24 86%	22 79%	27 96%	25 89%			
Main Street	1 b N	On-Street	Metered	Pole Meter	16	S			4 25%	13 81%	14 88%	16 100%	16 100%	16 100%	14 88%	16 100%	16 100%	14 88%			
Main Street	2 a N	On-Street	Metered	Pole Meter	5	S			2 40%	4 80%	5 100%	4 80%	5 100%	5 100%	2 40%	4 80%	5 100%	5 100%			
Main Street	2 b N	On-Street	Metered	Pole Meter	6	S			4 67%	5 83%	6 100%	6 100%	6 100%	5 83%	4 67%	5 83%	5 83%	5 83%			
Main Street	2 c N	On-Street	Metered	Pole Meter	6	S			6 100%	5 83%	6 100%	6 100%	6 100%	6 100%	5 83%	6 100%	6 100%	5 83%			
Main Street	1 a S	On-Street	Metered	Pole Meter	19	S			4 21%	9 47%	16 84%	18 95%	18 95%	16 84%	15 79%	19 100%	19 100%	17 89%			
Main Street	1 b S	On-Street	Metered	Pole Meter	14	S			1 7%	3 21%	12 86%	14 100%	14 100%	14 100%	12 86%	12 86%	13 93%	13 93%			
Main Street	2 a S	On-Street	Metered	Pole Meter	5	S			1 20%	3 60%	5 100%	5 100%	4 80%	5 100%	4 80%	5 100%	4 80%	5 100%			
Main Street	2 b S	On-Street	Metered	Pole Meter	7	S			2 29%	3 43%	4 57%	6 86%	4 57%	5 71%	3 43%	3 43%	6 86%	6 86%			
Main Street	2 c S	On-Street	Metered	Pole Meter	4	S			2 50%	3 75%	4 100%	3 75%	3 75%	2 50%	3 75%	3 75%	2 50%	4 100%			
Railroad Street	1 a	On-Street	Metered	Pole Meter	8	SE			3 38%	1 13%	4 50%	7 88%	7 88%	4 50%	0	7 88%	7 88%	7 88%	8 100%	7 88%	
Railroad Street	1 b	On-Street	Metered	Pole Meter	14	SE			0	1 7%	12 86%	12 86%	10 71%	12 86%	11 79%	12 86%	14 100%	12 86%	13 93%	13 93%	
Salon Railroad		Private Lot	Reserved	Free	24	SE			7 29%	6 25%	9 38%	7 29%	4 17%	13 54%	10 42%	5 21%	3 13%				
32 Church		Permit Lot	Permit Only	Free	8	SE			?	0	2 25%	?	12 150%	2 25%	2 25%	1 13%	1 13%				
Hotel Lot Upper		Permit Lot	Permit Only	Permit	115	SE			30 26%	21 18%	15 13%	14 12%	13 11%	17 15%	15 13%	18 16%	21 18%				
Hotel Lot Lower		Public Lot	Paid Public Lot	Kiosk	108	SE															
Wells Street Lot		Public Lot	Paid Public Lot	Kiosk	19	SE			9 47%	12 63%	9 47%	13 68%	15 79%	16 84%	13 68%	12 63%	16 84%				
Hannah Grimes		Private Lot	Reserved	Free	47	SE			17 36%	15 32%	14 30%	23 49%	22 47%	?	?	13 28%					
Wells Street		On-Street	No Parking	No Parking	0	SE			-	-		-	-	-	-	-	-				
Church Street		On-Street	No Parking	No Parking	0	SE			-	-		-	-	-	-	-	-				
Roxbury Street	2	On-Street	Loading	Free	6	E			1 17%	0	4 67%	1 17%	2 33%	1 17%	2 33%	1 17%	1 17%	7 100%	7 100%	7 100%	
Roxbury Street	1	On-Street	Metered	Pole Meter	7	E			4 57%	3 43%	4 57%	7 100%	7 100%	3 43%		3 43%	5 71%				
Town Hall Lot Upper		Public Lot	Paid Public Lot	Kiosk	45	E			2 4%	3 7%	6 13%	7 16%	5 11%	6 13%	6 13%	6 13%	7 16%				
Town Hall Lot Lower		Permit Lot	Permit Only	Permit	44	E															
Washington Street	1	On-Street	Metered	Kiosk	13	C				?		?			?	?	?				
Washington Street	2 a	On-Street	Metered	Pole Meter	9	N			0	1 11%	2 22%	5 56%	6 67%								
Washington Street	2 b	On-Street	Metered	Pole Meter	10	N			1 10%	3 30%	2 20%	5 50%	5 50%	5 50%	2 20%	3 30%	8 80%				
Washington Street	2 c	On-Street	Metered	Pole Meter	13	N			1 8%	2 15%	2 15%	3 23%	1 8%	2 15%	1 8%	1 8%	2 15%				
Bank Washington		Private Lot	Reserved	Free	21	N			3 14%	3 14%	4 19%	7 33%	5 24%	5 24%	3 14%	4 19%	5 24%				
Vernon Street	3	On-Street	Reserved	Private	2	N			0		0		0			0	0				
Vernon Street	2	On-Street	Metered	Pole Meter	4	N			0		3 75%	0	1 25%			0	1 25%				
Vernon Street	1	On-Street	No Parking	No Parking	0	N			0	-	-	0	0	?	-	0	0				
Fire 1		Private Lot	Reserved	Free	19	N			8 42%	10 53%	10 53%	9 47%	8 42%	?	5 26%	10 53%	9 47%				
Elm Street		On-Street	No Parking	No Parking	0	N			-	-	-		-	-		0	-				
Elm Street Lot		Public Lot	Paid Public Lot	Kiosk	27	N			0	0	0	0	0	0	0	0	0				
Condos		Permit Lot	Permit Only	Permit	44	N			16 36%	18 41%	19 43%	17 39%	13 30%	13 30%	11 25%	12 27%	11 25%				
Funeral		Private Lot	Reserved	Free	8	N			3 38%	4 50%	0	5 63%	7 88%	6 75%	2 25%	3 38%	2 25%				
Endodontics		Private Lot	Reserved	Reserved	10	N			0	0	0	0	0	0	0	1 10%	1 10%				
Mechanic Street	2	On-Street	Metered	Pole Meter	4	N			0	0	0	1 25%	1 25%	1 25%	1 25%	1 25%	1 25%				
Mechanic Street	1	On-Street	Permit Only	Permit	4	N			1 25%	1 25%	1 25%	2 50%	2 50%	2 50%	2 50%	2 50%					
Fire 2		Private Lot	Reserved	Free	6	N			2 33%	2 33%	2 33%	2 33%	2 33%	2 33%	?	0	0				
Church Vernon		Private Lot	Reserved	Free	32	N			1 3%	1 3%	4 13%	5 16%	3 9%	3 9%	4 13%	4 13%	6 19%				
Court Street	1 a	On-Street	Metered	Pole Meter	12	N			2 17%	1 8%	1 8%	3 25%	7 58%	1 8%	0	0	5 42%				
Court Street	1 b	On-Street	Metered	Pole Meter	18	N			5 28%	7 39%	5 28%	10 56%	7 39%	14 78%	7 39%	8 44%	17 94%				
Court Street	1 c	On-Street	Loading	Free	1	N			0	0	1 100%	0	0	1 100%	0	0	0				
Court Street	2	On-Street	Metered	Pole Meter	14	C			13 93%	13 93%	11 79%	14 100%	14 100%	8 57%	14 100%	14 100%	14 100%				
Traffic Circle		On-Street	No Parking	No Parking	0	C															
Winter Street	2 a	On-Street	Metered	Pole Meter	9	C					44%	100%	89%	100%	89%	100%	89%	100%	11%	11%	22%
Winter Street	2 b	On-Street	Metered	Pole Meter	7	C			0		29%		100%			86%		14%	14%	29%	
Winter Street	1	On-Street	Metered	Pole Meter	25	W			4 16%	44%	40%	40%	36%			32%	68%	8%	16%	28%	
West Street		On-Street	No Parking	No Parking	0	W									n/a						
Totals							0	0	318 29%	401 36%	453 41%	501 47%	457 42%	385 39%	328 35%	348 34%	389 39%	169 76%	75 63%	71 60%	

APPENDIX B

Parking Demand Adjustments

Parking Demand Adjustments for Commercial Street - Summary

Summary Tables

Demand	Parking Spaces
Current Parking Demand	523
Normal Growth (1.5% annual over 5 years)	40
New Demand (Shared Parking Model Applies)	
Vacancy Lease Up - Subtotal	99
Gilbo E Lot (projected development) - Subtotal	120
2 Parcels @ Main St & Emerald St & Davis St - Subtotal	193
Shared Parking Peak Demand Increase	210
Parking Adequacy Cushion - 10%	77
<i>Total Demand</i>	<i>850</i>
Supply	
Current Parking Supply (within Study Area)	626
Displaced Parking Supply - Commercial Street Lot	-116
Net Parking Supply Change - Gilbo East Lot	-72
<i>Total Supply</i>	<i>438</i>
Future Parking Adequacy	-412

Future parking demand is projected to be approximately 850 spaces within the study area based on the projected increase in parking demand based on growth, vacancy lease up, and new developments. With the projected development on Gilbo E Lot and Commercial Street Lot (Recommended site of Parking Garage), the available supply of parking spaces within the study area is reduced to approximately 438 spaces (prior to the addition of the proposed parking garage). Thus, the proposed parking garage is recommended to provide upwards of 412 parking spaces.

Preliminary Garage Design	5 Total Floors	468
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Parking Demand Adjustments for Commercial Street - Calculations

Consider General Growth in Parking Demand

Consider Population Growth

Census QuickFacts from

<https://www.census.gov/quickfacts/fact/table/keenecitynewhampshire/PST045224>

Keene, New Hampshire

Population	Year / source type	Averaged Annual Growth Rate
23034	Census estimate 2024 (April 1)	-0.2% 2010 to 2024
23047	Census 2020 (April 1)	-0.01% 2020 to 2024
23409	Census 2010 (April 1)	-0.2% 2010 to 2020

Historic data shows population a very slight population decrease

Also consider traffic variation over time

Traffic data from NH website

<https://nhdot.public.ms2soft.com/tcds/tsearch.asp?loc=Nhdot&mod=TCDS>

Traffic count location ID: 82237140

Traffic count location: Main Street, south of Gilbo Avenue

ADT	Year	Source type	Averaged Annual Growth Rate	
20490	2024	Estimate		
19948	2022	Counts, adjusted to ADT	1.3% 2022 to 2024	
18627	2019	Counts, adjusted to ADT	1.9% 2019 to 2024	2.3% 2019 to 2022
21871	2016	Counts, adjusted to ADT	-0.8% 2016 to 2024	-1.5% 2016 to 2022

Population shows little variation (decrease of less than 0.5% per year)

Traffic volumes shows varied growth between -1.5% to 2.3% annually.

Parking Demand Background Growth - target area

For future parking conditions, use the following growth **1.5%**

Target area had maximum demand of 523 Spaces

Years of Growth to consider - 5 Years

Resulting increase in parking demand of 5 years growth at 1.5% growth

Growth 40 Spaces

Existing +Growth 563 Spaces

Parking Demand Adjustments for Commercial Street - Calculations

Consider Additional Future Demand if Current Vacancy Rate Reduces

Not all buildings in area are fully occupied - some spaces are vacant.
For future conditions, a portion of those vacancies may be filled.

Estimate for future conditions that there will be future lease ups of currently vacant space.
The following commercial properties within the study area were listed for sale/rent/lease according to a publically accesible real estate website, on 8/12/2025:

Address	SF	Type
1 Elm Street	6,052	Office
34 West Street	9,600	Office
37 Main Street	3,000	Commercial (formerly "Subway")
46 Main Street	31,000	Office
116 Main Street	2,572	Commercial (formerly "The Keene Axe House")

For future conditions, assume the following portion of vacancies are filled: 50%
and apply parking ratios.

Proportion per use type		Parking ratio	Spaces
1,500 SF	Restaurant	(8 per 1,000 SF)	12
1,286 SF	Retail	(4 per 1,000 SF)	5
23,326 SF	Office	(3.5 per 1,000 SF)	82
26,112 SF	All	n/a	99

Varied land uses will experience maximum parking demand at different times.
Apply shared parking model developed by Victoria Transportation Institute.
(see "*Shared Parking Model For New Demand* ")

Parking Demand Adjustments for Commercial Street - Calculations

Consider Additional Development of Gilbo East Lot

Parking Demand

Parcels development projected with the following uses

80 DUs
5,000 SF of commercial

		Parking ratio	Spaces
5,000 SF	Retail	(4 per 1,000 SF)	20
80 DU	Multifamily	(1.25 per DU)	100
<i>n/a</i>	<i>All</i>	<i>n/a</i>	120

Varied land uses will experience maximum parking demand at different times.

Apply shared parking model developed by Victoria Transportation Institute.

(see "*Shared Parking Model For New Demand* ")

Parking Supply

The concept development will provide some parking spaces

36 Spaces on-site

Gilbo East Lot currently provides parking spaces that will be removed

108 Spaces on-site

Resulting net change in parking spaces provided

-72 Spaces

Parking Demand Adjustments for Commercial Street - Calculations

Consider Additional Development of 2 Nearby/influential Parcels

2 Parcels on west side of Main Street between Emerald Street and Davis Street

Parcels development projected with the following uses

70 DUs of Multifamily
20,300 SF of commercial

Assume commercial space is 1/3 restaurant, 1/3 retail, and 1/3 office,
and apply parking ratios

Proportion per use type		Parking ratio	Spaces
6,767 SF	Restaurant	(8 per 1,000 SF)	54
6,767 SF	Retail	(4 per 1,000 SF)	27
6,766 SF	Office	(3.5 per 1,000 SF)	24
70 DU	Multifamily	(1.25 per DU)	88
<i>n/a</i>	<i>All</i>	<i>n/a</i>	193

As this potential development is south of the limits of the study area, some of its demand for parking may be filled by on-site parking, nearby on-street parking or elsewhere. Apply a percentage to the parking demand to represent the portion of vehicles that will use the proposed parking garage.

25% of spaces apply to parking garage demand.

	Parking ratio	Spaces
Restaurant	(8 per 1,000 SF)	14
Retail	(4 per 1,000 SF)	7
Office	(3.5 per 1,000 SF)	6
Multifamily	(1.25 per DU)	22
<i>All</i>	<i>n/a</i>	<i>49</i>

Varied land uses will experience maximum parking demand at different times.

Apply shared parking model developed by Victoria Transportation Institute.

(see "*Shared Parking Model For New Demand* ")

Parking Demand Adjustments for Commercial Street - Calculations

Shared Parking Model For New Demand

Spaces by location and type

	Lease up	Gilbo E Lot	2 Parcels	<u>Total</u>
Restaurant	12		14	<u>26</u>
Retail	5	20	7	<u>32</u>
Office	82		6	<u>88</u>
Multifamily		100	22	<u>122</u>
<i>Totals</i>	99	120	49	<u>268</u>

Varied land uses will experience maximum parking demand at different times.
Apply shared parking model developed by Victoria Transportation Institute.

Shared Model - Percentages

	M-F 8AM-5PM	M-F 6PM-12AM	M-F 12AM-6AM	Sat & Sun 8AM-5PM	Sat & Sun 6PM-12AM	Sat & Sun 12AM-6AM
Restaurant	70%	100%	10%	70%	100%	20%
Retail	90%	80%	5%	100%	70%	5%
Office	100%	20%	5%	5%	5%	5%
Multifamily	60%	100%	100%	80%	100%	100%

Shared Model - Calculations

	M-F 8AM-5PM	M-F 6PM-12AM	M-F 12AM-6AM	Sat & Sun 8AM-5PM	Sat & Sun 6PM-12AM	Sat & Sun 12AM-6AM
Restaurant	19	26	3	19	26	6
Retail	29	26	2	32	23	2
Office	88	18	5	5	5	5
Multifamily	74	122	122	98	122	122
<i>Totals</i>	<u>210</u>	192	132	154	176	135

Maximum demand for new developments: 210

Demand for new developments at 9 PM on a Friday: 192

APPENDIX C

Site Study Options

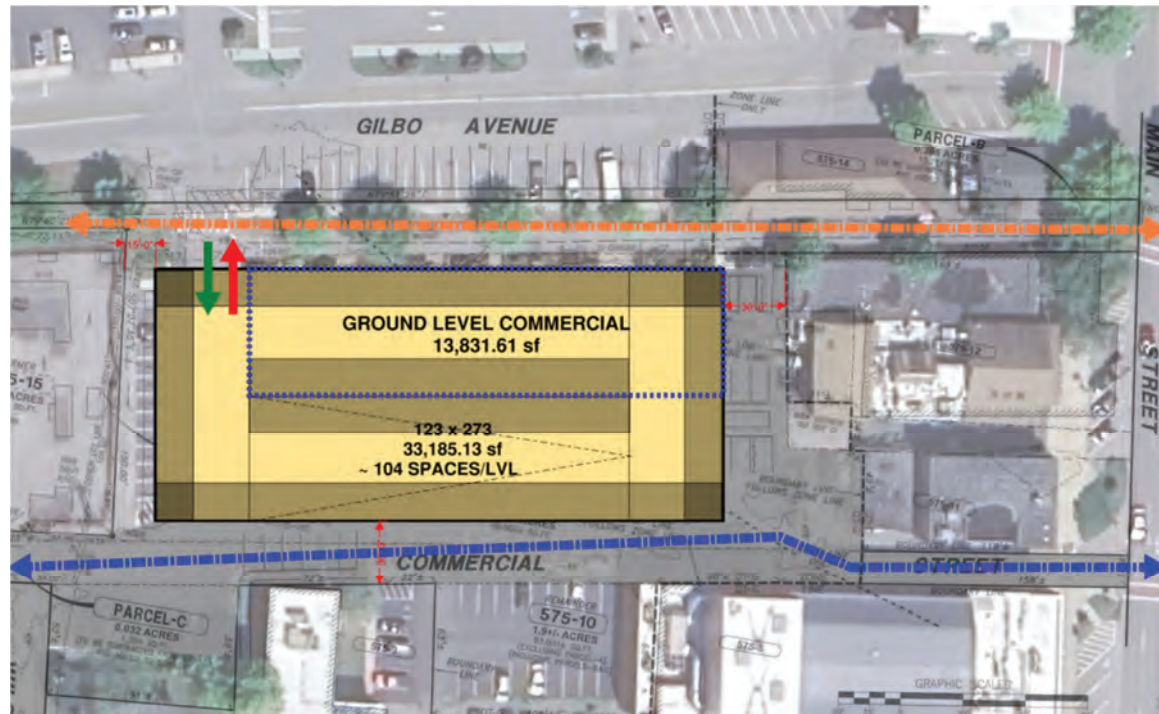
SITE STUDY OPTIONS

Weston & Sampson
THA
THA CONSULTING

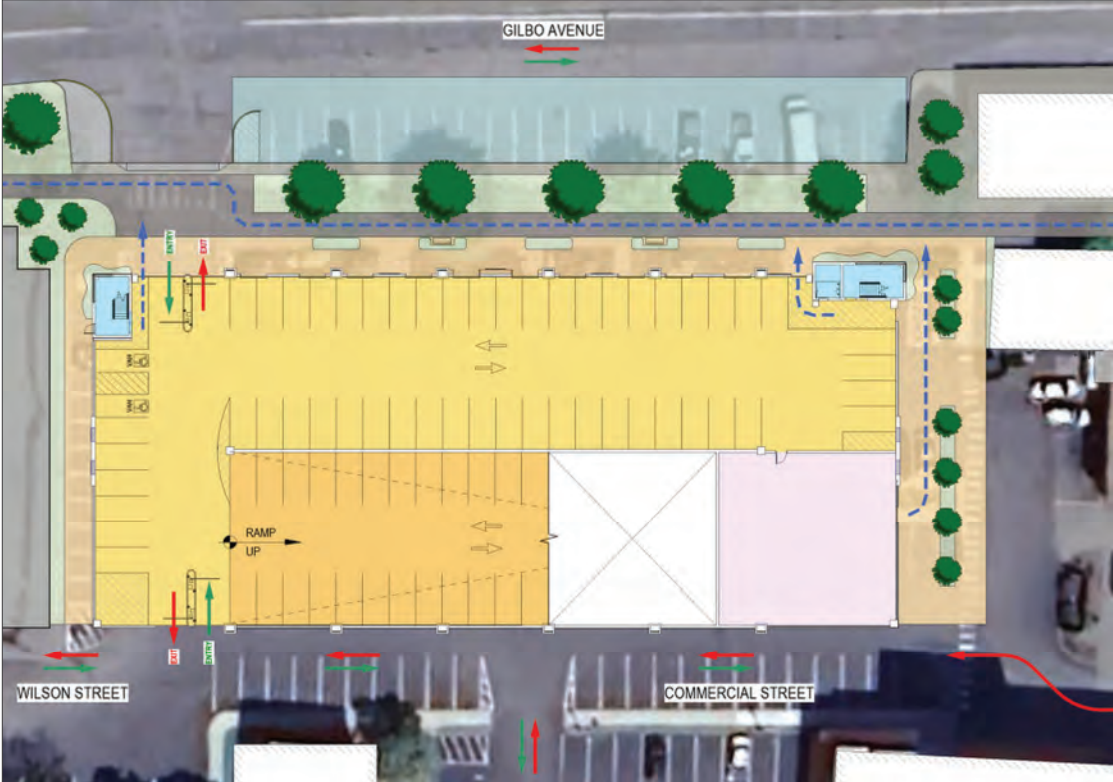
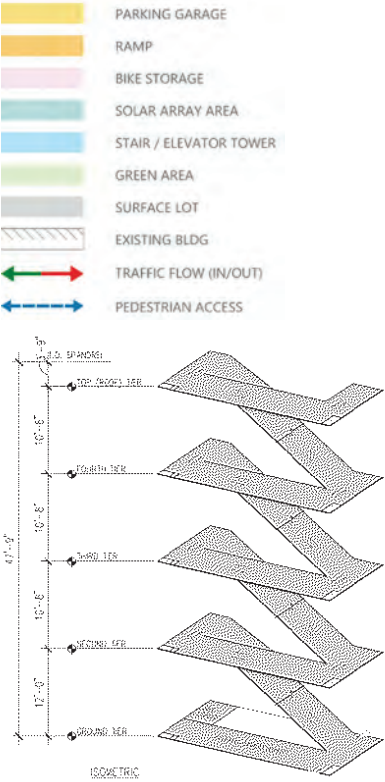


SITE 2 - PREFERRED OPTION

- Efficient footprint
- User-friendly ramping system
- More than 65% of parking on flat surface
- Higher level of service
- Multiple access / egress locations
- Opportunity for flex space within garage
- Lower height to achieve parking count
- Net gain of over 300 spaces on 5 levels
- Not negatively impacted by adjacent properties
- 3 sides have flat vs. ramped elevations – improved façade aesthetic



SITE 2 - PREFERRED OPTION SITE PLAN



SITE 2 – PREFERRED OPTION GROUND TIER PLAN



LEGEND

PARKING GARAGE

RAMP

ANOTHER USER GROUP

STAIR/ELEVATOR TOWER

GREEN AREA

SURFACE LOT

ROAD

TRAFFIC FLOW (IN/OUT)

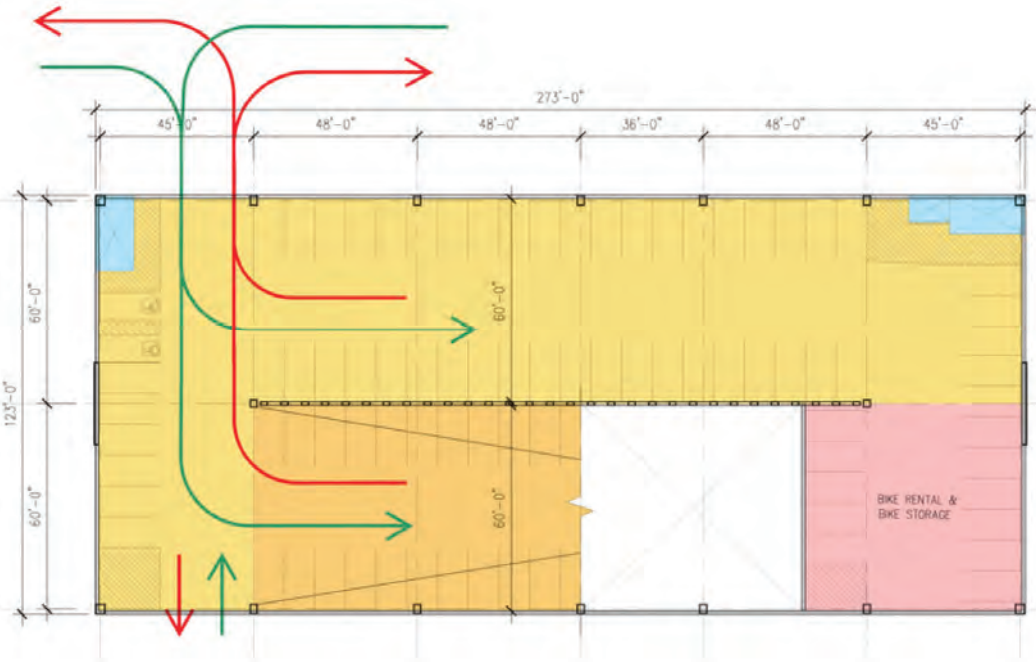
PEDESTRIAN ACCESS

PROPERTY LINE

SETBACK LINE

EXISTING BLDG.

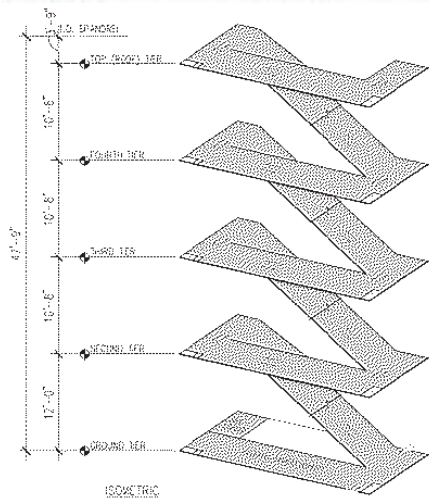
TREE



9'-0" PARKING SPACE TABULATION		
PROPOSED	TOP	PARKING
	TYPICAL (2ND-5TH)	82
	GROUND	77
	TOTAL	477
EXISTING SURFACE LOT		114
EST. PARKING FOR DEVELOPMENT		0
NET GAIN		363

- SUBTRACT 44 +/- SPACES FOR PROPOSED EVENT AREA

TYPICAL TIER EFFICIENCY		
LEVEL	FOOTPRINT	PARKING SPACE
TYPICAL TIER	33,579 SQ. FT.	106
EFFICIENCY	317 SF/Space	



APPENDIX D

Architectural Design

SITE 2 – MIXED USE OPPORTUNITY



ARCHITECTURAL PRECEDENT



SITE 2 - PREFERRED DESIGN OPTION



SITE 2 - PREFERRED DESIGN OPTION



SITE 2 - PREFERRED DESIGN OPTION



SITE 2 - PREFERRED DESIGN OPTION



SITE 2 - PREFERRED DESIGN OPTION



SITE 2 - PREFERRED DESIGN OPTION



SITE 2 - PREFERRED DESIGN OPTION



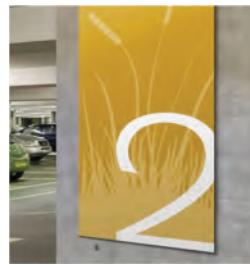
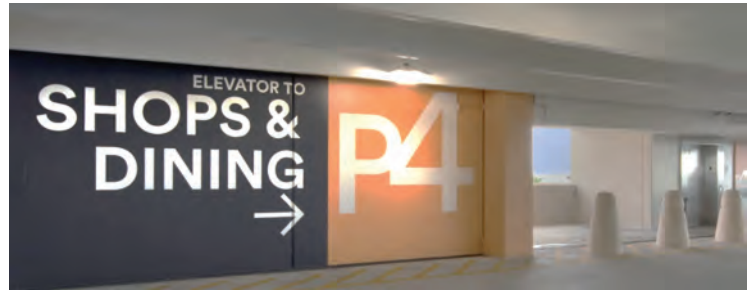
SITE 2 - PREFERRED DESIGN OPTION



INTERIOR FINISHES



- To promote user comfort of the facility and to better-serve as a gateway to the immediate area, the main elevator lobby, stair, walls, and ceilings in the main elevator / stair tower are intended to be aesthetically enhanced finishes to offer a pleasing experience.
- Each level can be branded with a uniquely colored accent wall with large graphic numbers, indicating floor level.
- Other areas within the garage can also be used for branding and signage.
- Elevator shafts for glass-backed elevators shall be painted black.
- Concrete floor surfaces shall be medium broom finish (non-slip) . Elevator lobby shall have a non-slip granite tile.
- Accommodations shall be made to utilize a chase to conceal all vertical conduits and piping in the elevator / stair towers to provide a clean, neatly organized design.



SUSTAINABLE DESIGN FEATURES

The intent is that the parking structure be designed to incorporate sustainable strategies to limit the impact of the parking facility on the environment, while also helping to reduce costs with efficient technologies. Some of these opportunities include:

- Solar Array is currently excluded for this scope, but the structure can be designed for future installation.
- Provisions for bicycle parking / sharing located at the ground tier.
- The landscape plantings selected would not require irrigation, limiting the use of potable water for this purpose.
- Energy efficient lighting with controllability via photocell/timer.
- Electric vehicle charging stations.
- Stormwater management ranging from pervious surface design to natural infiltration.
- Energy efficient glazing materials along stair/elevator towers.
- The use of precast concrete, offering advantages over cast-in-place concrete in terms of waste generation.



OPERATIONS PARKING CONTROL SYSTEM



Parking Access System

- The parking facility would serve the public, employees, and residents with access provided to visitors and neighboring parkers.
- To ensure convenient and secure access, an automated, gated PARC system is recommended. This system would provide many options for vehicular access including Automatic Vehicle Identification (AVI) or License Plate Recognition (LPR) technology for employee permit parking. The gated system allows Keene to monitor occupancy and control access as needed.

Permit Parkers

- Permit Parkers would access the parking facility through AVI technology. Each employee vehicle would be equipped with a Radio Frequency Identification (RFID) tag.
- As the vehicle approaches the gate, the antenna reads the RFID tag, verifies authorization, and opens the gate automatically. This system allows for seamless “hands-free” entry and exit, similar to EZPass systems.
- As an alternative, License Plate Recognition (LPR) technology may be used. With LPR, an employee’s registered license plate acts as their entry credential.
- Cameras at the entry and exit points capture the plate and activate the gate. LPR systems typically achieve a 95%-99% capture rate, ensuring efficient and accurate access.

Visitor / Patron Parker Access

Visitors / patrons to the area would pull a ticket at entry from a ticket splitter and a few ways would be provided for payment to exit. The most common being a pay station at the stair / elevator tower. Other means can be by a phone application or simply pay with card at the gate upon exit.



APPENDIX E

Financial Analysis

PRELIMINARY ORDER OF MAGNITUDE COST ESTIMATE



Development / Construction Order of Magnitude Cost Estimate

- Precast Concrete Structure
- Façade Enhancement
- Parking Access and Revenue Control Equipment
- Fire Protection – Sprinkler and Dry Standpipe
- Security Cameras and Blue Light Call System
- EV Charging Stations – 5% of total (24 spaces)
- General Conditions
- Escalation
- Overhead and Profit
- Construction Contingency
- Design Costs
- Estimated Development / Construction Cost - \$24M
- Revenue from sale of Gilbo East Lot - \$2M

Exclusions:

- No permitting / review fees
- No specialized testing and inspection
- No hazard / environmental remediation
- No relocation of existing utilities
- No pavement outside the site of disturbance
- No resiliency / flooding requirements
- No Police Department traffic control

Parking Inventory 468 Spaces	
Construction Costs	
Sitework and Site Development	\$1,000,000
Cast In Place Concrete	\$1,700,000
Precast Concrete	\$10,000,000
Façade Enhancement	\$550,000
Masonry	\$140,000
Structural Steel and Miscellaneous Metals	\$400,000
Carpentry	\$50,000
Thermal & Moisture Protection	\$280,000
Openings	\$800,000
Finishes	\$60,000
Specialties	\$140,000
Equipment & Furnishings	\$200,000
Elevator	\$300,000
Fire Protection	\$800,000
Plumbing	\$350,000
HVAC	\$100,000
Electrical	\$900,000
Electronic Safety and Security	\$250,000
Electric Vehicle Charging Stations	\$240,000
Subtotal	\$18,260,000
Contingency	\$1,826,000
Design	\$1,278,200
General Conditions	\$1,388,673
Escalation	\$455,057
Bond	\$177,472
General Liability Insurance	\$411,583
Builders Risk Insurance	\$5,000
Overhead and Profit	\$630,753
Total Cost	\$24,432,739

PRELIMINARY FINANCIAL ANALYSIS - SUMMARY



Parking Fund / System Financing

Revenue Assumptions

- Previous Rate Increases - Permit rates 2021 / Meter rates 2022
- Permit Revenue and Meter Revenue
 - Rates Increase 25% in FY 2026-2027
 - Rates Increase 40% in FY 2029-2030
 - Rates Increase 14% in FY 2032-2033
 - Rates Increase 12.5% in FY 2035-2036
- Parking Violation Revenue
 - Fines Increase 50% in FY 2026-2027
 - Fines Increase 20% in FY 2029-2030
 - Fines Increase 20% in FY 2032-2033
- Permit and meter revenue increases based on projected parking demand
- Violation revenue increases 2% annually based on increased demand until 2033
- Revenue from sale of Gilbo East Lot offsets construction cost by \$2M.
- Expense avoidance from sale of Gilbo East Lot and garage development of Commercial St Lot

Expenses Assumptions

- Operational expenses increase 3% annually starting in 2027
- New Parking Deck opening Summer 2028
- Garage Debt Service starts in 2028 - \$1,321,068
- \$570 per space for operations
- \$125 per space for capital expenses

Keene Parking Garage Preliminary Bond Analysis	
Project Parameters	
Number of Parking Spaces	477
Total Development / Construction Cost	\$24,000,000
Interest Rate of Bond	3.75%
Term (Years) 30 years	30
Cost of Issuance Rate	3.00%
Calculated Values	
Construction Cost - \$24,000,000 - \$2,000,000 land sale	\$22,000,000
Cost of Issuance	\$660,000
Debt Service Reserve 12 mo)	\$1,321,068
Total Bond Amount	\$23,981,068
Annual Debt Service - Years 1-30	\$1,321,068
Annual Operation Cost	\$271,990
Annual Capital Reserve	\$59,625

PRELIMINARY FINANCIAL ANALYSIS - PROFORMA



Parking Fund / System Operating Proforma

PARKING FUND	FY 2023-2024 ACTUAL	FY 2024-2025 ACTUAL	FY 2025-2026 BUDGETED	FY 2026-2027 PROJECTED	FY 2027-2028 PROJECTED	FY 2028-2029 PROJECTED	FY 2029-2030 PROJECTED	FY 2030-2031 PROJECTED	FY 2031-2032 PROJECTED	FY 2032-2033 PROJECTED	FY 2033-2034 PROJECTED	FY 2034-2035 PROJECTED	FY 2035-2036 PROJECTED	FY 2036-2037 PROJECTED	FY 2037-2038 PROJECTED
Revenue				Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12
Permit Parking	\$344,447	\$255,353	\$328,641	\$410,801	\$410,801	\$410,801	\$575,122	\$575,122	\$575,122	\$655,639	\$655,639	\$655,639	\$737,594	\$737,594	\$737,594
Meter Parking	\$461,031	\$443,344	\$494,800	\$618,500	\$618,500	\$618,500	\$865,900	\$865,900	\$865,900	\$987,126	\$987,126	\$987,126	\$1,110,517	\$1,110,517	\$1,110,517
Additional Revenue from Projected Demand	\$0	\$0	\$0	\$38,574	\$77,148	\$115,723	\$287,653	\$410,461	\$533,269	\$577,243	\$577,243	\$577,243	\$649,399	\$649,399	\$649,399
Parking Fines & Forfeits	\$266,882	\$251,595	\$296,550	\$444,825	\$453,722	\$462,796	\$555,355	\$566,462	\$577,791	\$693,350	\$693,350	\$693,350	\$693,350	\$693,350	\$693,350
Wells - Miscellaneous	\$43,172	\$48,247	\$55,903	\$56,462	\$57,027	\$57,597	\$58,173	\$58,755	\$59,342	\$59,936	\$60,535	\$61,140	\$61,752	\$62,369	\$62,993
Operational Savings (Gilbo East and Commercial Lot)	\$0	\$0	\$0	\$0	\$0	\$0	\$65,710	\$67,682	\$69,712	\$71,803	\$73,958	\$76,176	\$78,462	\$80,815	\$83,240
Total Revenue	\$1,311,022	\$1,237,050	\$1,426,741	\$1,569,162	\$1,617,198	\$1,665,417	\$2,576,979	\$2,544,381	\$2,681,136	\$3,045,097	\$3,047,850	\$3,050,674	\$3,331,072	\$3,334,043	\$3,337,091
Operating Expenses				Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12
Parking Administration	\$615,129	\$767,688	\$678,925	\$699,293	\$720,272	\$741,880	\$764,136	\$787,060	\$810,672	\$834,992	\$860,042	\$885,843	\$912,418	\$939,791	\$967,985
Parking Transfer Capital & Reserve	\$276,000	\$236,000	\$247,400	\$254,822	\$262,467	\$270,341	\$278,451	\$286,804	\$295,409	\$304,271	\$313,399	\$322,801	\$332,485	\$342,459	\$352,733
Outside Services	\$254,742	\$215,622	\$233,531	\$240,537	\$247,753	\$255,186	\$262,841	\$270,726	\$278,848	\$287,214	\$295,830	\$304,705	\$313,846	\$323,262	\$332,959
City Hall Deck Maintenance	\$13,802	\$11,950	\$19,686	\$20,277	\$20,885	\$21,511	\$22,157	\$22,821	\$23,506	\$24,211	\$24,938	\$25,686	\$26,456	\$27,250	\$28,068
Wells Deck Maintenance	\$20,855	\$31,728	\$29,425	\$30,308	\$31,217	\$32,153	\$33,118	\$34,112	\$35,135	\$36,189	\$37,275	\$38,393	\$39,545	\$40,731	\$41,953
New Parking Deck Debt Service	\$0	\$0	\$0	\$0	\$0	\$1,321,068	\$1,321,068	\$1,321,068	\$1,321,068	\$1,321,068	\$1,321,068	\$1,321,068	\$1,321,068	\$1,321,068	\$1,321,068
New Parking Deck Operations	\$0	\$0	\$0	\$0	\$0	\$271,990	\$299,050	\$308,021	\$317,262	\$326,780	\$336,583	\$346,681	\$357,081	\$367,793	\$378,827
New Parking Deck Capital Expense	\$0	\$0	\$0	\$0	\$0	\$0	\$59,625	\$61,414	\$63,256	\$65,154	\$67,108	\$69,122	\$71,195	\$73,331	\$75,531
Total Operating Expenses	\$1,296,496	\$1,442,457	\$1,331,987	\$1,245,236	\$1,282,593	\$2,914,129	\$3,040,446	\$3,092,027	\$3,145,156	\$3,199,878	\$3,256,243	\$3,314,298	\$3,374,095	\$3,435,686	\$3,499,124
Net Income	\$14,526	\$205,407	\$94,754	\$323,926	\$334,605	\$1,248,712	\$463,467	\$547,646	\$464,020	\$154,782	\$208,393	\$263,624	\$43,023	\$101,642	\$162,033

- Proforma does not include any additional revenue contribution by City through TIF, capital Contributions, or State / Federal grants.
- Disclaimer: This is a preliminary financial analysis. Projected costs, revenue and expenses outlined above are estimates subject to a variety of factors that may alter the Operational Proforma. Items / factors include projected downtown parking demand and economic market conditions.

APPENDIX F

MSFI Presentation Slides



Downtown Parking Structure Project

MUNICIPAL SERVICES,
FACILITIES AND
INFRASTRUCTURE COMMITTEE

AUGUST 27, 2025





AGENDA

01

Project Scope Goals

02

**Existing Inventory, Future
Growth, & Adequacy**

03

Site Analysis / Renderings

04

Preliminary Financial Analysis

05

Conclusions





Project Team



Alyssa Rezendes Peck, PE
Senior Project Manager



**Jim Zullo, AICP, PP, CAPP,
LEED AP**
Regional Manager



Douglas Ostler, PE, PTOE
Senior Project Engineer



Project Scope Goals

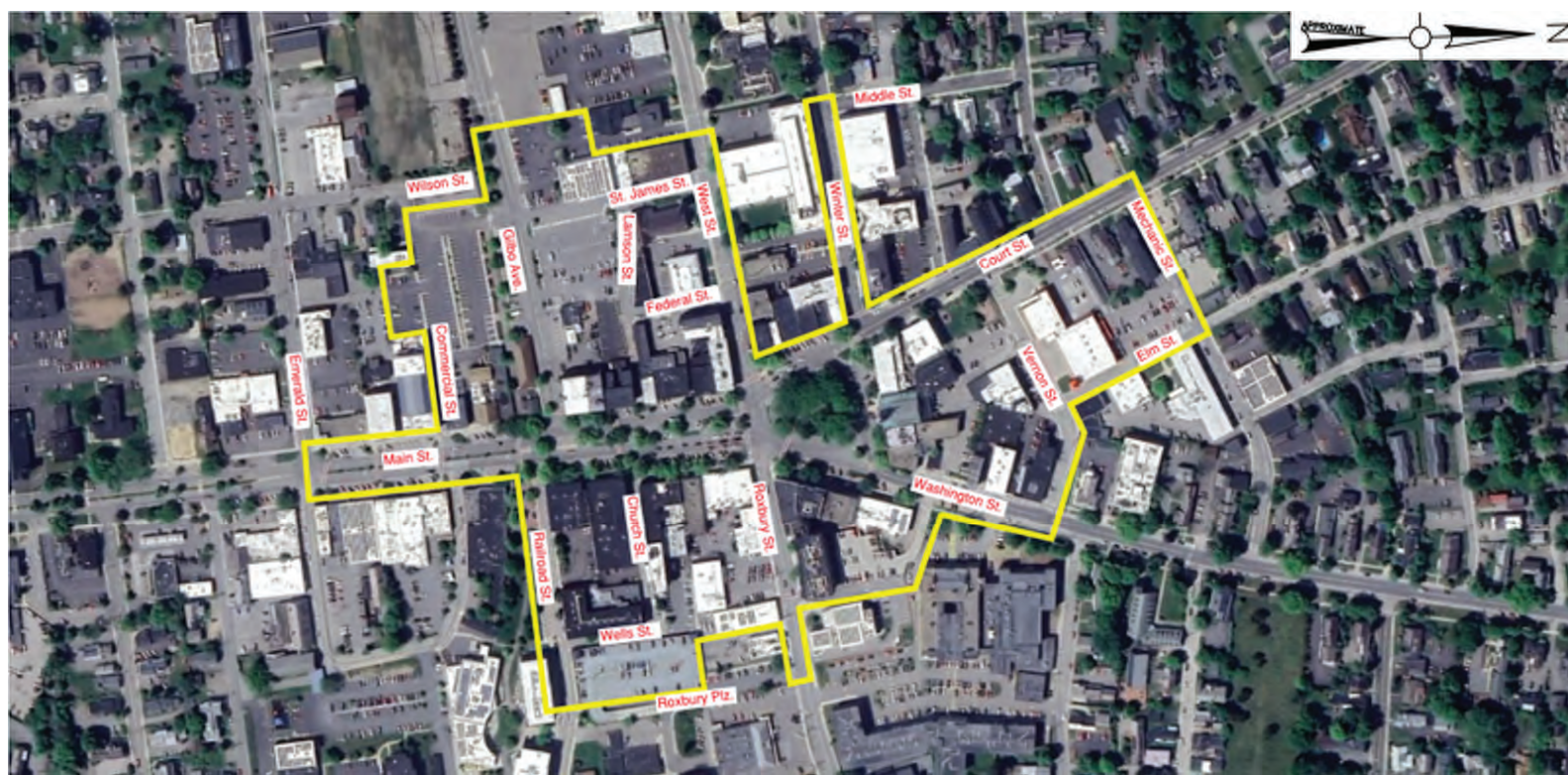


Project Scope & Goals

- Data Review
 - Master Plans, City Rules Regulations, available parking data, etc.
 - Site available for future development
- Review Existing Parking Inventory – Public and Private
- Calculate Existing Parking Demand – Drone Data Collection
- Future-cast Parking Needs – will parking be adequate to accommodate growth?
- Provide Concept Designs for a parking structure.
- Preliminary Financial Analysis



Study Area





Existing Inventory



Parking Inventory Summary

On-Street: 372

Public Lots: 254

Commercial St Lot
E Gilbo Ave Lot
Wells St Lot
Elm St Lot



Observed Use – Weekday at 1pm



Weekday At 1PM



Weekdays 1PM

- Busy areas near businesses
 - North of Central Square
 - Some lots south of Central Square
- Midday peak near “lunch”
- On-street parking more in demand on Friday than Thursday



Observed Use – Weekend at 1pm



Saturday At 1PM



Weekend 1PM

- Main Street highly utilized all day – due to restaurants and shops
- Midday peak near “lunch”
- Parking concentrated on-street
- Gatherings, Farmers Market can overflow into street interactions
- Some illegal parking



Observed Use – Weekday at 6pm



Weekdays 6PM

- Peak parking on Friday Evening
- Main Street full during evening – due to restaurants and shops. Moderate parking midday.
- Parking concentrated on-street / Public parking lots underutilized
- Some illegal parking



Observed Use – Weekend at 6pm



Saturday At 6PM



Weekend 6PM

- Main Street highly utilized all day – due to restaurants and shops
- Parking concentrated on-street
- Public parking lots underutilized
- Some illegal parking

Future Parking Needs



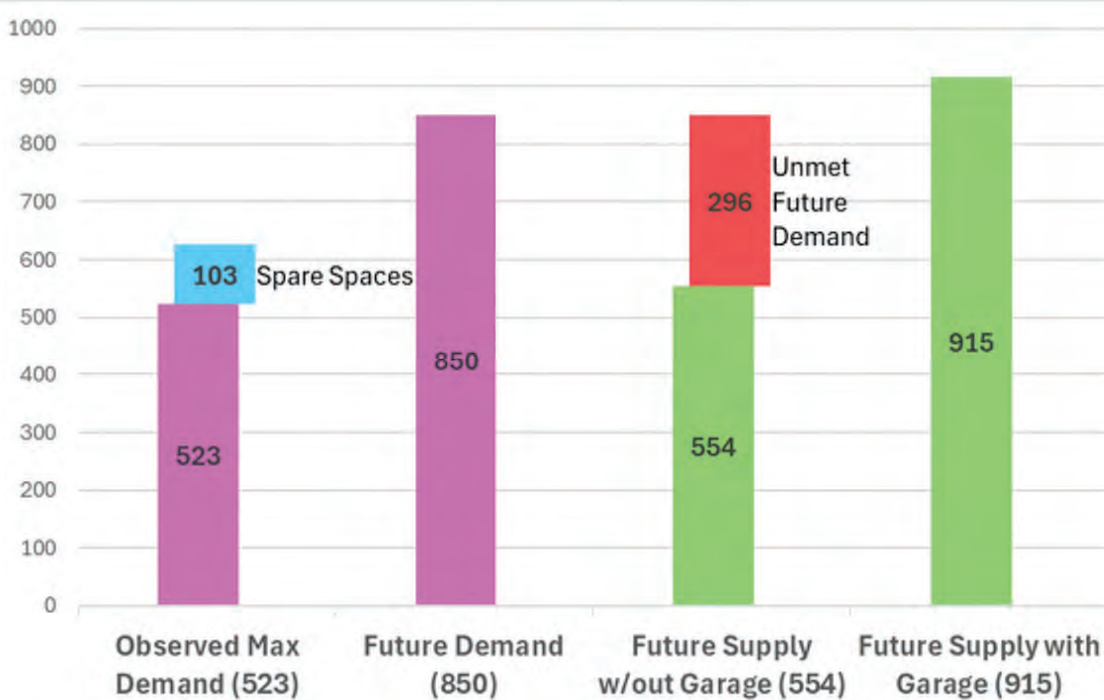
Note: Starred locations currently listed as available for commercial lease – future projections for planning for potential parking needs only

Growth Conditions

- “Normal” Growth (Census and Traffic Data)
- – more downtown visitors
- Filling Vacant Commercial Space, Projected New Developments
- – more downtown attractors
- Cushion – some empty spaces for new arrivals, some buffer for growth uncertainty



Future Adequacy



Projections for Future Adequacy

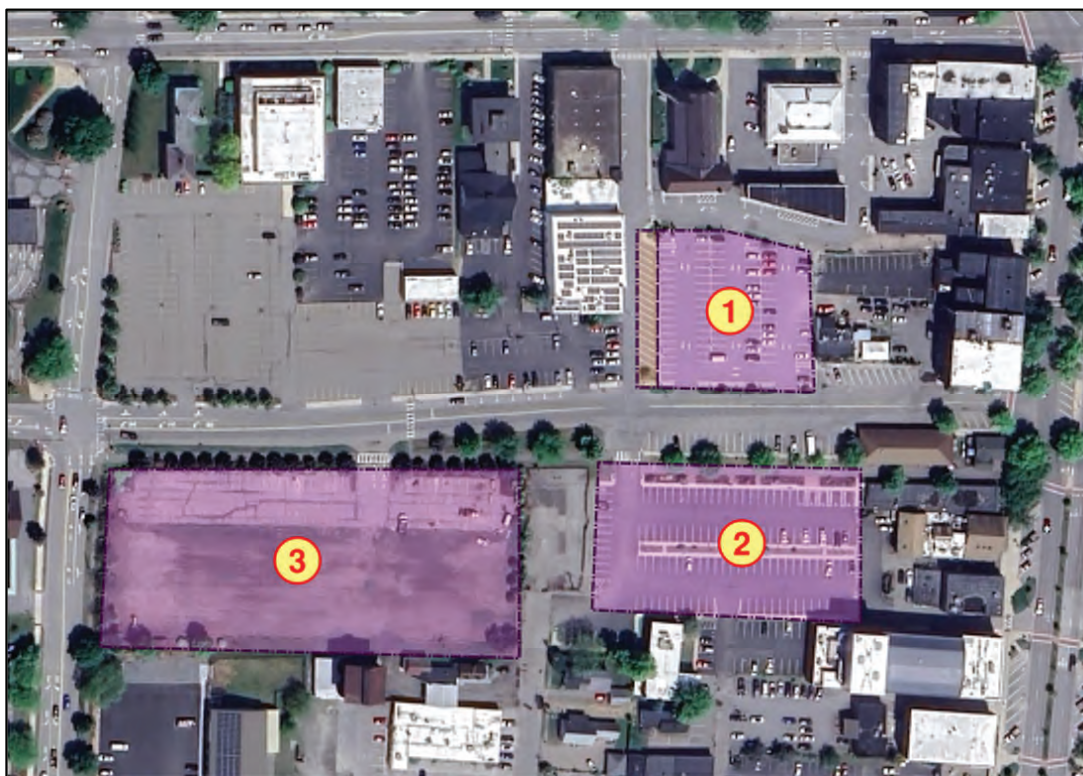
Currently enough parking spaces downtown overall

Based on growth conditions projected, more spaces needed

Also consider:

- Improved wayfinding
- Ride-share/hail friendly infrastructure
- Maintain downtown plaza appeal

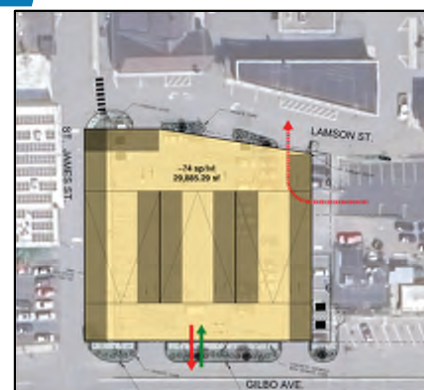
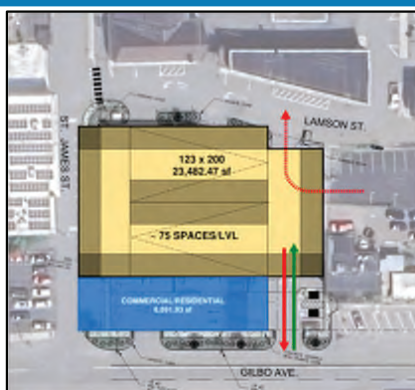
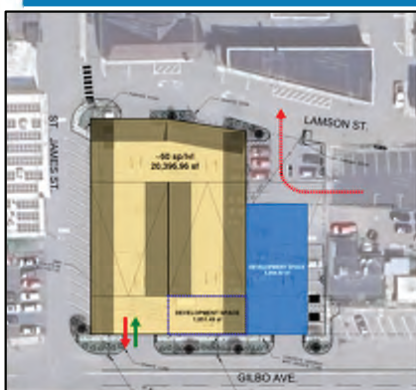
Study Sites



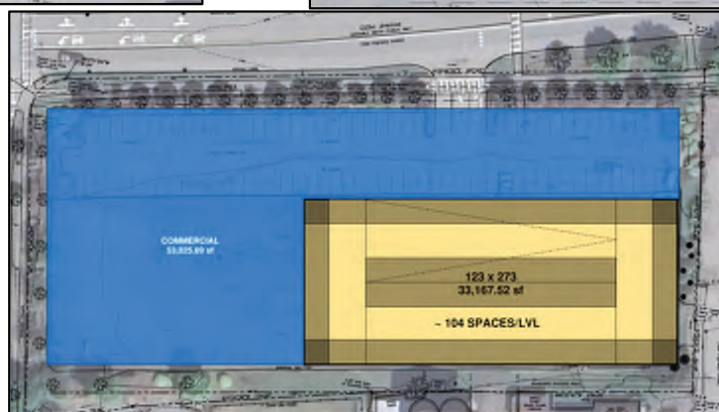
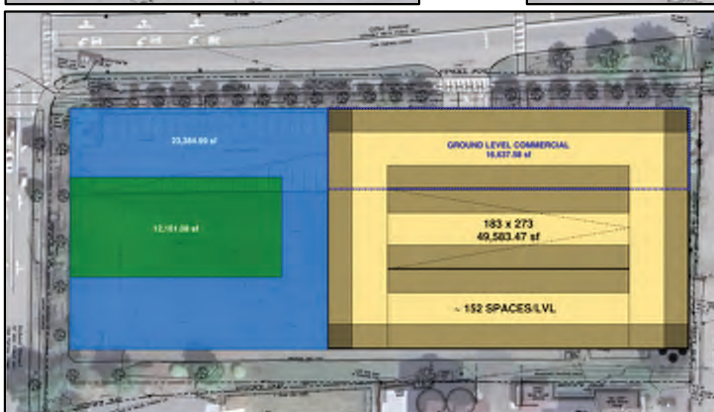


Sites 1 & 3

SITE
1

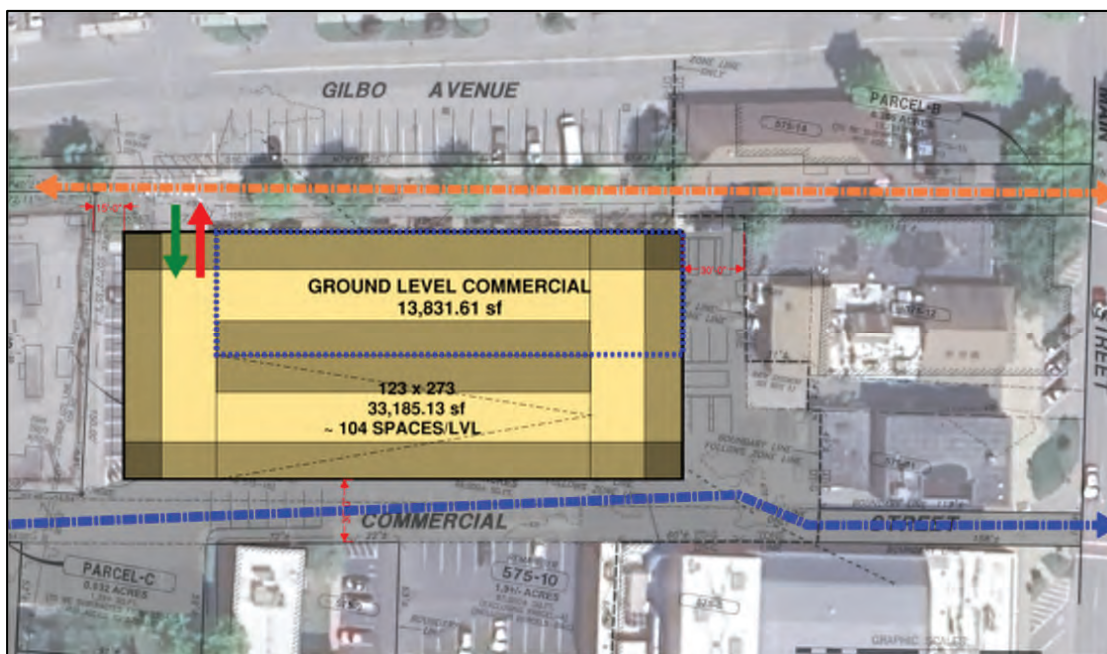


SITE
3





Site 2 - Concept Design

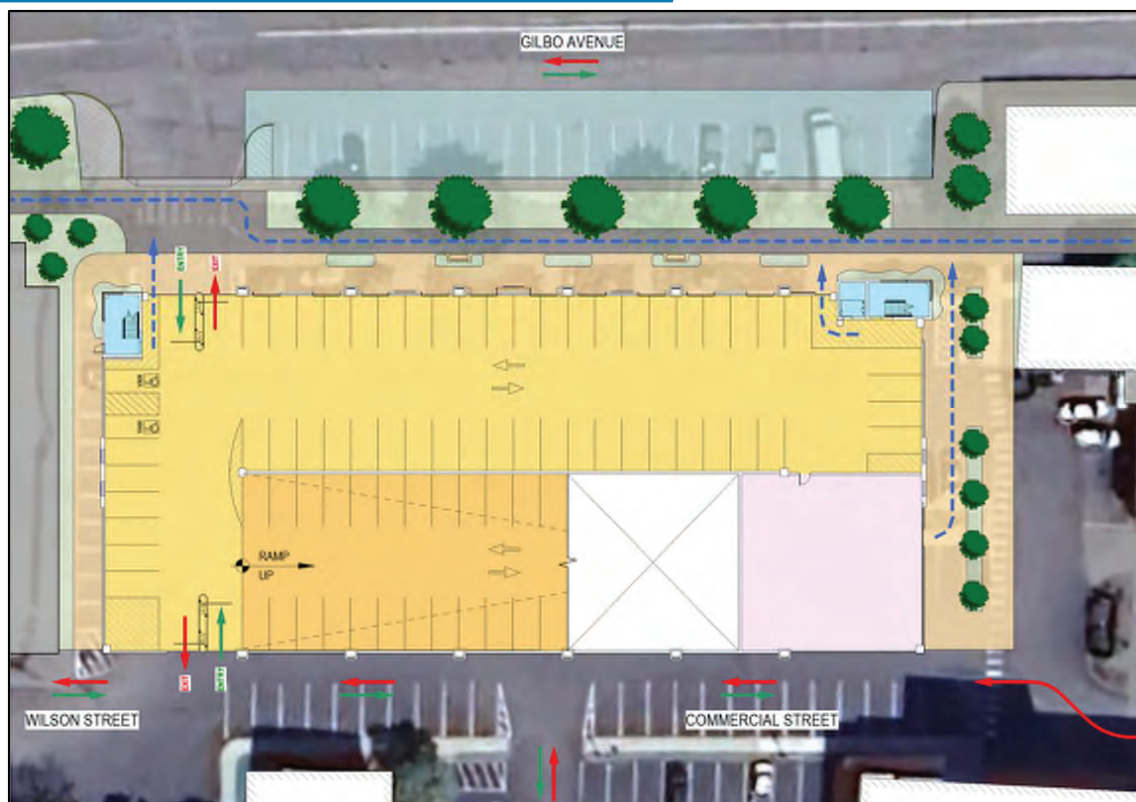
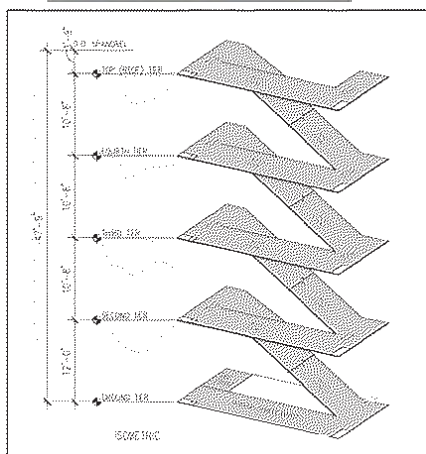
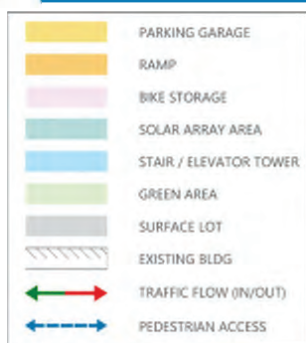


- Efficient Footprint
- User-friendly ramp system
- >65% parking on flat surface
- Higher level of service
- Multiple access / egress locations
- Opportunity for flex space w/in garage
- Lower height to achieve parking count
- Net gain >300 spaces on 5 levels
- Not negatively impacted by adjacent properties
- Improved façade aesthetic – 3 sides have flat vs. ramped elevations



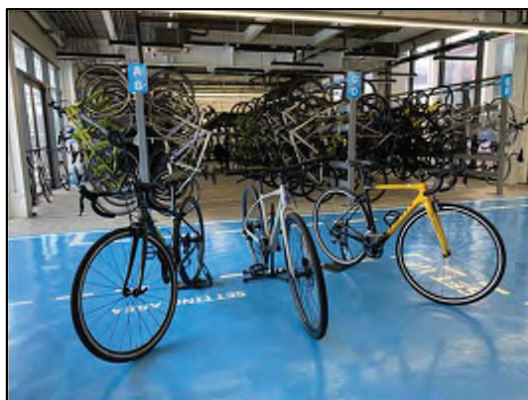
Site 2 - Concept Design

Weston & Sampson THA THE CONSULTING





Site 2 – Mixed Use Opportunity





Architecture





Proposed Garage

Weston & Sampson **THA**
THE CONSULTING





Proposed Garage

Weston & Sampson THA
THE CONSULTING





Proposed Garage

Weston & Sampson **THA**
THE CONSULTING





Proposed Garage

Weston & Sampson **THA**
THE CONSULTING





Proposed Garage





Proposed Garage

Weston & Sampson **THA**
THE CONSULTING





Proposed Garage

Weston & Sampson **THA**
THE CONSULTING





Proposed Garage

Weston & Sampson **THA**
THE CONSULTING





Preliminary Financial Analysis



Development / Construction Cost Estimate

- Precast Concrete Structure
- Façade Enhancement
- Parking Access and Revenue Control Equipment
- Fire Protection – Sprinkler and Dry Standpipe
- Security Cameras and Blue Light Call System
- EV Charging Stations – 5% of total (24 spaces)
- General Conditions
- Escalation
- Overhead and Profit
- Construction Contingency
- Design Costs
- Estimated Development / Construction Cost - \$24M
- Revenue from sale of Gilbo East Lot - \$2M

Exclusions

- No permitting / review fees
- No specialized testing and inspection
- No hazard / environmental remediation
- No relocation of existing utilities
- No pavement outside the site of disturbance
- No resiliency / flooding requirements
- No Police Department traffic control

Keene Parking Garage Preliminary Bond Analysis	
Project Parameters	
Number of Parking Spaces	477
Total Development / Construction Cost	\$24,000,000
Interest Rate of bond	3.75%
Term (Years) 30 years	30
Cost of Issuance Rate	3.00%
Calculated Values	
Construction Cost - \$24,000,000 - \$2,000,000 land sale	\$22,000,000
Cost of Issuance	\$660,000
Debt Service Reserve (12 mo)	\$1,321,068
Total Bond Amount	\$23,981,068
Annual Debt Service - Years 1-30	\$1,321,068
Annual Operation Cost	\$271,990
Annual Capital Reserve	\$59,625



Preliminary Financial Analysis



Parking Fund / System Financing

Revenue Assumptions

- Permit Revenue and Meter Revenue
 - Rates Increase 25% in FY 2026-2027
 - Rates Increase 40% in FY 2029-2030
 - Rates Increase 14% in FY 2032-2033
 - Rates Increase 12.5% in FY 2035-2036
- Parking Violation Revenue
 - Fines Increase 50% FY 2026-2027
 - Fines Increase 20% FY 2029-2030
 - Fines Increase 20% FY 2032-2033
- Permit and meter revenue increases - projected parking demand
- Violation revenue increases 2% annually – projected parking demand
- Expense avoidance - Gilbo East Lot and Commercial St. Lot

Keene Proposed Parking Rate Adjustments					
	Current	2027	2030	2033	2036
Permit					
Garage Quarterly	\$350.00	\$437.50	\$612.50	\$698.25	\$785.53
Lot Quarterly	\$275.00	\$343.75	\$481.25	\$548.63	\$617.20
Transient					
On-Street Hourly	\$1.00	\$1.25	\$1.75	\$2.00	\$2.25
Lot Hourly	\$0.50	\$0.63	\$0.88	\$1.00	\$1.12

Expenses Assumptions

- New Parking Deck opening Summer 2028
- Garage Debt Service starts in 2028 - \$1,321,068
- \$570 / space for operations
- \$125 / space for capital expenses
- Expenses increase 3% annually starting in 2027



Preliminary Financial Analysis



Parking Fund / System Operating Proforma

PARKING FUND	FY 2024-2025 ACTUAL	FY 2025-2026 BUDGETED	FY 2026-2027 PROJECTED	FY 2027-2028 PROJECTED	FY 2028-2029 PROJECTED	FY 2029-2030 PROJECTED	FY 2030-2031 PROJECTED	FY 2031-2032 PROJECTED	FY 2032-2033 PROJECTED	FY 2033-2034 PROJECTED	FY 2034-2035 PROJECTED	FY 2035-2036 PROJECTED	FY 2036-2037 PROJECTED	FY 2037-2038 PROJECTED
Revenue			Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12
Permit Parking	\$255,353	\$328,641	\$410,801	\$410,801	\$410,801	\$575,122	\$575,122	\$575,122	\$655,639	\$655,639	\$655,639	\$737,594	\$737,594	\$737,594
Meter Parking	\$443,344	\$494,800	\$618,500	\$618,500	\$618,500	\$865,900	\$865,900	\$865,900	\$987,126	\$987,126	\$987,126	\$1,110,517	\$1,110,517	\$1,110,517
Additional Revenue from Projected Demand	\$0	\$0	\$38,574	\$77,148	\$115,723	\$287,653	\$410,461	\$533,269	\$577,243	\$577,243	\$577,243	\$649,399	\$649,399	\$649,399
Parking Fines & Forfeits	\$251,595	\$296,550	\$444,825	\$453,722	\$462,796	\$555,355	\$566,462	\$577,791	\$693,350	\$693,350	\$693,350	\$693,350	\$693,350	\$693,350
Wells - Miscellaneous	\$48,247	\$55,903	\$56,462	\$57,027	\$57,597	\$58,173	\$58,755	\$59,342	\$59,936	\$60,535	\$61,140	\$61,752	\$62,369	\$62,993
Operational Savings (Gilbo East and Commercial Lot)	\$0	\$0	\$0	\$0	\$0	\$65,710	\$67,682	\$69,712	\$71,803	\$73,958	\$76,176	\$78,462	\$80,815	\$83,240
Total Revenue	\$1,237,050	\$1,426,741	\$1,569,162	\$1,617,198	\$1,665,417	\$2,576,979	\$2,544,381	\$2,681,136	\$3,045,097	\$3,047,850	\$3,050,674	\$3,331,072	\$3,334,043	\$3,337,091
Operating Expenses			Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12
Parking Administration	\$767,688	\$678,925	\$699,293	\$720,272	\$741,880	\$764,136	\$787,060	\$810,672	\$834,992	\$860,042	\$885,843	\$912,418	\$939,791	\$967,985
Parking Transfer Capital & Reserve	\$236,000	\$247,400	\$254,822	\$262,467	\$270,341	\$278,451	\$286,804	\$295,409	\$304,271	\$313,399	\$322,801	\$332,485	\$342,459	\$352,733
Outside Services	\$215,622	\$233,531	\$240,537	\$247,753	\$255,186	\$262,841	\$270,726	\$278,848	\$287,214	\$295,830	\$304,705	\$313,846	\$323,262	\$332,959
City Hall Deck Maintenance	\$11,950	\$19,686	\$20,277	\$20,885	\$21,511	\$22,157	\$22,821	\$23,506	\$24,211	\$24,938	\$25,686	\$26,456	\$27,250	\$28,068
Wells Deck Maintenance	\$31,728	\$29,425	\$30,308	\$31,217	\$32,153	\$33,118	\$34,112	\$35,135	\$36,189	\$37,275	\$38,393	\$39,545	\$40,731	\$41,953
New Parking Deck Debt Service	\$0	\$0	\$0	\$0	\$1,321,068	\$1,321,068	\$1,321,068	\$1,321,068	\$1,321,068	\$1,321,068	\$1,321,068	\$1,321,068	\$1,321,068	\$1,321,068
New Parking Deck Operations	\$0	\$0	\$0	\$0	\$271,990	\$299,050	\$308,021	\$317,262	\$326,780	\$336,583	\$346,681	\$357,081	\$367,793	\$378,827
New Parking Deck Capital Expense	\$0	\$0	\$0	\$0	\$0	\$0	\$59,625	\$61,414	\$63,256	\$65,154	\$67,108	\$69,122	\$71,195	\$73,331
Total Operating Expenses	\$1,442,457	\$1,331,987	\$1,245,236	\$1,282,593	\$2,914,129	\$2,980,821	\$3,090,238	\$3,143,313	\$3,197,981	\$3,254,288	\$3,312,285	\$3,372,021	\$3,433,550	\$3,496,924
Net Income	(\$205,407)	\$94,754	\$323,926	\$334,605	(\$1,248,712)	(\$403,842)	(\$545,857)	(\$462,177)	(\$152,884)	(\$206,438)	(\$261,611)	(\$40,949)	(\$99,507)	(\$159,833)

- Proforma does not include any additional revenue contribution by City through TIF, capital Contributions, or State / Federal grants.
- Projected operating deficit of \$3.6M (\$3.2M NPV)

Disclaimer: This is a preliminary financial analysis. Projected costs, revenue and expenses outlined above are estimates subject to a variety of factors that may alter the Operational Proforma. Items / factors include projected downtown parking demand and economic market conditions.



Preliminary Conclusions



- Presentation Based on Material in Draft Report
 - Feedback from Today's Meeting to be Incorporated
- Currently: Adequate Parking in the Study Area Based on Existing Conditions
- Future: Growth and Development May Necessitate Additional Parking
- New Parking Structure Would Require City Contribution / Subsidy



Thank you!
Questions?

westonandsampson.com

Weston & SampsonSM

APPENDIX G

City Council Documentation



CITY OF KEENE NEW HAMPSHIRE

ITEM #A.2.

Meeting Date: August 27, 2025

To: Municipal Services, Facilities and Infrastructure Committee

From: Bryan Ruoff, City Engineer

Through: Elizabeth Ferland, City Manager
Donald Lussier, Public Works Director

Subject: **Downtown West Side Parking Garage Study Assessment, Findings, Recommendations and Report Summary - City Engineer**

Recommendation:

Accept as informational.

Attachments:

None

Background:

In 2024, as part of the City's Downtown West Side Parking Garage Study Project, the City hired Weston & Sampson to perform an analysis of the City's existing downtown parking areas, parking trends, current and projected future parking needs and provide recommendations based on their analysis. In addition, as part of their scope, Weston & Sampson contacted both downtown businesses and the public to obtain downtown parking feedback in order to incorporate those opinions and input in both the analysis of parking conditions and the recommendations to the City for a downtown West Side parking structure. The Consultant will be present their findings and recommendations.



CITY OF KEENE NEW HAMPSHIRE

ITEM #D.2.

Meeting Date: September 4, 2025

To: Mayor and Keene City Council

From: Municipal Facilities, Services and Infrastructure Committee, Standing Committee

Through:

Subject: Downtown West Side Parking Garage Study Assessment, Findings, Recommendations and Report Summary

Council Action:

In City Council September 4, 2025.
Report filed as informational.

Recommendation:

On a vote of 5 to 0, the Municipal Services, Facilities, and Infrastructure Committee recommends the Downtown West Side Parking Garage Study Assessment, Findings, Recommendations, and Report Summary be accepted as informational.

Attachments:

None

Background:

Don Lussier, Public Works Director, stated that he is filling in for the City Engineer tonight. He continued that with him tonight is Alyssa Peck from Weston & Sampson, who will introduce her team. He noted that Weston & Sampson was selected as the engineering consultant to lead the study. They completed their work of evaluating the feasibility of a parking structure for the west side of downtown.

Alyssa Peck introduced herself and Doug Ostler from Weston & Sampson, and Jim Zullo from THA. She continued that regarding the scope and goal of the project, they wanted to understand the existing parking today, whether a structure is needed now, or potentially in the future. They had to review the existing parking inventory within the study area, both public and private, and understand how those spaces are being occupied. They used drone data collection over a Thursday, Friday, and Saturday, last October or November. They collected the data every hour to understand how those spaces were being occupied throughout the day. Ms. Peck explained that once data has been collected, they look into whether the parking is adequate to accommodate future growth and use typical growth factors as well as future development to understand what size of a structure might be needed. They prepared some concept designs for that structure and a preliminary financial analysis for it. She showed a graphic of the study area and continued that it is generally Mechanic St. to the

north and Emerald St. to the south and focused on the Central Square and Gilbo Ave. areas. She asked Mr. Ostler to speak about the existing inventory.

Mr. Ostler stated that he was tasked with going over the parking counts, gathering the data, and coming up with some conclusions about existing conditions, then making projections for future parking needs. He showed a slide summarizing the types of parking in the downtown study area, and continued that for public parking, there are 372 on-site spaces, the majority of which are metered or paid, with a few that are loading zones or free spaces. There are 254 public parking spaces in off-street parking lots and some parking spaces that are privately-owned, whether available for the public's use by those private entities, such as shopping centers, or reserved by permit only.

Mr. Ostler continued that the next slides are heat maps showing snapshots of a few particular hours. They saw a moderate amount of parking around noon or 1:00 PM during the weekday. A moderate amount of parking was utilized throughout the study on the north and south sides, both east and west. There was quite a bit of on-street parking used on Winter St., Court St., and Washington St. On Saturday, parking was not nearly as utilized on the north side. Many offices might be closed. Main St. is more heavily utilized on Saturday, mid-day, than weekdays. They see a moderate amount of parking in public lots still, particularly south of Court St. Regarding weekdays at 6:00 PM, the highest amount of parking they counted was Friday evening, but on-street parking was nearly full everywhere they counted. There was moderate use of off-street public parking south of Court St. At 6:00 PM on Saturday, the parking was not as utilized in the north, but still very busy along Main St., with some moderate use of the public parking lots.

Mr. Ostler continued that in the future, they estimate continued use of the existing parking would remain about the same, but then they add on some growth projections. That can vary between what might be expected and what might actually happen in the future, but for their projections, they look at Census data – which has stayed roughly the same for Keene during the past two Census periods – and traffic in the downtown area. Main St. traffic volumes increased by a considerable percentage over several years. They also looked at currently vacant spots that could be filled in the future, and two potential sites where there could be some increased intensity for retail, if the city aims to have that, and residential use, if there is a desire for expanded downtown intensity and healthy growth in that area. They consider those as part of their future projections, as well as what he labels as a “cushion.” You do not want every single space filled; you want at least some for people who come in as people come out. They use 10% as a cushion.

Mr. Ostler continued that in summary, the existing parking was a maximum of 523 vehicles they counted parked within the publicly available parking spaces, with 103 to spare. In the future, based on the projections they used, they would expect up to 850 parking spaces to be needed. That includes the cushion. If there are only 554 parking spaces available in the future and there is an unmet demand they would want to supply for, with the possibility of a potential public parking garage in the downtown area, a concept that would give a total of 915 parking spaces would be able to meet the projected parking needs. In addition, if the City wants to evaluate any wayfinding, he noticed a few parking signs directing to areas of public parking, that could be revised for increased clarity or used if they intend to have more live areas for people arriving. They noticed some illegal parking. They did not notice many loading areas that might be more convenient for ridesharing or hailing types of activity where people are being dropped off as opposed to parking and staying. That could be considered. That said, Keene has a beautiful downtown, lovely for walking through, and he wants to make sure they maintain the downtown plaza appeal.

Jim Zullo, President of THA Consulting, stated that THA's role was to help evaluate different sites for a parking structure, identify what they thought was the best, do some functional designs, and then some façade renderings to show what it might look like. Lastly, they did a financial analysis of what the garage would cost to build, operate, and maintain; and how much revenue that might require. To stress what Mr. Ostler said, the need for a parking structure downtown is highly dependent on new development. Many of the sites THA looked at are on Gilbo Ave., where there is a sea of surface parking. The need for a garage is part of the vision of how they see what is not the highest and best use of land a block away from the beautiful Main St. being developed in the future. Without development, the likelihood is the existing parking resources are adequate. Development would drive the need for a new facility.

Mr. Zullo continued that per the City's request, THA looked at three sites. First is Gilbo East. Initially, the discussion was about Gilbo West across the street, but functionally, that was too small of a facility. The City-owned property there was inadequate for supporting a garage without taking a good chunk of right-of-way. Second was the Commercial St. Lot, and third, where they pivoted to, was a privately held lot, very large, appropriate for parking and potentially other development, too. Parking functionality is about how to build the most efficient parking facility. Parking, and structured parking, are expensive. Thus, a key to evaluating sites is determining how efficient it can be, meaning, how many square feet per space. A good, efficient garage is about 320 square feet per space. With more than that, it gets expensive and is not recommended. With these sites, not only were they looking at what parking they could get, but also, other types of development. Typically, they do not want to design just a parking facility. He showed a slide of what other options were available based on Site 3 and continued that the City does not control that site, so they pivoted to the team's preferred option. Gilbo East is a difficult site that would require a lot of height to achieve the parking that would be needed as per the study and is less efficient because it is an awkward size. Because it is small, every parking space would have to be on a ramp, unlike the City Hall garage with its flat area. In conclusion, they determined that the Commercial Lot site was best.

Mr. Zullo continued that regarding the advantages of the Commercial Lot site, it is a very efficient footprint. Parking would only be about 35% on a ramp and the rest would be flat. The flat side, which would face Gilbo Ave., is a better aesthetic enhancement than looking at ramps. You can do a lot more with the façade to make it more attractive and to better fit into the downtown. This type of garage is more user-friendly, with multiple opportunities for access and egress, and opportunities for other types of uses at the grade level. This efficient design has a net gain of 300 parking spaces, which would meet future needs, per Mr. Ostler's evaluation. Again, the future need is a projection, not an exact science. The garage on the Commercial Lot site has no negative impact on adjacent properties. With the Gilbo Ave. site, an adjacent lot would have needed an easement. Mr. Zullo showed the footprint of the garage and continued that to achieve the amount of parking they talked about, it would have grade plus four supported levels, for a total of about 477 spaces. The net gain would be about 360 spaces based on the loss of the surface parking there. While planning this, they were cognizant of understanding the Cheshire Rail Trail, the Farmer's Market on Gilbo Ave., and even thinking about this first bay that could be used as either not parking, such as converting it to retail or community space, or a temporary expansion of Farmer's Market on Saturdays, if that was desirable. He indicated an area in the rendering that could be a bike storage facility, given its proximity to the Rail Trail, and continued that they have designed facilities that accommodate bike storage or bike rental facilities, which might be a nice option here. Thus, this is not just about the parking; it is about thinking of what other uses can be mixed in. These are just examples. The team regularly designs garages that have grade-level retail or community uses. They looked at architecture in Keene and you will see the renderings are sensitive.

Mr. Zullo showed more conceptual renderings of the facility from different viewpoints. He indicated the brick motif. He continued that an important factor of a parking facility's design is safety and user comfort. For example, you can see the significant amount of glass in the stair and elevator towers, to make sure people feel comfortable and can see in and out. That is a key consideration to where those stairwells go. They want to locate them close to Main St. This facility is well located by the theater, Main St. businesses, and potentially new development on Gilbo Ave. and other sites. He showed the access and egress off Gilbo Ave. and another in the back of the facility, continuing that you get a sense of the scale of the project. This project is about 47 feet high to the top of the parapet wall. The elevator and stairs go a bit higher. He showed a rendering from the transportation center, looking down the trail, which gives a sense of the size and the street-level activity. He indicated how areas within the garage could be parking or another use such as a community center, or the expansion of the Farmer's Market on Saturdays. Again, this is conceptual; many other things could be done. He showed a rendering looking at the facility from across the street and one looking at the garage from the theater, which shows the brick wrapping around. A mural could break up the structure and enliven what would otherwise be concrete, or there could be scrims or artwork through the full length of the garage to add vibrancy. In sum, it is a very efficient garage, sized to accommodate that future need.

Mr. Zullo stated that regarding the preliminary financial analysis, in many towns and cities, people say they need a parking structure, but until they see the economics of it, they do not know how it works. He continued that in Keene, as is true in most or all towns, a parking garage will not stand on its own two feet financially. It has to be system financing. The revenue from all the parking Mr. Ostler talked about, in the streets and public lots the City charges for, has to help support a new facility, because the facility itself would require about \$250 to \$300 per space, per month, to be financially viable, to cover debt service, operating expenses, and capital reserves. In many towns and cities, that is not viable; there are not enough people paying that amount of money to make it work. Based on the conceptual plan, the team did an order of magnitude cost estimate, assuming it would be publicly financed, where the bond rate term is 30-years, cost of issuance of a bond, about 3% of the total value. They are still having discussions with the City's Finance Department and the Parking Director. The team assumed one of the drivers for this garage might be the development of the Gilbo East lot across the way into housing or something like that, which would be more beneficial than just a surface parking lot. They estimate about 80 units. They thought the sale of that property would generate some revenue to offset the cost of the garage. He has not talked with realtors in Keene, but he estimates that based on the number of units, they might get about two million dollars.

Mr. Zullo continued that the slide shows the total cost of the garage and the annual debt service. They included a debt service reserve fund into the sizing of the bond, which often is required by public finance entities. Regarding system financing, they have to look at how to adjust the overall rates to generate revenue to help support the facility. It is \$1.3 million of debt service every year. It is over \$500,000 in operating costs. They looked at rate increases over the next 10 years, to see how close they might get. They raised Keene's on-street rates, permit rates, and violation rates, and they did this also consulting other towns in the area, looking at their rates. Additional operating costs are associated with a garage, such as utilities, insurance, and maintenance. They also provided a capital reserve fund. Every year, the City should put away a certain amount. They projected about \$125 per space per year, which is about \$60,000 per year, because in seven to nine years they will start to have failure in joints, waterproofing, and items like that.

Mr. Zullo continued that the revenue they project over time not only increases to the existing rates,

but also the additional demand that Mr. Ostler spoke of, giving a total projected revenue amount. Then, they add in the expenses. Note that the parking fund budget has a contribution by the City to pay for capital and things like that; it is not entirely made out of parking revenues. However, they wanted to show just what parking revenues would generate without any other City contribution. In summary, there is an operating deficit in the first 10-years, of a little over \$3.5 million. In summary, it would require a subsidy by the City to support this garage, even with the projected rates. They could potentially get more aggressive with rates, but these rates would double the existing rates in 10 or 11 years. The rate today is a dollar per hour for on-street parking, and 10 or 11 years out it would be \$2.25. Again, that is not adequate to support this without some subsidy from the City. The team looked at grants that might offset the cost, and there might be some minor grants related to EV charging and things like that, but without the inclusion of a multi-modal facility such as a bus or something like that, or some significant economic benefit, grants for new parking structures are hard to find and win. This parking structure would only make sense depending on the future development in the area. In those cases, too, it becomes a bit of a catalyst. This facility absorbing some of the parking would open up other surface lots in the area for future development. In summary, the downtown has adequate parking now, but in the future, growth might start stressing that, and future development, depending on its intensity, might require a new facility. That new facility would likely require additional contribution from the City and would not stand on its own two feet financially.

Chair Greenwald thanked Mr. Zullo, Ms. Peck, and Mr. Ostler for their detailed presentation. He continued that for the benefit of the press; he wants to make it very clear that the MSFI Committee is not proposing that this is going to happen anytime soon. He does not want to see headlines saying the Council is taking on another multi-million-dollar project.

Mr. Zullo replied that to that point, the team did not even start projecting the financial analysis until three years out. He continued that there is no reason for it to be built for the next three years, maybe four or five years, if ever. Chair Greenwald replied that without the information, the City Council cannot proceed and make good decisions, so he thanks them again for the presentation.

Councilor Favolise stated that he has a couple questions. He continued that he appreciates the presentation. He had asked a question during the budget hearing, trying to understand the Parking Fund and how it is sustained. He asked if the City Manager could speak to that a bit, in terms of what goes into the Parking Fund, because they talk about it as “self-sustaining.”

The City Manager replied that the Parking Fund is sustained primarily by the revenues generated by parking, including parking permits, on-street parking, and all those fees. She continued that the fund also receives a contribution from the City; there are some administrative costs paid by the General Fund. That is separate from the Parking Fund and is calculated each year, based on staff time and other work that is done by the General Fund to support the Parking Fund. Primarily, it is a self-sustaining fund. It does contribute to the downtown. There has been a lot of work in the downtown area in terms of beautification, supported partly by the Parking Fund.

Councilor Favolise stated that it was a comprehensive presentation, and he thinks the City Council made the right decision to move forward with the study to take stock of where they are and what they might need. This will be an important resource in the future, as they continue to grapple with what is possible on Gilbo Ave. and what the Council and community would like to see. He thinks, broadly, that he would be interested in seeing how the parking demand does or does not increase based on the performance of institutions in the city and what they are doing. For example, KSC has been able to absorb its increased parking demand over the past couple of years with the temporary Blake Lot. If

that is truly temporary, then at some point there will be demand for something closer to long-term, permitted parking. In addition, as they continue to see increased development downtown and increased development based on some of the restrictions they recently modernized in regards to building height, first floor residential spaces behind tenantable commercial spaces in mixed-use zones that are on or adjacent to Gilbo Ave., he thinks the picture might change in the next few years in terms of the needed growth. He is not crazy about moving aggressively on increasing parking rates or parking violation fines downtown. It has struck him that the City has many free parking holidays where quite a bit of parking revenue is left on the table. That is something to think about in the future.

Councilor Filiault thanked the group for the presentation. He continued that he and Chair Greenwald have been on the Council for three decades and have seen too many parking garage presentations to count. Especially in today's economic climate and with the downtown project about to happen, because it has to happen, the chances of this garage going through are zero. He appreciates the presentation but does not want his constituents to think there is even a chance this garage will happen, because the Council will not approve it. Maybe they could look at it again in a decade.

The City Manager stated that staff is not recommending they move forward with a parking garage at this time, because the demand does not say they need one. She continued that however, the City moves slowly and plans projects methodically over long periods of time so that they can hopefully set aside funds in the future for when they do need them. They continue to monitor the trends as they loosen parking restrictions for housing projects, and they see different areas in the city continue to grow. Thus, she thinks this study was a worthwhile effort and something they will build on.

Councilor Tobin stated that she appreciates the presentation, and she was glad they touched upon the "cushion," which she was thinking of as "vacancy rates." She is not sure how much they explored timetables as part of this study, regarding when the City collects revenue versus when people are actually parking. She heard that Friday evenings were very busy and Saturdays were very busy on Main St. Mr. Ostler replied that the team has data for many hours of the day for this presentation. He continued that he did not specifically look at revenue by hour.

Mayor Jay Kahn stated that if there were to be some public/private partnership relative to an infill project in the downtown, in that general vicinity along Gilbo Ave., his question for the consultants is whether it is the most logical to use lower levels for the parking and have the development above be residential, or in the opposite direction. He is asking in terms of safety, emissions concerns, and how fan control and things best work in order to allow for that kind of public/private partnership at a site like this.

Mr. Zullo replied that there are a couple of ways parking can be developed with residential development. He continued that one is a wrap, with residential wrapping around the garage, which is the most common and most affordable. The other option is an overbuild, with a podium of two or three levels of parking and building over it. The challenge with that is the structure of the building above often has to come down through the garage, so instead of being an efficient parking space of, say, 320 square feet per space, that can go up to 375 square feet or more, and basically, it is cost per square foot. However, both options are utilized frequently. The podium just tends to be higher, because you will have layers of parking and then a building above. Another benefit of a wrap is it somewhat hides the facility as well, as many people do not like looking at parking garages. Both scenarios come with additional venting or HVAC requirements, because an open parking garage has to have a certain amount of air that gets through it. Otherwise, you have to put in mechanical

ventilation.

Chair Greenwald asked if anyone else had more comments. Hearing none, he asked for a motion.

The following motion by Councilor Workman was duly seconded by Vice Chair Filiault.

On a vote of 5 to 0, the Municipal Services, Facilities, and Infrastructure Committee recommends the Downtown West Side Parking Garage Study Assessment, Findings, Recommendations, and Report Summary be accepted as informational.