

TECHNICAL MEMORANDUM

DATE: *Tuesday, October 08, 2024*

TO: *Stephanie Yezzi, Director of Planning - Village of Johnson City*

CC: *John Judge, Vice President – DESMAN Inc.*

FROM: *Andrew S. Hill and Reese King-Hill*

PROJECT: *Village of Johnson City* **PROJECT #:** *30-23127.00*

RE: *Task 2 Report – Future Needs (Revised)*

The consulting team worked with staff from the Village of Johnson City to identify emerging developments likely to impact parking supply and demand dynamics within the defined study area over the coming decade and developed an impact analysis using parking industry standard methodologies to project future parking supply and demand conditions. The following memorandum summarizes this work.

Methodology

Land use is a planning term applied to describe how a particular plot or building is being used. Types of land use include retail stores, restaurants, office buildings, residential complexes, etc. Within each major type there can be sub-types; for example, the general heading of a 'retail store' can apply to everything from a neighborhood convenience store to a big-box retailer. Land use is what generates parking demand; after all, one does not need parking for vacant lot.

Different land uses have different intensities of demand. For example, a single residential unit may occupy 1,000 square feet of area, but only need 1-2 parking spaces to support it, whereas the same 1,000 square feet used for an office might need 3-4 parking spaces. These different land uses also have different demand dynamics; the residential unit will require its 1-2 parking spaces on evenings, overnight, and weekends while the office space will require its 3-4 parking spaces on weekdays during business hours for the most part.

In order to project how much parking might be needed in the future, the consulting team had to develop an analysis of parking needs based on emerging developments; that is, projects which were likely to alter existing parking supply and/or demand relative to current conditions. The consulting team worked with the Village's Planning Department to develop an understanding of emerging developments which might:

- ✓ Displace existing land uses (thereby reducing parking demand) over the next decade;
- ✓ Introduce new land uses (thereby increasing parking demand) over the next decade;

- ✓ Covert existing buildings into new land uses which increase and/or reduce parking demand relative to existing conditions¹;
- ✓ Displace existing parking spaces (e.g., reduce supply) and/or introduce new parking facility (i.e., increase parking supply).

Information and assumptions for emerging developments were developed from project plans currently under construction, plans already filed with the Village, projects being negotiated with local or regional planning staff members, prior planning and transportation studies, and other information as provided by the Village. The consulting team organized this information based on the Downtown Revitalization Strategic Investment Plan.

All future demand projections and conclusions regarding adequacy of parking supply to meet these needs were predicated on the following core assumptions:

- *If not clearly stated in plans or official filings, all proposed new development would provide parking in accordance with the Village's current Zoning ordinances.* Chapter 300 (Zoning) of the Village of Johnson City Code dated 06/20/2023 was used as a reference. DESMAN found the parking requirements under Part 5 (Development Standards), Article 51 (Off-Street Parking, Loading, and Stacking Regulations) to be aligned with parking demand ratios recommended by the Urban Land Institute and the Institute of Transportation Engineers.
- *Where future parking demand exceeded the parking supply planned for the project, or when future development created demand for which there was no appointed parking facility to support the needs, the consulting team assumed this demand would be absorbed within the nearest public parking spaces which had open capacity.* The consulting team acknowledges that, in some cases, depending on when demand occurs (i.e., day of week and/or time of day) some 'overflow' vehicles may elect to park illicitly in private facilities closer to their destination if there is capacity available and the facility can be accessed. However, the analysis assumes all drivers will conduct themselves according to common moral codes and bypass these opportunities where present.
- *Emerging development projections build on projected peak hour conditions and absorbed vacancies.* As the analysis will show, DESMAN calculated that absolute peak hour of demand under current conditions, which often varied relative to observed peak occupancy for each sub-area. DESMAN then factored the additional demand generated by absorption of the vacant existing space in each sub-area and added that to the projected peak hour demand to show the cumulative demand when those vacant spaces are absorbed. Demand from emerging developments assumes the cumulative impact of the adjustment to peak hour conditions, the absorption of vacant space and the impact of new development without assuming any mitigation between each benchmark.

In the interest of accuracy and realism, DESMAN prepared a Shared Parking model specific to the defined study area within the Village. *Shared Parking* is a methodology for calculating the parking demands of a project or area developed by the Urban Land Institute (ULI) in collaboration with the Institute of Transportation Engineers (ITE) and the International Council of Shopping Centers (ICSC). This methodology is a departure from the standard zoning ordinance method of calculating required parking which is to

¹ This included the assumed absorption of building space which was vacant at the time that field occupancy surveys were conducted.

apply a parking demand ratio (or parking requirement per local code or ordinance) to each component within a project, sum the total of all demands and build against this figure. This traditional methodology treats parking demand as a fixed, unwavering phenomenon and, as result, often results in the provision of parking supply greater than the true need of the development or district. Shared Parking methodology allows the planner to accurately determine the need for the development or district as an organic whole, rather than an assembly of disparate parts. The result is provision of a parking supply to support the project or area which is adequate to meet the project's needs without building excess parking spaces.

Shared Parking models are comprised of industry standard base parking demand ratios, adjusted to reflect for variations in demand specific to each project's composition and locality, as well as fluctuations in demand according to time of day and year. Base parking demand ratios are developed through the long-term study of stand-alone land uses (i.e. office buildings, retail stores, hotel, etc.) with their own dedicated parking facilities. Researchers perform occupancy counts at different times of day, different days of the week, and different times of the year, to isolate the busiest hour of the busiest weekday and/or weekend day annually.

Once the peak hour is isolated, researchers divide the number of vehicles parked by the key driving element in each land use, such as the number of hotel rooms or total gross leasable square footage of the building. This division renders a parking demand ratio; the mathematic expression of the number of cars parked at the busiest hour of the busiest day related to the land use's key driver.

Table 1: Base Parking Demand Ratios

Land Use	User Group	Weekday	Weekend	Unit	Source
Retail	Shoppers	2.90	3.20	kfs	Shared Parking: 3rd Edition, Washington DC: ULI-The Urban Land Institute, 2020, p.16
	Employees	0.70	0.80	kfs	Shared Parking: 3rd Edition, Washington DC: ULI-The Urban Land Institute, 2020, p.16
Grocery	Shoppers	4.00	4.00	kfs	Shared Parking: 3rd Edition, Washington DC: ULI-The Urban Land Institute, 2020, p.16
	Employees	0.75	0.75	kfs	Shared Parking: 3rd Edition, Washington DC: ULI-The Urban Land Institute, 2020, p.16
Fast Casual Dining	Diners	15.25	15.00	kfs	Shared Parking: 3rd Edition, Washington DC: ULI-The Urban Land Institute, 2020, p.16
	Employees	2.15	2.10	kfs	Shared Parking: 3rd Edition, Washington DC: ULI-The Urban Land Institute, 2020, p.16
Take-Out/Café	Diners	12.40	12.70	kfs	Shared Parking: 3rd Edition, Washington DC: ULI-The Urban Land Institute, 2020, p.16
	Employees	2.00	2.00	kfs	Shared Parking: 3rd Edition, Washington DC: ULI-The Urban Land Institute, 2020, p.16
Library	Visitors	2.00	1.90	kfs	Shared Parking: 3rd Edition, Washington DC: ULI-The Urban Land Institute, 2020, p.16
	Staff	0.25	0.20	kfs	Shared Parking: 3rd Edition, Washington DC: ULI-The Urban Land Institute, 2020, p.16
Theater	Patron	0.30	0.33	seats	Shared Parking: 3rd Edition, Washington DC: ULI-The Urban Land Institute, 2020, p.16
	Employees	0.07	0.07	seats	Shared Parking: 3rd Edition, Washington DC: ULI-The Urban Land Institute, 2020, p.16
Residential	Residents	1.25	1.25	units	Shared Parking: 3rd Edition, Washington DC: ULI-The Urban Land Institute, 2020, p.16
	Guest	0.10	0.15	units	Shared Parking: 3rd Edition, Washington DC: ULI-The Urban Land Institute, 2020, p.16
General Office	Visitors	0.25	0.03	kfs	Shared Parking: 3rd Edition, Washington DC: ULI-The Urban Land Institute, 2020, p.16
	Staff	3.15	0.32	kfs	Shared Parking: 3rd Edition, Washington DC: ULI-The Urban Land Institute, 2020, p.16
Medical Office	Patients	3.00	0.30	kfs	Shared Parking: 3rd Edition, Washington DC: ULI-The Urban Land Institute, 2020, p.16
	Staff	1.60	0.50	kfs	Shared Parking: 3rd Edition, Washington DC: ULI-The Urban Land Institute, 2020, p.16
Bank	Customers	3.50	3.00	kfs	Shared Parking: 3rd Edition, Washington DC: ULI-The Urban Land Institute, 2020, p.16
	Staff	2.50	1.75	kfs	Shared Parking: 3rd Edition, Washington DC: ULI-The Urban Land Institute, 2020, p.16
School	Visitors	1.47	0.00	kfs	Parking Generation: 5th Edition, Washington DC: ITE - Institute of Transportation Engineers, 2019, p.361
	Staff	0.40	0.00	kfs	Parking Generation: 5th Edition, Washington DC: ITE - Institute of Transportation Engineers, 2019, p.361

The Urban Land Institute (ULI), the Institute of Transportation Engineers (ITE), the International Council of Shopping Center (ICSC), the International Parking Institute (IPI), the National Parking Association (NPA), the American Planning Association (APA) and other agencies gather and consolidate these individual studies into peer-reviewed, statistically reliable resources for application in planning studies, such as this one. DESMAN applied the base demand ratios to the proposed program shown in **Table 1**, above.

Adjustments to base demand ratios can be applied to reflect the actual conditions in the project site. These applied factors included adjustments to reflect choice of transportation mode, internal rates of capture, and other local factors. A summary of applied adjustments to base demand ratios are shown in **Table 2**, next page.

Mode adjustments reflect the percentage of users expected to drive themselves to a project, versus arriving by other means. The most recent [2022] American Community Survey (ACS) covering Johnson City Village, New York² and administered by the US Census Bureau, reported that 70.7% of the local populace drove themselves to work in a personal vehicle; the remainder either carpooled (10.9%), worked from home (6.8%), or used other means (4.2%). This is the basis for DESMAN's assumptions regarding mode adjustment specific to the project for employees.

Table 2: Applied Mode and Capture Adjustments

WEEKDAYS									
DAYTIME (6:00 AM - 4:59 PM)									
Land Use	User Group	Base Ratio	Modal Adj.	Capture Adj.	Local Adj.	Project Ratio	Unit		
Retail	Shoppers	2.90	1.00	1.00	0.26	0.75	ksf		
	Employees	0.70	0.74	1.00	0.26	0.13	ksf		
Grocery	Shoppers	4.00	1.00	1.00	0.26	1.04	ksf		
	Employees	0.75	0.74	1.00	0.26	0.14	ksf		
Fast Casual Dining	Diners	15.25	1.00	1.00	0.26	3.97	ksf		
	Employees	2.15	0.74	1.00	0.26	0.41	ksf		
Take-Out/Café	Diners	12.40	1.00	1.00	0.26	3.22	ksf		
	Employees	2.00	0.74	1.00	0.26	0.38	ksf		
Library	Visitors	2.00	1.00	1.00	0.26	0.52	ksf		
	Staff	0.25	0.74	1.00	0.26	0.05	ksf		
Theater	Patron	0.30	1.00	1.00	0.26	0.08	seats		
	Employees	0.07	0.75	1.00	0.26	0.01	seats		
Residential	Residents	1.25	0.84	1.00	0.26	0.27	units		
	Guest	0.10	1.00	1.00	0.26	0.03	units		
General Office	Visitors	0.25	1.00	1.00	0.26	0.07	ksf		
	Staff	3.15	0.74	1.00	0.26	0.60	ksf		
Medical Office	Patients	3.00	1.00	1.00	0.26	0.78	ksf		
	Staff	1.60	0.74	1.00	0.26	0.31	ksf		
Bank	Customers	3.50	1.00	1.00	0.26	0.91	ksf		
	Staff	2.50	0.74	1.00	0.26	0.48	ksf		
School	Visitors	1.47	1.00	1.00	0.26	0.38	ksf		
	Staff	0.40	0.74	1.00	0.26	0.08	ksf		
EVENING (5:00 PM - 12:00 AM)									
Land Use	User Group	Base Ratio	Modal Adj.	Capture Adj.	Local Adj.	Project Ratio	Unit		
Retail	Shoppers	2.90	1.00	1.00	0.26	0.75	ksf		
	Employees	0.70	0.74	1.00	0.26	0.13	ksf		
Grocery	Shoppers	4.00	1.00	1.00	0.26	1.04	ksf		
	Employees	0.75	0.74	1.00	0.26	0.14	ksf		
Fast Casual Dining	Diners	15.25	1.00	1.00	0.26	3.97	ksf		
	Employees	2.15	0.74	1.00	0.26	0.41	ksf		
Take-Out/Café	Diners	12.40	1.00	1.00	0.26	3.22	ksf		
	Employees	2.00	0.74	1.00	0.26	0.38	ksf		
Library	Visitors	2.00	1.00	1.00	0.26	0.52	ksf		
	Staff	0.25	0.74	1.00	0.26	0.05	ksf		
Theater	Patron	0.30	1.00	1.00	0.26	0.08	seats		
	Employees	0.07	0.75	1.00	0.26	0.01	seats		
Residential	Residents	1.25	0.84	1.00	0.26	0.27	units		
	Guest	0.10	1.00	1.00	0.26	0.03	units		
General Office	Visitors	0.25	1.00	1.00	0.26	0.07	ksf		
	Staff	3.15	0.74	1.00	0.26	0.60	ksf		
Medical Office	Patients	3.00	1.00	1.00	0.26	0.78	ksf		
	Staff	1.60	0.74	1.00	0.26	0.31	ksf		
Bank	Customers	3.50	1.00	1.00	0.26	0.91	ksf		
	Staff	2.50	0.74	1.00	0.26	0.48	ksf		
School	Visitors	1.47	1.00	1.00	0.26	0.38	ksf		
	Staff	0.40	0.74	1.00	0.26	0.08	ksf		
WEEKENDS									
DAYTIME (6:00 AM - 4:59 PM)									
Land Use	User Group	Base Ratio	Modal Adj.	Capture Adj.	Local Adj.	Project Ratio	Unit		
Retail	Shoppers	3.20	1.00	1.00	0.47	1.50	ksf		
	Employees	0.80	0.75	1.00	0.47	0.28	ksf		
Grocery	Shoppers	4.00	1.00	1.00	0.47	1.88	ksf		
	Employees	0.75	0.75	1.00	0.47	0.26	ksf		
Fast Casual Dining	Diners	15.00	1.00	1.00	0.47	7.05	ksf		
	Employees	2.10	0.75	1.00	0.47	0.74	ksf		
Take-Out/Café	Diners	12.70	1.00	1.00	0.47	5.97	ksf		
	Employees	2.00	0.75	1.00	0.47	0.70	ksf		
Library	Visitors	1.90	1.00	1.00	0.47	0.89	ksf		
	Staff	0.20	0.75	1.00	0.47	0.07	ksf		
Theater	Patron	0.33	1.00	1.00	0.47	0.16	seats		
	Employees	0.07	0.75	1.00	0.47	0.02	seats		
Residential	Residents	1.25	0.94	1.00	0.47	0.55	units		
	Guest	0.15	1.00	1.00	0.47	0.07	units		
General Office	Visitors	0.03	1.00	1.00	0.47	0.01	ksf		
	Staff	0.32	0.75	1.00	0.47	0.11	ksf		
Medical Office	Patients	0.30	1.00	1.00	0.47	0.14	ksf		
	Staff	0.50	0.75	1.00	0.47	0.18	ksf		
Bank	Customers	3.00	1.00	1.00	0.47	1.41	ksf		
	Staff	1.75	0.75	1.00	0.47	0.62	ksf		
School	Visitors	0.00	1.00	1.00	0.47	0.00	ksf		
	Staff	0.00	0.75	1.00	0.47	0.00	ksf		
EVENING (5:00 PM - 12:00 AM)									
Land Use	User Group	Base Ratio	Modal Adj.	Capture Adj.	Local Adj.	Project Ratio	Unit		
Retail	Shoppers	3.20	1.00	1.00	0.47	1.50	ksf		
	Employees	0.80	0.75	1.00	0.47	0.28	ksf		
Grocery	Shoppers	4.00	1.00	1.00	0.47	1.88	ksf		
	Employees	0.75	0.75	1.00	0.47	0.26	ksf		
Fast Casual Dining	Diners	15.00	1.00	1.00	0.47	7.05	ksf		
	Employees	2.10	0.75	1.00	0.47	0.74	ksf		
Take-Out/Café	Diners	12.70	1.00	1.00	0.47	5.97	ksf		
	Employees	2.00	0.75	1.00	0.47	0.70	ksf		
Library	Visitors	1.90	1.00	1.00	0.47	0.89	ksf		
	Staff	0.20	0.75	1.00	0.47	0.07	ksf		
Theater	Patron	0.33	1.00	1.00	0.47	0.16	seats		
	Employees	0.07	0.75	1.00	0.47	0.02	seats		
Residential	Residents	1.25	0.94	1.00	0.47	0.55	units		
	Guest	0.15	1.00	1.00	0.47	0.07	units		
General Office	Visitors	0.03	1.00	1.00	0.47	0.01	ksf		
	Staff	0.32	0.75	1.00	0.47	0.11	ksf		
Medical Office	Patients	0.30	1.00	1.00	0.47	0.14	ksf		
	Staff	0.50	0.75	1.00	0.47	0.18	ksf		
Bank	Customers	3.00	1.00	1.00	0.47	1.41	ksf		
	Staff	1.75	0.75	1.00	0.47	0.62	ksf		
School	Visitors	0.00	1.00	1.00	0.47	0.00	ksf		
	Staff	0.00	0.75	1.00	0.47	0.00	ksf		

Capture adjustments – the percentage of persons already on the project site for one reason, but patronizing another business – is applied so that demand associated with one land use is not credited against another land use during the modeling process. For example, the office worker who goes to Starbucks on break does not generate any new or additional parking demand by getting a latte. If that employee's parking demand is already 'credited' to his office, the capture adjustment to Starbucks assures

² Census Tract S0802 in Johnson City village, New York.

that his parking demand is NOT associated with the coffee shop, i.e. “double counting” him. Some of these reductions will remain fairly stable, regardless of the day of week or time of day, while others will fluctuate according to time of day or day of the week. Within the proposed project site, DESMAN assumed that the largest ‘captive population’ would be hotel guests, area employees or project residents who might also patronize retail stores, restaurants, or health clubs onsite without necessarily generating any additional trips or resulting parking demand. Due to lack of 3rd party documentation, the consulting team elected not to apply any time of capture adjustment, leaving it at 1.0.

Local adjustments are applied based on an existing, occupied land use program and observed occupancy conditions; they calibrate results further to align them with local dynamics. Each sub-area has a different local adjustment ratio based on its parking needs. This process is addressed later in the report.

The final factor comprising the model is the adjustment to reflect for variances for temporal and seasonal *presence*. *Presence* is the expression of parking demand for specific users and land uses according to time of day and time of year. Presence is expressed as a percentage of peak potential demand modified for time of day or year.

For example, at a parking industry standard of 4.0 spaces per thousand feet of gross floor area, 5,000 square feet of general retail space has a peak parking demand equal up to 20 spaces. However, this demand is influenced by the hours of operation. At 3:00 AM, a retail store is unlikely to project any parking demand at all. Additionally, parking demand is influenced by the time of year. Traditionally, retail stores are busiest as the winter holidays approach and least busy in January and February, when fewer people shop. Therefore, parking demand associated with a retail store also decreases.

Presence becomes a significant factor in a mixed-use environment like the Village because it allows different land uses to share the same parking supply. For example, if an office building is placed next to a business hotel, summing the peak projected demand of each of the land uses would result in parking supply substantially larger than necessary, as the business hotel is largely empty when the office building is occupied and vice versa. However, applying presence factors to the peak demand projections to adjust for hours of operation and use trends, the owner actually needs to provide only a fraction of the spaces needed for the combined land uses to adequately support both the hotel and the office building. The assumption is that demand for the hotel will peak in overnight, while demand for the office space will peak during standard business hours. These presence trends of parking demand for these land uses are complimentary and allow for some sharing of the same spaces, reducing total peak demand.

Variations for time of day and time of year for weekends (Saturdays) were also calculated for the Village and applied to the model. The majority of presence adjustments were taken from the ULI’s **Shared Parking: 3rd Edition**. Presence factors were applied to projections of gross demand and used to generate hourly parking demand projections for a typical weekday and weekend day throughout the year. DESMAN used these projections to isolate the peak hour in each month. The applied presence adjustments for time of year are shown below in **Table 3** on the next page, and time of day presence adjustments are included as **Tables 4** (weekdays) and **5** (weekends) on the following pages.

Table 3: Applied Monthly Presence Factors

Land Use	User Group	January	February	March	April	May	June	July	August	September	October	November	December	Holidays
Retail	Shoppers	59%	61%	69%	67%	72%	82%	90%	83%	76%	68%	76%	100%	85%
	Employees	69%	71%	79%	77%	82%	82%	80%	83%	76%	78%	86%	100%	95%
Grocery	Shoppers	93%	86%	94%	92%	97%	93%	96%	95%	92%	95%	95%	100%	95%
	Employees	100%	96%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Fast Casual Dining	Diners	86%	86%	97%	95%	100%	98%	100%	100%	93%	97%	92%	96%	95%
	Employees	96%	96%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Take-Out/Café	Diners	54%	59%	71%	88%	88%	99%	94%	86%	67%	77%	96%	97%	100%
	Employees	92%	85%	93%	92%	97%	93%	95%	95%	90%	93%	95%	100%	98%
Library	Visitors	75%	75%	80%	85%	90%	90%	90%	90%	95%	95%	90%	65%	50%
	Staff	85%	85%	85%	90%	95%	95%	90%	95%	100%	100%	95%	65%	45%
Residential	Residents	100%	100%	100%	100%	100%	100%	95%	95%	100%	100%	100%	100%	100%
	Guest	100%	100%	100%	100%	100%	100%	95%	95%	100%	100%	100%	100%	100%
General Office	Visitors	100%	100%	100%	100%	100%	100%	95%	95%	100%	100%	100%	100%	80%
	Staff	100%	100%	100%	100%	100%	100%	95%	95%	100%	100%	100%	100%	80%
Medical Office	Patients	100%	100%	100%	100%	100%	100%	95%	95%	100%	100%	100%	10%	80%
	Staff	100%	100%	100%	100%	100%	100%	95%	95%	100%	100%	100%	100%	80%
Bank	Customers	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	10%	100%
	Staff	100%	100%	100%	100%	100%	100%	95%	95%	100%	100%	100%	100%	80%
School	Visitors	100%	95%	100%	95%	100%	70%	0%	0%	100%	100%	100%	100%	0%
	Staff	100%	100%	100%	100%	100%	90%	0%	0%	100%	100%	100%	100%	0%

Table 4: Applied Daily Presence Factors for a Weekday

Land Use	User Group	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM	9:00 PM	10:00 PM	11:00 PM	12:00 AM
Retail (Typical)	Shoppers	1%	5%	15%	35%	65%	85%	95%	100%	95%	90%	85%	90%	90%	90%	80%	50%	30%	10%	0%
	Employees	10%	15%	25%	45%	75%	95%	100%	100%	100%	100%	100%	100%	100%	100%	90%	60%	40%	20%	0%
Retail (December)	Shoppers	1%	5%	15%	30%	55%	75%	90%	100%	100%	100%	95%	85%	80%	75%	65%	50%	30%	10%	0%
	Employees	10%	15%	25%	45%	75%	95%	100%	100%	100%	100%	100%	100%	100%	100%	90%	60%	40%	20%	0%
Retail (Holidays)	Shoppers	1%	5%	10%	20%	40%	65%	90%	100%	100%	100%	95%	85%	70%	55%	40%	25%	15%	5%	0%
	Employees	10%	15%	25%	45%	75%	95%	100%	100%	100%	100%	100%	100%	100%	100%	90%	60%	40%	20%	0%
Grocery	Shoppers	5%	20%	30%	50%	60%	67%	85%	90%	95%	97%	100%	100%	100%	85%	55%	35%	20%	5%	5%
	Employees	20%	30%	40%	80%	90%	100%	100%	100%	100%	100%	100%	100%	80%	50%	35%	20%	20%	20%	20%
Fast Casual Dining	Diners	5%	10%	20%	30%	55%	85%	100%	100%	90%	60%	55%	60%	85%	80%	50%	30%	20%	10%	5%
	Employees	20%	20%	30%	40%	75%	100%	100%	100%	95%	70%	60%	70%	90%	90%	60%	40%	30%	20%	20%
Take-Out/Café	Diners	25%	50%	60%	75%	85%	90%	100%	90%	50%	45%	45%	75%	80%	80%	80%	60%	55%	50%	25%
	Employees	50%	75%	90%	90%	100%	100%	100%	100%	100%	75%	75%	95%	95%	95%	95%	80%	65%	65%	35%
Library	Visitors	0%	0%	0%	100%	100%	98%	98%	78%	72%	65%	70%	79%	60%	50%	40%	0%	0%	0%	0%
	Staff	0%	10%	50%	100%	100%	100%	100%	100%	100%	100%	100%	90%	75%	50%	20%	10%	0%	0%	0%
Theater	Patron	0%	0%	0%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	25%	100%	100%	0%	0%	0%
	Employees	0%	10%	10%	20%	20%	20%	30%	30%	30%	30%	30%	30%	100%	100%	100%	100%	30%	10%	5%
Residential	Residents	90%	85%	80%	75%	70%	69%	68%	67%	66%	55%	60%	55%	50%	55%	65%	75%	85%	90%	100%
	Guest	5%	10%	20%	20%	20%	20%	20%	20%	20%	20%	20%	40%	60%	100%	100%	100%	100%	80%	50%
General Office	Visitors	0%	1%	20%	60%	100%	45%	15%	45%	95%	45%	15%	10%	5%	2%	1%	0%	0%	0%	0%
	Staff	3%	15%	50%	90%	100%	100%	85%	85%	95%	95%	85%	60%	25%	15%	5%	3%	1%	0%	0%
Medical Office	Patients	0%	10%	40%	85%	100%	100%	75%	60%	95%	90%	80%	35%	25%	10%	5%	0%	0%	0%	0%
	Staff	0%	20%	60%	100%	100%	100%	100%	100%	100%	100%	100%	100%	75%	40%	25%	0%	0%	0%	0%
Bank	Customers	0%	0%	50%	90%	100%	50%	50%	50%	70%	50%	80%	100%	0%	0%	0%	0%	0%	0%	0%
	Staff	0%	0%	60%	100%	100%	100%	100%	100%	100%	100%	100%	100%	0%	0%	0%	0%	0%	0%	0%
School	Visitors	0%	50%	100%	70%	20%	20%	50%	40%	20%	100%	40%	30%	20%	0%	0%	0%	0%	0%	0%
	Staff	10%	70%	100%	100%	100%	100%	100%	100%	100%	100%	60%	30%	20%	5%	1%	0%	0%	0%	0%

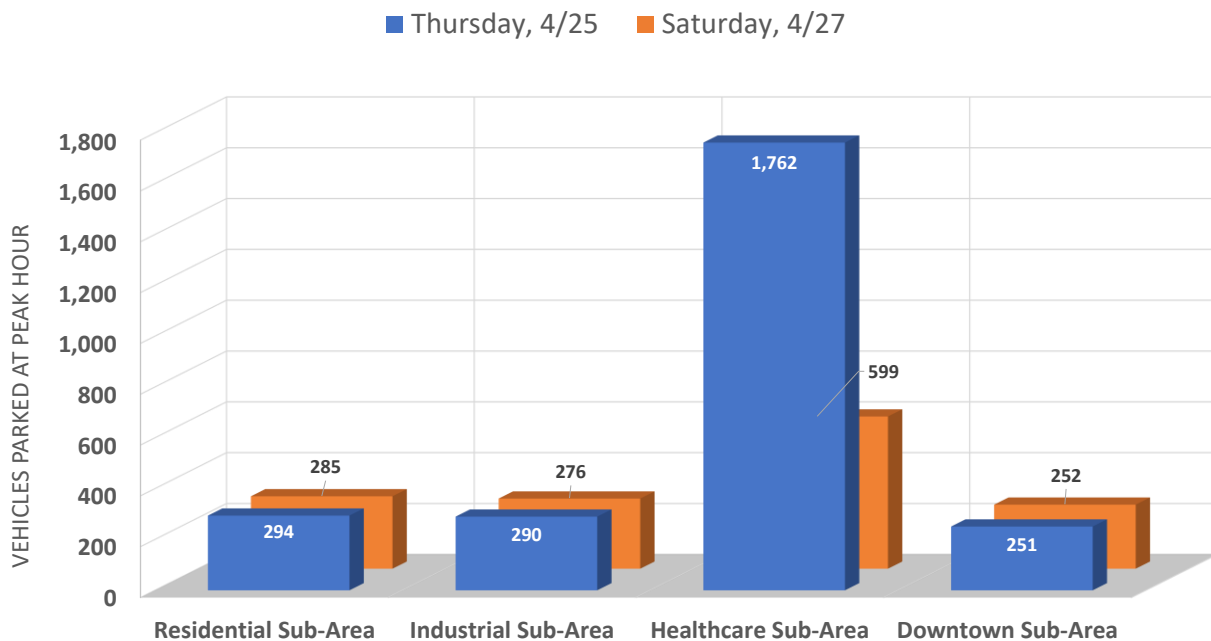
Table 5: Applied Daily Presence Factors for a Weekend

[illegible]

In projects still in the planning or design stage, adjusting base ratios to reflect mode choice, capture and presence factors completes the process. In projects in development, where one or more phases have been complete, the model can be further calibrated to align with local conditions not addressed by the adjustments for mode choice, capture and presence. This is done by performing field observations, and recording those conditions, inputting the program in place, producing projections, comparing them to field data, and adjusting the model to align with observed occupancy. The result of this process is a more refined, accurate, and project-specific set of projections of future need which result in a more efficient parking supply.

An initial series of parking occupancy counts were performed across the study area on Thursday, April 25th and Saturday, April 27th, of this year. The counts were planned around the busy times of the day in anticipation of higher than typical activity levels. Counts were executed at different times for each zone to capture peak times on both days. Data was collected on a facility-by-facility basis during multiple-pass counts across the whole of the study area at each interval. It's important to remember that each peak count was at different times for each zone. A distilled record of the peak occupancy levels during these two days is shown below in **Figure 1**.

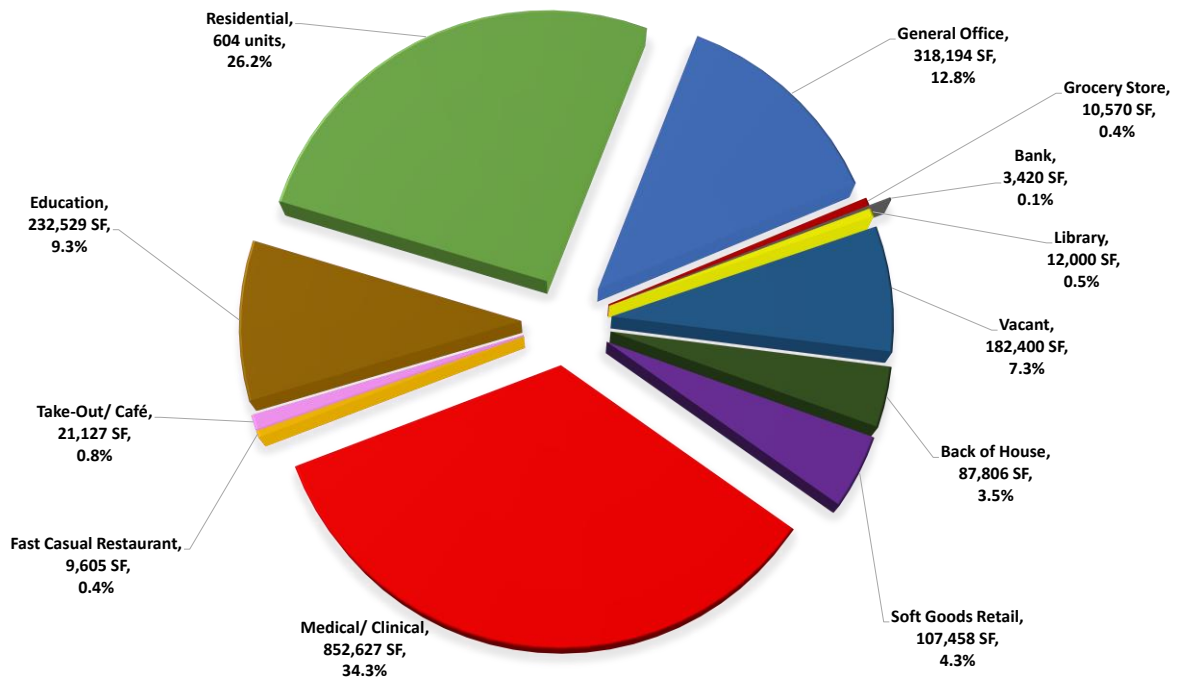
Figure 1: Observed Peak Hour Parking Occupancy Summary by Sub-Area and Day of Week



These counts were used as a baseline for understanding local conditions and parking occupancy of the Village; the peak hour occupancy counts were used to 'calibrate' the model by comparing the outputs from the model using the land use program in place against what was observed in the field. The active land use program during the April counts is illustrated in **Figure 2** on the following page. This land use inventory was developed from Broome County tax records for each property within the study, checked against field observations and/or other resources to validate the reported square footage, number of residential units, number of rooms, current land use, etc. were accurate and consistent with current conditions. The data from this inventory was then entered into the model to render a result which was

compared to recorded peak parking occupancy for each sub-area. Where a discrepancy between model output and observed occupancy was identified, a local adjustment factor was applied to calibrate the model to reflect local conditions.

Figure 2: Village of Johnson City Land Uses Within Defined Study Area (April 2024)



When calibrating a model (i.e., applying the local adjustment) to align with actual conditions, it is very common for the model to generate demand projections which are greater than actual observed conditions as the base demand ratios are based on an 85th percentile standard; this means that, of all the land uses studied to render the demand ratio, 85% generated demand less than the recommended ratio and only 15% exhibited demand equal to or greater than the demand ratio. In simple terms, this means the base demand ratios are engineered to be inherently conservative and are intended to represent a level of demand which is exceptionally high, not average or typical.

In regards to the models that were developed for each sub-area, application of local adjustment factors to calibrate the model to observed peak conditions was as follows:

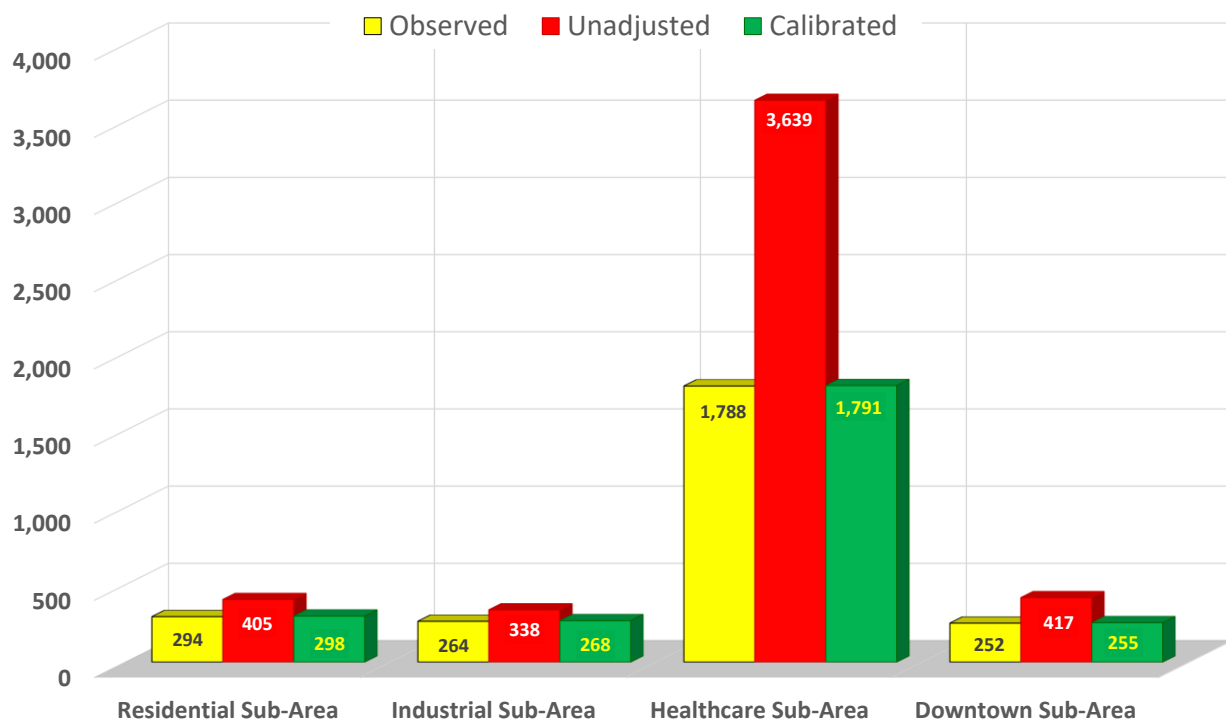
1. In the Downtown Sub-Area, the observed peak occupancy was 252 vehicles on a weekend. The unadjusted model projected there should be 417 vehicles present, based on land use data. A local adjustment of 0.61 aligned the model to project peak hour demand at 255 vehicles.
2. In the Healthcare Sub-Area, the observed peak occupancy was 1,788 vehicles on a weekday³. The unadjusted model projected there should be 3,639 vehicles present, based on land use data. A local adjustment of 0.492 aligned the model to project peak hour demand at 1,791 vehicles.

³ This included the peak observed occupancy of 1,762 vehicles within the sub-area at 9:00 AM on Thursday, 4/25 plus 26 Wilson Medical Center vehicles which were parked in the Industrial West Sub-Area.

3. In the Industrial Sub-Area, the observed peak occupancy was 264 vehicles on a weekday⁴. The unadjusted model projected there should be 338 vehicles present, based on land use data. A local adjustment of 0.79 aligned the model to project peak hour demand at 268 vehicles.
4. In the Residential Sub-Area, the observed peak occupancy was 294 vehicles on a weekday. The unadjusted model projected there should be 405 vehicles present, based on land use data. A local adjustment of 0.74 aligned the model to project peak hour demand at 298 vehicles.

Figure 3 below shows the changes in model output before and after calibration (local adjustments) to align the model with observed conditions.

Figure 3: Comparison of Unadjusted and Calibrated Projections to Observed Conditions



Future Needs Projections

Future parking needs for each sub-area were measured and reported upon using three benchmarks:

1. *Existing Conditions* identified parking demand, supply, and adequacy at the busiest hour of the busiest day of the year according to the parking demand model assuming the land use program in place when occupancy counts were conducted in April 2024. It should be noted that Existing

⁴ Peak observed occupancy was actually 290 vehicles, but this included 26 vehicles associated with the Wilson Medical Center (located in the Healthcare Sub-Area) parked in a surface lot located in the Industrial West Sub-Area. These 26 vehicles were 'credited' to the Healthcare Sub-Area and 'deducted' from the Industrial West Sub-Area to match occupancy with the driving land use.

Conditions are NOT synonymous with occupancy counts because the dates and times when occupancy counts were conducted were not necessarily periods of peak demand on annualized basis. The advantage of using the parking demand modelling methodology applied by DESMAN in this analysis is that it provides the consultant with the ability to identify when the busiest hour of the busiest day of the year occurs for each sub-area exclusive of the occupancy counts, while still assuring that the model is calibrated to local conditions, and therefore accurate.

2. *Absorption* assumes that the all the land uses which were vacant at the time of field occupancy counts are absorbed by the market and fully occupied. In this benchmark, these land uses are entered into the model in addition to the land uses occupied during field exercises to reflect the near-term impact of those existing spaces being reactivated within the market. Unless otherwise communicated to DESMAN, we assume that the formerly vacant land uses will be reactivated again as their original land uses (e.g., vacant retail space returns as a retail store, empty restaurant is reactivated as a new eatery, etc.) It should be noted that the Absorption benchmark is a compounding projection, building off the projected demand from Existing Conditions with the assumption that any supply shortfalls or overruns indicated in the prior benchmark have not been addressed prior to application of the vacant space to the model.
3. *Emerging Development* applies to all the new projects and development in the pipeline as identified by the Village of Johnson City and expands upon conditions projected under the *Absorption* benchmark without assumption of mitigation. The focus is again on project peak hour parking demand relative to estimated parking supply.

Results of each benchmark analysis are presented in the aggregate (i.e., across the entirety of the study area) as well as facility-by-facility. Aggregate presentations are in table form, comparing existing and/or planned parking supply with projected demand to indicate whether the sub-area as a whole is likely to experience a shortfall.

Facility-by-facility presentations are as figures with supporting text to explain key findings. These graphics present total utilization in terms of 'low' utilization (50% or less of the total parking supply within the block being used) in **blue**, 'moderate' utilization (between 50% and 69% of the total supply within the block occupied) in **green**, 'growing' utilization (between 70% and 79% of the total supply within the block filled) in **yellow**, 'high' utilization (between 80% and 89% of the total supply within the block filled) in **orange**, 'major' (90% to 100% of the total parking capacity of the block filled) in **red**, and lastly 'over utilized' (over 100% of the total parking capacity of the block filled) in **purple**.

It should be noted that those facilities showing parking demand exceeding parking supply (e.g., those in **purple**) may not in actual practice contain more vehicles than spaces; in many cases, those excess vehicles may migrate to the nearest available open space. The more critical consideration is whether those facilities or block faces are abutted by other parking areas with available capacity; if not, a parking shortfall may be identified within a sub-area which has, on the balance, excess parking supply across its whole. The **Exhibits** at the end of the document will include tables showing facility-by-facility results for each sub-area and benchmark for the reader's reference.

Vacant Space and Absorption

The table on the following page identifies those properties that were unoccupied at the time of field counts.

Table 6: Vacant Space (as of August 2024)

Sub-Area	Address	Description	Existing Vacant s.f. GFA	OCCUPIED LAND USE					PARKING IMPACT ^{3,4,5}	
				Retail (s.f. GLA)	Residential (units)	Office (s.f. GFA)	Medical (s.f. GFA)	Industrial (s.f. GFA)	Gross ¹ (spaces)	Shared ² (spaces)
Downtown	257 Main St	Vacant Retail	6,000	6,000					14	13
Downtown	253 Main St	Vacant Retail	6,000	6,000					14	13
Downtown	251 Main St	Vacant Retail	3,000	3,000					7	6
Downtown	247 Main St	Vacant Retail	3,000	3,000					7	6
Downtown	15 Avenue B	Vacant Retail	14,374	14,374					33	30
Downtown	205B Main St	Vacant Retail	1,560	1,560					4	3
Downtown	19 Avenue B	Vacant- Former Warehouse	40,428					40,428	43	21
Downtown	181 Main St	Vacant-Former Body Shop	9,255					9,255	10	5
Downtown	24 Avenue A	Vacant Retail	1,336	1,336					3	2
Downtown	252 Main St	Vacant Retail	1,570	1,570					4	3
Downtown	258 Main St	For Lease- Office Space	3,634			3,634			6	5
Downtown	263 Main St	For Lease- Office Space	5,723			5,723			9	7
Downtown	218 Main St	Vacant Retail	3,600	3,600					8	7
Downtown	200 Main St	Vacant Retail	14,679	14,679					34	31
Downtown	214 Main St	Vacant Retail	3,600	3,600					8	7
Downtown	126 Main St	Vacant Office	9,166			9,166			14	12
Downtown	18 Park St	Vacant Office	3,662			3,662			6	5
Downtown	5-11 Avenue C	Vacant Apartments	12,024		18				18	9
Healthcare	12-17 Baldwin St	UHS Building	3,418				3,418		7	7
Healthcare	272-278 Main St	Vacant Retail	10,032	10,032					19	12
Healthcare	290 Main St	Vacant Retail	4,080	4,080					8	5
Healthcare	284 Main St	Vacant Retail	3,010	3,010					6	3
Healthcare	282 Main St	Vacant Retail	4,920	4,920					9	5
Healthcare	80 Arch St	Vacant Office	1,680			1,680			2	2
Residential	26 Crocker Ave	8 Apartments - 1 for rent	720		1				1	1
Residential	59 Allen St	12 Apartment- 1 for rent	600		1				1	1
Residential	207 Grand Ave	Vacant Retail	2,762	2,762					8	6
Residential	213 Grand Ave	Vacant Retail	1,530	1,530					5	4
Residential	205 Grand Ave	Vacant Auto Shop	1,569					1,569	2	0
Residential	5 Endicott Ave	Vacant- Former Warehouse	10,192					10,192	13	0
Residential	139 Grand Ave	Vacant- Former Health Building	5,952				5,952		18	0
GRAND TOTAL			193,076	85,053	20	23,865	9,370	61,444	341	231

Notes:

1. Gross projected demand shows each land use at its absolute peak as a standalone property with no influences via time of day or time of year presence.
2. Shared project demand shows peak hour demand for all vacancies at the defined peak hour for the sub-area, factoring in variances in demand according to time of day and year.
3. Peak Hour in the Downtown Sub-Area is projected to occur at 1:00 PM on a December weekday.
4. Peak Hour in the Healthcare Sub-Area is projected to occur at 11:00 AM on a November weekday.
5. Peak Hour in the Residential Sub-Area is projected to occur at 10:00 PM on a December Saturday.

As the preceding table indicates, the vacant spaces identified were located in the Downtown, Healthcare, and Residential Sub-Areas; no vacant properties were identified or assumed within the Industrial Sub-Areas. As independent and stand-alone land uses, these vacant properties could require up to 341 parking spaces to support. Factoring in variations in parking demand by land use according to time of day, day of the week, and time of year when each sub-area experiences peak demand, these properties will require 231 parking spaces to support. This data was entered into the model in addition to the existing land use inventory to render projections under the Absorption benchmark. No information was provided as to how quickly these properties are likely to be reoccupied within the market, but DESMAN would assume in the next 12 to 36 months.

Emerging Developments

The emerging developments found in the study area were researched and confirmed via the Downtown Revitalization Strategic Investment Plan and through conversations with Village of Johnson City Planning Department staff. They include developments that are currently under construction and those that are approved and permitted future developments. The identified emerging developments appears to fall into one of four general categories as follows:

- **Renovation** projects were focused on improving the exterior, interior, and/or critical systems within a particular building. In some cases, the property was vacant and accounted for among the vacant properties to be absorbed; in other cases, the property was already occupied with existing tenants. While these projects may draw in additional vehicles during the renovation process and will assuredly improve the appeal and vitality of downtown when completed, DESMAN did not assume any permanent new parking demand associated with these properties.
- **Improvement** projects were focused on improving parks, public spaces, wayfinding, pedestrian cross-walks, and streetscapes to enhance the environment in downtown Johnson City. As with Renovations, there may be an ancillary increase in parking demand during the execution phase of each project, but DESMAN does not believe these projects will generate any permanent parking demand in and of themselves.
- **Conversion** projects propose to activate formerly dormant spaces within existing buildings with introduction of new land uses. These spaces were not accounted for as 'vacant' within the prior benchmark as the buildings were often already occupied. These projects did present an opportunity to create new parking demand within the sub-area and were included in DESMAN's Emerging Developments benchmark analysis.
- **New Development** involved large-scale conversion of a formerly dormant building into new land uses and wholesale creation of new buildings. DESMAN factored the impact of these projects into our projections of future parking need for each sub-area.

All emerging development are listed by sub-area, identifier, address, and type of development and described in **Table 7** and shown in **Figure 4** on the following pages. The emerging developments expected to project permanent new parking demand when completed include the following:

- The **Firehouse Stage Addition** (*Map ID "2"*) at 48 Willow St, in the Downtown Sub-Area is improving 25,000 square footage which will provide 250 additional theater seats on renovated top floors. The facility will utilize the existing surface parking supply adjacent to the building and

could generate demand during a performance for up to 125 vehicles, but at the peak hour on a weekday will need just two spaces on most days.

- **The Homesteads on Grand**, (*Map ID "3"*), in the Residential Sub-Area is an empty lot that will be developed into a mixed-use building with 72 residential apartments totaling approximately 64,000 square feet along with 6,200 square feet of new retail space. The existing lot on-site contains 150 spaces and the new development will add an additional 8 parking spaces to accommodate the residential demand. Peak hour demand for the project is projected to be for 87 parking spaces.
- In the Healthcare Sub-Area, improvements to the **Century Building** (*Map ID "10"*) will create nearly 5,000 square feet of commercial space to support Binghamton Brewing Company operations that will need up to 32 parking spaces at the peak hour. This will be satisfied by the private surface parking lot adjacent to the building.
- In the Industrial West Sub-Area **the Old High School Building**, (*Map ID "11"*), is being redeveloped into 62 residential apartments with 10,000 square feet of potential retail or office space. This building already has a 147-space surface parking lot to support the project and DESMAN projects the new land uses will need 51 spaces at the peak hour.
- Conversion of the historical building at **20 Willow Street** (*Map ID "14"*) will result in the conversion of this former single-family home into office/commercial space with one new residential unit attached. DESMAN estimates the project will need up to three parking spaces to support it at the peak hour, which will be provided by the existing driveway on the property and available on-street supply in the area.
- Conversion of the **Endicott Johnson Fire Station** (*Map ID "15"*) will result in new residential units and reinvigorated commercial space within the Downtown Sub-Area along Avenue B. DESMAN estimates this project may need as many as eight parking spaces at the peak hour, which will be provided in the private lot attached to the property.

DESMAN assumes the impact of these projects will likely be felt within the next 24-60 months.

Legend:

- = Private Projects
- = Non-Profit Projects
- = Small Fund Projects
- = Municipal Projects
- = Streetscape Projects

Legend:

- 1 = Hancock Building
- 2 = Firehouse Stage Addition
- 3 = Homesteads on Grand
- 4 = New Century Building
- 5 = EJ Theme/Jenison Park
- 6 = Small Project Fund
- 7 = Streets & Gateways
- 8 = Willbrow Alley Project
- 9 = HCA Facility Renovations
- 10 = Bing Brew/Century Building
- 11 = Old High School
- 12 = M&B Perinatal Network Bldg
- 13 = Jupiter Games
- 14 = Historical Mixed-Use Building
- 15 = Endicott Johnson Fire Station
- 16 = IBEW Local 10

Table 7: Emerging Developments

Map ID	Sub-Area	Property Identifier	Property Address	Type of Development	Estimated Completion	NEW LAND USES						PARKING			
						Retail (GLA)	Theater (seats)	Restaurant (GLA)	Office (GFA)	Residential Units	Residential (GFA)	New Supply	Displaced Supply	Peak Hour Demand ¹⁷	Surplus/ (Deficit)
1	Downtown	Hancock Building ¹	214 Main St	Renovation	Spring 2026							0	0	0	0
2	Downtown	Firehouse Stage Addition ²	48 Willow St	Conversion	Summer 2027		250					0	0	(2) ¹⁸	(2)
3	Residential	Homesteads on Grand ³	333 Grand Ave	New Development	Spring 2027	6,200				72	63,878	158	(150)	(87) ¹⁹	(79)
4	Downtown	New Century Building ⁴	254 Main St	Renovation	Fall 2026							0	0	0	0
5	Downtown	EJ Theme/Jenison Park ⁵	115 Main St/55 Willow St	Improvement	Summer 2027	-						0	0	0	0
6	Mixed	Small Project Fund	TBD ⁶	Renovation	Summer 2027	-						0	0	0	0
7	Mixed	Streets & Gateways	Various ⁷	Improvement	Summer 2027							0	0	0	0
8	Downtown	Willbrow Alley Project ⁸	238-258 Main St	Improvement	Summer 2026							0	0	0	0
9	Healthcare	HCA Facility Renovations ⁹	18 Broad St	Renovation	Fall 2025							0	0	0	0
10	Healthcare	BBC/Century Building ¹⁰	135 Baldwin St	Conversion	Winter 2025			4,860				0	0	(32) ²⁰	(32)
11	Industrial	Old High School ¹¹	435 Main St	New Development	Summer 2027	10,000				62	70,000	0	0	(51) ²¹	(51)
12	Residential	M&B Perinatal Network Bldg ¹²	346 Grand Ave	Renovation	Summer 2025							0	0	0	0
13	Downtown	Jupiter Games ¹³	240 Main St	Renovation	Summer 2027	-						0	0	0	0
14	Downtown	Historical Mixed-Use Building ¹⁴	20 Willow St	Conversion	Summer 2028	-			1,319	1	1,000	0	0	(3) ¹⁸	(3)
15	Downtown	Endicott Johnson Fire Station ¹⁵	15 Avenue B	Conversion	Fall 2026	2,500				6	7,500	0	0	(8) ¹⁸	(8)
16	Downtown	IBEW Local 10 ¹⁶	271 Main St	Renovation	Summer 2027				-			0	0	0	0
TOTAL						18,700	250	4,860	1,319	141	142,378	158	(150)	(183)	(175)

Notes:

- Renovation of an existing 2-story, 7,200 SF mixed-use building - **no new parking demand projected**
- Existing building includes a 140-seat theater and 3 floors of empty space (cannot meet building requirements). Revisions and expansions could unlock 25,000 SF of space for a new theater, rehearsal space, etc.
- New development includes 72 affordable apartments and new daycare center
- Internal and external rehabilitation of existing mixed-use building - **no new parking demand projected**
- Development of new park, renovation of existing park, improvement to cross walks and wayfinding, plus new public art installations - **no new parking demand projected**
- Proposed projects include "blade" signs for downtown businesses, façade/commercial space/ roof renovations for 13 buildings along Main St, Grand Ave, Broad St, Willow St, and Cleveland Ave - **no new demand parking demand projected**
- Improvements to sidewalks, crosswalks, streetscapes, etc. to improve pedestrian connections and walkability - **no new parking demand projected**
- Improvements to convert vehicle accessway to 7,000 SF pedestrian pathway - **no new parking demand projected**
- Improvements and repairs to existing building to improve functionality - **no new parking demand projected**
- 4,860 SF expansion to existing Binghamton Brewing Company building
- The 100,000 SF building, which already contains some commercial space, will undergo conversion of 70,000 SF of unused space into 62 residential units. The project will use the existing surface lot for parking.
- Upgrading HVAC system and enhancing building frontage - **no new parking demand projected**
- Renovations to the building's interior and exterior - **no new parking demand projected**
- Conversion of a single-family home to office space, one residential unit, and additional leasable space
- Conversion into grade-level retail and restaurant with upper story residential.
- Cosmetic renovations and improvements - **no new parking demand projected**
- As calculated by DESMAN's model specific to each Sub-Area, at the busiest day of the year (e.g., "Peak Hour").
- Peak Hour in the Downtown Sub-Area is projected to occur at 1:00 PM on a December Weekday.
- Peak Hour in the Residential Sub-Area is projected to occur at 10:00 PM on a December Saturday.
- Peak Hour in the Healthcare Sub-Area is projected to occur at 11:00 AM on a November weekday.
- Peak Hour in the Industrial Sub-Area is projected to occur at 10:00 AM on a June weekday.

Residential Sub-Area

The highest observed occupancy in the Residential Sub-Area was recorded at 10:00 AM on Thursday, April 25, 2024 with 292 vehicles parked in 1,372 spaces for an overall utilization rate of 21%.

However, the parking demand model developed for this sub-area projects peak hour demand under Existing Conditions occurs at 10:00 PM on a December Saturday, when 409 vehicles are parked, resulting in a 30% utilization rate across the study area. This is roughly 40% higher than observed peak occupancy.

Figure 5: Residential Sub-Area Existing Conditions

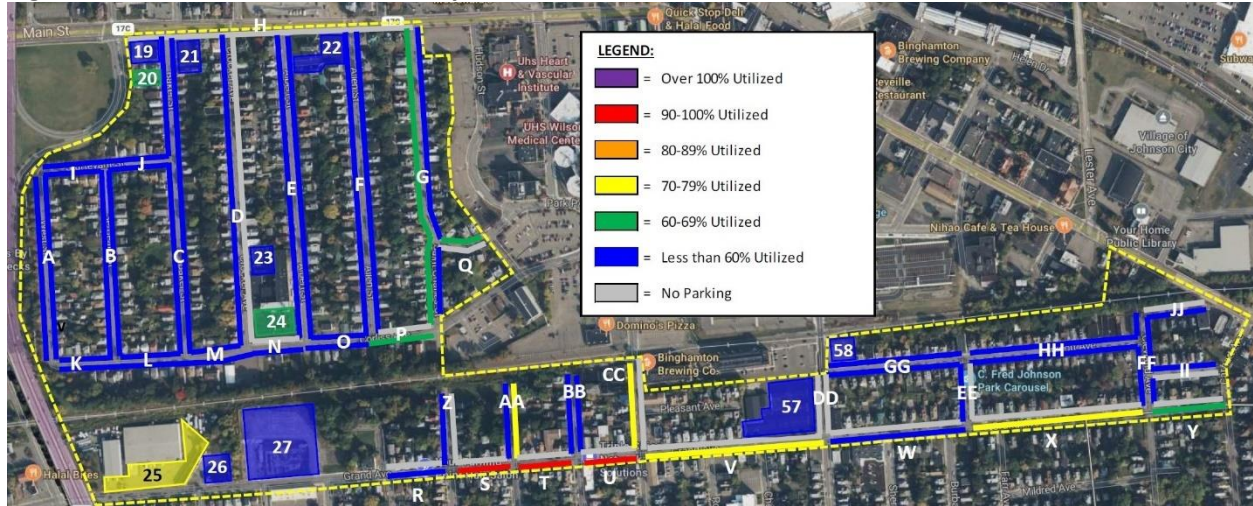


Across the sub-area, the majority of on-street parking is less than 60% utilized with select block faces slightly more used or parked to capacity. Most off-street parking lots are less than 60% utilized with the exception of a handful of private parking lots which were slightly more utilized, but never exceeded 90% of their supply.

With limited vacant space open currently in the Residential Sub-Area, total parking demand is only projected to increase by roughly 3% under the Absorption benchmark. Peak demand is projected to occur at 10:00 PM on December Saturday when 420 vehicles will occupy 31% of the total supply across the area (1,372 spaces).

In terms of impacts, as shown in **Figure 6** on the following page, there are nominal increases in utilization along Crocker Avenue, Allen Street, and Grand Avenue between Baldwin and Willow Streets in response to vacant residential units and commercial space being reoccupied. The on-street parking along Grand Avenue between St Charles Street, and Baldwin Street continues to be parked to capacity and other select block faces are filled to more than 60% of their capacity. Off-Street parking facility utilization is unchanged between the Existing Conditions and Absorption benchmarks.

Figure 6: Residential Sub-Area Absorption Conditions



The only emerging development within the sub-area is the Homesteads on Grand, which will displace the 150-space private lot at 346 Grand Avenue. This lot was unoccupied during field observations and assumed to remain that way until the proposed development is complete, so the displacement of supply will not result in displacement of demand.

The project will introduce 158 parking spaces to support 72 residential units and 6,200 square feet of commercial space, increasing the total supply across the area by eight spaces from 1,372 to 1,380 total spaces. Peak hour demand will increase by 21% over the prior benchmark, increasing from 420 to 508 spaces.

Based on the model developed by DESMAN, demand from the project will be 87 spaces at the peak hour (10:00 PM on a December Saturday). This will not appreciably change utilization on the parcel or in any adjacent areas from the Absorption benchmarks as shown in **Figure 7**.

Figure 7: Residential Sub-Area Emerging Development Conditions



Projected parking demand, utilization, and adequacy across the Residential Sub-Area for each benchmark are summarized in **Table 8**.

Table 8: Projected Total Parking Demand and Adequacy Across the Residential Sub-Area

Type of Parking	Supply	Observed		Existing Peak		Absorption		Emerging Devts	
		Thurs 4/25 @ 10:00 AM		Dec Sat @ 10:00 PM		Dec Sat @ 10:00 PM		Dec Sat @ 10:00 PM	
		Occ	Util	Occ	Util	Occ	Util	Occ	Util
Off-Street	647	108	17%	151	23%	151	23%	239	36%
On-Street	725	184	25%	258	36%	269	37%	269	37%
TOTAL	1,372	292	21%	409	30%	420	31%	508	37%
Available Spaces =		1,080		963		952		872	

Between December 1st and March 31st each year, the Village of Johnson City institutes an Alternate Side Street Parking program which bans parking on the side of the street with even numbered addresses on odd calendar days and parking on the street with odd numbered addresses on even calendar days. This is done to facilitate snow removal and is in effect around the clock, with conversions occurring every day at 5:00 PM.

This program applies to all public streets with exception of ‘Red-Line’ streets which have parking only on one side of the roadway. This policy applies to the following streets within the Residential Sub-Area: Crocker Avenue, sections of Corliss Avenue, Park Place, Grand Avenue, sections of St. Charles Street, Baldwin Street, Johnson Street, Custer Avenue, and Main Street Terrace.

This program does effectively reduce the capacity along certain two-way streets within the Residential Sub-Area, but the rate of utilization along these streets is generally below 60% of supply, indicating that even with half the capacity absent, there should still be adequate parking to accommodate demand.

Industrial Sub-Area

The highest observed occupancy in the Industrial Sub-Areas was recorded at 8:00 AM on Thursday, April 25, 2024 with 290 vehicles parked in 1,045 spaces for an overall utilization rate of 28%.

However, the parking demand model developed for this sub-area projects peak hour demand under Existing Conditions occurs at 10:00 AM on a June weekday, when 555 vehicles are parked, resulting in a 53% utilization rate across the study area. This is roughly 92% higher than observed peak occupancy.

Under Existing Conditions, surface parking lots supporting one of the UHS medical office buildings in the Industrial West Sub-Area was projected to operate near capacity and elevated utilization rates were forecast for the lots servicing the Women’s OBGYN Association building, the UHS Pharmacy, the Walgreens, and the UHS Employee Remote Lot. In contrast, only the surface lot supporting the Southern Tier Auto Care Lot is projected to be highly used, as shown in **Figure 8** on the following page. As the figure shows, all of the limited on-street parking is utilized to less than 70% of capacity.

DESMAN did not identify any vacant space within the Industrial Sub-Areas, so there is no projected change from the Existing Conditions to Absorption benchmarks. The impact of the Old High School conversion project is expected to drive up total demand across the industrial sub-areas by just over 9%, with a projected peak demand for 607 spaces at 10:00 AM on a June weekday under the Emerging Conditions

benchmark, resulting in an overall utilization rate of 58% against the sub-area parking supply of 1,045 spaces as shown in **Figure 9**, next page.



West Industrial Sub-Area

Legend:

- Over 100% Utilized (Purple)
- 90-100% Utilized (Red)
- 80-89% Utilized (Orange)
- 70-79% Utilized (Yellow)
- 60-69% Utilized (Green)
- Less than 60% Utilized (Blue)
- No Parking (Grey)

Map details: 14 numbered lots are shown. Lot 1 is red (90-100% utilized). Lot 2 is blue (less than 60% utilized). Lot 3 is blue. Lot 4 is yellow (70-79% utilized). Lot 5 is orange (80-89% utilized). Lot 6 is blue. Lot 7 is yellow. Lot 8 is yellow. Lot 9 is blue. Lot 10 is yellow. Lot 11 is blue. Lot 12 is yellow. Lot 13 is blue. Lot 14 is blue. The map also shows streets like Main St, Highway 17C, and various businesses like McDonald's and Redbox.



Projected parking demand, utilization, and adequacy across the Industrial Sub-Area for each benchmark are summarized in **Table 9** which shows that even at peak, there will still be excess parking spaces across the sub-areas.

Table 9: Projected Total Parking Demand and Adequacy Across the Industrial Sub-Area

Type of Parking	Supply	Observed		Existing Peak		Absorption		Emerging Devts	
		Thurs 4/25 @ 8:00 AM		June Wkdy @ 10:00 AM		June Wkdy @ 10:00 AM		Jun Wkdy @ 10:00 AM	
		Occ	Util	Occ	Util	Occ	Util	Occ	Util
Off-Street	999	279	28%	527	53%	527	53%	579	58%
On-Street	46	11	24%	28	61%	28	61%	28	61%
TOTAL	1,045	290	28%	555	53%	555	53%	607	58%
Available Spaces =		755		490		490		438	

With regards to Alternate Side Street Parking program impacts, the relative small supply of on-street parking within the sub-area and the fact only two streets have parking on both sides would suggest the risk of shortfalls is minute.

Healthcare Sub-Area

The highest observed occupancy in the Healthcare Sub-Area was recorded at 9:00 AM on Thursday, April 25, 2024 with 1,762 vehicles parked in 2,833 spaces for an overall utilization rate of 62%.

The parking demand model developed for this sub-area projects that peak hour demand under Existing Conditions occurs at 11:00 AM on a November weekday, when 1,939 vehicles are parked, resulting in a 68% utilization rate across the study area. This is roughly 10% higher than observed peak occupancy.

Under Existing Conditions, private surface parking lots to the west of Wilson Medical Center were projected to operate at capacity while those to east of the medical center varied in utilization, as did those to the south. The facilities supporting Binghamton University were lightly utilized as shown in **Figure 10** on the next page. Similarly, on-street utilization varied widely from block to block.

DESMAN's land use inventory identified over 27,000 square feet of vacant space. Absorption of vacant space was projected to increase demand in the Healthcare Sub-Area by only about 2% over Existing Conditions, with peak demand rising from 1,939 vehicles to 1,972 vehicles. As shown in **Figure 11** on the following pages, utilization rates for off-street parking facilities are largely unchanged, but on-street utilization rates along Main Street, Broad Street, and Arch Street increase dramatically relative to Existing Conditions. This is due in part to the absorption of vacant commercial space along Main Street between Broad and Arch Streets.

The only emerging development that will generate new demand in the Healthcare Sub-Area is the conversion of roughly 5,000 square feet of commercial space in the Century Building, which is projected to require 33 parking spaces at the peak hour. Peak hour demand is projected to increase by 2%, from 1,972 to 2,005 spaces. As shown in **Figure 12** on the following pages, this growth in demand will only influence the utilization in the surrounding surface lots.

With regards to Alternate Side Street Parking program impacts, only two streets within the sub-area are two-sided so the reduction in the available capacity would be nominal and unlikely to result in major displacement of current or future on-street drivers.

Figure 10: Healthcare Sub-Area Existing Conditions

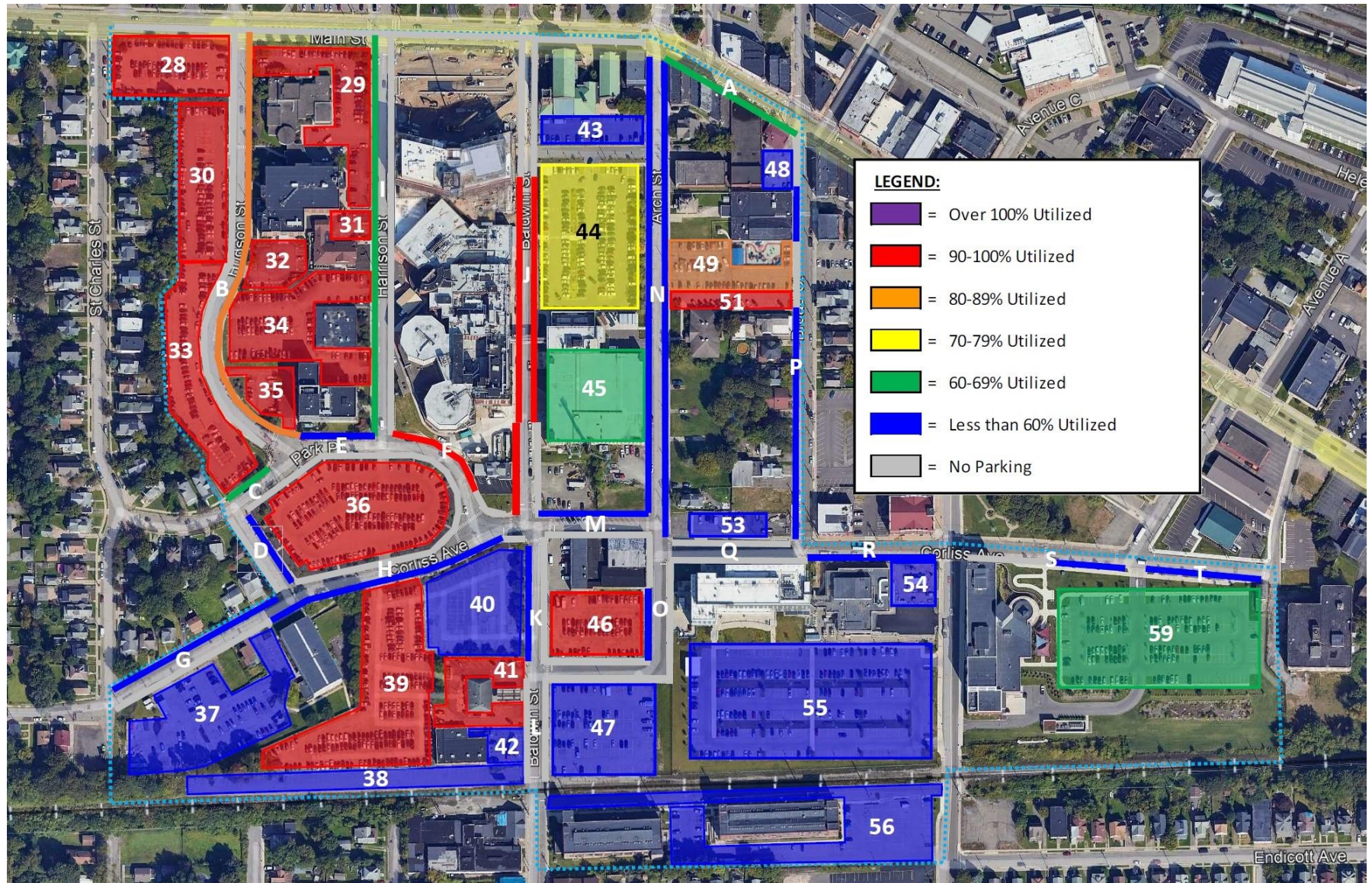


Figure 11: Healthcare Sub-Area Absorption Conditions

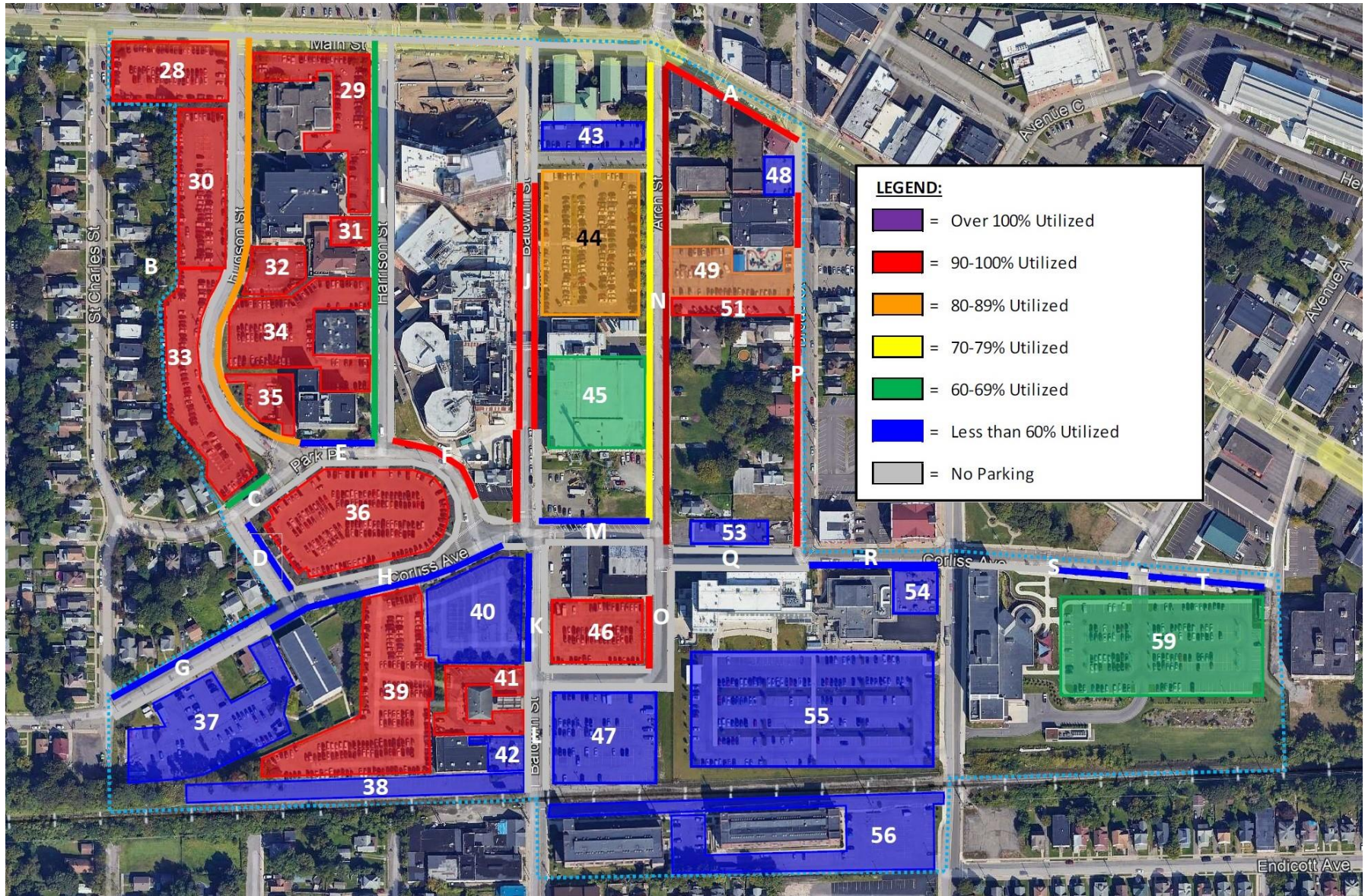
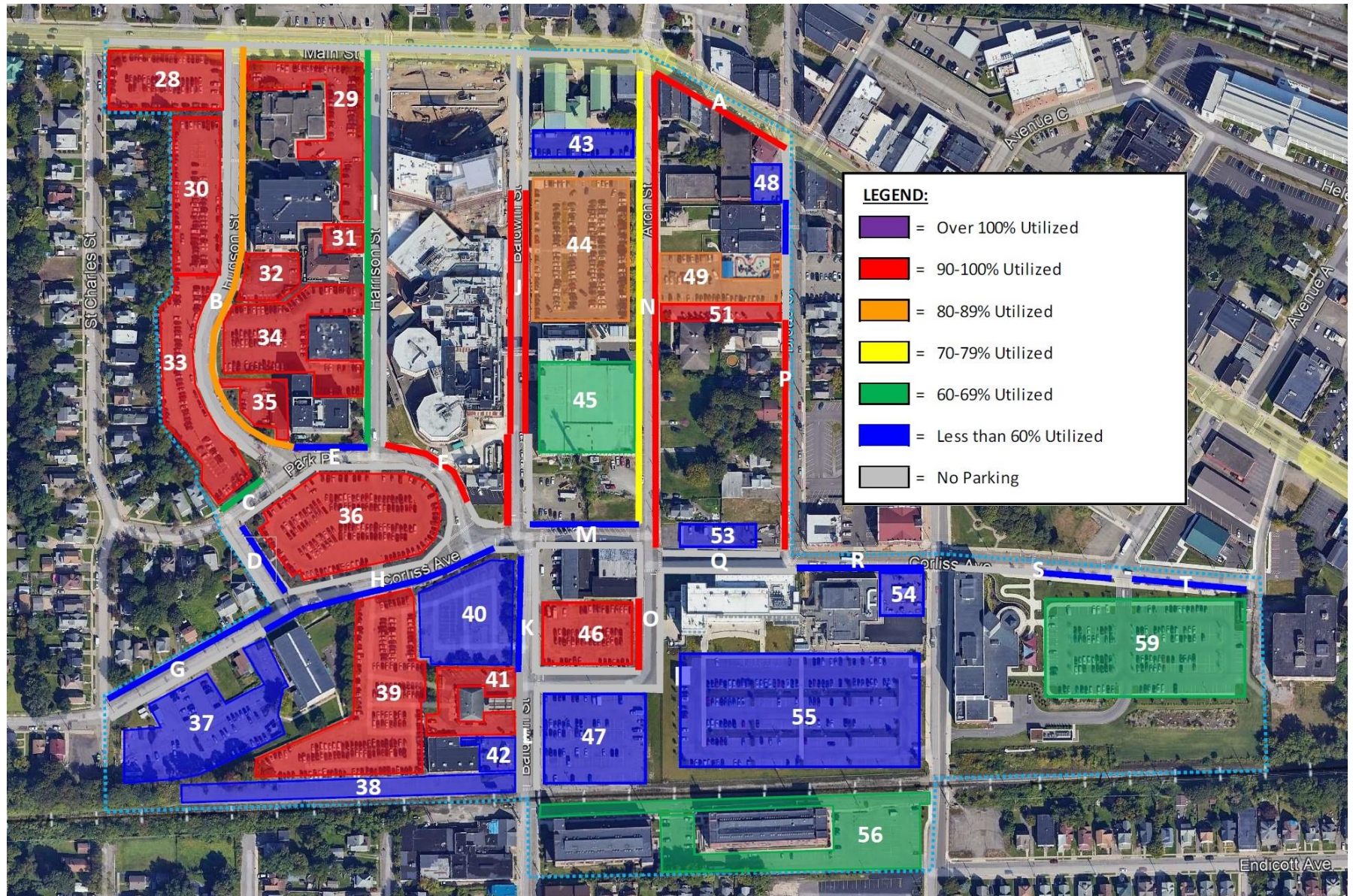


Figure 12: Healthcare Sub-Area Emerging Developments Conditions



Projected parking demand, utilization, and adequacy across the Healthcare Sub-Area for each benchmark is summarized in **Table 10** which shows that even at peak, there will still be excess parking spaces across the sub-area.

Table 10: Projected Total Parking Demand and Adequacy Across the Healthcare Sub-Area

Type of Parking	Supply	Observed		Existing Peak		Absorption		Emerging Devts	
		Thurs 4/25 @ 9:00 AM		Nov Wkdy @ 11:00 AM		Nov Wkdy @ 11:00 AM		Nov Wkdy @ 11:00 AM	
		Occ	Util	Occ	Util	Occ	Util	Occ	Util
Off-Street	2,612	1,678	64%	1,822	70%	1,829	70%	1,862	71%
On-Street	221	84	38%	117	53%	143	65%	143	65%
TOTAL	2,833	1,762	62%	1,939	68%	1,972	70%	2,005	71%
Available Spaces =		1,071		894		861		828	

Downtown Sub-Area

The highest observed occupancy in the Downtown Sub-Area was recorded at 4:00 PM on Saturday, April 27, 2024 with 252 vehicles parked in 1,247 spaces for an overall utilization rate of 20%.

The parking demand model developed for this sub-area projects that peak hour demand under Existing Conditions occurs at 12:00 PM on a June weekday, when 447 vehicles are parked, resulting in a 36% utilization rate across the study area. This is roughly 77% higher than observed peak occupancy.

Under Existing Conditions, the majority of off-street parking facilities were less than 60% utilized, with the exception of the following: the parking lot supporting the Vitali Auto Exchange (Map ID 62); the Southeast Lot along Helen Drive set aside for Victory Loft residents and guests (Map ID 74); and the St. James School Lot (Map ID 78) as shown in **Figure 13** on the following page. DESMAN also identified six on-street parking areas, all metered, which parked to or beyond capacity.

There is just over 142,000 square feet of vacant space within the sub-area. Absorption of this vacant space was projected to increase demand in the Downtown Sub-Area by roughly 41% over Existing Conditions, with peak demand rising from 447 vehicles to 631 vehicles. As shown in **Figure 14** on the following pages, utilization rates for the three lots named as running near capacity under Existing Conditions, plus two more⁵ and fifteen block faces with on-street parking approached or exceeded capacity. As the figure shows, much of the on-street parking along Main Street and bisecting avenues and streets is filled to capacity.

Conversions of space within Firehouse Stage building, 20 Willow Street, and the Endicott Johnson Fire Station will drive up peak demand by 2% over the Absorption benchmarks, from 631 spaces to 642 spaces. As shown in **Figure 15** on the following pages, this growth in demand is primarily captured in existing private parking lot associated with each property that have more than adequate capacity to support the new demand.

Given that on-street utilization is projected to run at 64-74% of capacity, losses of capacity created by the Alternate Side Street Parking program could stress the system. Luckily, this sub-area holds an abundance of open public off-street parking capacity to capture any spillover should this occasion arise.

⁵ The Village's Willow Lot (Map ID 50) and the 190 Main Street Dental Lot (Map ID 64).

Figure 13: Downtown Sub-Area Existing Conditions



Figure 14: Downtown Sub-Area Absorption Conditions



LEGEND:

- Over 100% Utilized
- 90-100% Utilized
- 80-89% Utilized
- 70-79% Utilized
- 60-69% Utilized
- Less than 60% Utilized
- No Parking



Projected parking demand, utilization, and adequacy across the Downtown Sub-Area for each benchmark is summarized in **Table 11** which shows that even at peak, there will still be excess parking spaces across the sub-area.

Table 11: Projected Total Parking Demand and Adequacy Across the Downtown Sub-Area

Type of Parking	Supply	Observed		Existing Peak		Absorption		Emerging Devts	
		Sat 4/27 @ 4:00 PM		June Wkdy @ 12:00 PM		Dec Wkdy @ 1:00 PM		Dec Wkdy @ 1:00 PM	
		Occ	Util	Occ	Util	Occ	Util	Occ	Util
Off-Street	1,059	194	18%	327	31%	495	47%	503	47%
On-Street	188	58	31%	120	64%	136	72%	139	74%
TOTAL	1,247	252	20%	447	36%	631	51%	642	51%
Available Spaces =		995		800		616		605	

Conclusions

Despite the substantial reinvestment in downtown buildings, streets, and public spaces and the significant redevelopment efforts underway in various parts of the study area, DESMAN was unable to identify any current or future shortfalls that might fall under the purview of the Village of Johnson City. While there is significant congestion in the UHS lots surrounding the Wilson Medical Center and the various specialty practices located in the buildings surrounding the facility, this speaks more specifically to management challenges than a true parking supply shortfall which might mandate development of new or additional supply. What shortfalls are projected on a block-by-block or facility-by-facility basis are located adjacent to areas of public on- and/or off-street supply which could absorb the spillover from these facilities without reaching capacity.

Exhibit 1: Residential Sub-Area Off-Street Parking Adequacy Projections

ID	Facility Name	Ownership/ Access	Supply	Observed Parking		Existing Peak		Absorption		Emerging Devts	
				Thurs, 10:00 AM		Dec Sat @ 10:00 PM		Dec Sat @ 10:00 PM		Dec Sat @ 10:00 PM	
				Occ	Util	Occ	Util	Occ	Util	Occ	Util
19	JC Learning Center Lot	Private/Private	15	2	13%	3	20%	3	20%	3	20%
20	19 Baker Street Lot	Private/Private	14	4	29%	9	64%	9	64%	9	64%
21	16 Baker Street Lot	Private/Private	40	8	20%	23	58%	23	58%	23	58%
22	Barber Memorial Home Lot	Private/Private	42	0	0%	0	0%	0	0%	0	0%
23	Campus Square North Lot	Private/Private	36	8	22%	21	58%	21	58%	21	58%
24	Campus Square South Lot	Private/Private	99	26	26%	67	68%	67	68%	67	68%
25	Moore Tire Sales Lot	Private/Private	36	27	75%	27	75%	27	75%	27	75%
26	DGS General Contractor Lot	Private/Private	6	0	0%	0	0%	0	0%	0	0%
27	346 Grand Ave Lot	Private/Private	150	0	0%	0	0%	0	0%	0	0%
57	Islamic Center Lot	Private/Private	178	11	6%	1	1%	1	1%	1	1%
58	119 Endicott/HCA Lot	Private/Private	31	22	71%	0	0%	0	0%	1	3%
*	Homesteads on Grand	Private/Private	158	0	0%	0	0%	0	0%	87	55%
Total			647	108	17%	151	23%	151	23%	239	36%

* New development at 333 Grand Avenue will replace lot @ 27 with a 158-space lot, 72 residential units, and 6,200 square feet of commercial space. Expected to open Spring 2027.

Exhibit 2: Residential Sub-Area On-Street Parking Adequacy Projections

ID	Street Name	Cross Streets	POT	Supply	Observed Parking		Existing Peak		Absorption		Emerging Devts	
					Thurs, 10:00 AM	Util	Dec Sat @ 10:00 PM	Util	Dec Sat @ 10:00 PM	Util	Dec Sat @ 10:00 PM	Util
A	West St	Sturtevant St & Corliss Ave	NB	21	3	14%	4	19%	4	19%	4	19%
			SB	44	3	7%	4	9%	4	9%	4	9%
B	Sergeant St	Sturtevant St & Corliss Ave	NB	22	8	36%	11	50%	11	50%	11	50%
			SB	20	6	30%	9	45%	9	45%	9	45%
C	Baker St	Corliss Ave & Main St	NB	36	11	31%	16	44%	16	44%	16	44%
			SB	25	6	24%	9	36%	9	36%	9	36%
D	Crocker Ave	Main St & Corliss Ave										
E	Albert St	Main St & Corliss Ave	SB	33	7	21%	10	30%	11	33%	11	33%
			NB	23	5	22%	7	30%	7	30%	7	30%
F	Allen St	Corliss Ave & Main St	SB	31	8	26%	11	35%	11	35%	11	35%
			NB	34	3	9%	4	12%	4	12%	4	12%
G	St Charles St	Corliss Ave & Main St	SB	35	5	14%	7	20%	8	23%	8	23%
			NB	35	12	34%	17	49%	17	49%	17	49%
H	Main St	Route 201 & St. Charles St	SB	36	18	50%	26	72%	26	72%	26	72%
I	Sturtevant St	West St & Sergeant St	EB	14	1	7%	1	7%	0	0%	0	0%
			WB	8	0	0%	0	0%	0	0%	0	0%
J	Sturtevant St	Sergeant St & Baker St	EB	9	3	33%	4	44%	4	44%	4	44%
			WB	6	1	17%	1	17%	1	17%	1	17%
K	Corliss Ave	West St & Sergeant St	EB	7	0	0%	0	0%	0	0%	0	0%
			WB	6	1	17%	1	17%	1	17%	1	17%
L	Corliss Ave	Sergeant St & Baker St	EB	7	2	29%	3	43%	3	43%	3	43%
			WB	6	2	33%	3	50%	3	50%	3	50%
M	Corliss Ave	Baker St & Crocker Ave	EB	5	0	0%	0	0%	0	0%	0	0%
			WB	7	1	14%	1	14%	1	14%	1	14%
N	Corliss Ave	Crocker Ave & Albert St	EB	4	0	0%	0	0%	0	0%	0	0%
O	Corliss Ave	Albert St & Allen St	EB	6	1	17%	1	17%	1	17%	1	17%
			WB	5	0	0%	0	0%	0	0%	0	0%
P	Corliss Ave	Allen St & St Charles St	EB	6	3	50%	4	67%	4	67%	4	67%
Q	Park Pl	St Charles St & Hudson St										
			WB	6	3	50%	4	67%	4	67%	4	67%
R	Grand Ave	Allen St / Elizabeth St & St Charles St										
			WB	5	1	20%	1	20%	1	20%	1	20%
S	Grand Ave	St Charles St & Hudson St										
			WB	3	2	67%	3	100%	3	100%	3	100%
T	Grand Ave	Hudson St & Harrison St										
			WB	4	3	75%	4	100%	4	100%	4	100%
U	Grand Ave	Harrison St & Baldwin St										
			WB	3	2	67%	3	100%	3	100%	3	100%
V	Grand Ave	Baldwin St & Willow St										
			WB	19	3	16%	4	21%	14	74%	14	74%
W	Grand Ave	Willow St & Johnson St										
			WB	13	2	15%	3	23%	3	23%	3	23%
X	Grand Ave	Johnson St & Cleveland Ave										
			WB	21	11	52%	16	76%	16	76%	16	76%
Y	Grand Ave	Cleveland Ave & Carhart Ave										
			WB	6	3	50%	4	67%	4	67%	4	67%
Z	St Charles St	Grand Ave & Dead End										
			SB	10	3	30%	4	40%	4	40%	4	40%
AA	Hudson St	Grand Ave & Dead End	NB	9	5	56%	7	78%	7	78%	7	78%
			SB	9	0	0%	0	0%	0	0%	0	0%
BB	Harrison St	Grand Ave & Dead End	NB	3	1	33%	1	33%	1	33%	1	33%
			SB	10	3	30%	4	40%	4	40%	4	40%
CC	Baldwin St	Grand Ave & Railway Track										
DD	Willow St	Endicott St & Grand Ave	SB	10	5	50%	7	70%	7	70%	7	70%
EE	Johnson St	Endicott St & Grand Ave										
			SB	6	2	33%	3	50%	3	50%	3	50%
FF	Cleveland Ave	Main St Terrace & Grand Ave	NB	6	2	33%	3	50%	3	50%	3	50%
			SB	12	4	33%	6	50%	6	50%	6	50%
GG	Endicott Ave	Willow St & Johnson St	EB	13	4	31%	6	46%	6	46%	6	46%
			WB	13	5	38%	7	54%	7	54%	7	54%
HH	Endicott Ave	Johnson St & Cleveland Ave	EB	18	4	22%	6	33%	6	33%	6	33%
			WB	18	3	17%	4	22%	4	22%	4	22%
II	Custer Ave	Cleveland Ave & Carhart Ave										
			WB	9	1	11%	1	11%	1	11%	1	11%
JJ	Main St Terrace	Cleveland Ave to Dead End	EB	8	2	25%	3	38%	3	38%	3	38%
Total				725	184	25%	258	36%	269	37%	269	37%

OSA = Blockface located in Other Sub-Area

NP = No Parking Zone

Bold Red = Utilization 90% or higher

Exhibit 3: Industrial East Sub-Area Off-Street Parking Adequacy Projections

ID	Facility Name	Ownership/ Access	Supply	Observed		Existing Peak		Absorption		Emerging Devts	
				Thurs, 8:00 AM Occ	Util	June Wkdy @ 10:00 AM Occ	Util	June Wkdy @ 10:00 AM Occ	Util	June Wkdy @ 10:00 AM Occ	Util
79	Village Hall Lot	Public/Public	58	0	0%	18	31%	18	31%	18	31%
80	Village Hall Public Works Lot	Public/Private	36	2	6%	19	53%	19	53%	19	53%
81	JH Robotics Lot	Private/Private	46	14	30%	36	78%	36	78%	36	78%
82	Public Library Lot	Public/Public	40	1	3%	12	30%	12	30%	12	30%
83	Equinox Broadcasting Lot	Private/Private	32	2	6%	24	75%	24	75%	24	75%
84	Slavik & Company Lot	Private/Private	12	2	17%	8	67%	8	67%	8	67%
85	Olum's Clearance Center Lot	Private/Private	63	0	0%	6	10%	6	10%	6	10%
86	Southern Tier Auto Care Lot	Private/Private	19	15	79%	18	95%	18	95%	18	95%
87	Car Wash Lot	Private/Private	11	0	0%	3	27%	3	27%	3	27%
Total			317	36	11%	144	45%	144	45%	144	45%

Bold Red = Utilization 90% or higher

Exhibit 4: Industrial West Sub-Area Off-Street Parking Adequacy Projections

ID	Facility Name	Ownership/ Access	Supply	Observed		Existing Peak		Absorption		Emerging Devts	
				Thurs, 8:00 AM Occ	Util	June Wkdy @ 10:00 AM Occ	Util	June Wkdy @ 10:00 AM Occ	Util	June Wkdy @ 10:00 AM Occ	Util
1	UHS Primary Care Lot	Private/Private	32	20	63%	30	94%	30	94%	30	94%
2	All Saints Church Lot	Private/Private	39	1	3%	8	21%	8	21%	8	21%
3	Old JC High School / Rear Lot	Private/Private	50	3	6%	10	20%	10	20%	25	50%
4	Old JC High School / Front Lot	Private/Private	97	15	15%	33	34%	33	34%	70	72%
5	Women's OBGYN Assoc Lot	Private/Private	65	22	34%	52	80%	52	80%	52	80%
6	United Dental Services Lot	Private/Private	19	1	5%	11	58%	11	58%	11	58%
7	Sante CWHC Lot	Private/Private	39	22	56%	29	74%	29	74%	29	74%
8	UHS Pharmacy Lot	Private/Private	63	27	43%	48	76%	48	76%	48	76%
9	McDonalds Lot	Private/Private	32	12	38%	11	34%	11	34%	11	34%
10	Walgreens/ UHS Lot	Private/Private	97	66	68%	72	74%	72	74%	72	74%
11	NBT Bank Lot	Private/Private	33	7	21%	11	33%	11	33%	11	33%
12	WMC Employee Parking Lot	Private/Private	58	26	45%	41	71%	41	71%	41	71%
13	US Postal Service Lot	Public/Private	38	13	34%	16	42%	16	42%	16	42%
14	305 Main Street Bldg. Lot	Private/Private	20	8	40%	11	55%	11	55%	11	55%
Total			682	243	36%	383	56%	383	56%	435	64%

Bold Red = Utilization 90% or higher

Exhibit 5: Industrial Sub-Areas On-Street Parking Adequacy Projections

ID	Sub-Area	Street Name	Cross Streets	POT	Supply	Observed		Existing Peak		Absorption		Emerging Devts	
						Thurs, 8:00 AM Occ	Util	June Wkdy @ 10:00 AM Occ	Util	June Wkdy @ 10:00 AM Occ	Util	June Wkdy @ 10:00 AM Occ	Util
A	Industrial East	Wells Ave	Main St & Dead End										
B	Industrial East	Brigham Ave	Main St & Dead End										
C	Industrial East	Lester Ave	Main St & Rail Line										
D	Industrial East	Main St	Lester Ave & Wells Ave										
E	Industrial West	Arch St	Main St & Rail Line										
F	Industrial West	1st St	Main St & Rail Line		SB 8	2	25%	5	63%	5	63%	5	63%
G	Industrial West	2nd St	Main St & Rail Line		SB 7	2	29%	4	57%	4	57%	4	57%
H	Industrial West	3rd St	Main St & Endwell St		SB 11	3	27%	7	64%	7	64%	7	64%
I	Industrial West	4th St	Main St & Endwell St		NB 8	2	25%	5	63%	5	63%	5	63%
J	Industrial West	Endwell St	3rd St & 4th St		WB 12	2	17%	7	58%	7	58%	7	58%
K	Industrial West	Main St	4th St & Arch St										
Total					46	11	24%	28	61%	28	61%	28	61%

OSA = Blockface located in Other Sub-Area

NP = No Parking Zone

Exhibit 6: Healthcare Sub-Area Off-Street Parking Adequacy Projections

ID	Facility Name	Ownership/ Access	Supply	Observed		Existing Peak		Absorption		Emerging Devts	
				Thurs 4/25 @ 9:00 AM Occ	Util	Nov Wkdy @ 11:00 AM Occ	Util	Nov Wkdy @ 11:00 AM Occ	Util	Nov Wkdy @ 11:00 AM Occ	Util
28	UHS Employee Parking Lot	Private/Private	80	78	98%	80	100%	80	100%	80	100%
29	UHS Wilson Square East Patient Lot	Private/Private	50	57	114%	50	100%	50	100%	50	100%
30	UHS Wilson Square West Patient Lot	Private/Private	91	90	99%	91	100%	91	100%	91	100%
31	UHS MRI Parking Lot	Private/Private	12	6	50%	12	100%	12	100%	12	100%
32	UHS HVI Patient Lot	Private/Private	18	20	111%	18	100%	18	100%	18	100%
33	UHS Wilson Sq/Place Employee Lot	Private/Private	99	115	116%	99	100%	99	100%	99	100%
34	UHS Neurosurgery/Ophthalmology Lot	Private/Private	100	99	99%	100	100%	100	100%	100	100%
35	UHS Pain & Spine Clinic Lot	Private/Private	8	9	113%	8	100%	8	100%	8	100%
36	WMC Employee Parking Lot	Private/Private	183	189	103%	183	100%	183	100%	183	100%
37	Eckelberger Tower Lot	Private/Private	129	51	40%	56	43%	56	43%	56	43%
38	122 Baldwin Street Parking Lot	Private/Private	59	0	0%	9	15%	9	15%	9	15%
39	WMC Employee Parking Lot	Private/Private	213	193	91%	213	100%	213	100%	213	100%
40	UHS Evening Lot	Private/Private	99	0	0%	26	26%	26	26%	26	26%
41	Dunkin Donuts Lot	Private/Private	13	13	100%	13	100%	13	100%	13	100%
42	Domino's Pizza Lot	Private/Private	20	0	0%	1	5%	1	5%	1	5%
43	Sarah Jane Johnson Church Lot	Private/Private	35	26	74%	20	57%	20	57%	20	57%
44	WMC Patient & Visitor Parking Lot	Private/Private	156	108	69%	119	76%	126	81%	126	81%
45	WMC Physician/Employee Garage	Private/Private	355	189	53%	218	61%	218	61%	218	61%
46	WMC North Faatz Alley Employee Lot	Private/Private	70	62	89%	68	97%	68	97%	68	97%
47	WMC South Faatz Alley Employee Lot	Private/Private	135	53	39%	68	50%	68	50%	68	50%
48	8 Bits Restaurant Lot	Private/Private	15	0	0%	3	20%	3	20%	3	20%
49	18 Broad St/HCA Lot	Private/Private	55	41	75%	45	82%	45	82%	45	82%
51	OBGYN Breast Center Lot	Private/Private	16	15	94%	16	100%	16	100%	16	100%
53	BU School of Pharmacy Visitor Lot	Public/Private	10	1	10%	2	20%	2	20%	2	20%
54	Binghamton University - R&D Bldg Lot	Public/Private	12	1	8%	2	17%	2	17%	2	17%
55	Binghamton U R-HSC Commuter Lot	Public/Private	279	122	44%	135	48%	135	48%	135	48%
56	Baldwin/Sunrise Building Lots	Private/Private	95	19	20%	31	33%	31	33%	64	67%
59	Binghamton U R-HSC 2 Commuter Lot	Public/Private	205	121	59%	136	66%	136	66%	136	66%
Total			2,612	1,678	64%	1,822	70%	1,829	70%	1,862	71%

Bold Red = Utilization 90% or higher

Bold Purple = Utilization greater than capacity

Exhibit 7: Healthcare Sub-Areas On-Street Parking Adequacy Projections

ID	Street Name	Cross Streets	POT	Type	Supply	Observed		Existing Peak		Absorption		Emerging Devts	
						Thurs 4/25 @ 9:00 AM		Nov Wkdy @ 11:00 AM		Nov Wkdy @ 11:00 AM		Nov Wkdy @ 11:00 AM	
						Occ	Util	Occ	Util	Occ	Util	Occ	Util
A	Main St	Arch St & N Broad St	EB	Meter	3	0	0%	2	67%	3	100%	3	100%
B	Hudson St	Main St & Park Pl	NB	Meter	21	16	76%	18	86%	18	86%	18	86%
C	Park Pl	Hudson St	WB	Meter	6	4	67%	4	67%	4	67%	4	67%
D	Hudson St	Park Pl & Corliss Ave	SB	Meter	6	0	0%	3	50%	3	50%	3	50%
E	Park Pl	Hudson St & Harrison St	WB	Meter	6	3	50%	3	50%	3	50%	3	50%
F	Park Pl	Harrison St & Corliss Ave	WB	Meter	4	5	125%	4	100%	4	100%	4	100%
G	Corliss Ave	St. Charles St & Hudson St	EB	Meter	5	1	20%	2	40%	2	40%	2	40%
			WB	Free	10	3	30%	4	40%	4	40%	4	40%
H	Corliss Ave	Hudson St & Baldwin St	EB	Meter	12	1	8%	6	50%	6	50%	6	50%
I	Harrison St	Main St & Park Pl	SB	Meter	18	11	61%	12	67%	12	67%	12	67%
J	Baldwin St	Main St & Corliss Ave	NB	Meter	11	9	82%	10	91%	10	91%	10	91%
			SB	Meter	3	3	100%	3	100%	3	100%	3	100%
K	Baldwin St	Corliss Ave & Faatz Alley	SB	Free	4	2	50%	2	50%	2	50%	2	50%
L	Baldwin St	Faatz Alley & Railroad Track											
M	Corliss Ave	Baldwin St & Arch St	WB	Meter	15	2	13%	4	27%	4	27%	4	27%
N	Arch St	Main St & Corliss Ave	NB	Meter	23	11	48%	13	57%	23	100%	23	100%
			SB	Meter	24	9	38%	13	54%	18	75%	18	75%
O	Arch St	Corliss Ave & Faatz Alley	SB	Meter	4	0	0%	2	50%	4	100%	4	100%
P	N Broad St	Main St & Corliss Ave	SB	Meter	14	4	29%	6	43%	14	100%	14	100%
Q	Corliss Ave	Arch St & N Broad St											
R	Corliss Ave	N Broad St & Willow St	EB	Free	11	0	0%	2	18%	2	18%	2	18%
S	Corliss Ave	Willow St & Jennison Ave	EB	Free	6	0	0%	1	17%	1	17%	1	17%
T	Corliss Ave	Jennison Ave & Ozalid Rd	EB	Free	15	0	0%	3	20%	3	20%	3	20%
Total					221	84	38%	117	53%	143	65%	143	65%

OSA = Blockface located in Other Sub-Area

NP = No Parking Zone

Bold Red = Utilization 90% or higher

Bold Purple = Utilization greater than capacity

Exhibit 8: Downtown Sub-Area Off-Street Parking Adequacy Projections

ID	Facility Name	Ownership/ Access	Supply	Observed		Existing Peak		Absorption		Emerging Devts	
				Sat 4/27 @ 4:00 PM		June Wkdy @ 12:00 PM		Dec Wkdy @ 1:00 PM		Dec Wkdy @ 1:00 PM	
				Occ	Util	Occ	Util	Occ	Util	Occ	Util
15	VJC - Isabelle Lot	Public/Public	58	5	9%	12	21%	33	57%	33	57%
16	VJC - Municipal Lot	Public/Public	59	7	12%	16	27%	36	61%	36	61%
17	VJC - Police Department Lot	Public/Private	24	3	13%	6	25%	15	63%	15	63%
18A	VJC - Justice Lot	Public/Public	27	2	7%	7	26%	17	63%	17	63%
18B	VJC - Main Street Lot	Public/Public	20	4	20%	10	50%	13	65%	13	65%
50	VJC - Willow Lot	Public/Public	59	28	47%	50	85%	53	90%	53	90%
52	Goodwill Theater lot	Private/Private	97	2	2%	5	5%	10	10%	12	12%
60	14 Lewis Street Lot	Private/Private	22	1	5%	3	14%	6	27%	6	27%
61	Guthrie JC Senior Care Lot	Private/Private	15	0	0%	2	13%	4	27%	4	27%
62	Vitali Auto Exchange Lot	Private/Private	50	45	90%	49	98%	49	98%	49	98%
63	215 Main Street Lot	Private/Private	45	0	0%	5	11%	10	22%	10	22%
64	190 Main St (Dental) Lot	Private/Private	4	0	0%	3	75%	4	100%	4	100%
65	M&T Bank Lot	Private/Private	58	0	0%	3	5%	9	16%	9	16%
66	2 Jennison Ave Lot	Private/Private	58	0	0%	3	5%	9	16%	9	16%
67	JF Rice Funeral Home Lot	Private/Private	60	0	0%	2	3%	9	15%	9	15%
68	Old Mary Myers Salon Lot	Private/Private	31	2	6%	4	13%	12	39%	12	39%
69	St. James Church Lot	Private/Private	69	16	23%	29	42%	33	48%	33	48%
70	Knights of Columbus Lot	Private/Private	42	0	0%	3	7%	10	24%	10	24%
71	Victory Lofts Southwest Lot	Private/Private	73	12	16%	16	22%	36	49%	42	58%
72	Dollar General	Private/Private	24	5	21%	11	46%	13	54%	13	54%
73	Millers Body Shop	Private/Private	13	0	0%	3	23%	7	54%	7	54%
74	Victory Lofts Southeast Lot	Private/Private	30	15	50%	27	90%	27	90%	27	90%
75	39 Laurel Street Lot	Private/Private	31	3	10%	6	19%	16	52%	16	52%
76	NY Telephone Company Lot	Private/Private	12	1	8%	4	33%	7	58%	7	58%
77	St. James Rectory Lot	Private/Private	18	1	6%	3	17%	9	50%	9	50%
78	St. James School Lot	Private/Private	42	42	100%	42	100%	42	100%	42	100%
88	Binghamton Realtor's Lot	Private/Private	18	0	0%	3	17%	6	33%	6	33%
Total			1,059	194	18%	327	31%	495	47%	503	47%

Bold Red = Utilization 90% or higher

Exhibit 9: Downtown Sub-Areas On-Street Parking Adequacy Projections

ID	Street Name	Cross Street	POT	Type	Supply	Observed		Existing Peak		Absorption		Emerging Devts	
						Sat 4/27 @ 4:00 PM		June Wkdy @ 12:00 PM		Dec Wkdy @ 1:00 PM		Dec Wkdy @ 1:00 PM	
						Occ	Util	Occ	Util	Occ	Util	Occ	Util
A	Arch St	Main St & Railroad track											
B	N Broad St	Main St & Railroad track	NB	Free	12	5	42%	10	83%	12	100%	12	100%
C	Avenue D	Main St & Dead End	NB	Meter	5	4	80%	5	100%	5	100%	5	100%
D	Avenue C	Main St & Helen Dr	NB	Meter	3	3	100%	3	100%	3	100%	3	100%
E	Avenue B	Main St & Helen Dr	SB	Meter	4	3	75%	4	100%	4	100%	4	100%
F	Avenue A	Main St & Helen Dr	NB	Meter	6	1	17%	6	100%	6	100%	6	100%
G	Lester Ave	Main St & Rail Line	SB	Meter	10	3	30%	8	80%	10	100%	10	100%
H	Main St	Arch St & N Broad St	NB	Meter	7	2	29%	6	86%	7	100%	7	100%
I	Main St	N Broad St & Avenue C	WB	Meter	3	3	100%	3	100%	3	100%	3	100%
J	Main St	Avenue C & Avenue B	EB	Meter	10	2	20%	8	80%	10	100%	10	100%
K	Main St	Avenue B & Avenue A	WB	Meter	9	6	67%	9	100%	9	100%	9	100%
L	Main St	Avenue A & Lester Ave	EB	Meter	7	2	29%	5	71%	7	100%	7	100%
M	Helen Dr	Avenue B & Lester Ave	WB	Meter	10	4	40%	8	80%	10	100%	10	100%
N	Laurel St	Avenue A & Lester Ave	EB	Meter	4	1	25%	3	75%	4	100%	4	100%
P	N Broad St	Main St & Corliss Ave	WB	Meter	6	0	0%	4	67%	6	100%	6	100%
Q	Willow St	Main St & Corliss Ave	WB	Meter	6	0	0%	4	67%	4	67%	6	100%
R	Jennison Ave	Main St & Corliss Ave	SB	Meter	3	0	0%	2	67%	2	67%	2	67%
S	Ozolid Rd	Corliss Ave & Main St	NB	Meter	7	0	0%	3	43%	3	43%	3	43%
T	Park St	Main St & Dead End	EB	Free	12	2	18%	5	45%	5	45%	5	45%
U	Lewis St	Willow St & Jennison Ave	NB	Free	25	7	28%	4	16%	4	16%	5	20%
V	Corliss Ave	N Broad St & Willow St	WB	Free	10	0	0%	2	20%	2	20%	2	20%
W	Corliss Ave	Willow St & Jennison Ave	WB	Free	10	0	0%	2	20%	2	20%	2	20%
X	Corliss Ave	Jennison Ave & Ozolid Rd											
Total					188	58	31%	120	64%	136	72%	139	74%

OSA = Blockface located in Other Sub-Area

NP = No Parking Zone

Bold Red = Utilization 90% or higher