



DOWNTOWN PARKING STUDY

City of Auburn Hills, Michigan

Final Report

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RICH & ASSOCIATES, INC.
PARKING CONSULTANTS - PLANNERS

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5:00 PM – 7:00 PM	
7:00 PM – 9:00 PM	
9:00 PM – 11:00 PM	



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11:00 AM- 1:00 PM

1:00 PM – 3:00 PM

3:00 PM – 5:00 PM

5:00 PM – 7:00 PM

7:00 PM – 9:00 PM

9:00 PM – 11:00 PM

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11:00 AM- 1:00 PM

1:00 PM – 3:00 PM

3:00 PM – 5:00 PM

5:00 PM – 7:00 PM

7:00 PM – 9:00 PM

9:00 PM – 11:00 PM

Section 1 – Executive Summary

As the result of a comprehensive parking analysis conducted for the City of Auburn Hills within their downtown, Rich & Associates have quantified and qualified the parking needs. The analysis was performed due to the significant development taking place in Auburn Hills that is anticipated to add significant residential and commercial demand that, it is feared, would stress the existing parking supply.

Methodology

Using an analysis that benchmarks the parking generation factors to existing observed conditions, Rich applies a methodology that uses these validated values in calculating the parking needs for future years.

Rich completed 3 days of parking utilization counts between the hours of 11:00 am and 11:00 pm. The utilization study is designed to measure and document how the existing parking is being used. This data is used as a benchmark to compare to the parking demand model created as part of this analysis.

Results

Parking Supply – There are a total of 1,045 parking spaces within the study area. Of this total, 56% is designated for private use and 44% is designated as publicly available. This split between private use and publicly available parking is below the industry best practice benchmark that more than 50% of downtown community parking be publicly available. Rich defines **publicly available parking** as parking where someone may park and visit any destination they choose. This parking includes both on-street and off-streets spaces. The contrary class of parking is **private parking**, which is generally restricted to use by staff or visitors to a particular destination.

Utilization Analysis – As noted, Rich conducted 3 days of parking utilization counts. The survey dates were Wednesday August 9th, Friday August 11th and Saturday August 12th. The analysis demonstrated that at peak, time 44% of the public off-street parking spaces were occupied on Wednesday between 7:00 pm and 9:00 pm. Thirty-four percent of private parking spaces were occupied.

The on-street parking occupancy peaked at 64% on Friday between 7:00 and 9:00 pm. However, the turnover analysis revealed that as much as 20% of parkers parked beyond 2 hours and in some cases as long as 8 hours. A 2-hour time limit for prime downtown on-street parking is considered a best practice.

Parking Demand – The analysis shows that at this time it does not appear that the total parking capacity is an issue. Rich's analysis of the current conditions shows an overall parking surplus of 333 spaces during the peak daytime period and 324 spaces during the peak evening period. Projections for one year out (2024) when the Auburn Square, The MiL and the Brunswick developments are projected to be at or near full occupancy show the daytime surplus declining to 204 spaces and the evening surplus reducing to 227 spaces. However, the residential component has a 31-space deficit on the block encompassing these three facilities (Block 6).

Current plans are for the Webster which is currently under construction to be completed by August of 2025 (2 years in the future). This would add 88 residential units and nearly 7,500 sf of ground floor commercial space which Rich is forecasting as restaurant space. Assuming that all 88 residential units were occupied at opening, the residential deficit on this block could be as great as 126 spaces while the non-residential categories could see an 8-space shortfall at this time on this block. Overall, the non-residential categories would have a net 146-space surplus.

The potential 126 space residential deficit on block 6 could continue into the fall 2026 projections (year 3 of the forecast) because by fall 2026 the planned garage expansion is not expected to be completed. Given the provided schedule for the garage of construction not anticipated to begin until spring of 2026 and Rich estimates a 10-month construction period, it is likely that the garage would not be ready until early 2027. By the fall of 2027, the 172 net-added spaces from the garage could eliminate the residential parking deficit on block 6 as well as provide surplus spaces for the non-residential uses within the downtown that could be as much as 186-spaces during the daytime.

A final projected development (3306 – 3320 Auburn Road) is projected to add 13,500 square feet of retail space plus three floors providing approximately 41 residential units. The 44 spaces of added parking demand would be accommodated within the available garage expansion. By the time this development is completed the calculated residential parking needs on this block total 270 spaces which would all need to be accommodated within the existing and expanded garage. This leaves approximately 133 publicly available spaces in the garage.

Stakeholder Interviews

During the data collection process, Rich interviewed several stakeholders to discuss their issues or concerns regarding access to parking within the study area. The following includes summaries of points made by the stakeholders.

- Very concerned about the lack of parking. I don't think the current model will support the business growth.
- With the new residential buildings like the Webster, which will add 88 new apartments, they will probably have reserved parking in the garage which will cut down on available public parking. I don't think they thought about if parking could support the growth.
- There is no parking enforcement.
- Parking should have been taken into consideration before all the development started.
- Everyone parks in our private lot to the point there are no available spaces for our customers and employees.
- When there are events there is no parking. There is no action to help or stop people from parking in the private lots.
- I have elderly patrons who cannot walk to/from the parking garage.

- It seems the city did not have the foresight to consider parking during construction. Construction workers park in the on-street spaces that should be kept for the patrons of the businesses.
- Some customers say there needs to be more handicap parking on-street.
- I feel some type of enforcement is needed. During the summer every Friday night there is no parking. People going to the concerts in the park and are parking in our private lot.
- Very concerned with parking in the near future. With the new developments like the Webster, once complete where will all the people park? Once the Mexican restaurant opens with seating over 100 people, where will they all park?
- Once the Webster starts erecting the building, where will all the contractors park? The construction foreman should direct trades to park in the public lot east of parking garage.
- Signage directing visitors to public parking is poor.
- Currently I feel we're getting by with parking, but once the Webster is complete and the other planned openings, there will not be enough parking.
- I'm very concerned there is too much building in short period of time and no plan as to how parking will support it.
- Wayfinding signage is bad. Definitely needs to be improved. It was at one time indicated the city would look into the signage, but never happened.
- The deck expansion should begin as soon as possible by shifting the latter phase of construction staging of the Webster to the north side of the site on Auburn.
- Basically, the worst is yet to come because, for 6-9 months the current surface lot users (and deck users displaced by Webster reserved spaces) will need to use the dermatology lot to the east, street parking or the lots on the north.
- Hopefully the reserved Webster spaces together with the current reserved deck spaces will leave some open parking in the deck during expansion. After the expansion we will be through the problems, with room to spare for some event parking and future growth.
- The surface lot should prohibit Webster contractors, but remain 24-hour parking for all tenants, residents and customers.
- The city should allow residents to reserve spaces in the deck on an individual basis.
- There is confusion regarding the abrupt policy change to 2-hour parking limits. The vast majority of surrounding businesses did not ask for this new policy, nor do any suffer without the change.
- It may seem to others that there is real trouble now (there is not). The real problems are yet to happen, but are necessary to get what we all started into this for.

Recommendation Type	#	Recommendation	Time Frame
Enforcement	1	Implement and enforce two-hour time limit for on-street parking between the hours of 8:00 am and 6:00 pm	6 - 12 Months
Enforcement	2	Enact an anti-shuffling ordinance so that someone cannot simply move their vehicle to a different on-street space to start a new two-hour session. Limit the on-street to two-hours per day in on-street spaces within the downtown	12 - 18 Months
Enforcement	3	Implement a program of, at a minimum, random parking enforcement varying the days of the week and the times of day that the enforcement be conducted. Each enforcement shift should be for a minimum of four hours so that vehicles can be initially recorded and monitored a second time for violation of the two-hour (and other violations) limit. a. Consider the use of volunteers to perform the enforcement function to supplement the current program of police officers.	12 - 24 Months 12-24 Months
Enforcement	4	The current fine for parking violations as adopted by 52-3 District Court is \$75.00. The City's fine is \$30.00. Rich would recommend monitoring enforcement to determine if the \$30.00 is not sufficiently high enough to deter habitual offenders. If so, increase in stages up to 52-3 District Court level.	Immediate
Enforcement	5	Require that anyone parking overnight in the current and expanded parking garage have a permit	6 - 12 Months
Enforcement	6	Use the current availability through the Secretary of State's office to hold vehicle registrations for vehicles that have three or more unpaid parking citations.	12 - 24 Months
Zoning Ordinance Changes	7	The provision of parking spaces is not required in Downtown Auburn Hills. At a minimum, adjust the ordinance that developers of multi-unit residential properties provide parking at the following levels:	18 - 24 Months
		a. Studio and One bedroom – 1 parking space per dwelling unit	
		b. Two Bedroom Units – 1.5 spaces per dwelling unit	
		c. Three or more Bedroom Units – 2 spaces per dwelling unit	
	7A	Do not require parking for other developments - too many inefficient small lots	
Marketing / Operations	8	Through the DDA, encourage employees of downtown businesses to park in the more remote public off-street lots to save the most convenient spaces for downtown visitors and customers	Immediate
Marketing / Operations	9	Clearly identify the public off-street lots with signage. The signs should indicate a name of the lot (not a letter or number) and the permitted hours of operation. Overnight parking in public lots should not be allowed without a city-issued permit that limits the duration (3-days).	6 -12 Months
Marketing / Operations	10	The first floor or at least a portion of the first floor of the garage should be dedicated for customer / visitor use during the daytime hours (8:00 am – 8:00 pm). Currently, much of the floor is designated for AHH, LLC or Hyde Associates, LLC parking. Resident parking should be on the upper levels so that visitors are not driving past multiple empty spaces reserved for residential use to reach an available visitor space or to find out that all visitor parking is filled. Signs should indicate that visitor parking above the first level is allowed during the daytime hours (8:00 am – 8:00 pm) without a permit but that after a designated hour, residential parking permits are required	12- 24 Months

Section 2 – Analysis

Introduction

Rich & Associates have been asked to assess the parking needs for the seven blocks of downtown Auburn Hills. Presently, downtown Auburn Hills is experiencing significant development with the recent addition of several mixed-use developments consisting of residential and commercial uses. Two developments (The Mil and Brunswick) are in the process of opening and receiving tenants while a third (Primary Place) is planned to begin receiving residents during fall 2023. Another project (The Webster) is in the very early stages of construction. The Webster, an 88-unit residential development, has resulted in the removal of a 57-space city lot from service, and prompted plans to expand the existing Primary Street parking garage.

Methodology

Rich employs a methodology which involves a detailed collection of data from the defined study area. The collected data includes parking supply and land use data by block noting public versus private supply, on-street versus off-street spaces as well as parking supply restrictions such as time limits, and specific use (residential parking).

The land Use data, provided by the City, includes the use of each business/building supported by square footage or number of residents. Within the defined study (shown by **Figure 1** below), Rich quantifies and qualifies the parking needs for comparison against the available parking supply.

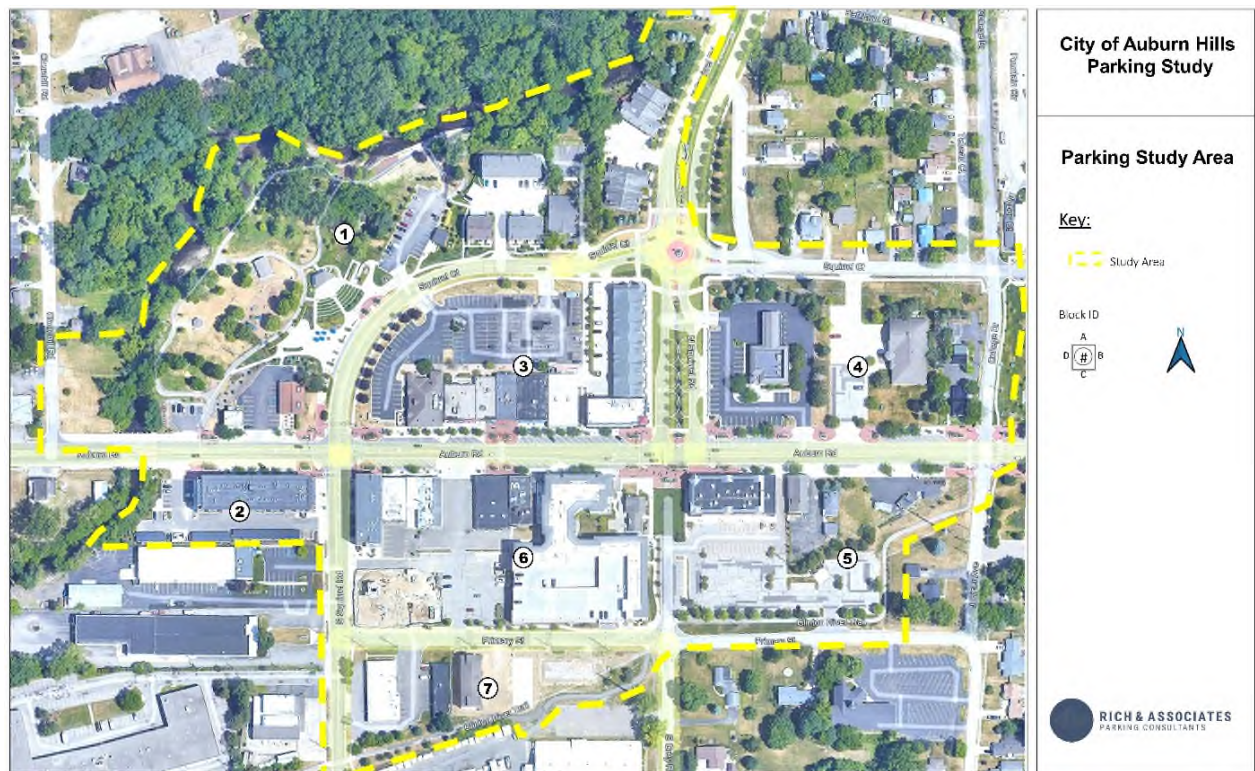


Figure 1 - Downtown Parking Study Area

Rich typically quantifies the parking needs and compares this against the available parking supply at various points in time. In the case of Auburn Hills, the assessment conducted reflect the following time periods:

Current Demand – At the time of the Utilization Studies (used to calibrate parking demand model)

1-Year Assessment (Summer 2024) – Allowing for developments opening Fall 2023 to be operational

2-Year Assessment (Summer 2025) – Allowing for Webster to be open (garage not yet)

3-Year Assessment (Summer 2026) – Allows for additional vacant space occupancy (garage not open)

4-Year Assessment (Summer 2027) – Garage expansion complete and open

5-Year Assessment (Summer 2028) – 3306 – 3324 Auburn Road Development

Current Demand (August 9, 11 & 12) coinciding with the dates of the parking utilization studies. This data (to be discussed) showed that the highest daytime parking occupancy occurred coinciding with the Wednesday survey date.

An initial assessment is performed where the parking needs are compared against the conditions as actually observed as accomplished via the parking utilization study. This is used to calibrate the parking demand model to be developed and establish the **parking generation rates** to be used.

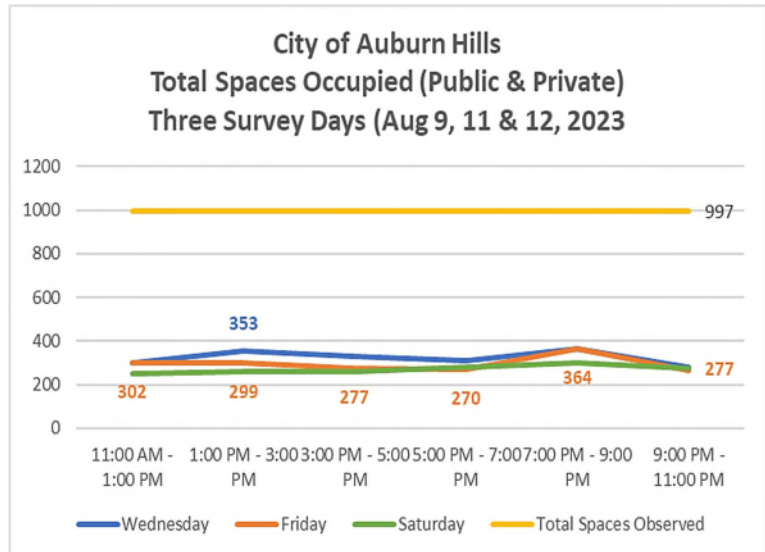


Figure 2 - Total Observed Occupancy

1-Year Assessment (Summer 2024) - In the case of the Downtown Auburn Hills study, at the time the occupancy counts were performed, several current developments were not open or not fully operational. Therefore, the square footage of use of these buildings/businesses (Brunswick, Primary Place) were not included. Using the parking generation rates correlated to the observed conditions, the needs, as they would be expected during the summer of 2024, were calculated. This would allow for these buildings to be fully open, occupied and operational during what would be expected to be a “peak” season.

3-Year Assessment (Summer 2026) - Additional projections were made for the summer of 2026 when it would be expected that the newest development downtown (The Webster) would be constructed and fully operational. Being complete in 2025, we are expecting that it would only be partially occupied in 2025. The 2026 projections also assume that a portion (35%) of the existing vacant space in the study area is reoccupied.

5-Year Assessment (Summer 2028) - A final projection completed reflecting five years in the future with not only the various known developments all operational but a higher proportion (75%) of the existing vacant space in the study area is occupied.

Parking Data

Study Area – As shown by **Figure 1 on page 4**, the study area consists of seven defined blocks. Within the study area there is a mixture of public facilities including Riverside Park with its 320-seat amphitheater, as well as the 233-space parking garage. Private facilities include numerous commercial buildings housing various businesses and offices, as well as several mixed-use buildings which include commercial businesses and residential units. The downtown has an increasing residential population due in part to these new buildings as well as several residential townhomes, apartments and condominiums with attached parking.

Parking Supply

The total parking supply within downtown Auburn Hills, at the time of the occupancy counts, totaled 1,045 spaces. This consisted of 589± spaces designated for private use which represents 56 percent of the total supply, with the balance of 456± spaces (44%) designated as publicly available. The private supply included 100 spaces in the public garage which are signed as reserved spaces (presumably for the residents of the adjacent Auburn Square Apartments) as well as spaces within private areas serving several residential developments or the spaces in the adjacent lots.

Rich defines public and private parking supply in the following manner:

Public Parking – is defined as available to anyone regardless of their destination. Although it may be time limited (such as on-street parking), the parking patron may visit any destination they wish.

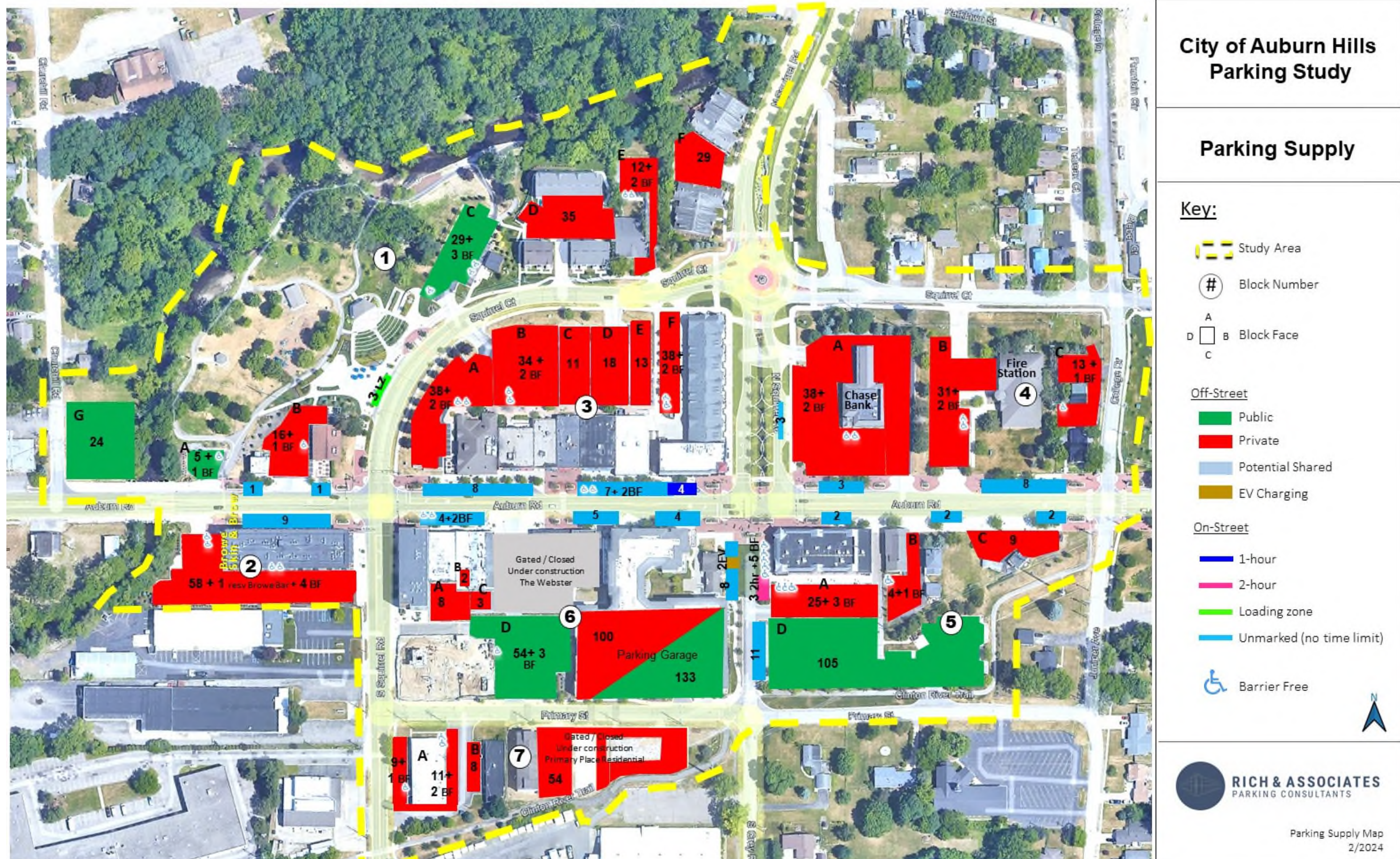
Private Parking – is restricted only to residents, staff or patrons of the business or entity which owns the parking. In the case of commercial businesses, the patron would be expected to move their vehicle at the conclusion of their visit to make the space available for the next customer.

Table 1 below and **Map 1** on the following page demonstrates the parking supply as it existed at the time of the field data collection.

Table 1 – Parking Supply Summary

	PRIVATE					PUBLIC											
BLOCK	OFF-STREET				TOTAL PRIVATE	OFF-STREET			ON-STREET							TOTAL PUBLIC	TOTAL SUPPLY
	HC	(LOT/DECK)	RESIDENTIAL	Residential HC		DECK	NO LIMIT	HC	NO LIMIT	1-HR	2-HR	EV	HC	LOAD ZONE			
1	3	28	64	0	95	0	58	4	2	0	0	0	0	3	67	162	
2	0	0	59	4	63	0	0	0	9	0	0	0	0	0	9	72	
3	4	114	38	2	158	0	0	0	15	4	0	0	2	0	21	179	
4	5	82	0	0	87	0	0	0	14	0	0	0	0	0	14	101	
5	1	13	25	3	42	0	105	0	17	0	3	0	5	0	130	172	
6	0	13	100	0	113	133	54	3	21	0	0	2	2	0	215	328	
7	3	28	0	0	31	0	0	0	0	0	0	0	0	0	0	31	
TOTAL	16	278	286	9	589	133	217	7	78	4	3	2	9	3	456	1,045	

Map 1 - Downtown Parking Supply



Residential Parking Supply

Because of the significant impact the residential supply and needs have on downtown parking in fulfilling its role to make for a vibrant, pedestrian-oriented community and reducing the reliance on private automobiles, the amount of parking dedicated to residential needs should be considered. Residents generally want their vehicles parked relatively proximate to their living quarters. When residential parking is located on adjacent blocks the apartment or condominium may not be as attractive.

Rich analyzed several existing developments and compared the number of residential units to the number of provided parking spaces on site. As **Table 2** demonstrates, the Riverside Townhomes and Mocerri Condos are providing nearly 2.5 spaces per dwelling unit. The Astoria Park Condominiums with 22 garage spaces and an additional 18 surface lot spaces is nearly 2.7 spaces per dwelling unit. On the other end of the spectrum, the Jordan is providing just 1.25 spaces per unit, the six residential units in the MiL have no on-site spaces provided, while the Auburn Square apartments rely upon the 100 designated reserved spaces in the adjacent public parking garage. Combined, these facilities are providing 1.37 spaces per dwelling unit.

Table 2 – Parking Provided Residential Units

		At Time of Occ Counts				Spaces				
		Residential Units		Office Square Ftge		Active Aug 2023 (Y / N)	Garage	Lot	Total	Spaces / Unit
Block	Development Name	Total	Vacant	Total	Vacant					
1	Riverside Townhomes	14	0			Y	14	21	35	2.50
1	Mocerri Condos Riverwalk	12	0			Y	12	17	29	2.42
2	The Jordan	48	2			Y	0	63	63	1.26
3	Astoria Park Condos	15	0			Y	22	18	40	2.67
6	The MiL	6	1	12,591	400	Y	0	0	0	0.00
6	Auburn Sq Apartments	97	0			Y	100	0	100	1.03
	TOTALS	192	3				148	119	267	1.37

These values contrast with the number of spaces being provided by the three new developments recently completed or planned. While residents at Primary Place will have the benefit of three spaces dedicated to each unit due to each having two tandem-parked garage spaces in addition to one space outside each garage, the Webster and Brunswick will be lacking on-site parking. These three new developments are only providing 0.61 spaces per dwelling unit.

When these new developments are combined with the developments evaluated in **Table 2** above, the average parking generation rate is just 1.08 spaces per dwelling unit. (Refer to **Table 3 on page 10**). This may be insufficient depending on the number of multi-bedroom units in the developments. It is expected however, that spaces needed for residents living in the Webster and Brunswick will be accommodated in the planned expansion of the Primary Street parking garage.

A unique condition with residential parking spaces is that these parking stalls typically cannot be made available to anyone but the residents nor can spaces at one residential development be shared with residents from another development. Residents generally want to be assured that when they need their parking space(s) that they will be available for them regardless of time of day.

Table 3 – Combined Residential Spaces Provided

Block	Development Name	Residential Units			Spaces			Spaces / Unit
		Fall 2023	New Resid'tl	Total Resid'tl Units	Garage	Lot	Total	
	Residential Units (Summer 2023)	195		195	148	119	267	1.37
6	The Brunswick (Fall 2023)	18		18	0	0	0	0.00
6	The Webster (Summer 2026)		88	88	0	21	21	0.24
7	Primary Place (Fall 2023)	18		18	36	18	54	3.00
	Three New Developments	36	88	124	36	39	75	0.61
	Occupied Residential Units	231	88	319	184	158	342	1.08

Land Use Data

Downtown Auburn Hills has approximately 128,000 sf of building space, not including residential space, with nearly 102,000 sf occupied. This includes approximately 33,000 sf of office space, 12,000 sf of medical office space, 35,000 sf of retail and personal service space, 20,000 sf of restaurant space and 26,000 of space determined to be vacant. At the time of the field data collection, there were 194 residential units within the seven-block study area. In addition, Riverside Park, a 320-seat amphitheater, accommodates musical and other performances. These buildings and facilities all contribute to the demand for parking within the downtown.

Table 4 – Land Use Summary – August 2023

	2023 Summer Square Footage Values													
		VACANT	MED					VACANT	MUSIC			Total		
Block	OFFICE	OFFICE	OFFICE	RETAIL	SERVICE	RESTAURANT	RESIDENTIAL	RESIDENTIAL	VENUE	COMMUNITY	VACANT	Occupied SF	Total Vacant SF	Total Block SF
Daytime							RDU's		Seats					
1	0	0	0	0	2,128	2,146	28	0	320	0	3,276	4,274	3,276	7,550
2	3,191	0	0	0	3,225	0	46	2	0	0	0	6,416	0	6,416
3	2,795	0	0	8,275	4,654	6,233	15	0	0	0	11,109	21,957	11,109	33,066
4	2,886	0	0	5,450	3,881	0	0	0	0	0	0	12,217	0	12,217
5	11,700	0	9,414	650	0	0	0	0	0	0	9,009	21,764	9,009	30,773
6	12,191	400	2,097	1,260	0	11,669	102	1	0	1,976	400	29,193	400	29,593
7	0	0	0	890	4,949	0	0	0	0	0	2,670	5,839	2,670	8,509
Total	32,763	400	11,511	16,525	18,837	20,048	191	3	320	1,976	26,464	101,660	26,464	128,124

The parking assessment methodology employed by Rich uses a shared-use analysis. This concept recognizes that different groups tend to peak at different times of the day and therefore, potentially

parking spaces used by one group may be available to patrons of another group with a different peak time. The amount of parking needed by each of the various land use categories is determined by applying **parking generation rates** which are typically the number of spaces needed per 1,000 sf or per residential unit. In its simplest form, the number of spaces can be quantified through the application of the municipalities zoning ordinance applied to the square footage or residential unit values although, in Rich's experience, these values tend to overstate the amount of parking required because they often do not consider shared use.

However, parking is not required to be provided in downtown Auburn Hills.

Off-Street Parking Requirements: *Off-street parking shall not be required.* If off-street parking is voluntarily provided, it shall meet the applicable requirements of Sections 1804 and 1805. Off-street parking shall be located in the rear of the building.

Parking Utilization Study

A key component of Rich & Associates' study methodology is the review of how the parking is actually being used within a defined downtown study area. Accomplished via the parking utilization study, this analysis periodically records the number of on-street and off-street spaces occupied throughout one or more survey days. This provides not only a critical demonstration of how and when parking is being used but, more importantly, can help provide the parking generation rates when the occupied square footage or number of residential units is compared to the observed parking patterns.

In the case of Auburn Hills, the counts were conducted over three days (Wednesday August 9, 2023, Friday August 11th and Saturday August 12th). The counts were conducted every two hours between 11:00 am and 11:00 pm on each of the three dates.

As part of the parking utilization study, not all spaces were physically inventoried. The analysis included 997± of the 1,045± available spaces within the study area. The 48± spaces that were not included were spaces in the private garages beneath the Riverside Townes, Riverwalk Apartments and the Astoria Park Condominiums. The surface lots adjacent these facilities were included but, in Rich's opinion, it would be inaccurate to base the occupancy of parking related to these apartments based on the parking in

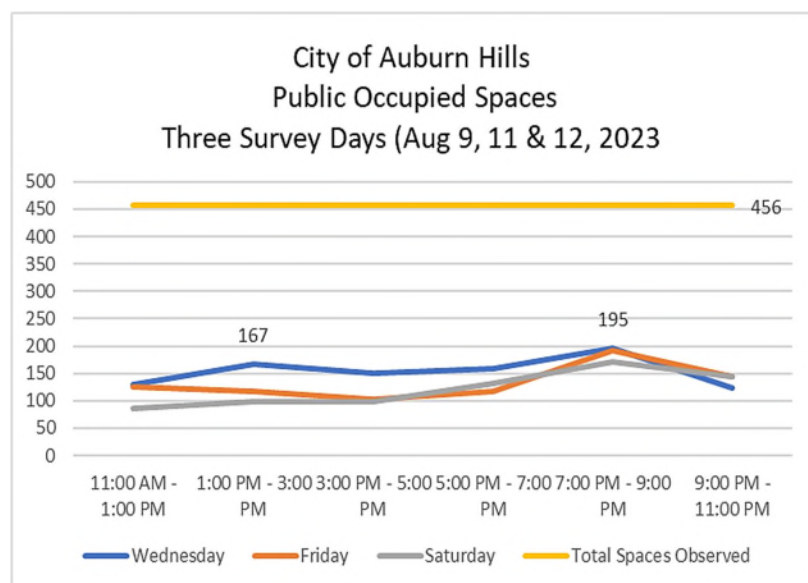


Figure 3 - Public Space Occupancy

the visible surface spaces. **Map 2 on page 13** shows the spaces that were included as part of the utilization analysis.

In evaluating the public / private occupancy, Rich made some assumptions in allocating the occupancy of the spaces in the existing parking garage to public or private. The placement of the signs designating reserved spaces are placed on the wall at the front of the stall. It was not possible for the surveyors to easily see this sign. Rich therefore prorated the garage occupancy to public versus private in the same proportion that the total spaces were allocated. With this adjustment the total 456± public spaces occupancy could be shown. The analysis then demonstrated that at peak time, 195 (43%) of the public spaces were occupied. For the visible private spaces, just 34 percent were occupied at peak time.

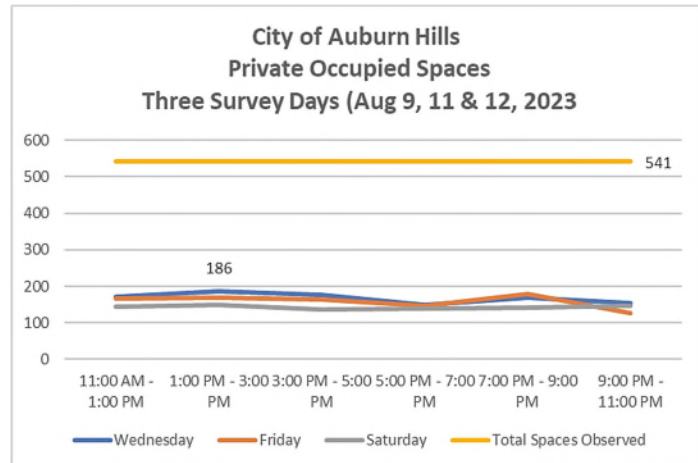


Figure 4 - Private Space Occupancy

On-Street Parking

As previously noted, Rich uses the utilization study to demonstrate how the parking is currently being used and thus applies this information in determining how future needs may be accommodated. In many downtowns, the on-street spaces are often heavily used because they offer not only convenience to specific destinations, but as public spaces, allow a patron to visit more than one destination without the need to move their vehicle. When a patron parks in a private lot, they are generally expected to move their vehicle

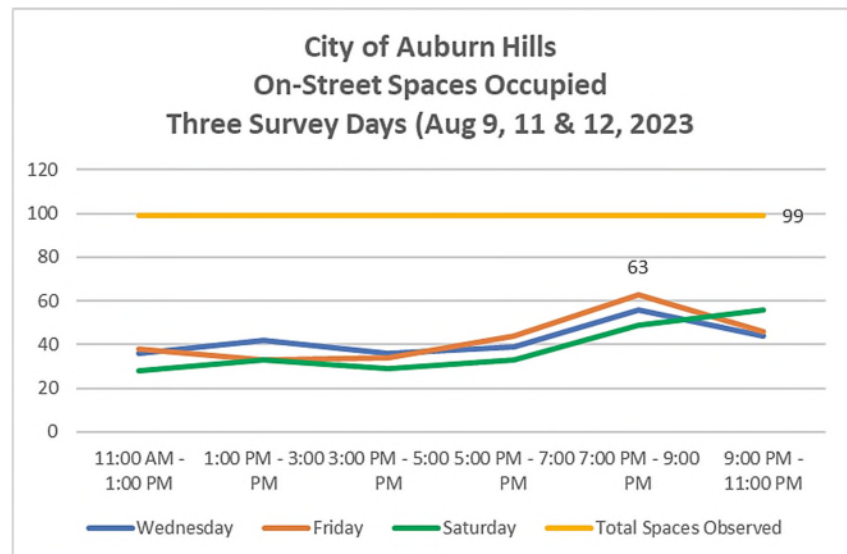
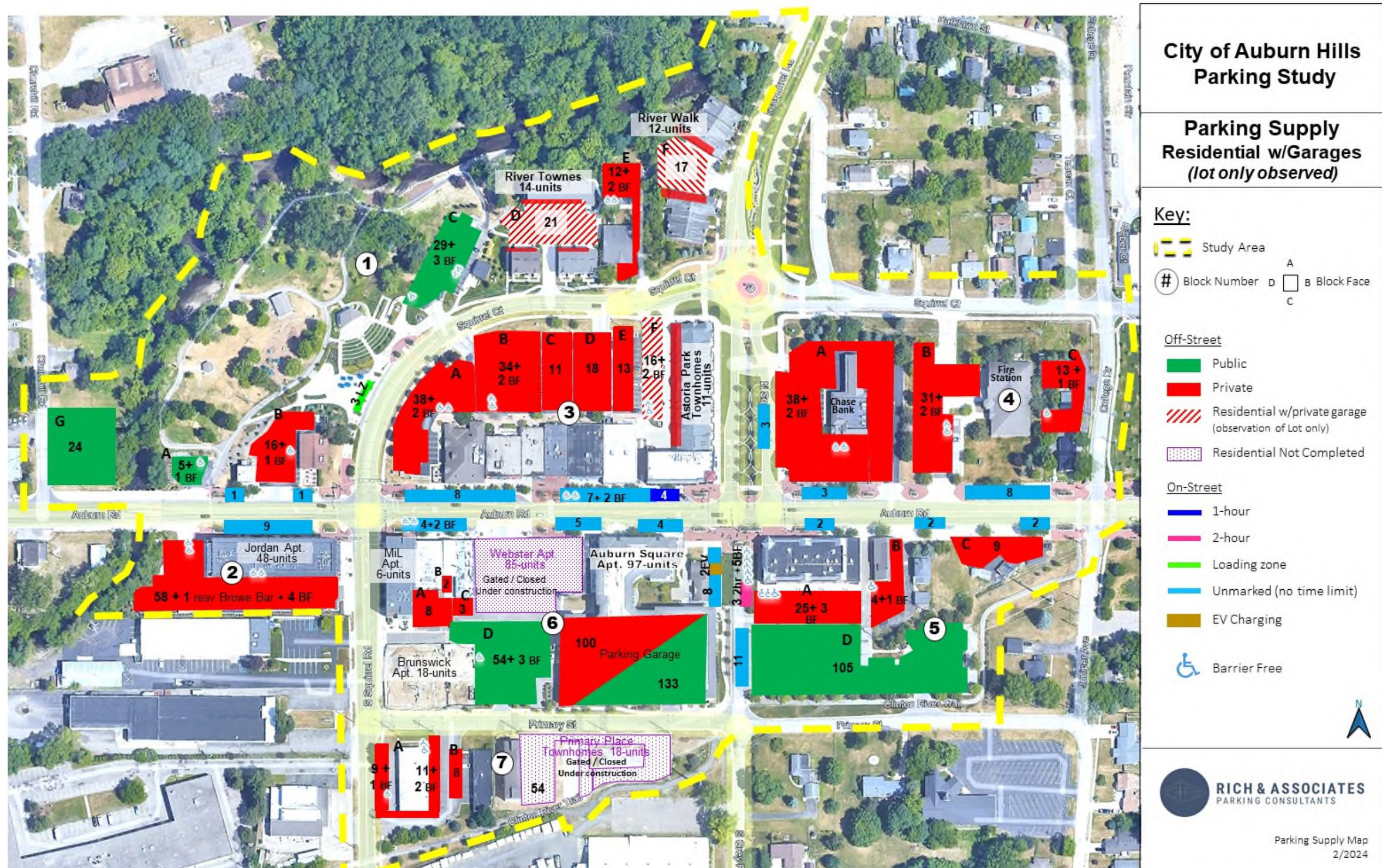


Figure 5 - On-street Parking Occupancy

if they intend to visit a destination not associated with the parking. The data shows that at peak time (Friday 7:00 pm – 9:00 pm), 63 of 99 or (64%) of the on-street spaces were occupied.

Map 2 - Observed Parking Spaces Parking Utilization Study



Public Off-Street Parking

The number of spaces occupied in the public designated spaces shown in **Map 2** on the preceding page were all evaluated. This data showed that at the highest value obtained just 98 of 224 or (44%) of the public off-street supply was occupied.

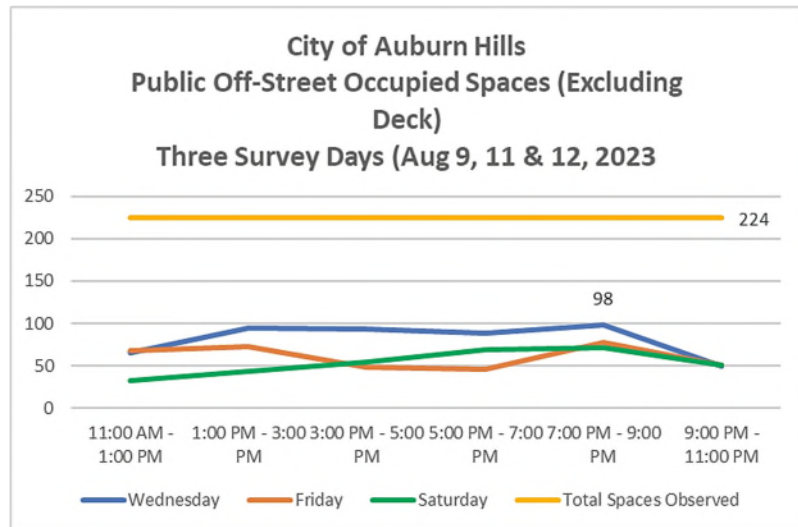


Figure 6 - Public Off-Street Occupancy by Time of Day

Handicap Parking Occupancy

Within the downtown there are also 16 designated barrier-free (handicap accessible) spaces in public facilities and on-street. It is important to review the occupancy of these spaces to determine if, at a high utilization rate, additional spaces should be provided. Rich therefore generally analyzes the occupancy of handicap spaces separately. **Figure 7** shows that of the 16 designated spaces at peak time, 8 spaces were occupied during the 7:00 pm to 9:00 pm period on the Friday observation date. On the Wednesday survey date at this same time, 6 spaces were occupied.

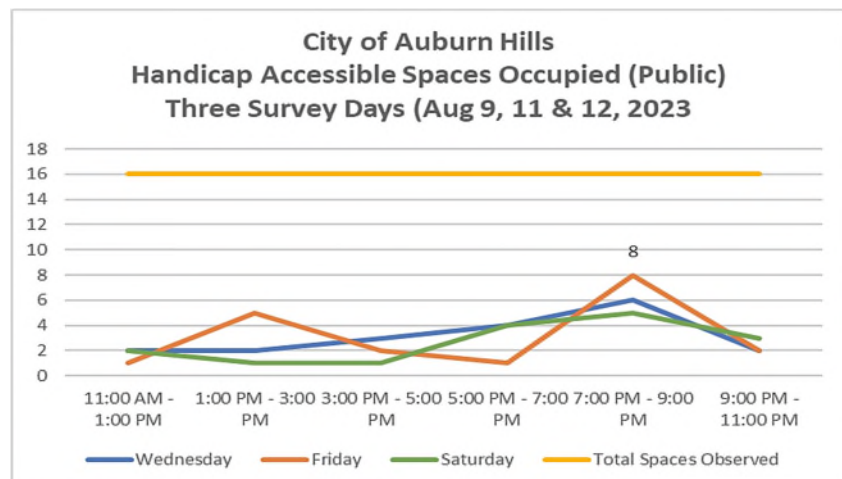


Figure 7 – Handicap Occupied Spaces (Public)

Parking Deck Occupancy

Rich also evaluated the occupancy by time of day in the existing 233-space parking garage. This analysis showed that, at peak time, just 91 spaces were found occupied coinciding with the 9:00 pm to 11:00 pm time period on the Wednesday survey date. At this same time on the Friday survey date, the number of occupied spaces was 85 and down to 77 during the Saturday observations.

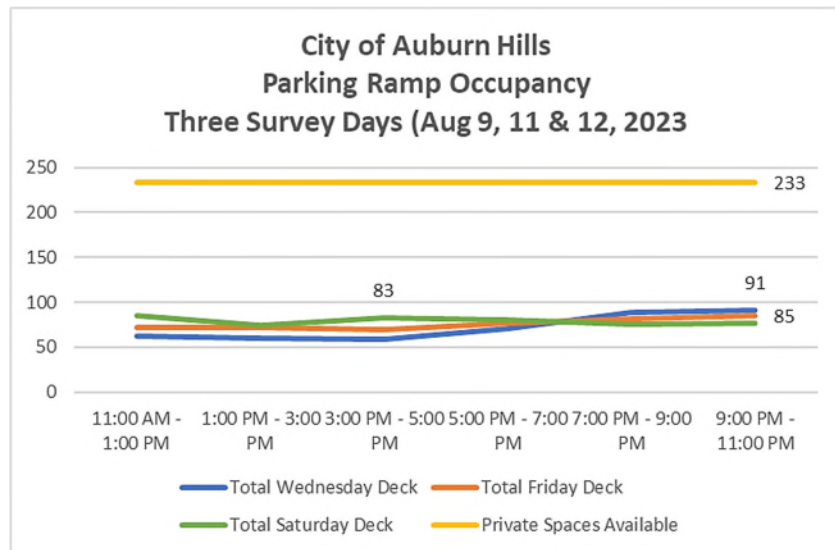


Figure 8 - Parking Ramp Occupancy

Residential Parking Occupancy

As mentioned previously, Rich uses the number of parking spaces occupied in order to calibrate the parking demand model. This data is used to help calculate the number of parking spaces needed by time of day per 1,000 square feet of land use. However, in the case of residential uses, the calculation is per dwelling unit. Because 48 of the designated residential spaces were in enclosed garages that Rich could not evaluate, Rich used a different method to extrapolate the residential occupancy.

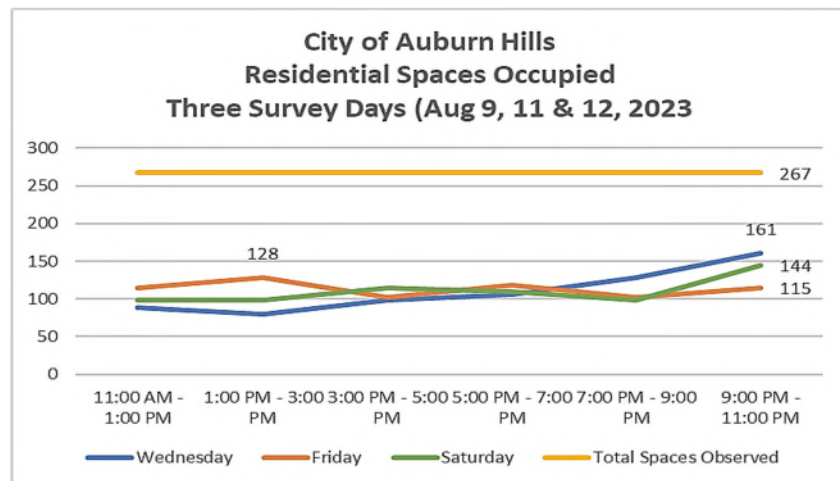


Figure 9 - Residential Parking Occupancy

The Jordan is the only downtown residential development operating at the time where all 63-spaces available to the residents could be observed. The surface lot spaces at Riverwalk Apartments (17), Riverside Town (Moceri Condos – 21 spaces) and Astoria Park Condos totaled 56 spaces. Adding the 48 spaces in the enclosed garages for these developments' totals 104 spaces for the condos. Applying the occupancy as observed for the Jordan to these 104 residential spaces plus the 100 reserved spaces in the existing parking garage provided the expected number of occupied spaces. These values could then be added to the observations of the other public and private parking to derive the occupancy within the

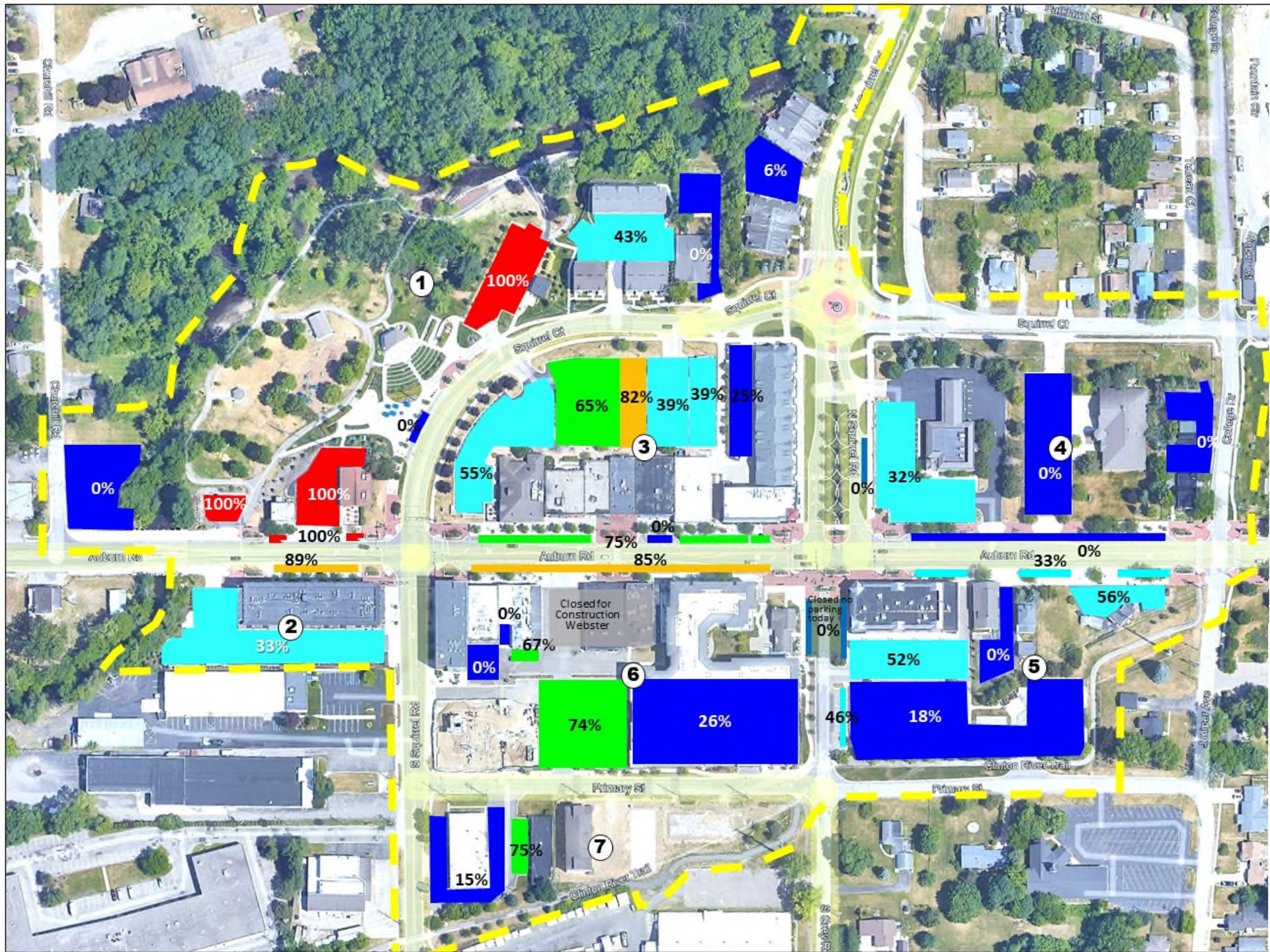
downtown by time of day. This analysis and **Figure 9** shows that at peak time (at the time of the field observations) 161 residential spaces would be expected to be observed as occupied.

An important point to be made is that although more than 100 spaces are shown as unoccupied, it would not be proper to assume that residents would generally be able to use surplus residential spaces at another development. Those are generally reserved just for residents and guest whether used or not.

Observed Parking Occupancy by Time of Day by Location

Rich has prepared a series of maps showing the number of spaces observed occupied in each of the various on and off-street parking areas. **Map 3** on the following page shows what this may look like reflecting the 1:00 pm to 3:00 pm period on the Wednesday survey date which was found to be the highest occupancy observed. Maps showing all the time periods for the three survey dates are included in the **appendix** of this report.

Map 3 – Turnover/Occupancy Wednesday 1:00-3:00 August 9, 2023



City of Auburn Hills
Parking Study

Turnover/Occupancy
1:00 PM – 3:00 PM

Wednesday, August 9, 2023

Key:

Study Area

- 0% - 30%
- 31% - 60%
- 61% - 80%
- 81% - 90%
- 91% - 100%

A
D # B
C

Block # / Face



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Parking Demand Model

Although the maps, tables and graphs show the extent of parking utilization in downtown Auburn Hills, they do not show what groups are experiencing parking shortages. Rich uses a parking demand model which applies **parking generation rates** to each land use. The calculated demand is initially compared to the observed parking occupancy in order to validate that the values are reasonably representing the parking needs. As noted, the utilization study in addition to showing how and where the parking is being used, is used to show the parking needs by time of day.

Figure 10 shows the results of the observations. Because the counts were conducted every two hours, Rich extrapolates the values in-between as the mid-point between two adjacent observations. The graph shows the values that the calculated demand should approximate.

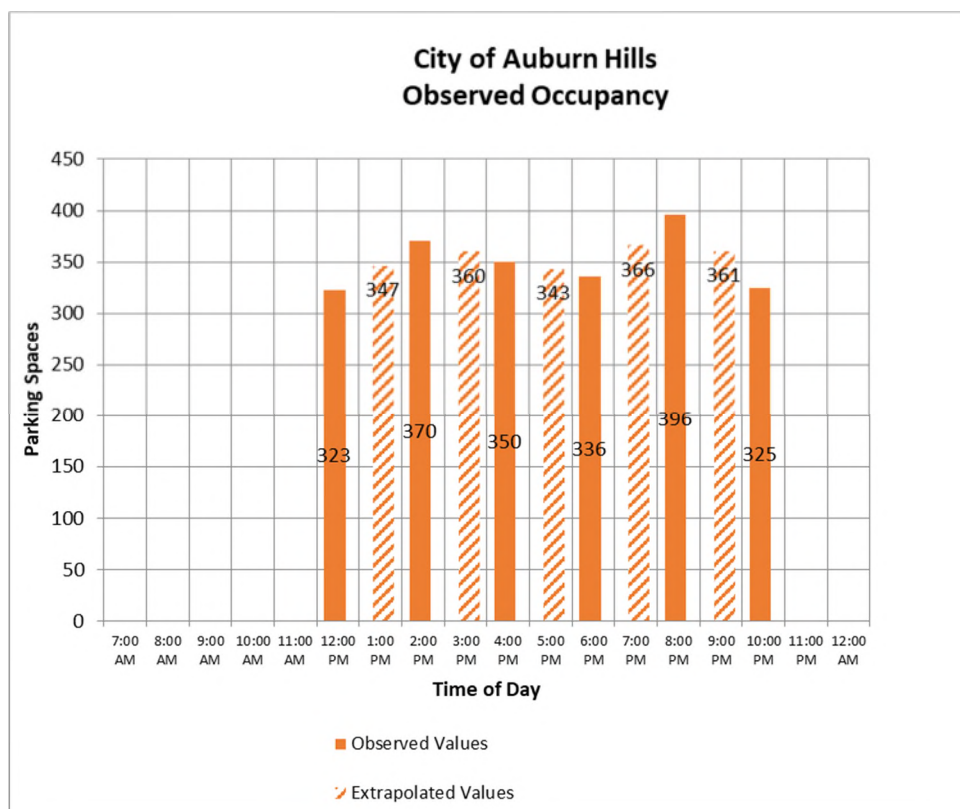


Figure 10 – Observed Parking Occupancy

Using the land use data as was shown by **Table 4**, Rich applied the parking demand values to the land-use values as determined by the model. Rich’s model uses a “*shared-use analysis*” which allows for the fact that different groups have different peaks at different times of the day.

Therefore, the spaces needed by one group may be available if the first group has not yet reached their peak needs or their peak period has passed. The model is based on ULI’s (Urban Land Institute) *Shared*

Use Manual – Third Edition. **Figure 11** on the following page, shows how the calculated parking needs at the time of the field data collection correspond to the observed values.

Table 5 shows the number of parking spaces needed by time of day and land use during the observed daytime peak (1:00 pm – 3:00 pm or 2:00 pm). The 32,763-sf allocated to occupied office uses at this time using the calculated parking generation rate of 1.53 shows that 50 spaces would be needed. The total non-residential demand is 288± spaces plus 90 spaces for the residential needs at this time of day.

The combined total calculated need is 376 spaces (378 rounding difference in calculations), which is close to the “observed” needs of 370 spaces.

Table 5 – Existing Surplus / Deficit by Block (August 2023) – Daytime

Block	2023 Summer Demand (August)													Gross Surplus / (Deficit)	Res'dl Surplus / (Deficit)	Net Surplus / (Deficit)
	OFFICE	MED OFFICE	RETAIL	SERVICE	RESTAURANT	RESIDENTIAL	MUSIC VENUE	COMMUNITY	Non-Resdl Demand	Public Supply	Private Supply	Total Supply	Residential Supply			
Daytime						per R.D.U.	Per Seat									
	1.53	2.17	2.48	2.44	5.34	0.47	0.03	4.55								
1	0	0	0	5	11	13	10	0	26	67	31	98	64	136	51	67
2	5	0	0	8	0	22	0	0	13	9	0	9	63	59	41	(4)
3	4	0	21	11	33	7	0	0	69	21	118	139	40	110	33	21
4	4	0	14	9	0	0	0	0	27	14	87	101	0	74	0	14
5	18	20	2	0	0	0	0	0	40	130	14	144	28	132	28	104
6	19	5	3	0	62	48	0	9	98	215	13	228	100	230	52	130
7	0	0	2	12	0	0	0	0	14	0	31	31	0	17	0	0
Total	50	25	41	46	107	90	10	9	288	456	294	750	295	757	205	333

As **Figure 11** on **page 20** shows, the observed and calculated peak period coincided with the 7:00 pm to 9:00 pm period (8:00 pm) when 396± spaces observed occupied. Adding the non-residential (251±) spaces calculated for this period to the 149± spaces expected to be occupied in the residential locations show a total of 399 calculated spaces which is very close to the observed values. As **Figure 11** shows, similar correlation was shown for the other hours throughout the day. This suggests that the parking generation rates determined by the model can reasonably demonstrate the parking needs when applied to the different square footage amounts by land use. The parking generation rates for each category generally reflect the number parking spaces needed at that time of day per 1,000 square feet. For example, on Block 3, there is 8,275 sf of retail space. Applying $1.27 \times 8,275 = 11$ spaces needed at 8:00 pm.

Table 6– Existing Surplus / Deficit by Block (August 2023) - Evening

Block	2023 Summer Demand (August)													Gross Surplus / (Deficit)	Res'dl Surplus / (Deficit)	Net Surplus / (Deficit)
	OFFICE	MED OFFICE	RETAIL	SERVICE	RESTAURANT	RESIDENTIAL	MUSIC VENUE	COMMUNITY	Non-Resdl Demand	Public Supply	Private Supply	Total Supply	Residential Supply			
Evening						per R.D.U.	Per Seat									
	0	0	1.27	1.8	5.04	0.78	0.27	4.55								
1	0	0	0	4	11	22	86	0	101	67	31	98	64	61	42	(3)
2	0	0	0	6	0	36	0	0	6	9	0	9	63	66	27	3
3	0	0	11	8	31	12	0	0	50	21	118	139	40	129	28	21
4	0	0	7	7	0	0	0	0	14	14	87	101	0	87	0	14
5	0	0	1	0	0	0	0	0	1	130	14	144	28	171	28	130
6	0	0	2	0	59	80	0	9	69	215	13	228	100	259	20	159
7	0	0	1	9	0	0	0	0	10	0	31	31	0	21	0	0
Total	0	0	21	34	101	149	86	9	251	456	294	750	295	794	146	324

With the parking demand appearing to be reasonably portrayed, the next step in the process is to compare the demand for parking on each block to the available supply on each block. As noted in **Tables 5 and 6** above several surplus / deficit values are shown for each block. The first surplus / deficit value shown is the “gross surplus / deficit”. This is simply the comparison of total parking demand against total parking supply. Although this is shown, in Rich’s opinion, this value is erroneous because it assumes that surplus private spaces would be available to patrons from another entity that may have a shortfall.

The more appropriate value, in Rich’s opinion, is the “Net Surplus / Deficit”. This compares the parking demand against the private supply on a block first and if there are surplus spaces these extra parking spaces are eliminated from the calculation. However, if the private spaces don’t exceed the demand, then the total supply (public & private, non-residential) are compared to the demand. As **Table 6** shows, Block 1 would be in deficit due in part to the calculated demand from attendance at an event in Riverside Park. As **Table 5** shows, given the current conditions during the daytime hours (at the time of the occupancy counts) one of the blocks would be in a deficit condition.

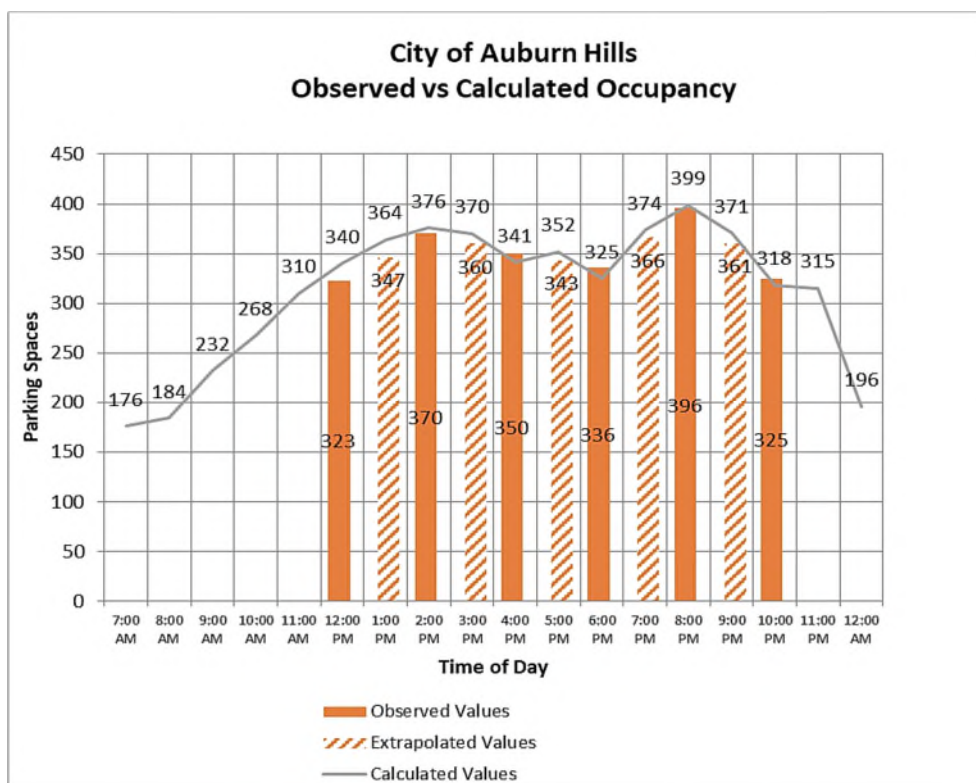
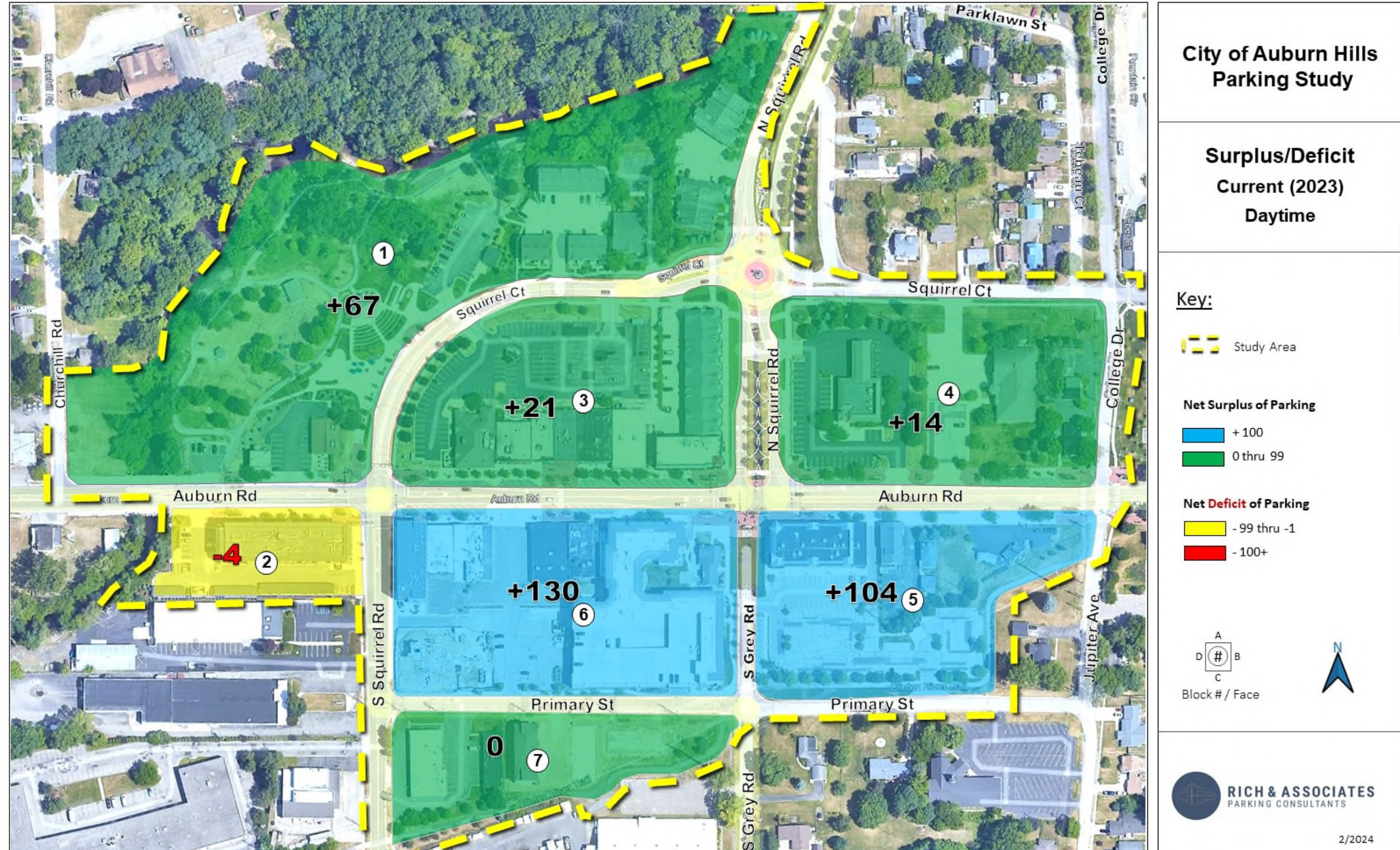


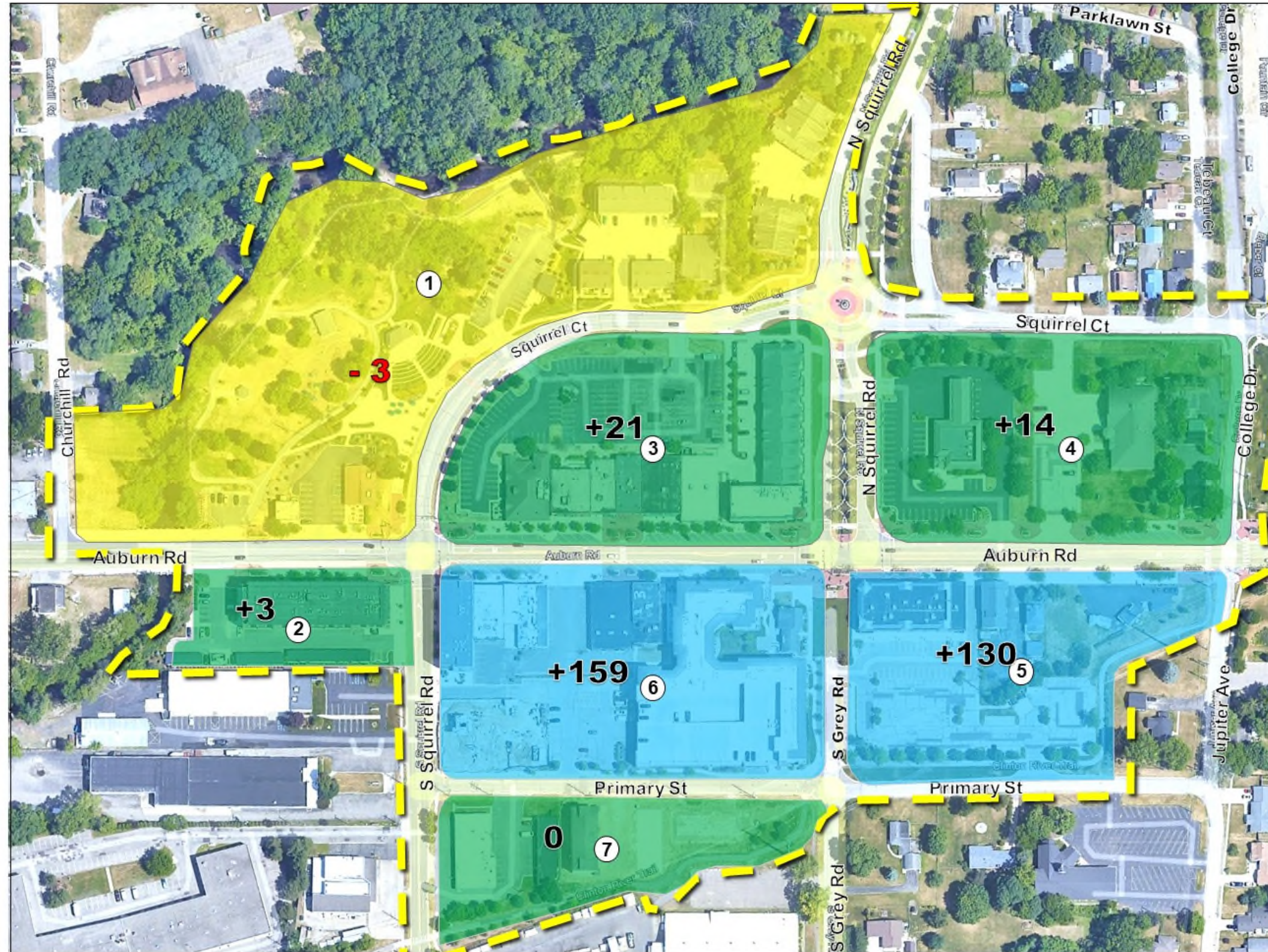
Figure 11 – Observed vs. Calculated Parking

The parking surplus / deficit conditions are illustrated **Maps 4 and 5** on the following pages.

Map 4 – Current Surplus/Deficit - Day




Map 5 Current Surplus / Deficit – Evening





City of Auburn Hills Parking Study

Surplus/Deficit Current (2023) Nighttime



Key:

 Study Area

Net Surplus of Parking

 + 100
 0 thru 99

Net Deficit of Parking

 - 99 thru -1
 - 100+

A
D # B
C
Block # / Face



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2/2024

Future Parking Projections

At the time that the fieldwork in downtown Auburn Hills was in process, there was a significant amount of development in progress. The data collection during the summer of 2023 combined with the fact that several projects were not expected to be operational until fall 2023, meant that the demand from these in-progress properties would not be included as part of the observed parking demand analysis completed in August. The observation of downtown parking is designed with two purposes. One, to see how the parking is actually being used in terms of locations parked and lengths of stay. The second purpose is to calibrate the parking demand model to be created. As such, it is important that the observed values be compared just to the businesses in operation at that time. Therefore, Rich reflected the “current” demand to the conditions as they existed in August 2023. During early fall 2023, construction of the Webster began. This project was expected to be completed no later than August 2025. Much of the activity, and potential parking deficits, centers around block 6 which is bounded by Auburn Road, Primary Street, South Squirrel Road and South Grey Road. This block is also where the existing and planned garage expansion is located.

1-Year Projections (2024)

Projects that would be in operation in Fall 2023 included The Brunswick, Primary Place and elements of “The Mil”. Since it would not be expected that these projects would be fully occupied during fall season of 2023, Rich elected to provide a forecast 1 year (summer 2024) in the future in order to allow this to occur.

2-Year Projections (2025)

By late summer/early fall 2025 (2-year forecast), data provided by the city showed that the Webster would be complete. However, the Webster is only providing 21 spaces beneath the building that Rich anticipates would be intended for use by the 1st floor commercial space although they could be used by residents. At this same time, it was reported that the anticipated garage expansion, which would need to provide for most of the Webster’s residents, is not anticipated to begin construction until spring 2026. Assuming a 10-month construction period, such a schedule means that the garage would not be completed until late 2026/early 2027 to accommodate the Webster’s residents.

Additionally, the city anticipates eliminating some surface spaces east of The DEN (on south Grey Road) and down towards Primary Street (29 total spaces) to make a public gathering space downtown. Expected to start construction in 2024, Rich anticipates that this would be completed by the time of the 2025 demand projections (late summer/early fall 2025).

3-Year Projections (2026)

At the time of this report (fall 2023), The Webster is in very early stages of construction with the completion date noted above. By late summer/early fall 2026, it would be anticipated that the Webster would be 100 percent occupied (or very close to this). However, as noted, the garage would still be under construction and thus not able to accommodate residents of the Webster. The 2026 projections

therefore show the parking demand with 100 percent occupancy of the Webster, but insufficient parking supply for residents.

4-Year Projections (2027)

Given the anticipated schedule for completion of the Webster and the planned parking garage expansion (late 2026/early 2027), Rich is showing the parking demand versus supply for fall 2027. At this time, a portion of the 172± net added spaces from the parking garage expansion can be allocated for use by Webster residents and other unaccommodated residents from developments on block 6.

5-Year Projections (2028)

Rich has also prepared a projection reflecting anticipated conditions five years in the future. At the time of the fieldwork, approximately 26,000 sf of space was unoccupied. Some of this was projected to be occupied by Fall of 2023 and therefore is shown as occupied by the time of the 1-year projections (Fall 2024). By the time of the five-year forecast, approximately 75 percent of the 26,000 vacant square feet is being assumed as occupied. Additionally, the five-year forecast provides for the proposed redevelopment resulting from several single-story buildings between 3306 and 3320 Auburn Road into a four-story mixed-used development of retail and residential space.

One-Year Forecast (2024)

One-Year Square Footage Change

Projecting the parking demand one year in the future would allow for full occupancy of “The Brunswick”, Primary Place and The MiL. **Table 7** below, compared to the square footage shown for the existing conditions at the time of the fieldwork demonstrated by **Table 4**, shows that nearly 12,000 sf has been added to the office uses, 8,200 sf for additional restaurant use and 39 new residential units. These 39 residential units include 3 units that were shown as vacant at the time of the current assessment plus 18 units each in the Brunswick and Primary Place developments.

Table 7 – One-Year Building Occupancy

Block	2024 SUMMER Square Footage Values										Total Occupied SF	Total Vacant SF	Total Block SF
	OFFICE	MED OFFICE	RETAIL	SERVICE	RESTAURANT	RESIDENTIAL RDU'S	VACANT RESIDENTIAL	MUSIC VENUE Seats	COMMUNITY	VACANT			
Daytime													
1	0	0	0	2,128	2,146	28	0	320	0	3,276	4,274	3,276	7,550
2	3,191	0	0	3,225	0	48	0	0	0	0	6,464	0	6,464
3	2,795	0	8,275	4,654	6,233	15	0	0	0	11,109	21,972	11,109	33,081
4	2,886	0	5,450	3,881	0	0	0	0	0	0	12,217	0	12,217
5	11,700	9,414	650	0	2,009	0	0	0	0	7,000	23,773	7,000	30,773
6	24,087	2,097	1,260	0	17,894	121	0	0	1,976	0	47,435	0	47,435
7	0	0	890	4,949	0	18	0	0	0	2,670	5,857	2,670	8,527
Total	44,659	11,511	16,525	18,837	28,282	230		320	1,976	24,055	121,992	24,055	146,047

One-Year Daytime Demand

As the current demand showed, only one block had a minimum calculated deficit. All other blocks had net surpluses. However as noted above, additional office space and residential buildings are coming on line during the Fall 2023 season. Therefore, Rich feels it is appropriate to project the demand with these additional needs. In order to allow time for the buildings (Primary Place and the Brunswick) to reach full occupancy, Rich is projecting the needs for Summer 2024.

In projecting the needs as will be shown for this future one-year period, Rich generally applied the parking generation rates as determined for the existing condition. However, the significant residential component and potential impact on downtown parking needs necessitated a slightly different approach. This is because spaces assigned or designated for residential needs because they are often in enclosed facilities or designated just for residents and their guest cannot be used by any other groups. Therefore, the parking generation rate that Rich is applying is 1.08 spaces per dwelling unit as was calculated in **Table 3**. This is the number of spaces (on average) being provided in downtown Auburn Hills for residential units.

Rich therefore uses the net surplus / deficit values which do not include residential demand or supply and calculates the residential surplus / deficit separately because of the reasons noted above that residential supply is not shared.

Table 8 – One-Year Surplus / Deficit Summary Daytime

2024 SUMMER Demand (Daytime) - BRUNSWICK, THE MIL & PRIMARY PLACE ALL OPEN & OCCUPIED																		
Block	OFFICE	VACANT OFFICE	MED OFFICE	RETAIL	SERVICE	RESTAURANT	RESIDENTIAL	VACANT RESIDENTIAL	MUSIC VENUE	COMMUNITY	VACANT	Non-Residl Demand	Public Supply	Private Supply	Total Supply	Residential Supply	Gross Surplus / (Deficit)	Res'dl Surplus / Deficit
Daytime							per R. D. U.			per Unit	0%							
1	1.53	0.00	2.17	2.48	2.44	5.34	1.08	0.00	0.03	4.55	2.70	26	67	31	98	64	136	34
2	5		0	0	8	0	52	0	0	0	0	13	9	0	9	63	59	11
3	4		0	21	11	33	16	0	0	0	0	69	21	118	139	40	110	24
4	4		0	14	9	0	0	0	0	0	0	27	14	87	101	0	74	0
5	18		20	2	0	11	0	0	0	0	0	51	130	14	144	28	121	28
6	37		5	3	0	96	131	0	0	9	0	149	148	13	161	100	112	(31)
7	0		0	2	12	0	19	0	0	0	0	14	0	31	31	54	71	35
Total	68	0	25	41	46	151	248	0	10	9	0	350	389	294	683	349	682	204

As **Table 8** demonstrates, six of the seven blocks using the net surplus / deficit figures would still have surplus or have parking supply be equal to their needs. Block 6 (encompassing the 18 units in the Brunswick plus the six residential units in the Mil) in addition to the 97 units at Auburn Square Apartments has a calculated 31-space residential deficit. This is because the 121 total units have a calculated need of 131-spaces compared to the 100 spaces shown as the supply which are the designated reserve spaces in the existing parking garage.

The deficit could be partially addressed because of the way the calculations are performed. The non-residential demand on block 6 is allocated first to the private non-residential supply on block 6. This results in a calculated 136-space deficit (13 private spaces – 149 spaces demanded = -136 “private” deficit). This 136-space deficit is offset by the 148 public spaces leaving the 12 space “net” surplus. Since the public supply includes spaces in the existing garage which are not currently dedicated to residential parking, the spaces could be allocated to the additional residential demand leaving just a 19-space residential deficit and 0 surplus on the parking supply.

This data is shown by **Maps 6 and 7** on the following two pages.

Map 6 – Net Surplus/Deficit Projected Daytime (One-Year)



Map 7 - Residential Surplus / Deficit Map Daytime (One-Year)



One-year Evening Demand

Table 9 shows the calculated parking demand during the evening hours reflecting the future one-year condition. As with the daytime example, because the number of spaces per dwelling unit does not change, Block 6 again has a 31-space residential deficit. Due to the patrons expected to be attending an event at Riverside Park, Block 1 has a calculated three-space shortfall as well. However overall, most blocks are in acceptable surpluses.

Table 9 – One-Year Evening Demand vs. Supply

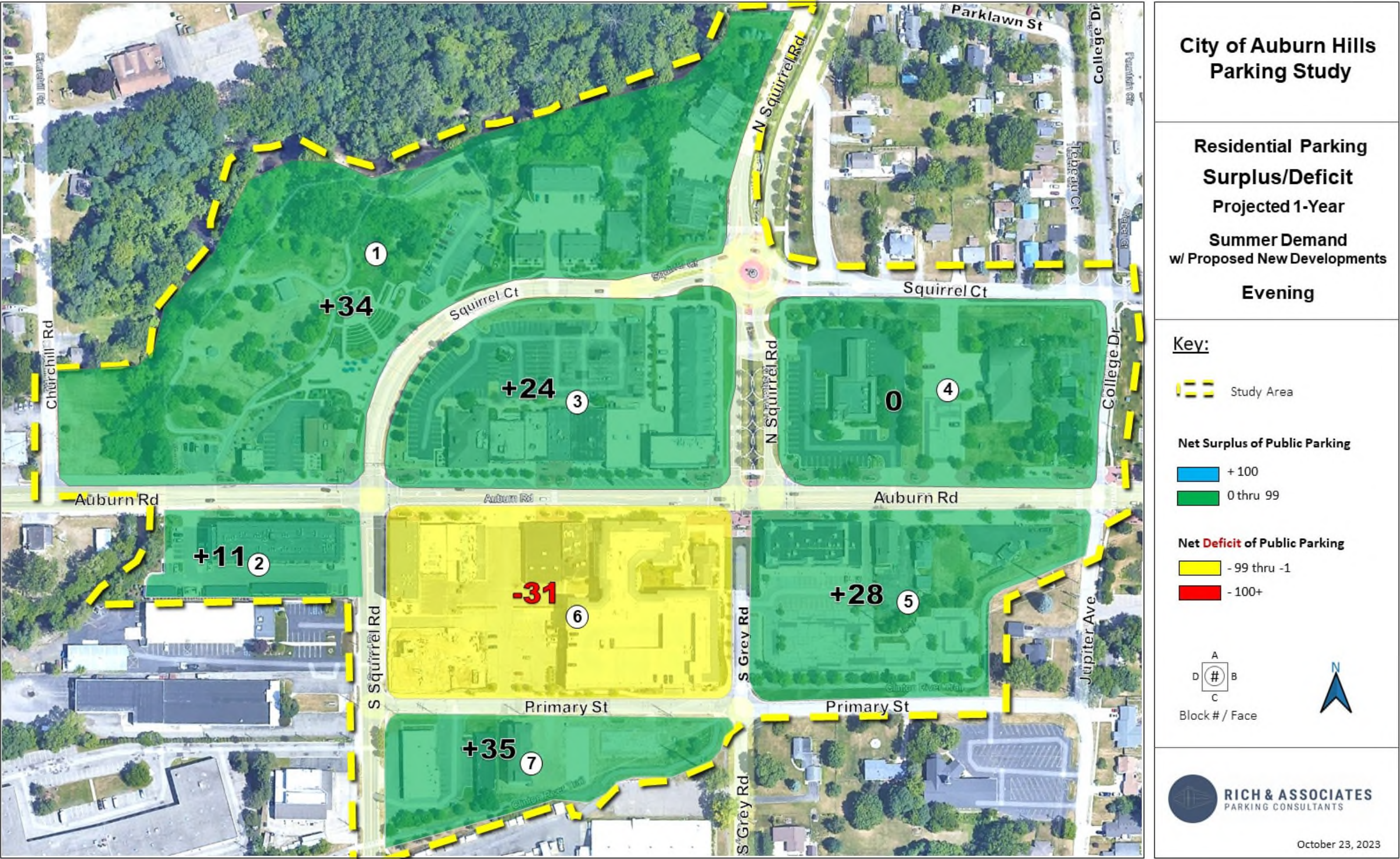
2024 SUMMER Demand (Evening) - BRUNSWICK, THE MIL & PRIMARY PLACE ALL OPEN & OCCUPIED																		
Block	OFFICE	VACANT OFFICE	MED OFFICE	RETAIL	SERVICE	RESTAURANT	RESIDENTIAL	VACANT RESIDENTIAL	MUSIC VENUE	COMMUNITY	VACANT	Non-Residl Demand	Public Supply	Private Supply	Total Supply	Residential Supply	Gross Surplus / (Deficit)	Res'dl Surplus / (Deficit)
							per R.D.U.			per Unit	0%							
1	0	0.00	0	1.27	1.7	5.04	1.08	0.00	0.27	4.05	1.56	101	67	31	98	64	61	34
2	0	0	0	0	5	0	52	0	0	0	0	5	9	0	9	63	67	11
3	0	0	0	11	8	31	16	0	0	0	0	50	21	118	139	40	129	24
4	0	0	0	7	7	0	0	0	0	0	0	14	14	87	101	0	87	0
5	0	0	0	1	0	10	0	0	0	0	0	11	130	14	144	28	161	28
6	0	0	0	2	0	90	131	0	0	8	0	100	148	13	161	100	161	(31)
7	0	0	0	1	8	0	19	0	0	0	0	10	0	31	31	54	75	35
Total	0	0	0	21	32	143	248	0	86	8	0	290	389	294	683	349	742	227

This data is also shown by **Maps 8 and 9** on the following two pages.

Map 8 – Net Surplus / Deficit Evening (One-Year)



Map 9 – Residential Surplus / Deficit Evening (One-Year)



Detailed Parking Demand Forecast

The provided schedule for the completion of the Webster, garage expansion and other developments leads to questions regarding the potential impact on downtown parking needs due to the lag between the Webster development and the planned parking garage expansion.

Two-Year Forecast (2025)

At the time of the report (fall 2023), the 88-unit Webster mixed-use development with ground floor commercial space was beginning construction. This project was anticipated to be completed no later than August 2025. However, the 88 residential units and 7,500± sf of ground floor commercial space are only supplied with 21 spaces beneath the building. With the garage expansion not anticipated to begin construction until the spring of 2026 with completion in late 2026/early 2027, there is the question of the impact on downtown parking demand during this period. **Table 10** below reflects the land use that would be in operation. The difference between this and the 2024 forecast are the 88 residential units in the Webster on block 6 and the nearly 7,500 square feet of anticipated restaurant space associated with this building.

Table 10 - Two-Year (2025) Land Use Summary

Block	2025 SUMMER Square Footage Values									Total Occupied SF	Total Vacant SF	Total Block SF
	OFFICE	MED OFFICE	RETAIL	SERVICE	RESTAURANT	RESIDENTIAL	MUSIC VENUE	COMMUNITY	VACANT			
Daytime						RDU'S	Seats					
1	0	0	0	2,128	2,146	28	320	0	3,276	4,274	3,276	7,550
2	3,191	0	0	3,225	0	48	0	0	0	6,464	0	6,464
3	2,795	0	8,275	4,654	6,233	15	0	0	11,109	21,972	11,109	33,081
4	2,886	0	5,450	3,881	0	0	0	0	0	12,217	0	12,217
5	11,700	9,414	650	0	2,009	0	0	0	7,000	23,773	7,000	30,773
6	24,087	2,097	1,260	0	25,370	209	0	1,976	0	54,999	0	54,999
7	0	0	890	4,949	0	18	0	0	2,670	5,857	2,670	8,527
Total	44,659	11,511	16,525	18,837	35,758	318	320	1,976	24,055	129,556	24,055	153,611

Also in 2024, the city is planning to develop a permanent public square on South Squirrel Road east of “The Den”. This will eliminate approximately 19 public spaces from the downtown supply from block 5, (block to the east of The Den) and 10 public spaces from block 6 (existing garage block). The total supply on this block is partially offset by the 21 private spaces added as part of the Webster.



Two-Year (2025) Parking Demand – Daytime

By late summer/early fall of 2025, the Webster will be completed and housing residents. As **Table 11** below demonstrates, completion and full occupancy of the Webster and anticipated ground floor restaurant space in 2025 could mean a residential parking deficit of as many as 126 spaces on block 6. For the non-residential demand compared to the non-residential supply, the deficit would be 8 spaces short on the net space basis. The net basis simply removes surplus private spaces from the calculation. These calculations assume that the 21 spaces beneath The Webster are allocated for the ground floor commercial space patrons and staff. Alternatively allocating the 21 spaces beneath The Webster for residential parking could reduce the residential deficit to 105± spaces but would increase the net deficit for non-residential demand versus supply from the calculated 8 spaces shown, to 29± spaces.

Table 11 - Two-Year (2025) Daytime Surplus Deficit Calculation

	2025 FALL Demand (Daytime) - BRUNSWICK, THE MIL PRIMARY PLACE & WEBSTER ALL OPEN & OCCUPIED																
		MED	RETAIL	SERVICE	RESTAURANT	RESIDENTIAL	MUSIC	COMMUNITY	VACANT	Non-Residl	Public	Private	Total	Residential	Gross	Res'dl	Net
Block	OFFICE	OFFICE					VENUE			Demand	Supply	Supply	Supply	Supply	Surplus /	Surplus /	Surplus /
Daytime						per R.D.U.		per Unit	10%						(Deficit)	Deficit	(Deficit)
	3.00	2.00	1.88	1.86	4.07	1.08	0.03	4.05	2.70								
1	0	0	0	4	9	30	10	0	1	23	67	31	98	64	139	34	67
2	10	0	0	6	0	52	0	0	0	16	9	0	9	63	56	11	(7)
3	8	0	16	9	25	16	0	0	3	61	21	118	139	40	118	24	21
4	9	0	10	7	0	0	0	0	0	26	14	87	101	0	75	0	14
5	35	19	1	0	8	0	0	0	2	66	111	14	125	28	87	28	59
6	72	4	2	0	103	226	0	8	0	190	148	34	182	100	92	(126)	(8)
7	0	0	2	9	0	19	0	0	1	12	0	31	31	54	73	35	0
Total	134	23	31	35	146	343	10	8	7	393	370	315	685	349	641		146

Residential Demand

The current deficit for residential parking of 126 spaces shown above is a function that just 100 spaces are currently allocated for residential use in the existing garage. The 226-space demand is the combined need from the various residential properties on this block such as The MiL, Brunswick, Auburn Square and The Webster. The 100-space residential supply which is all in the existing garage reflects the fact that none of the new residential properties are providing parking on site to accommodate their residential needs. At the time being demonstrated by this chart (fall 2025), the 178-spaces in the garage expansion will not yet be completed.

However, the residential deficit value needs some explanation. As was shown in **Table 3**, Rich calculated the residential parking generation rate (1.08 spaces per dwelling unit) based on the number of parking spaces provided in various properties. While this is a reasonable number, residential needs typically tend to experience their highest need very early in the day or very late in the evening when most residents are home.

- As such, if the 1.08 value is accepted as sufficient to accommodate all residential needs at peak time (late evening hours), then during the daytime hours, the residential parking generation rate could in fact be lower since Table 11 above reflects the parking demand during the *daytime* peak (approximately 2:00 pm). This means that the demand could actually be less than the 226 spaces needed.
- Also, if the spaces in the garage are not reserved only for use by residents, then any available or vacant spaces could be used by patrons to one of the non-residential categories (which is showing a

calculated 8-space deficit on block 6). If permitted to use these available spaces since they are not reserved 100 percent of the time, this could likely eliminate that small deficit.

- Finally, given that the Webster would just have opened (August 2025), the Webster may not be at the full occupancy shown since it is possible that the demand reflecting later summer or early fall may only see a portion of residents having moved in. The calculated 126 space deficit being shown for the 2025 time period on block 6 for the residential category may actually be higher than the values that would actually be experienced at that time.

Table 12 below shows the possible residential deficit on block 6 with The Webster at less than full occupancy.

Table 12 - Block 6 Alternative Deficit Analysis at Varying Webster Occupancy Rates (Daytime)

Other Bldg Demand	Webster Occupancy Rate	Webster Demand	Total Residential Units	Residential Demand (1.08 / DU)	Designated Residential Supply	Surplus / (Deficit)
121	100%	88	209	226	100	(126)
121	90%	79	200	216	100	(116)
121	80%	70	191	206	100	(106)
121	70%	62	183	198	100	(98)
121	60%	53	174	188	100	(88)
121	50%	44	165	178	100	(78)
121	40%	35	156	168	100	(68)

Two-Year (2025) Parking Demand – Evening

Table 13 below shows that the residential deficit on block 6 would continue into the evening hours comparing the available residential supply to the calculated residential parking demand. Although the restaurant demand has increased in the evening hours, the fact that offices and medical offices have closed for the day shows that the 8-space daytime net deficit on block 6 has changed to a 44-space net surplus.

Table 13 - Two Year (2025) Evening Surplus Deficit Calculation

2025 SUMMER Demand (Evening) - BRUNSWICK, THE MIL PRIMARY PLACE and WEBSTER ALL OPEN & OCCUPIED																
Block	OFFICE	MED OFFICE	RETAIL	SERVICE	RESTAURANT	RESIDENTIAL	MUSIC VENUE	COMMUNITY	VACANT	Non-Res'dl Demand	Public Supply	Private Supply	Total Supply	Residential Supply	Gross Surplus / (Deficit)	Res'dl Surplus / Deficit
						per R.D.U.		per Unit	10%							
	0	0	1.27	1.7	5.04	1.08	0.27	4.05	1.56							
1	0	0	0	4	11	30	86	0	1	101	67	31	98	64	61	34
2	0	0	0	5	0	52	0	0	0	5	9	0	9	63	67	11
3	0	0	11	8	31	16	0	0	2	52	21	118	139	40	127	24
4	0	0	7	7	0	0	0	0	0	14	14	87	101	0	87	0
5	0	0	1	0	10	0	0	0	1	12	111	14	125	28	141	28
6	0	0	2	0	128	226	0	8	0	138	148	34	182	100	144	(126)
7	0	0	1	8	0	19	0	0	0	10	0	31	31	54	75	35
Total	0	0	21	32	180	343	86	8	4	332	370	315	685	349	702	191

Three-Year Forecast (2026)

Three-Year Square Footage Change

As previously noted, the major project anticipated between the completion of the field data collection in summer 2023 and fall 2026 is the 88-unit Webster development. Although current plans project that this building will actually be completed by August 2025 (2-years), Rich is showing a 3-year forecast (fall 2026) because the planned garage expansion that would help support the parking needs for this building is not expected to be completed until early 2027. This means that there could continue to be a deficit in residential parking needs.



Table 14 – Three-Year Land Use Summary

	2026 Fall Square Footage Values											
		MED					MUSIC			Total		
Block	OFFICE	OFFICE	RETAIL	SERVICE	RESTAURANT	RESIDENTIAL	VENUE	COMMUNITY	VACANT	Occupied SF	Total Vacant SF	Total Block SF
Daytime						RDU'S	Seats					
1	0	0	0	2,128	2,146	28	320	0	3,276	4,274	3,276	7,550
2	3,191	0	0	3,225	0	48	0	0	0	6,416	0	6,416
3	2,795	0	8,275	4,654	6,233	15	0	0	11,109	21,957	11,109	33,066
4	2,886	0	5,450	3,881	0	0	0	0	0	12,217	0	12,217
5	11,700	9,414	650	0	2,009	0	0	0	7,000	23,773	7,000	30,773
6	24,087	2,097	1,260	0	25,370	209	0	1,976	0	54,790	0	54,790
7	0	0	890	4,949	0	18	0	0	2,670	5,839	2,670	8,509
Total	44,659	11,511	16,525	18,837	35,758	318	320	1,976	24,055	129,266	24,055	153,321

Three-Year (2026) Parking Demand - Daytime

By fall 2026, the non-residential demand has increased only slightly compared to fall 2025 values and this is only due to an anticipated increase in occupancy of the existing vacant space from 10 percent to 35 percent. All other categories remain the same.

Under the assumption that the parking supply was relatively underutilized due to the “in-progress” nature of many developments, Rich is of the opinion that the calculated parking generation rates demonstrating both the existing and one-year conditions in many cases, were likely too low. Therefore, with the added residential demand plus new businesses, Rich slightly adjusted many parking generation rates beginning with the 2025 projections to reflect the conditions as they may be experienced given the greater density and increased activity downtown. Additionally, for the three-year projections, Rich is assuming that about 35 percent of the 26,000 sf of vacant space will be re-occupied. Because it is not

known what the specific use may be, Rich is applying an average daytime and evening parking generation rate which increased the parking demand by 23 spaces.

Table 15 below shows the 2026 Daytime Parking Demand vs. Supply Projections. These values are very close to the demand shown for fall 2025 with the only difference reflected by the increased demand from re-occupied vacant space downtown. Because the garage expansion is still under construction at this time, and it is likely that the occupancy of The Webster would be much higher (if not fully occupied) the 126-space shortfall in residential spaces could actually occur as would the shortage in non-residential demand versus supply on this block.

As **Table 15** shows, with the garage expansion and the development planned, downtown Auburn Hills would still have a surplus of about 140 spaces on the net basis meaning that at peak daytime hours it would be operating at about 80 percent of capacity.

Table 15 – Three-Year (2026) Daytime Surplus Deficit Calculation

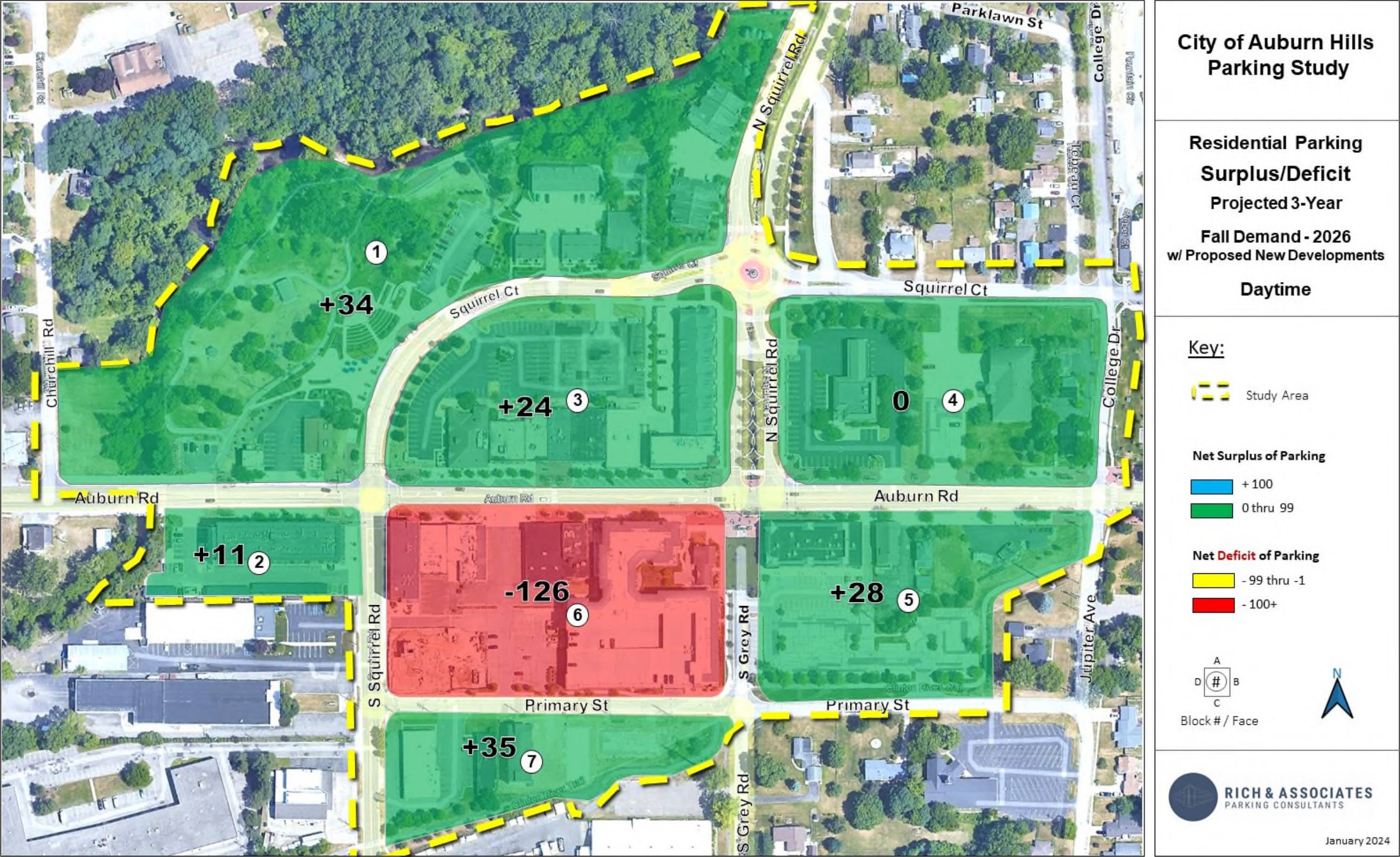
	2026 Fall Demand (Daytime) - WEBSTER OPEN & OCCUPIED (Garage Expansion Not Complete)																
Block	OFFICE	MED OFFICE	RETAIL	SERVICE	RESTAURANT	RESIDENTIAL	MUSIC VENUE	COMMUNITY	VACANT	Non-Resdl Demand	Public Supply	Private Supply	Total Supply	Residential Supply	Gross Surplus / (Deficit)	Res'dl Surplus / (Deficit)	Net Surplus / (Deficit)
Daytime		3.00	2.00	1.88	1.86	4.07	per R.D.U. 1.08	0.03	4.05	2.70	35%						
1	0	0	0	4	9	30	10	0	3	25	67	31	98	64	137	34	67
2	10	0	0	6	0	52	0	0	0	16	9	0	9	63	56	11	(7)
3	8	0	16	9	25	16	0	0	10	68	21	118	139	40	111	24	21
4	9	0	10	7	0	0	0	0	0	26	14	87	101	0	75	0	14
5	35	19	1	0	8	0	0	0	7	70	111	14	125	28	83	28	55
6	72	4	2	0	103	226	0	8	0	190	148	34	182	100	92	(126)	(8)
7	0	0	2	9	0	19	0	0	3	13	0	31	31	54	72	35	0
Total	134	23	31	35	146	343	10	8	23	409	370	315	685	349	625		142

The Daytime Surplus and Deficit (Non-Residential) and Residential is shown by **Maps 10 and 11** on the following two pages.

Map 10 – Net Surplus/Deficit Projected 3-Year (2026) Daytime



Map 11 - Residential Surplus/Deficit Projected 3-Year (2026) Daytime



Three Year (2026) Parking Demand – Evening

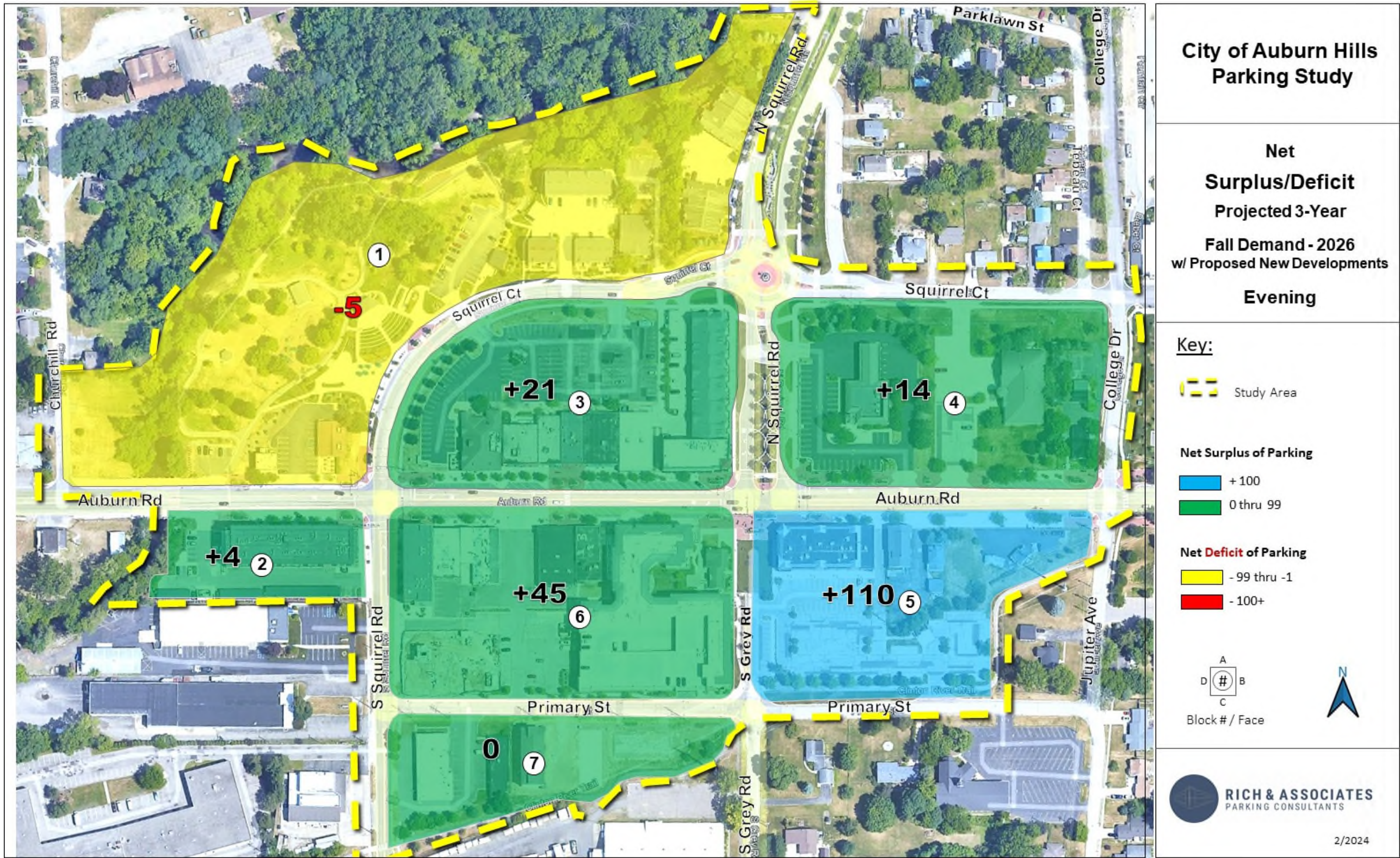
The evening demand would also see the 126-space deficit in residential parking continue although the net surplus overall for all blocks would improve slightly during the evening hours compared to daytime.

The surplus and deficit by block is shown by **Maps 12** and **13** on the following two pages.

Table 16 – Three Year Evening Surplus / Deficit

2026 Fall Demand (Evening) - WEBSTER OPEN & OCCUPIED (Garage not complete)																	
Block	OFFICE	MED OFFICE	RETAIL	SERVICE	RESTAURANT	RESIDENTIAL per R.D.U.	MUSIC VENUE	COMMUNITY per Unit	VACANT 35%	Non-Res'dl Demand	Public Supply	Private Supply	Total Supply	Residential Supply	Gross Surplus / (Deficit)	Res'dl Surplus / Deficit	Net Surplus / (Deficit)
	0	0	1.27	1.7	5.04	1.08	0.27	4.05	1.56								
1	0	0	0	4	11	30	86	0	2	103	67	31	98	64	59	34	(5)
2	0	0	0	5	0	52	0	0	0	5	9	0	9	63	67	11	4
3	0	0	11	8	31	16	0	0	6	56	21	118	139	40	123	24	21
4	0	0	7	7	0	0	0	0	0	14	14	87	101	0	87	0	14
5	0	0	1	0	10	0	0	0	4	15	111	14	125	28	138	28	110
6	0	0	2	0	128	226	0	8	0	137	148	34	182	100	145	(126)	45
7	0	0	1	8	0	19	0	0	1	11	0	31	31	54	74	35	0
Total	0	0	21	32	180	343	86	8	13	341	370	315	685	349	693		189

Map 12– Net Surplus / Deficit Projected Three-Years (2026) Evening



Four-Year Projections (2027)

Rich is showing a projection 4 years in the future (fall 2027). This is done to demonstrate the parking demand versus supply with the completion of the 178-space garage expansion. The square footage values would be the same as shown for 2026 with the only demand increase a function of slightly higher (50 percent) occupancy of existing vacant space compared to 2026.

Four Year Parking Demand vs Supply (2027) – Daytime

As **Table 17** below shows, the residential demand is unchanged from 2026 and the **non-residential** demand has only increased by 10 spaces due to the increased vacant space occupancy. However, the garage expansion begun in spring 2026 and completed by early 2027 (+172 net added spaces) has been completed and can be included in the assessment for fall 2027 as demonstrated below. Therefore, these spaces are available for use by residents of the Webster and other downtown residential and non-residential buildings. Given the 126-space calculated residential deficit that was shown for the 2026 projections without the garage spaces and the residential demand has not changed, Rich has allocated 126± spaces of the 172 net added spaces to residential demand and the balance of 46 spaces to the public supply. This has increased the “public” supply from 370 spaces within the downtown to 416 spaces within the downtown. (+46 on Block 6). The additional public spaces from the garage added to the previous supply on block 6 effectively eliminates the small net deficit on block 6 and converts it to a slight surplus. This leaves only a small deficit during the daytime on block 2 while overall the downtown would have a 186± space calculated net surplus. Obviously, the patrons unable to find parking on their block (block 2) would have the ability to use available public spaces on an adjacent block.

Table 17 – Four Year (2027) Daytime Surplus / Deficit Calculation

2027 Fall Demand (Daytime) - WEBSTER OPEN & OCCUPIED (Garage Expansion Complete)															
Block	OFFICE	MED OFFICE	RETAIL	SERVICE	RESTAURANT	RESIDENTIAL	MUSIC VENUE	COMMUNITY	VACANT	Non-Res'dl Demand	Public Supply	Private Supply	Total Supply	Residential Supply	Gross Surplus / (Deficit)
Daytime						per R.D.U.		per Unit	50%						Res'dl Surplus / (Deficit)
	3.00	2.00	1.88	1.86	4.07	1.08	0.03	4.05	2.70						
1	0	0	0	4	9	30	10	0	4	27	67	31	98	64	135
2	10	0	0	6	0	52	0	0	0	16	9	0	9	63	56
3	8	0	16	9	25	16	0	0	15	73	21	118	139	40	106
4	9	0	10	7	0	0	0	0	0	26	14	87	101	0	75
5	35	19	1	0	8	0	0	0	9	73	111	14	125	28	80
6	72	4	2	0	103	226	0	8	0	190	194	34	228	226	264
7	0	0	2	9	0	19	0	0	4	14	0	31	31	54	71
Total	134	23	31	35	146	343	10	8	32	419	416	315	731	475	787

Four Year Parking Demand vs Supply (2027) – Evening

Table 18 demonstrates the evening conditions comparing parking demand as calculated for fall 2027 (four-year future forecast) during the evening hours. The residential deficit has been eliminated given the allocation of 226± spaces (100 previously plus the additional 126 in the expanded garage) for residential parking needs.

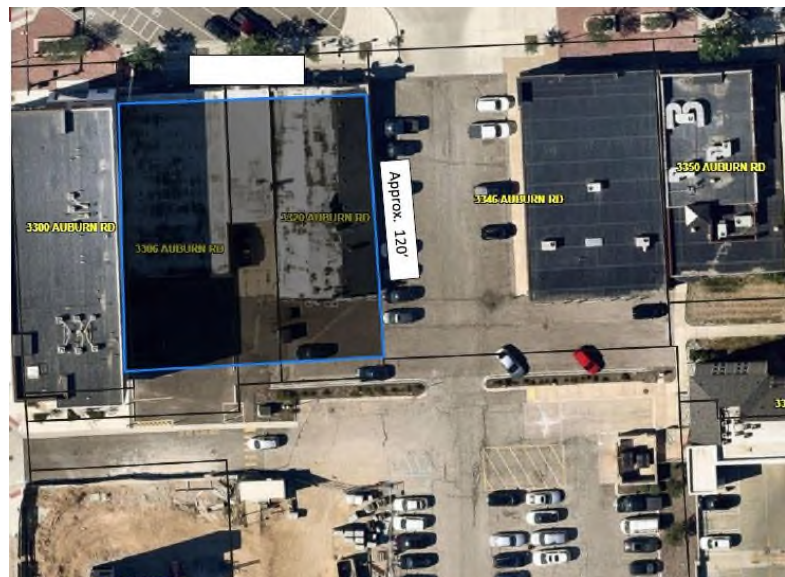
Table 18 – Four Year (2027) Evening Surplus / Deficit Calculation

	2027 Fall Demand (Evening) - WEBSTER OPEN & OCCUPIED (Garage Expansion Complete)																
										Non- Res'dl Demand	Public Supply	Private Supply	Total Supply	Residential Supply	Gross Surplus / (Deficit)	Res'dl Surplus / Deficit	Net Surplus / (Deficit)
Block	OFFICE	MED OFFICE	RETAIL	SERVICE	RESTAURANT	RESIDENTIAL per R.D.U.	MUSIC VENUE	COMMU NITY per Unit	VACANT 50%								
	0	0	1.27	1.7	5.04	1.08	0.27	4.05	1.56								
1	0	0	0	4	11	30	86	0	3	103	67	31	98	64	59	34	(5)
2	0	0	0	5	0	52	0	0	0	5	9	0	9	63	67	11	4
3	0	0	11	8	31	16	0	0	9	59	21	118	139	40	120	24	21
4	0	0	7	7	0	0	0	0	0	14	14	87	101	0	87	0	14
5	0	0	1	0	10	0	0	0	5	16	111	14	125	28	137	28	109
6	0	0	2	0	128	226	0	8	0	137	194	34	228	226	317	0	91
7	0	0	1	8	0	19	0	0	2	12	0	31	31	54	73	35	0
Total	0	0	21	32	180	343	86	8	19	346	416	315	731	475	860		232

Five-Year (2028) Projections

Five-Year (2028) Square Footage Change

Rich made a final projection reflecting conditions five years in the future. Recent data provided by the city suggested that several single-story properties (3306 – 3320 Auburn Road) between The MiL and Webster totaling approximately 9,500 square feet of commercial space would be redeveloped into a four-story mixed-use development. This development would have a footprint of about 13,600 square feet and consist of first floor retail space and three floors of residential (approximately 41 units). In addition to the added parking demand, 13 existing surface spaces are eliminated by the development.



Five-Year (2028) Parking Demand Projections

The 41 residential units require that 44 public spaces in the garage expansion need to be re-allocated as residential parking to accommodate the 41 residential units ($41 \times 1.08 = 44$ spaces required). Given the changes, after the garage expansion, the capacity of public spaces within the combined garages has increased by five spaces between 2023 and the projected values in 2028. The number of spaces allocated for residential needs in the expanded garage has grown by 170± spaces. This means that virtually the entire net added spaces from the garage expansion are needed to accommodate residential uses on block 6. The 13,600 square feet of projected retail space generates an additional 26 spaces of parking demand.

In addition to the added demand from this new development, Rich is assuming that about 75 percent of the 26,000 vacant square feet will be occupied within this five-year planning horizon (up from 35 percent applied in the three-year forecast). Although the added square footage does not significantly affect the parking needs, in the future if more definitive data is found for the use (such as restaurant space), then the appropriate parking generation rate can be applied which may slightly change the surplus or deficits on individual blocks.

Table 19 – Five Year (2028) Projected Demand (Daytime)

	2028 Fall Demand (Day) - ALL DEVELOPMENT PROJECTS OPEN & OCCUPIED - EXISTING VACANT OCCUPIED																
		MED					MUSIC			Non-Resdl					Gross	Res'dl	Net
Block	OFFICE	OFFICE	RETAIL	SERVICE	RESTAURANT	RESIDENTIAL	VENUE	COMMUNITY	VACANT	Demand	Public	Private	Total	Residential	Surplus / (Deficit)	Surplus / Deficit	Surplus / (Deficit)
Daytime						per R.D.U.		per Unit	75%								
	3.00	2.00	1.88	1.86	4.07	1.08	0.03	4.05	2.70								
1	0	0	0	4	9	30	10	0	7	29	67	31	98	64	133	34	67
2	10	0	0	6	0	52	0	0	0	16	9	0	9	63	56	11	(7)
3	8	0	16	9	25	16	0	0	22	80	21	118	139	40	99	24	21
4	9	0	10	7	0	0	0	0	0	26	14	87	101	0	75	0	14
5	35	19	1	0	8	0	0	0	14	78	111	14	125	28	75	28	47
6	72	0	26	0	87	270	0	0	0	184	150	21	171	270	257	0	(13)
7	0	0	2	9	0	19	0	0	5	16	0	31	31	54	69	35	0
Total	134	19	54	35	129	388	10	0	49	429	372	302	674	519	764		130

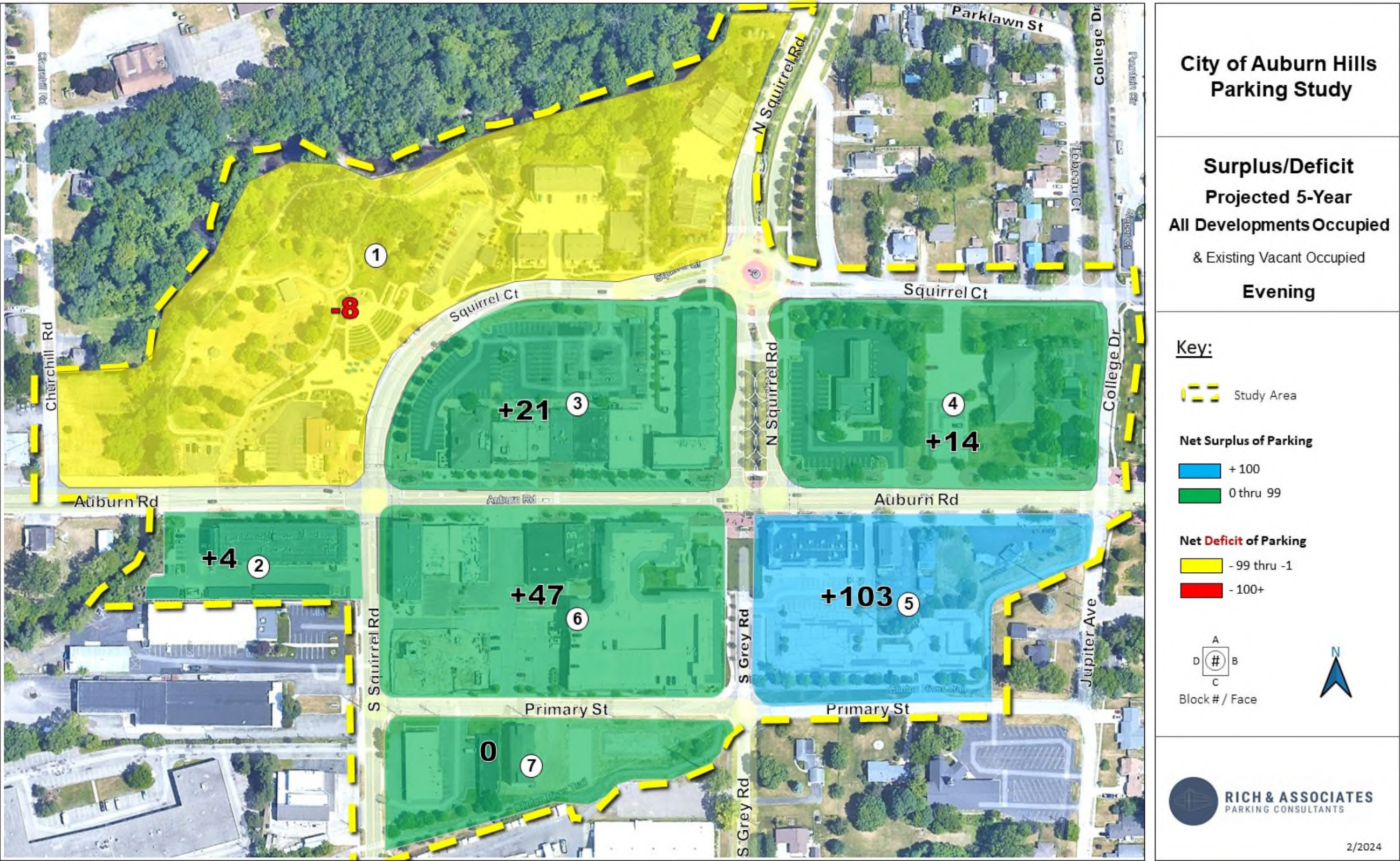
Table 20 – Five Year (2028) Projected Demand (Evening)

2028 Fall Demand (Evening) - ALL DEVELOPMENT PROJECTS OPEN & OCCUPIED - EXISTING VACANT OCCUPIED																	
Block	OFFICE	MED OFFICE	RETAIL	SERVICE	RESTAURANT	RESIDENTIAL per R.D.U.	MUSIC VENUE	COMMUNITY per Unit	VACANT 75%	Non-Res'dl Demand	Public Supply	Private Supply	Total Supply	Residential Supply	Gross Surplus / (Deficit)	Res'dl Surplus / Deficit	Net Surplus / (Deficit)
	0	0	1.27	1.7	5.04	1.08	0.27	4.05	1.56								
1	0	0	0	4	11	30	86	0	5	106	67	31	98	64	56	34	(8)
2	0	0	0	5	0	52	0	0	0	5	9	0	9	63	67	11	4
3	0	0	11	8	31	16	0	0	17	67	21	118	139	40	112	24	21
4	0	0	7	7	0	0	0	0	0	14	14	87	101	0	87	0	14
5	0	0	1	0	10	0	0	0	11	22	111	14	125	28	131	28	103
6	0	0	17	0	107	270	0	0	0	124	150	21	171	270	317	0	47
7	0	0	1	8	0	19	0	0	4	14	0	31	31	54	71	35	0
Total	0	0	37	32	159	388	86	0	38	352	372	302	674	519	841		180

Map 14 –Surplus/Deficit Projected Five-Year (2028) Daytime

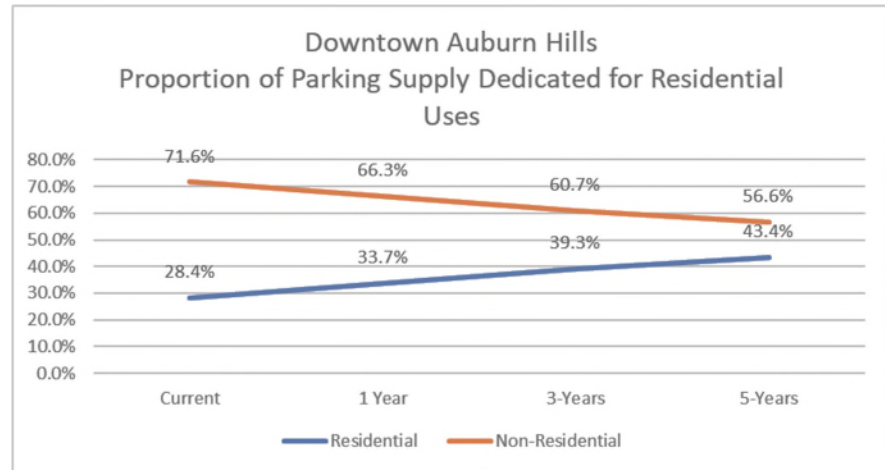


Map 15 – Surplus/Deficit Projected Five-Year (2028) Evening

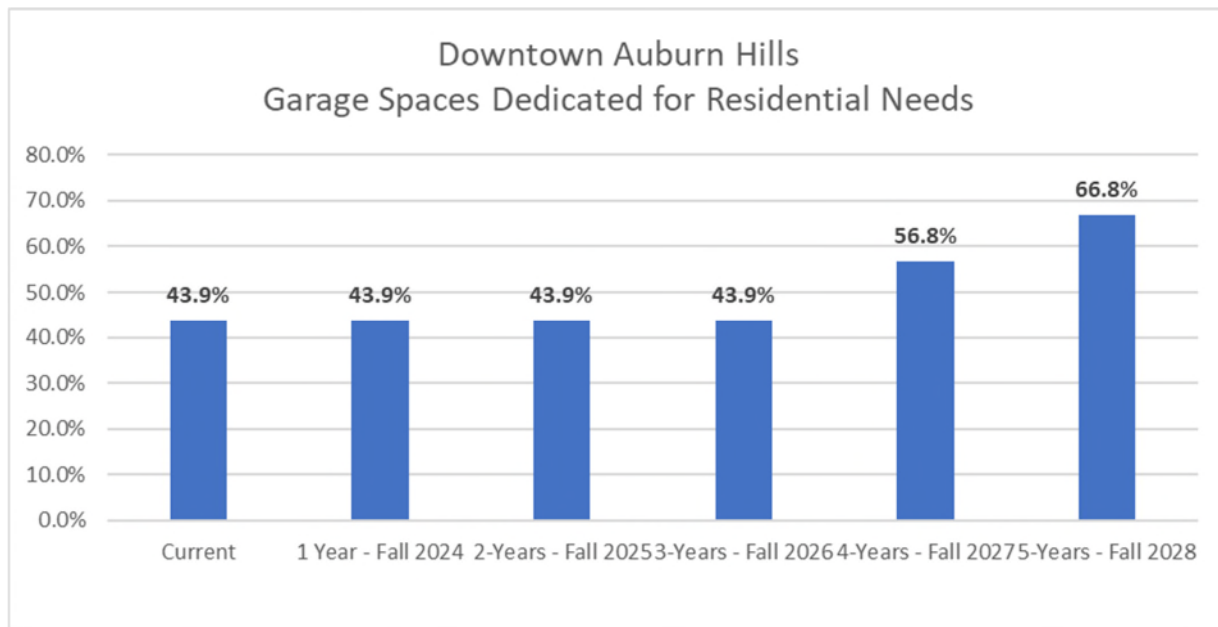


Summary – Residential Parking Downtown Auburn Hills

The extensive development in Downtown Auburn Hills shows that over the five-year planning period, that the number of residential units will increase by 168. Much of this added demand is not accommodated with its own parking supply but instead relies upon spaces provided in the existing and expanded parking garages. The proportion of the total parking supply dedicated for residential parking needs increases from about 28 percent currently to as much as 43 percent at the end of five years.



At the time of the report, the city does not require any parking to be provided by private businesses. As a result of this policy, it appears that developers of the The MiL, Webster, Brunswick and proposed new development east of the the MiL are not providing residential parking as part of their developments but instead relying on the city to provide the spaces.



Section 3 – Recommendations

Rich has prepared a series of recommendations that, applied over time, will help improve the parking system in downtown Auburn Hills so that it can function effectively to service the residents, employees and downtown visitors.

Issue: Two Hour On-street Parking

Discussion: On-street parking is often the most desirable parking because it affords ultimate convenience to most destinations. As long as the speed or volume of traffic on adjoining roadways is not excessive, or the spaces are not considered too tight for easy access and egress, particularly with parallel parking, patrons will often prefer to park on-street. This applies to downtown employees and staff. If the parking is not monitored, many downtown staff, if not discouraged, will choose to use convenient on-street parking.

Recommendation: Implement and enforce two-hour time limit for on-street parking between the hours of 8:00 am and 6:00 pm along Auburn Road, North Squirrel Road and South Grey Road.

Time Frame: 6 – 12 Months

Issue: Patrons will move their vehicle to new space to avoid two-hour time limit

Discussion: Absent any ordinance, some parking patrons will move their vehicle to a new on-street space either on the same block or across the street to start a new two-hour parking session. The major issue is that they are still taking a parking space away from a legitimate customer or visitor who can appreciate the convenient parking.

Recommendation: Enact an anti-shuffling ordinance so that someone cannot simply move their vehicle to a different on-street space to start a new two-hour session. Limit the on-street spaces to two-hours per day along Auburn Road, North Squirrel Road and South Grey Road.

Time Frame: 12 – 18 Months

Issue: Parking Enforcement

Discussion: A properly operating parking system requires that there be a series of rules and regulations so that the parking system can function effectively. This will cover issues such as time limits, where parking is allowed and discouraged, restrictions for public safety (hydrants, crosswalks handicap etc). If there is not a system of enforcement, downtown parking patrons will see this and many regulations will be ignored. Currently, parking enforcement is conducted by the Auburn Hills Police Department.

Recommendations:

1. Implement a program of, at a minimum, random parking enforcement varying the days of the week and the times of day that the enforcement be conducted. Each enforcement shift should be for a

minimum of four hours so that vehicles can be initially recorded and monitored a second time for violation of the two-hour (and other violations) limit.

2. Consider the use of volunteers to perform the enforcement function to supplement the current program of police officers. This is permitted by Michigan State law. (*see appendix A for 257.675d and Appendix C for MLIVE.COM article for use of Volunteers.*)
3. The current fine for parking violations, as adopted by 52-3 District Court, is \$75.00. However, the City fine is \$30.00. Rich would recommend monitoring whether the \$30.00 fine rate is sufficiently high enough to discourage repeat offenders and if not, raise the fine in stages to ensure compliance.

Time Frame: 12 – 24 Months

Issue: Monthly parking permit in garage

Discussion: Currently the city has agreements with Auburn Hills Housing LLC and Hyde Associates LLC for parking permits within the city downtown parking garage. Presumably, these agreements are for residents of downtown properties. In order to maintain the integrity of charging for parking, patrons should be discouraged from overnight parking in the garage without a permit.

Recommendation: Require that anyone parking overnight in the current and expanded parking garage have a permit.

Time Frame: 6 – 12 Months

Issue: Mechanism for collecting parking fines

Discussion: While performing the enforcement function is a critical element in any parking system there is a second part of the function that is critical. Just as if enforcement is not provided, the rules will not be followed. Similarly, if parking citations are issued but there is no follow up to ensure collection, again the rules will be ignored. Currently, the State of Michigan allows the Secretary of State's office to hold vehicle registrations for vehicles that have three or more unpaid parking citations.

Recommendation: Use the current availability through the Secretary of State's office to hold vehicle registrations for vehicles that have three or more unpaid parking citations. *See Appendix B (MCL 257.321)*

Time Frame: 12 – 24 Months

Issue: Currently the city does not require developers to provide any parking within downtown Auburn Hills.

Discussion: When parking is not required as part of any building development, it means the city is responsible for providing for the parking needs. While often this is desirable because it may otherwise result in developers constructing small lots designated as just private parking for their tenants, this can create an inefficient parking system. Many cities will not require downtown parking be provided with the exception of residential developments.

Recommendations:

- 1) Adjust the ordinance that developers of multi-unit residential properties provide parking at the following levels:
 - a. Studio and One bedroom – 1 parking space per dwelling unit
 - b. Two Bedroom Units – 1.5 spaces per dwelling unit
 - c. Three or more bedroom – 2 spaces per dwelling unit.
- 2) Do not require developers of other types of properties. This often results in small privately controlled lots that are not as efficient as larger public lots.

Time Frame: 18 – 24 Months

Issue: Ensure that the most convenient spaces both on-street and off-street lots are available for customer / visitor use to the greatest extent possible:

Discussion: Having convenient access to parking is a critical element for many patrons when coming to visit shops or restaurants in a downtown environment. Issues with parking may discourage visits by patrons who may seek alternatives in surrounding communities that have adequate convenient parking. While it is understood that downtown employees also wish to have convenient parking, customers and visitors should have priority. Discouraging use of on-street parking by employees has been discussed through the enforcement function but use of limited parking garage spaces in the near-term (until completion of the garage expansion) should be discouraged by employers and parking in the back of public lots encouraged. Once the garage expansion is completed, sufficient capacity should exist both for residential parking needs, visitors and employees in the garage and other public lots.

Recommendation: Through the DDA, encourage employees of downtown businesses to park in the more remote public off-street lots to save the most convenient spaces for downtown visitors and customers.

Time Frame: Immediate**Issue: Parking Signage**

Discussion: This recommendation focuses specifically on the parking wayfinding that leads customers and visitors to the public parking lots. Signage serves a critical role in a well-run parking system. It communicates directions, use guidelines, identification and information to parking patrons especially those coming to Downtown Auburn Hills for the first time. It also directs pedestrians to downtown destinations and activities. In order to function effectively, signs must clearly and concisely provide the necessary information and be easily recognizable. Signage should be of a consistent color, shape, font and text in order to be easily recognizable and understood by patrons. A cohesive sign program will create a positive user experience in downtown Auburn Hills.

Recommendation: As a best practice, the following three types of parking signs that improve drivers' wayfinding experience are strongly recommended. It should be noted that sign color, size design and placement may be impacted by local, county or State highway department's regulations.

Directional/Location: Directional-parking signage is distinct in color, size and logo and directs drivers to off-street parking areas. Parking location signage complements the directional parking signage. The signs have arrows pointing to the off-street lots. The signs are mounted on poles at standard heights, on the streets. Auburn Hills has many of these signs in the downtown, however these signs are small and not easily recognizable to a driver. In one instance the sign located at the southeast corner of Auburn Road and Juniper Avenue is obstructed from view due to streetscape plantings and other signage.



Identification: Identification signage is placed at the entry of each parking lot. The name of the parking area is identified along with use guidelines, such as public parking, hours of operation, etc. The identification signage is distinctive in color and size, and it is located on a pole at a lower height. The parking lot name can be tied to a significant landmark, name of the street or the street address.

Pedestrian Wayfinding: Pedestrian wayfinding signs or kiosks are placed at the points of pedestrian entry/exit to parking lots. Typically, a map illustrating the downtown area that points out the various shops or attractions. These types of signs are placed at locations easily found by a pedestrian and are intended to help that person orient themselves to the downtown area, to locate their destination and then be able to return to where they parked.

Time Frame: 6 – 12 Months

Issue: Garage Parking Allocation

Discussion: By the time the Webster is completed in mid-2025, the expanded garage will not yet have started construction. Current projections, given the currently allocated residential parking in the existing garage, shows that residential needs may be short as many as 126± spaces. During this period, virtually the entire existing garage may be needed, at least during the evening hours, to accommodate residents of the downtown buildings.

Recommendation: The first floor or at least a portion of the first floor of the garage should be dedicated for customer / visitor use during the daytime hours (8:00 am – 8:00 pm). Currently, much of the floor is designated for AHH, LLC or Hyde Associates, LLC parking. Resident parking should be on the upper levels so that visitors are not driving past multiple empty spaces reserved for residential use to reach an available visitor space or to find out that all visitor parking is filled. Signs should indicate that visitor parking above the first level is allowed during the daytime hours (8:00 am – 8:00 pm) without a permit but that after a designated hour, residential parking permits are required.

Time Frame: 12 – 24 months



Appendix

Appendix A

MICHIGAN VEHICLE CODE (EXCERPT)

Act 300 of 1949

257.675d Authorizing and utilizing persons other than police officers to issue citations; violations; training program; definitions.

Sec. 675d.

(1) Except as provided in subsection (2), a law enforcement agency or a local unit of government may implement and administer a program to authorize and utilize persons other than police officers as volunteers to issue citations for the following violations:

(a) Parking on a sidewalk in violation of section 674(1)(a) or a local ordinance substantially corresponding to section 674(1)(a).

(b) Parking in front of a public or private driveway in violation of section 674(1)(b) or a local ordinance substantially corresponding to section 674(1)(b).

(c) Parking within 15 feet of a fire hydrant in violation of section 674(1)(d) or a local ordinance substantially corresponding to section 674(1)(d).

(d) Parking on a crosswalk in violation of section 674(1)(e) or a local ordinance substantially corresponding to section 674(1)(e).

(e) Parking within 20 feet of a crosswalk or, if there is not a crosswalk, within 15 feet of the intersection of property lines at an intersection of highways, in violation of section 674(1)(f) or a local ordinance substantially corresponding to section 674(1)(f).

(f) Parking at a place where an official sign prohibits stopping or parking in violation of section 674(1)(n) or a local ordinance substantially corresponding to section 674(1)(n). This subdivision does not authorize a volunteer to issue a citation for any other violation set forth in section 674 or a local ordinance substantially corresponding to section 674.

(g) Parking in a space reserved for use by disabled persons in violation of section 674(1)(s) or a local ordinance substantially corresponding to section 674(1)(s).

(h) Parking in an access aisle or access lane immediately adjacent to a space designated for parking by persons with disabilities in violation of section 674(1)(t) or a local ordinance substantially corresponding to section 674(1)(t).

(i) Parking in violation of an official sign restricting the period of time for or manner of parking in violation of section 674(1)(w) or a local ordinance substantially corresponding to section 674(1)(w). This subdivision does not authorize a volunteer to issue a citation for any other violation set forth in section 674 or a local ordinance substantially corresponding to section 674.

(j) Parking in a space or in a manner that blocks access to a fire lane in violation of section 674(1)(aa) or a local ordinance substantially corresponding to section 674(1)(aa).

(k) Parking in a manner that blocks, delays, or otherwise interferes with the movement of a streetcar on a streetcar track in violation of section 674(1)(bb) or a local ordinance substantially corresponding to section 674(1)(bb).

(2) Before authorizing and utilizing persons other than police officers to issue citations, the law enforcement agency or local unit of government shall implement a program to train the persons to properly issue citations as provided in this section, of which not less than 8 hours must be in parking enforcement, conducted by that law enforcement agency or the law enforcement agency for that local unit of government or, if the local unit of government does not have a law enforcement agency, by the county sheriff. A person who successfully completes a program of training implemented under this section may issue citations as provided in this section as authorized by the law enforcement agency or local unit of government. A law enforcement agency of a local unit of government shall not implement or administer a program under this section without the specific authorization of the governing body of that local unit of government. A law enforcement agency shall not implement or administer a program under this section that would allow volunteers to issue citations under subsection (1)(a), (b), (c), (d), (e), (f), or (i) for any violations for which the use of volunteers is prohibited under a collective bargaining agreement between that local unit of government and any law enforcement officers of that local unit of government.

(3) As used in this section:

(a) "Law enforcement agency" means any of the following:

(i) A police agency of a city, village, or township.

(ii) A sheriff's department.

(iii) The department of state police.

(iv) Any other governmental law enforcement agency in this state, including, but not limited to, the transit police unit of a public body corporate established and maintained pursuant to an interlocal agreement under the urban cooperation act of 1967, 1967 (Ex Sess) PA 7, MCL 124.501 to 124.512, between a city that is authorized by the laws of this state to appoint or employ law enforcement officers and an authority under the metropolitan transportation authorities act of 1967, 1967 PA 204, MCL 124.401 to 124.426.

(b) "Local unit of government" means a state university or college or a county, city, village, or township.

Appendix B

FAILURE TO PAY FINES

If the person fails to appear, the court will promptly notify the Michigan Secretary of State. “The secretary of state, upon being informed of the failure of a person to appear or comply..., shall not issue a license to the person or renew a license for the person until BOTH of the following occur:”

- “The court informs the secretary of state that the person has resolved all outstanding matters regarding the notices or citations.” **MCL 257.321a(8)(a).**
- “The person has paid to the court a \$45.00 driver license clearance fee.” **MCL 257.321a(8)(b).** If the court determines that the person is responsible for only one handicap parking violation or fewer than 3 other illegal parking violations, for which the person’s license was not issued or renewed under this subsection, then the court may waive payment of the driver license clearance fee.

In addition to placing a hold on license issuance or renewal, the court may also find the driver responsible for a civil infraction punishable by a fine. This is a non-moving violation that does not result in any points on your driving record.

Appendix C

Volunteers can now write more parking tickets in Grand Rapids

July 11, 2019



GRAND RAPIDS, MI July 11 2019— Grand Rapids hopes it can free up time for police officers to do more of what they're trained to do by putting more of their less serious responsibilities on a group of volunteers.

On Tuesday, the city commission voted unanimously to adopt a resolution that will grant trained volunteers with the Grand Rapids Police Department the ability to enforce more parking ordinances than previously allowed.

Members of the police department's volunteer program could already write tickets for violations like parking in a handicapped zone, within a crosswalk, in a no parking zone and within 15 feet of a fire hydrant.

They'll now be able to write tickets for:

Parking left of curb

Parking within or on a bike lane

Parking in a manner that blocks a bike lane

Parking an unattached trailer or semi-trailer in the roadway

Season parking restrictions (odd/even winter parking)

“This is really an expansion of the volunteer program we’ve had at the police department for years,” said Second Ward Commissioner Ruth Kelly. “This is going to offer some additional support for our officers.”

State law authorizes police departments to develop a program that engages volunteers to write a variety of parking tickets, upon completion of training provided by that department.

The Grand Rapids Police Department’s volunteer program has been used to assist officers for close to two decades, according to city officials. Its non-sworn members do things like abandoned vehicle tagging, parking violation enforcement, graffiti reporting, vacation house checks and senior resident visits.

“The program is perfect for those who are at a point in life where they have some free time to give back to the community and are looking for a meaningful way to improve quality of life for all who call Grand Rapids home,” said Ofc. Ruth Walters, who serves as the department’s volunteer coordinator.

“The volunteer program is vital to ensuring the best service to the community while balancing the department’s resources.”

Odd-even parking tickets on the rise with more enforcement in Grand Rapids

Grand Rapids has issued more than 6,000 tickets for odd-even parking ordinance violations so far this season.

Earlier this year, the city announced it was seeking to double the 16 active members of the program.

Volunteers are paired up and assigned to one of the five patrol service areas in the city. They’re asked to commit to a minimum of eight hours each month between 8 a.m. and 5 p.m.

Qualifications for the program include:

Minimum age of 18 years old

Good health

U.S. citizenship

Possession of a valid Michigan driver’s license

Successful completion of a background investigation

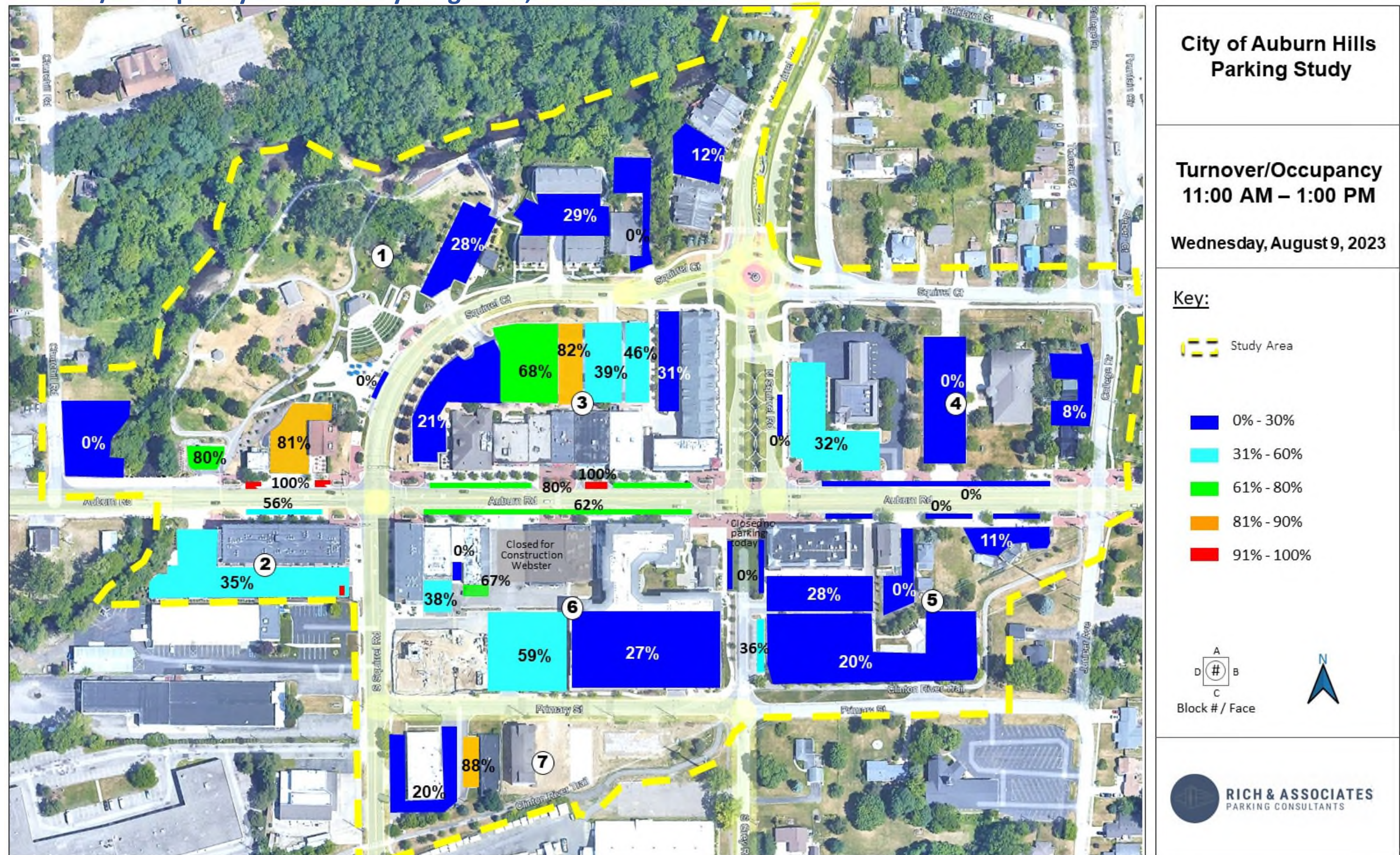
Willingness to serve others

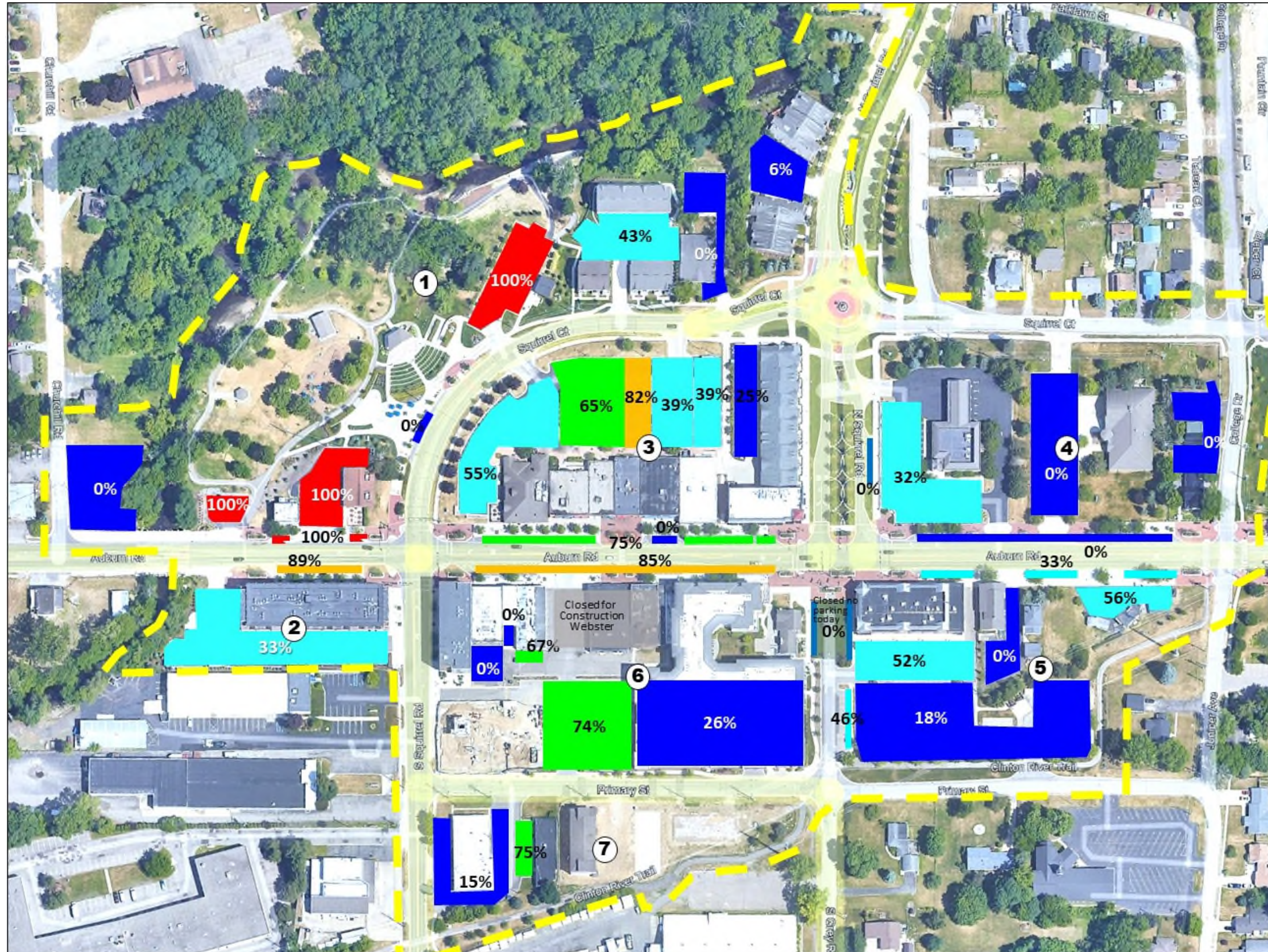
Volunteers dress in supplied uniforms and are assigned to city vehicles that are identified by the Neighborhood Services Team logo. They also receive training through the police department.

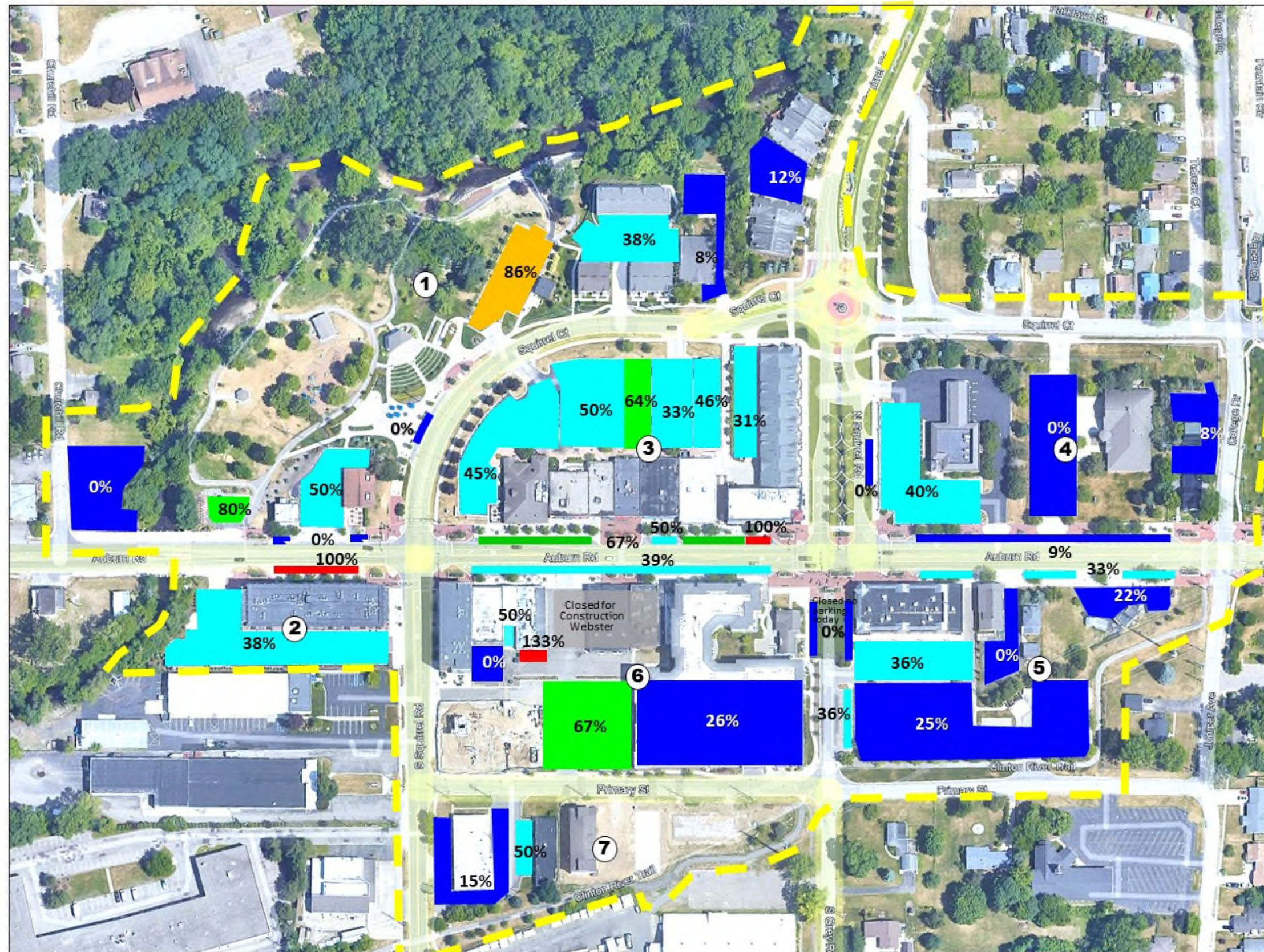
To learn more about the program or to register as a police department volunteer, visit the city website, call 616-456-3301, or email grpdrecruiting@grcity.us.

mlive.com

Turnover/Occupancy Wednesday August 9, 2023













City of Auburn Hills Parking Study

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Wednesday, August 9, 2023

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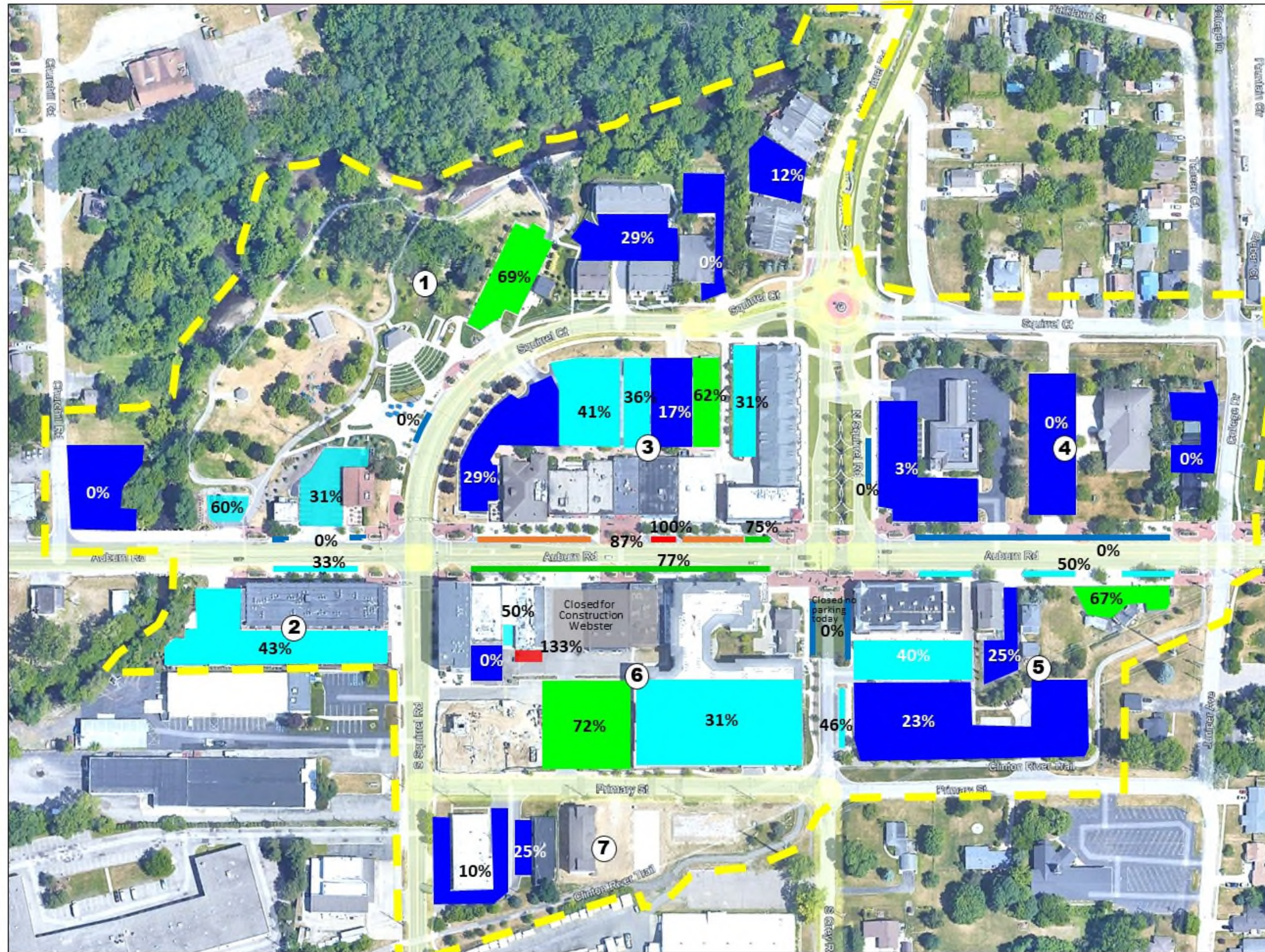
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City of Auburn Hills Parking Study


Turnover/Occupancy
5:00 PM – 7:00 PM


Wednesday, August 9, 2023


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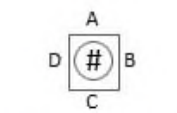
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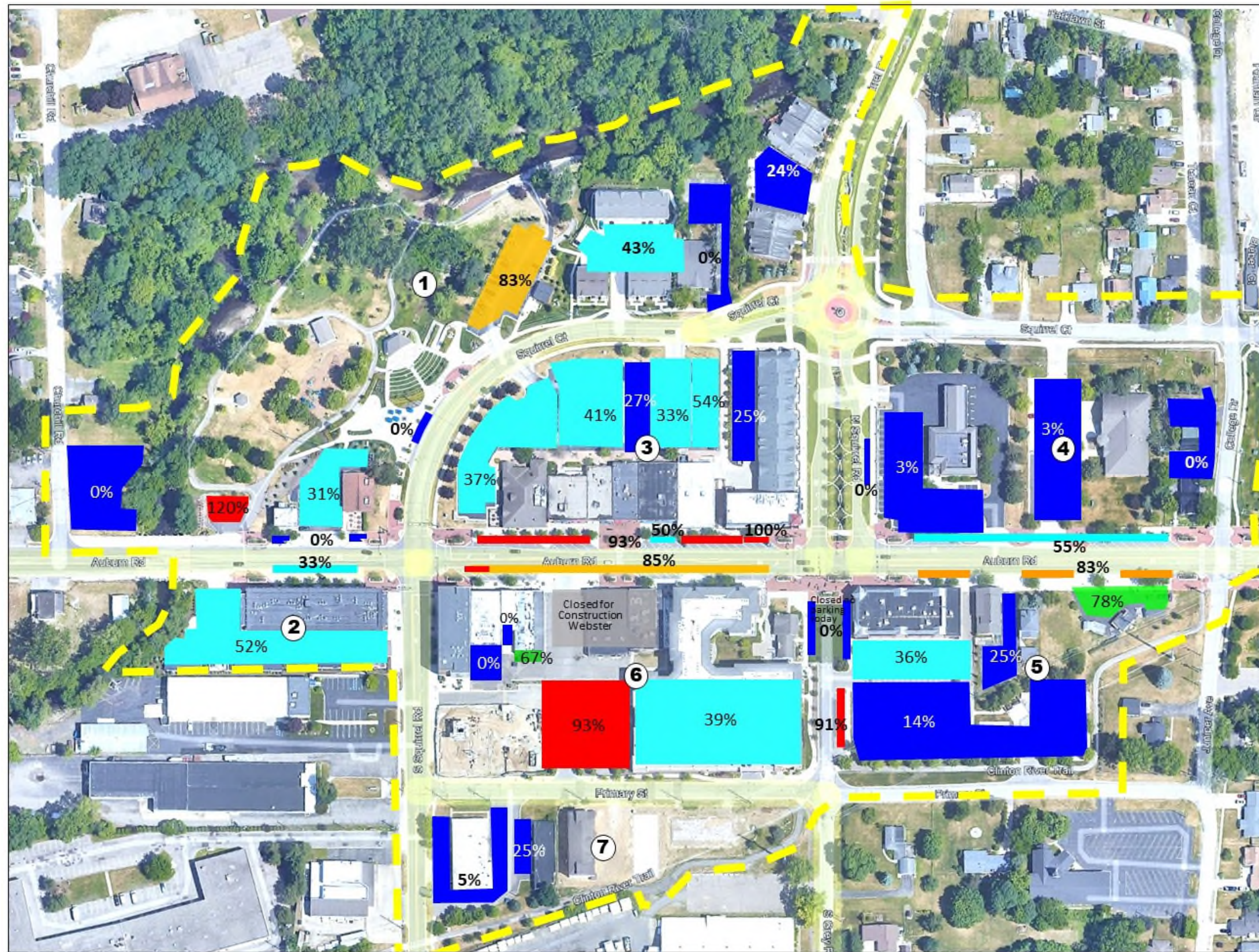
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City of Auburn Hills Parking Study

**Turnover/Occupancy
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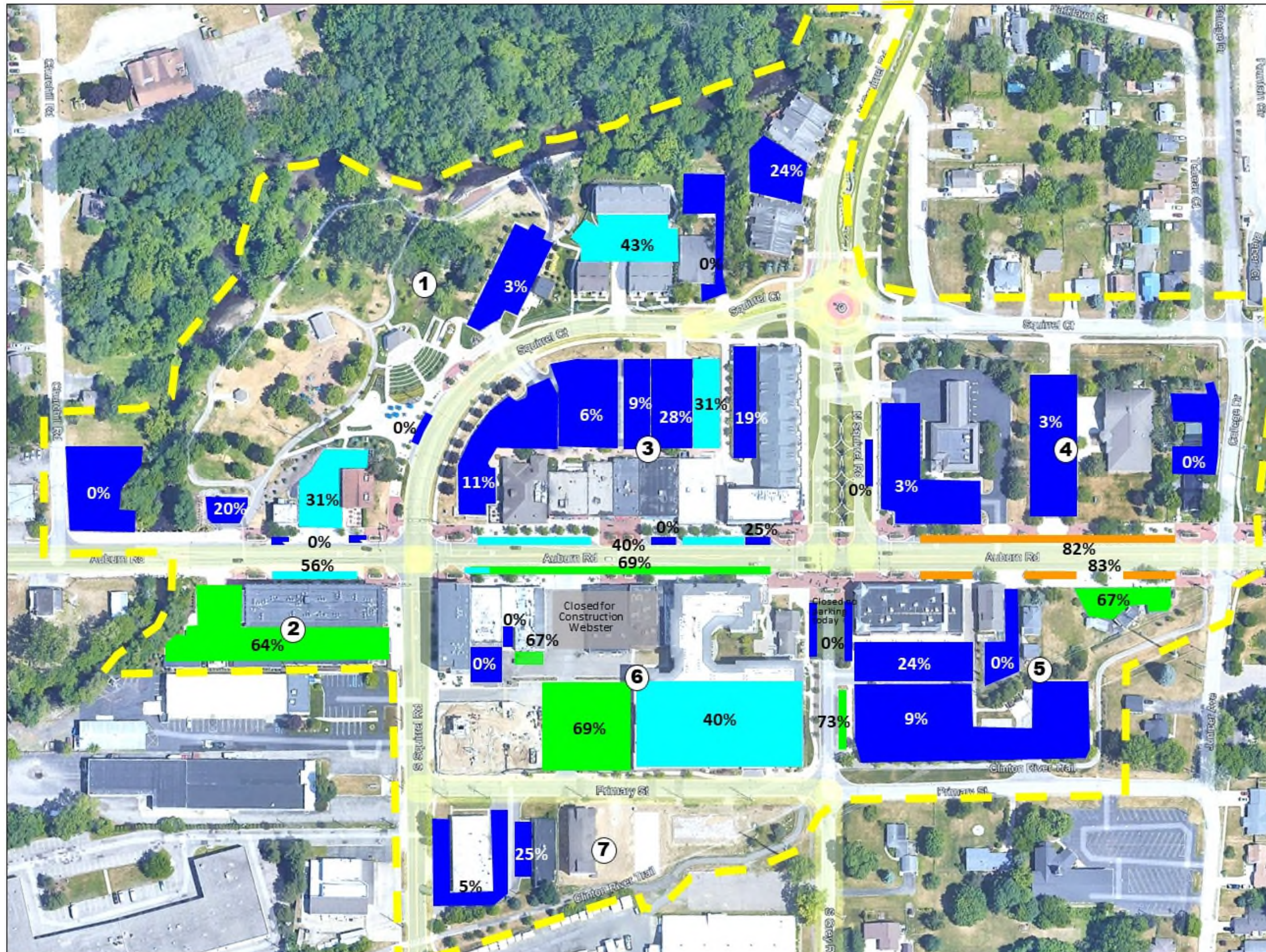
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City of Auburn Hills Parking Study

**Turnover/Occupancy
9:00 PM – 11:00 PM**

Wednesday, August 9, 2023

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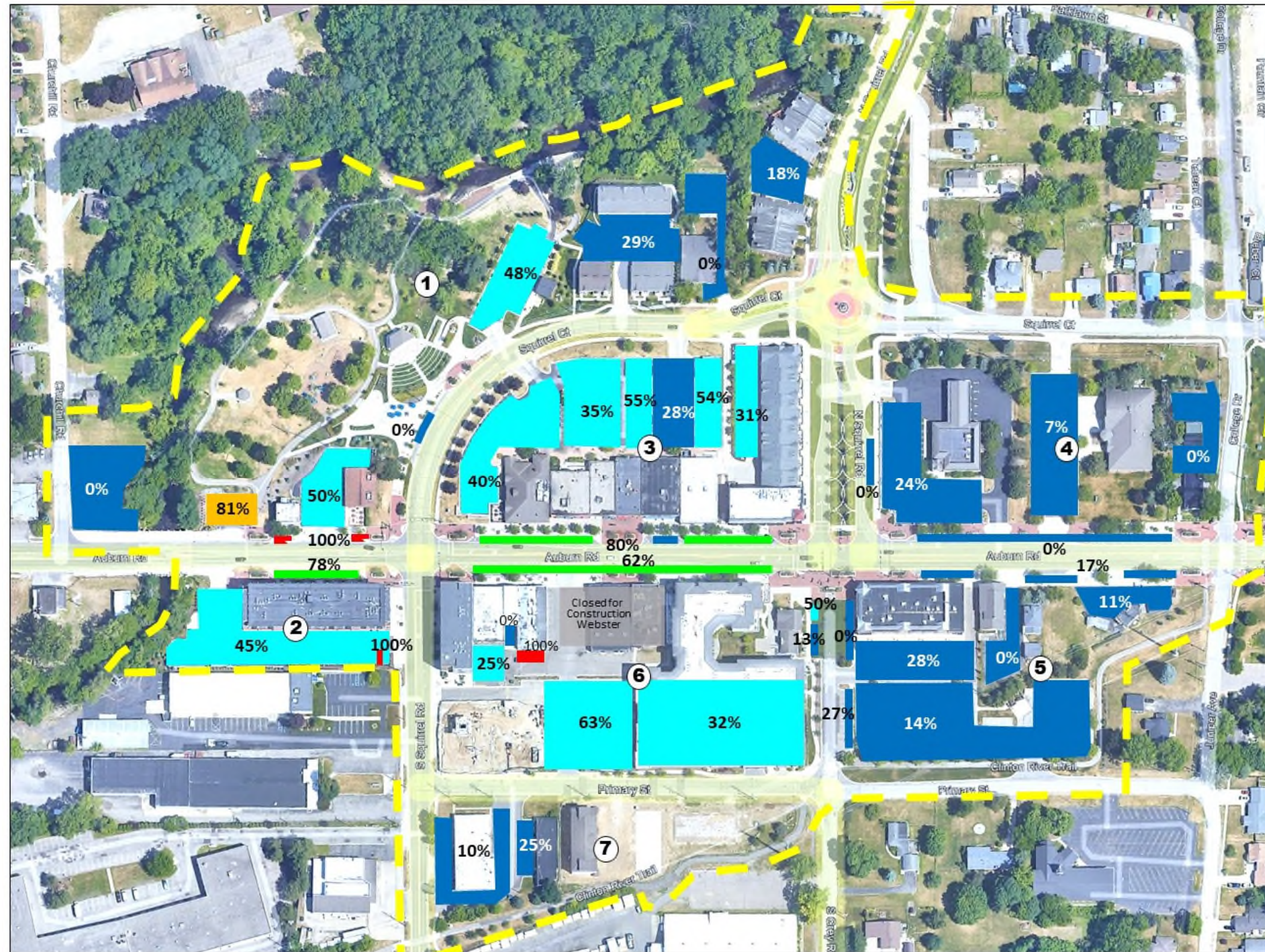
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Turnover/Occupancy Friday August 11, 2023



City of Auburn Hills Parking Study

**Turnover/Occupancy
11:00 AM – 1:00 PM**

Friday, August 11, 2023

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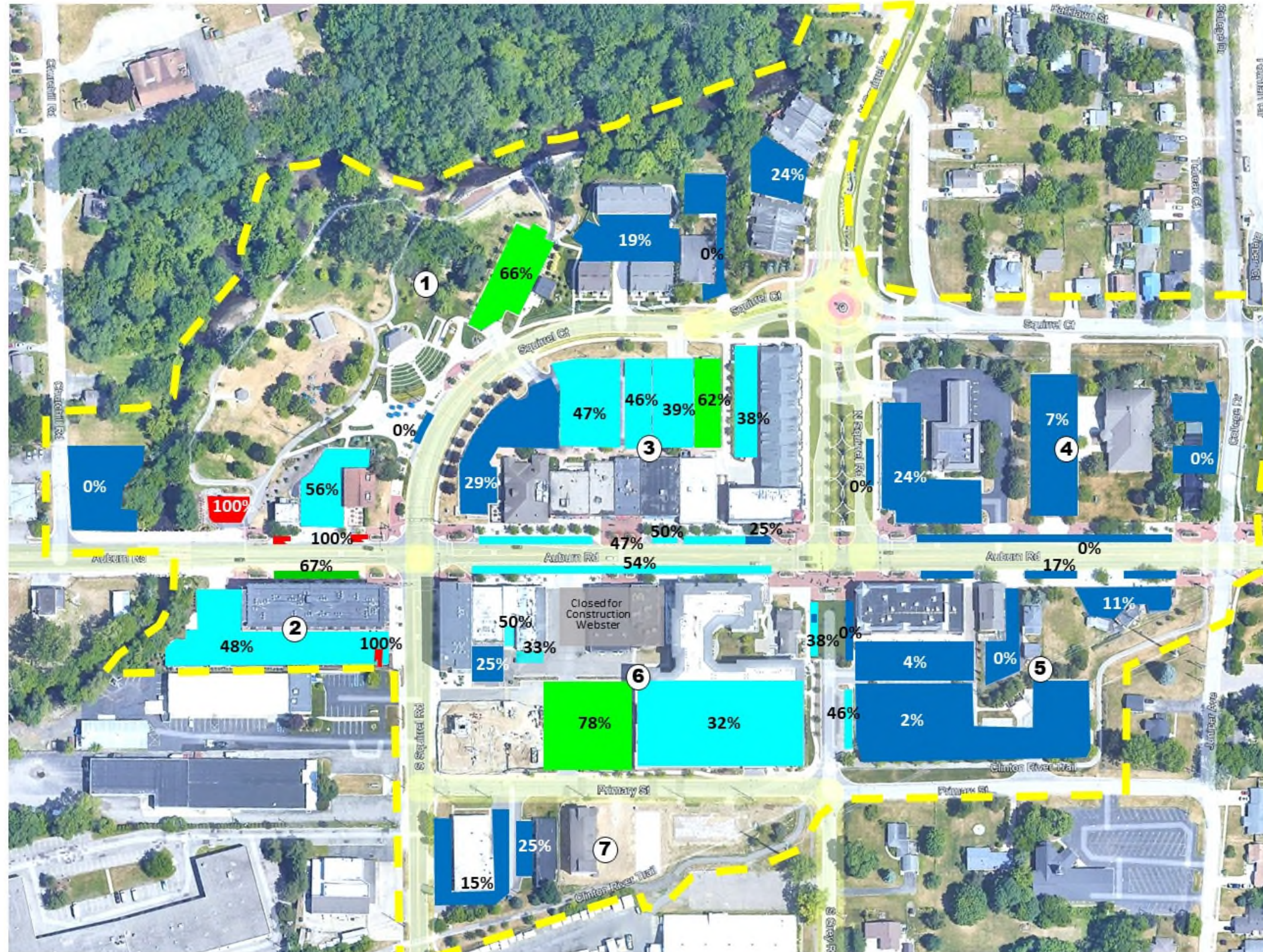
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City of Auburn Hills Parking Study

**Turnover/Occupancy
1:00 PM – 3:00 PM**

Friday August 11, 2023

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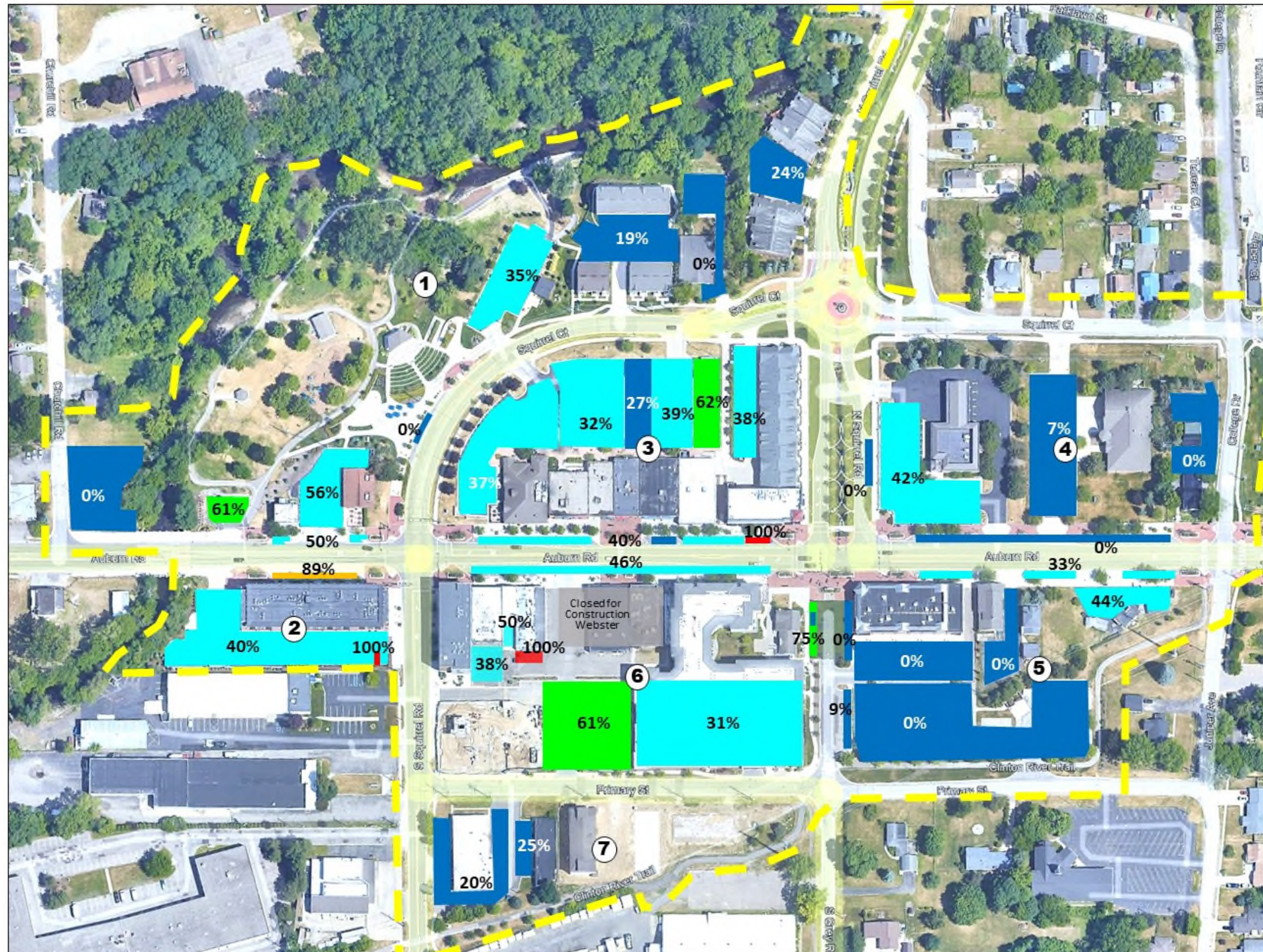
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City of Auburn Hills Parking Study


Turnover/Occupancy
3:00 PM – 5:00 PM


Friday, August 11, 2023


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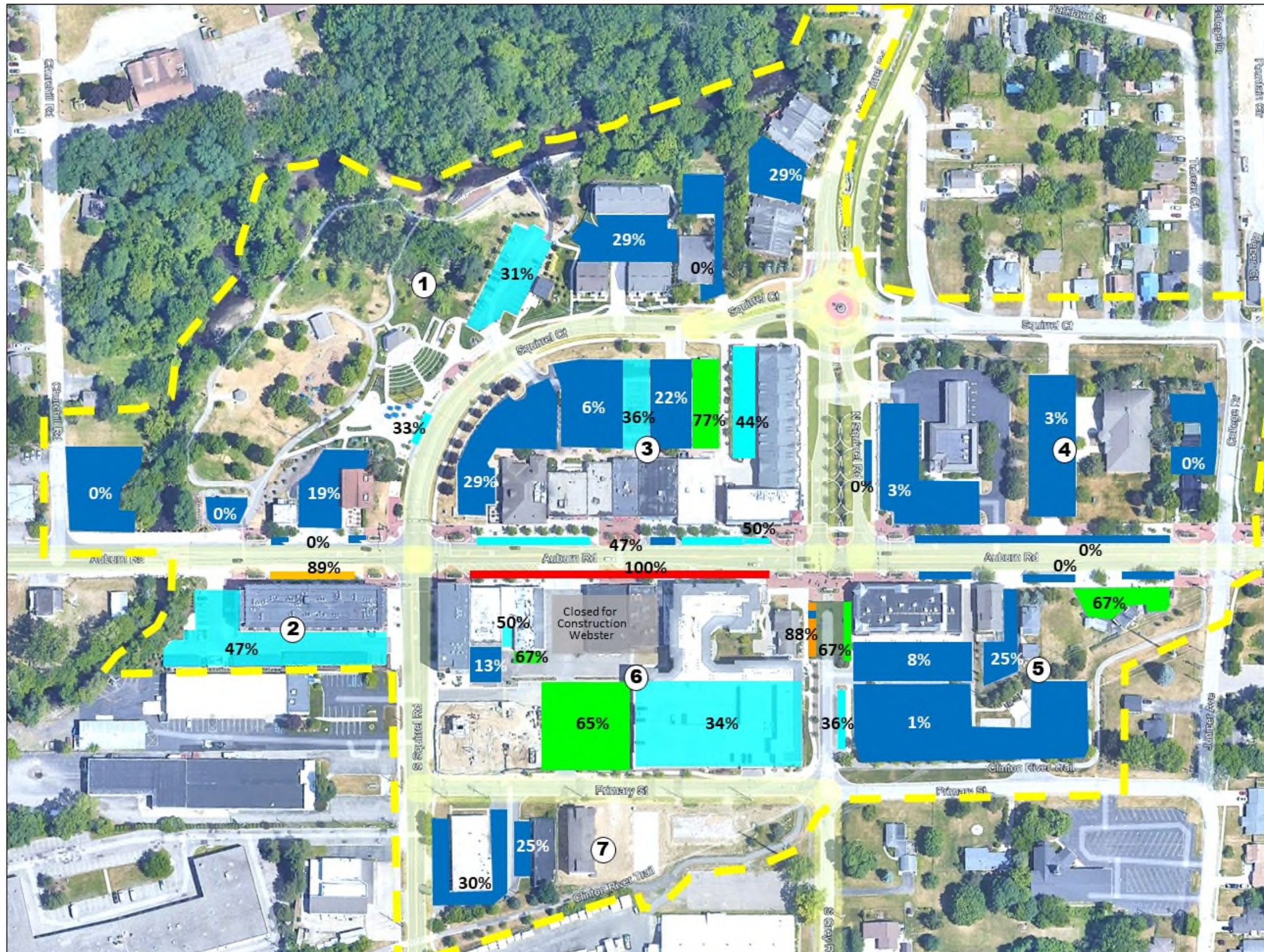
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City of Auburn Hills Parking Study

**Turnover/Occupancy
5:00 PM – 7:00 PM**

Friday, August 11, 2023

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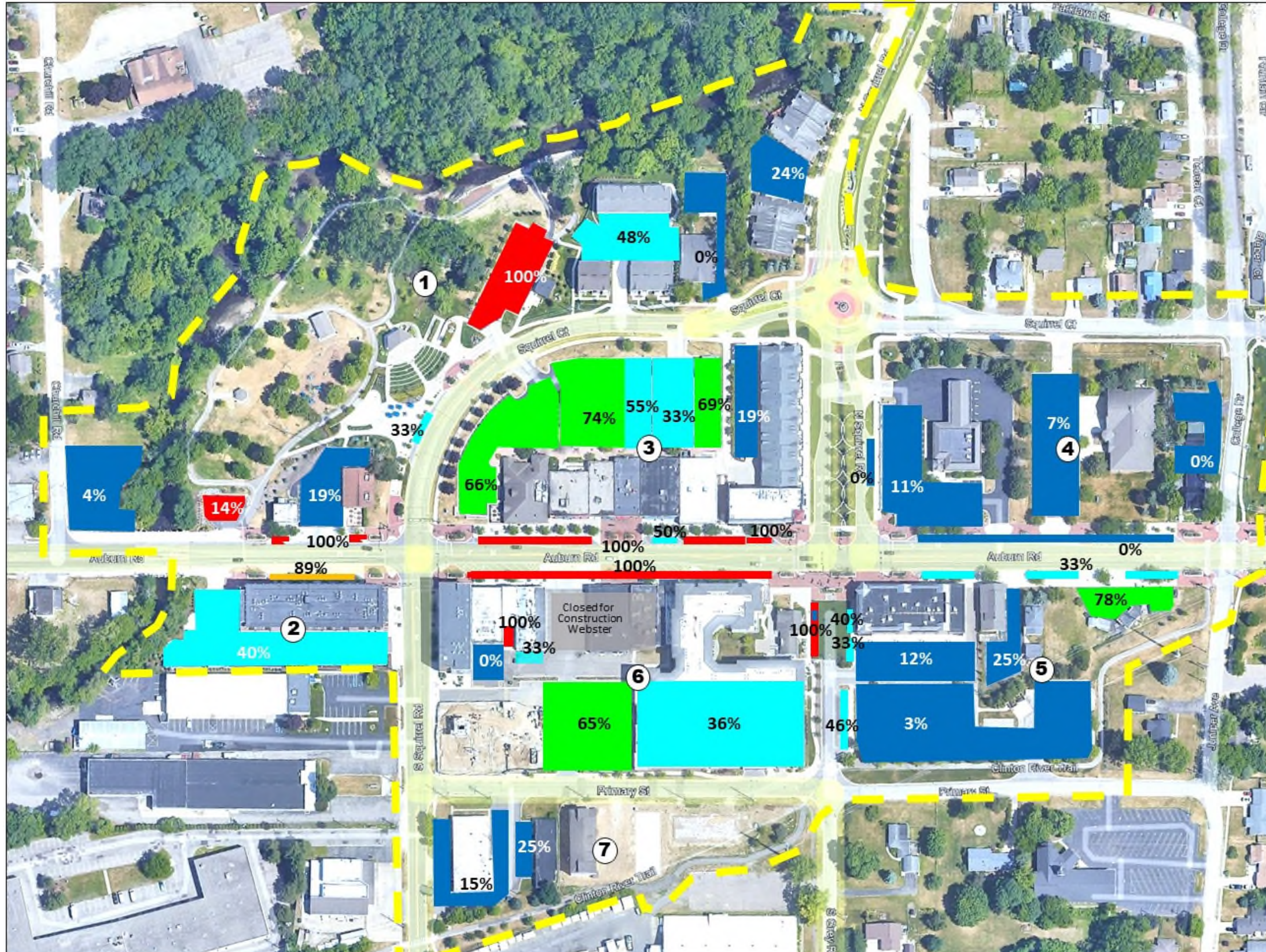
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City of Auburn Hills Parking Study

Turnover/Occupancy
7:00 PM – 9:00 PM

Friday, August 11, 2023

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City of Auburn Hills Parking Study

Turnover/Occupancy
9:00 PM – 11:00 PM

Friday, August 11, 2023

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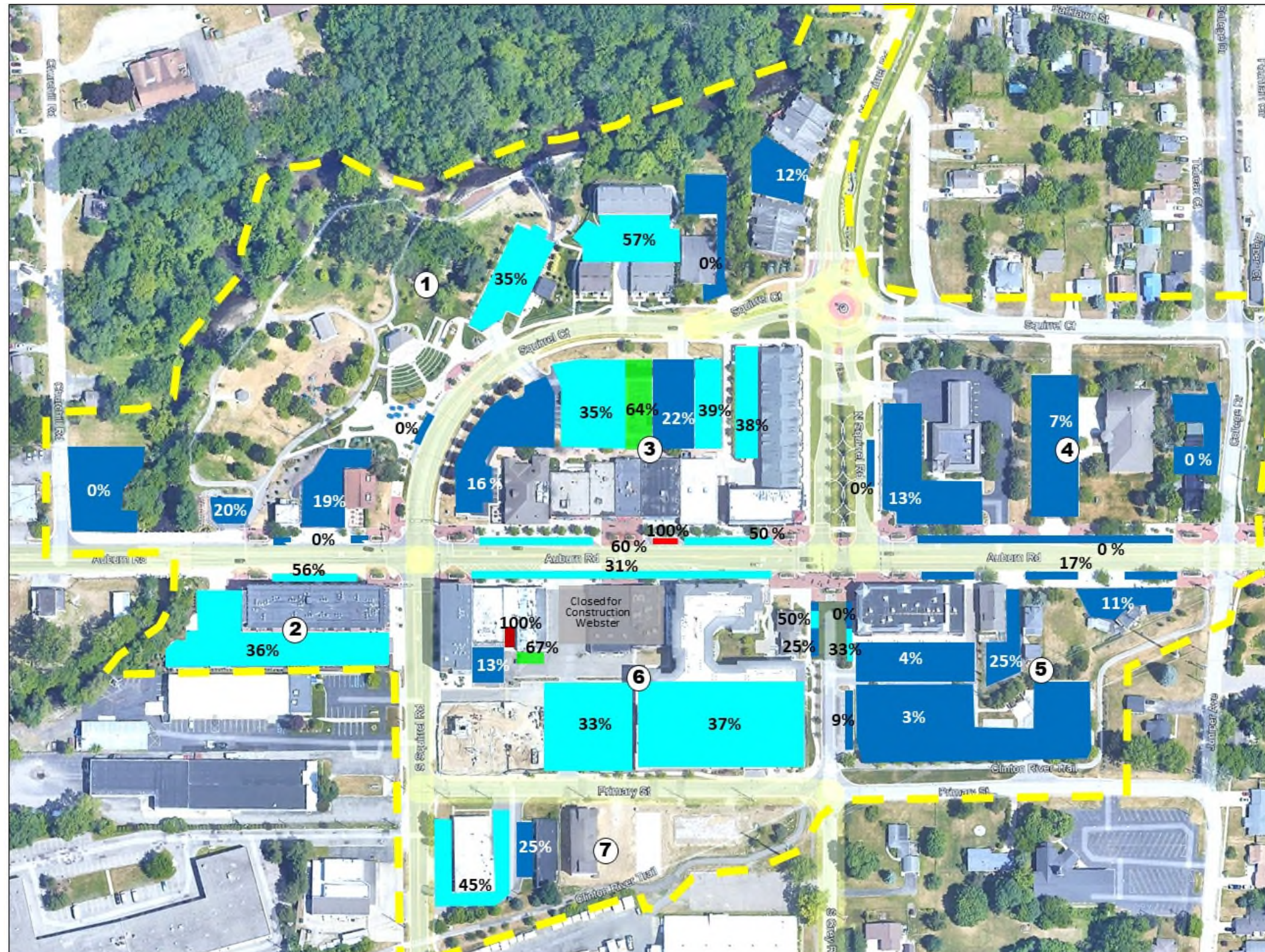
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Turnover/Occupancy Saturday August 12, 2023



City of Auburn Hills Parking Study

Turnover/Occupancy
11:00 AM – 1:00 PM
Saturday, August 12, 2023

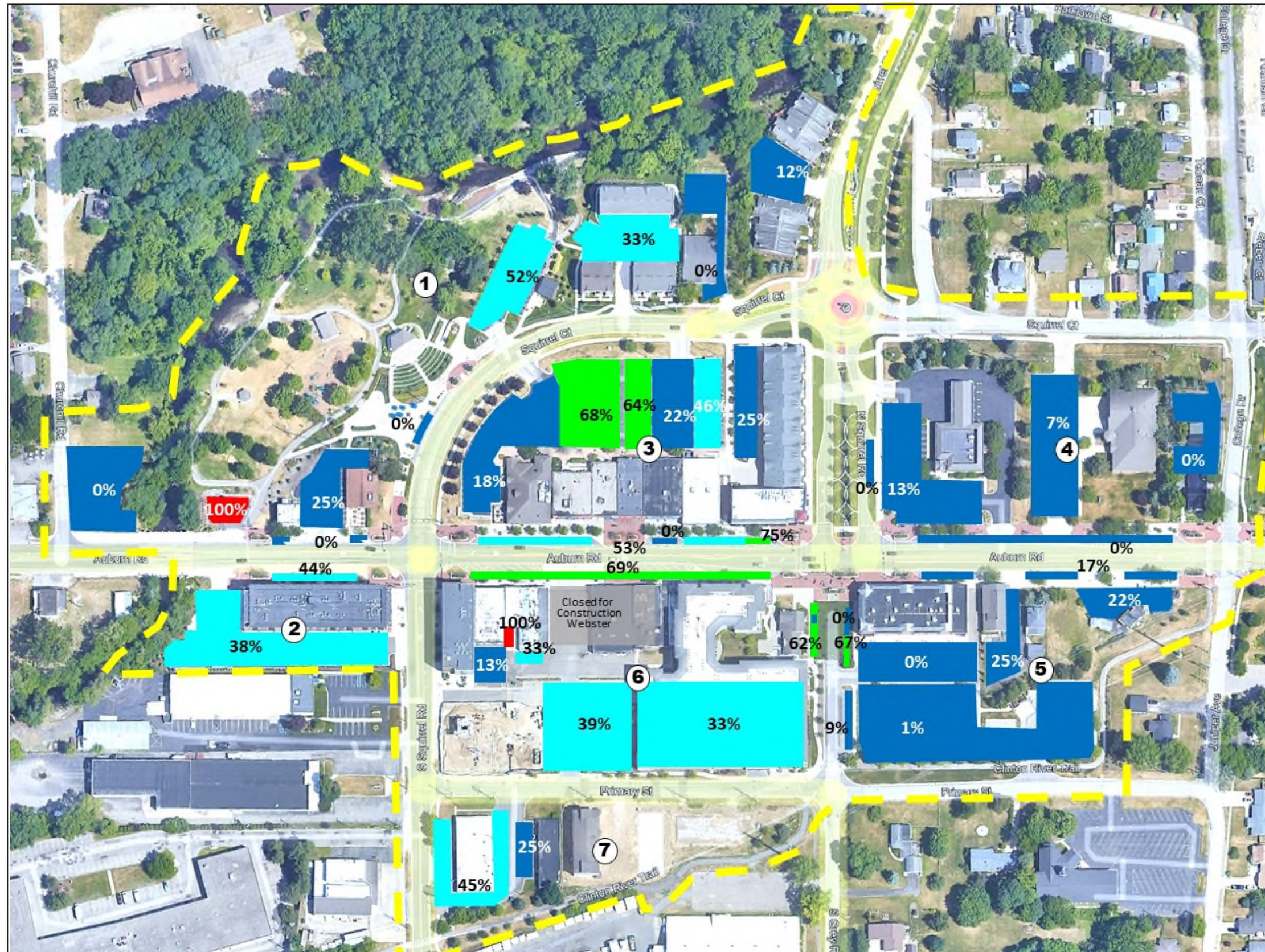
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City of Auburn Hills Parking Study


**Turnover/Occupancy
1:00 PM – 3:00 PM**


Saturday August 12, 2023


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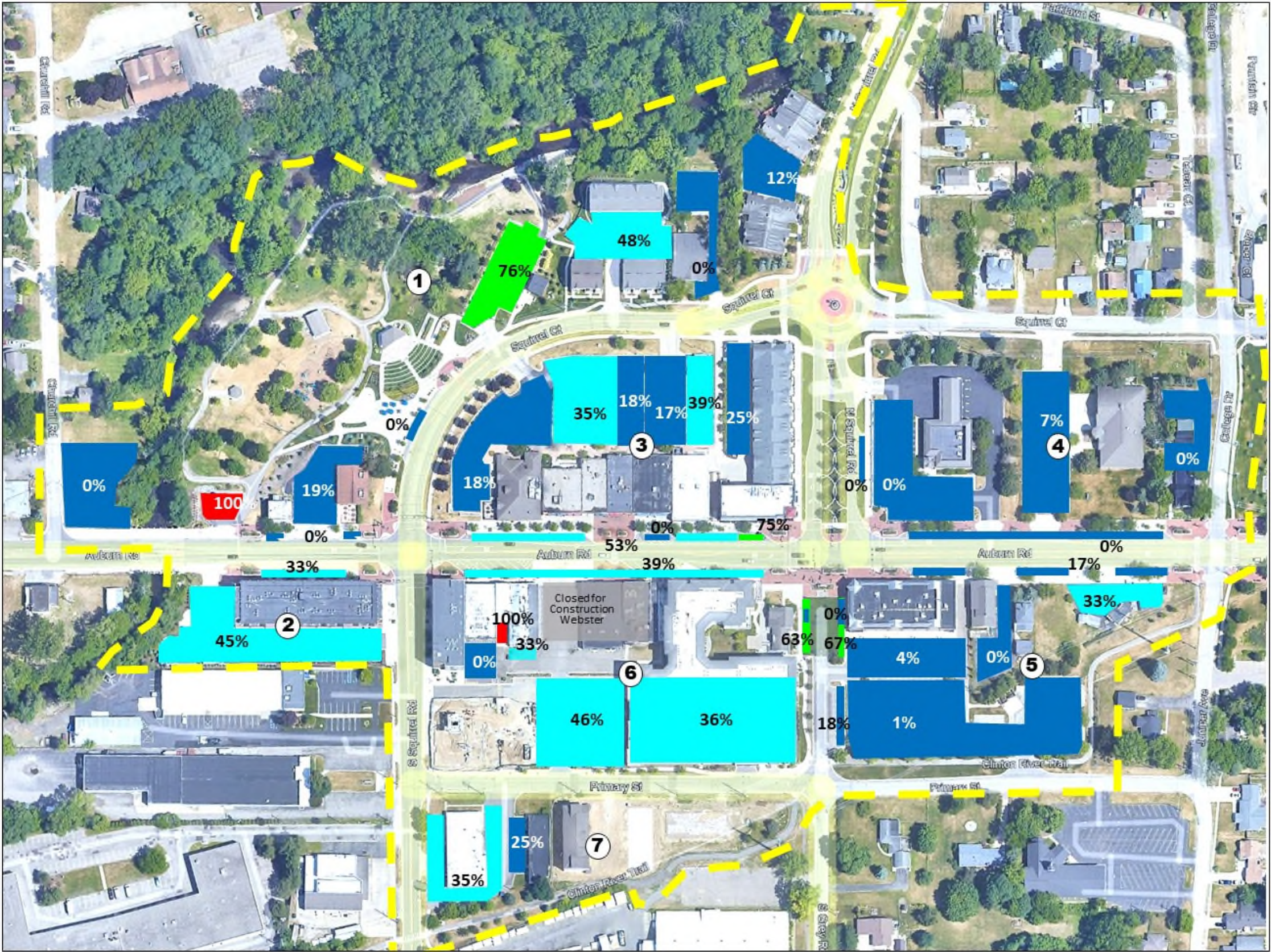
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City of Auburn Hills Parking Study

Turnover/Occupancy
3:00 PM – 5:00 PM

Saturday, August 12, 2023

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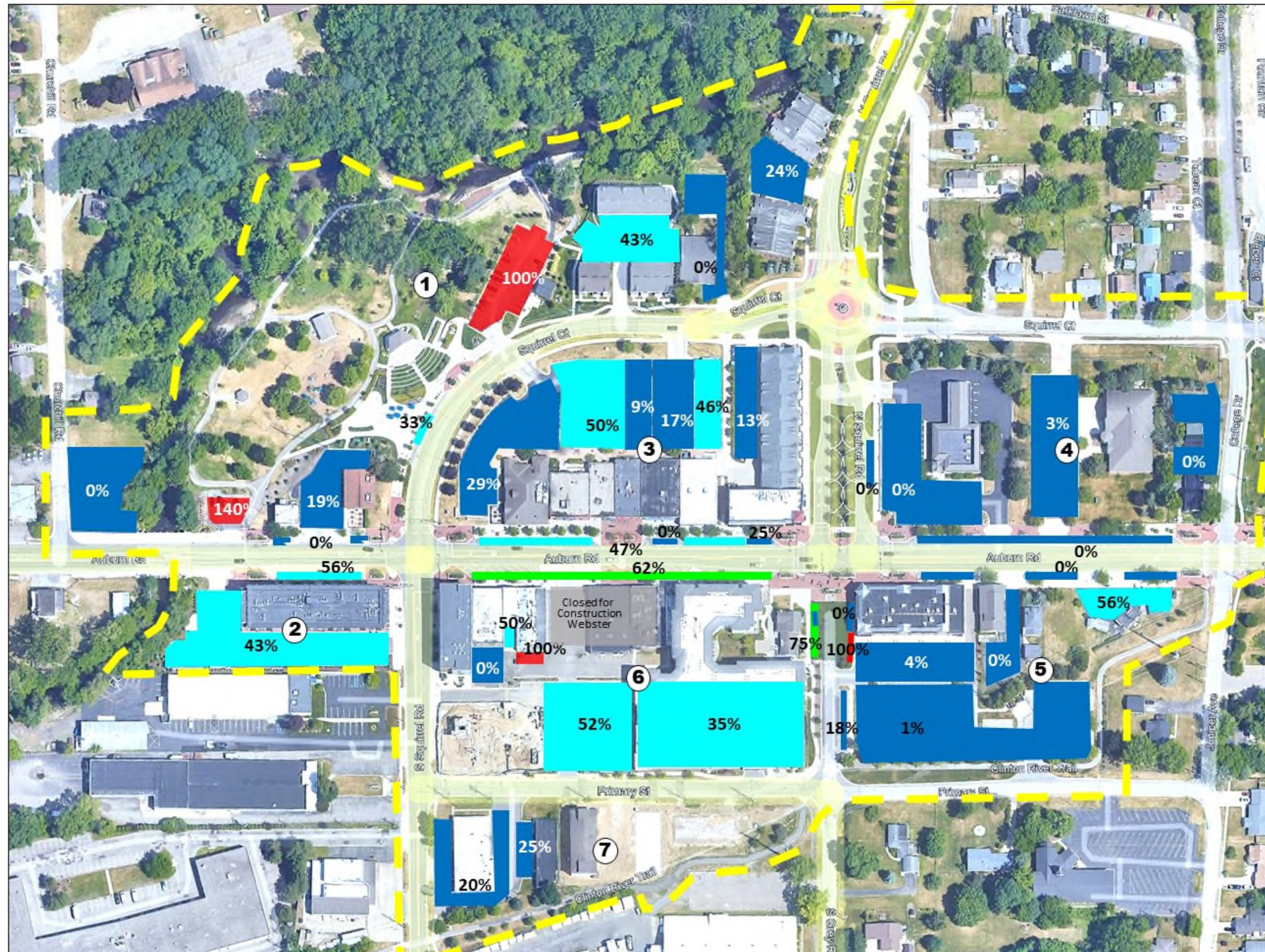
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City of Auburn Hills Parking Study

**Turnover/Occupancy
5:00 PM – 7:00 PM**

Saturday, August 12, 2023

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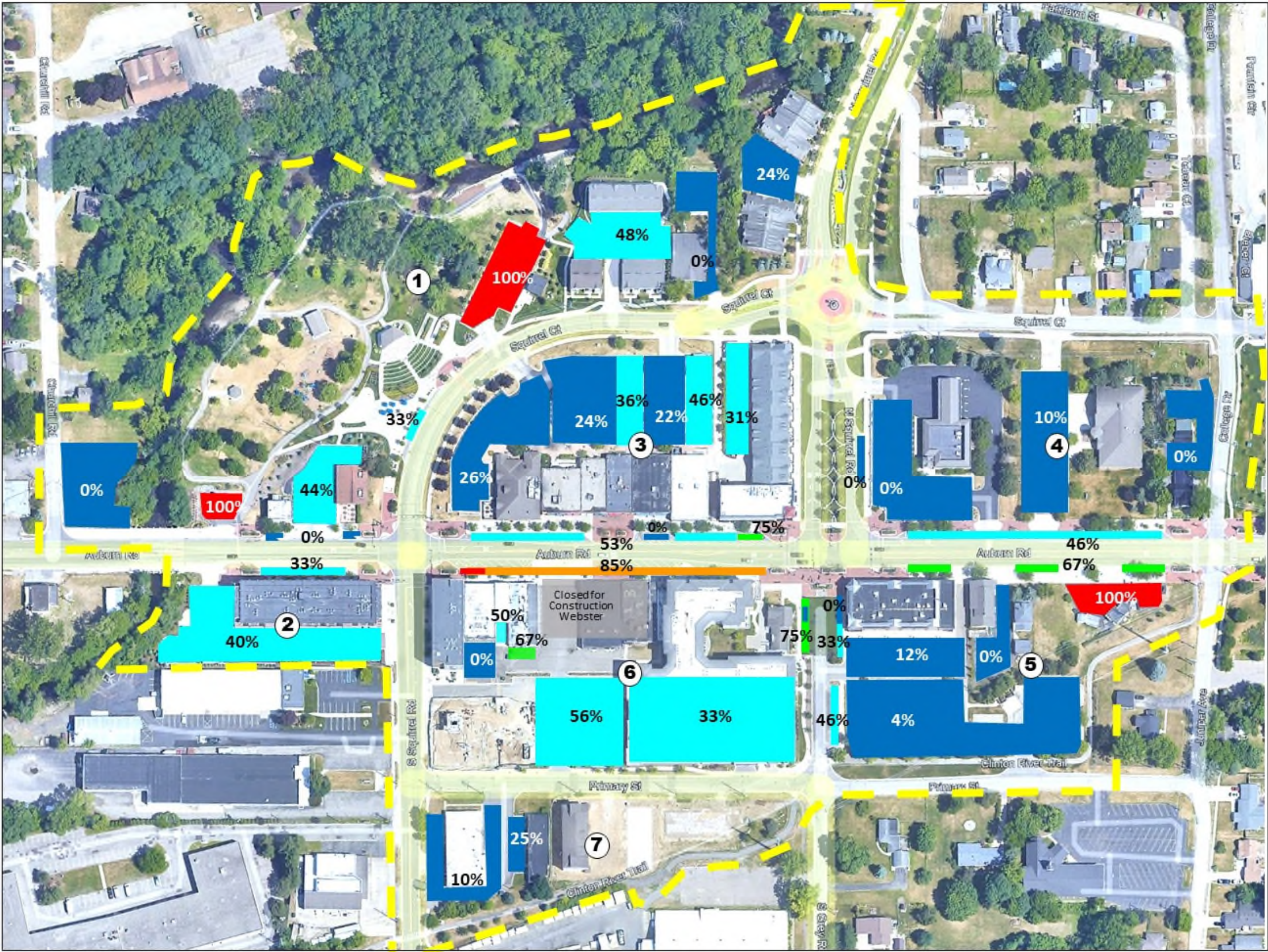
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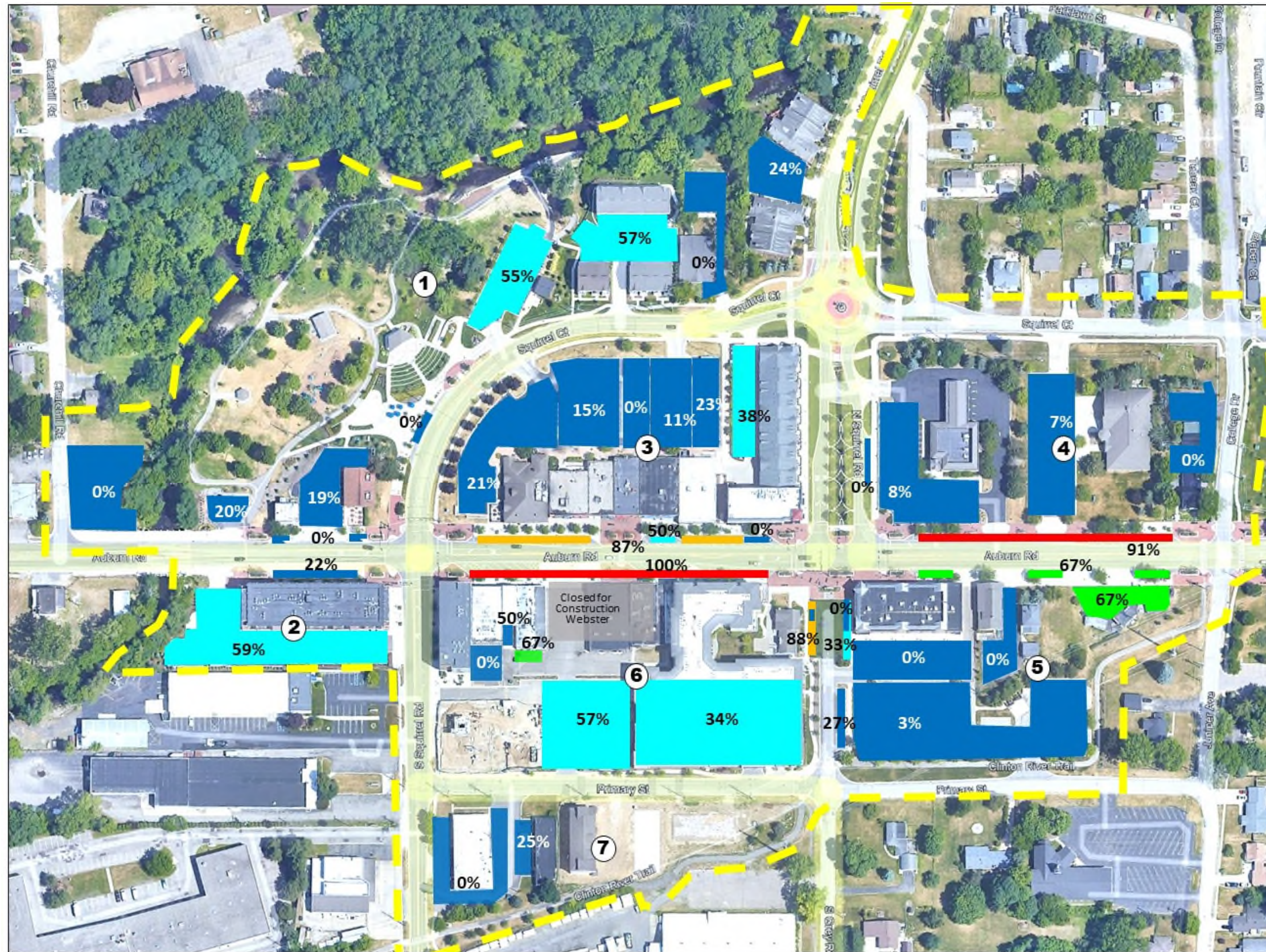
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City of Auburn Hills Parking Study

Turnover/Occupancy
9:00 PM – 11:00 PM

Saturday, August 12, 2023

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