



Downtown Midland Parking Study

Draft Final Report
February 2020

City of Midland, Michigan
City of Midland Downtown Development Authority



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SECTION 1 – EXECUTIVE SUMMARY

Introduction

Rich and Associates was commissioned by the City of Midland to conduct a comprehensive assessment of a 48-block area of downtown parking needs. This analysis quantified and qualified existing and near-term (3-years) conditions to demonstrate the impact from the planned development of a Delta College facility within the downtown. The analysis considers the many diverse types of land uses within the downtown that contribute to the vibrant, active downtown experienced.

Methodology

In order to complete the analysis, Rich staff collected on-site parking supply data and building inventory information noting the address and type of use of each building. This data, supported with square footage information provided by the City in conjunction with one day of on-site utilization counts, allowed Rich to quantify the parking needs by time of day for both the existing conditions and to project the near future parking requirements. This data was supported with a series of on-line surveys completed by downtown customers and visitors, downtown business owners and their staff.

Results

Current Conditions

The utilization counts showed that through much of a typical day, only about 50 percent of the total downtown parking supply is currently being utilized. Through much of the day, the publicly available parking follows the overall parking pattern but on the survey date, there was a well-attended concert in the park by the River that substantially increased the utilization of the public parking at the same time that much of the privately controlled spaces were decreasing as business and offices closed and many downtown employees left for the day.

The calculated parking demand shows that currently during the daytime hours, downtown Midland has a “gross surplus” of 2,310± spaces. The gross value simply compares total parking demand to total parking supply. This figure is slightly misleading, however, because it includes surplus privately controlled spaces that may not be available to patrons from other businesses. Therefore, Rich makes an adjustment which discounts these “extra” private spaces and results in a calculation referred to as the “net basis.” On the net basis, the downtown would still have a surplus but it would be 1,300 spaces less at 1,002± spaces. Eleven blocks would have deficits of parking meaning the supply of parking on that block cannot accommodate the demand for parking on that block. These deficits range from three spaces to as many as 91 spaces. It should be noted that it is not uncommon for blocks in an urban setting to have deficits since it is often planned that the parking supply intended to service one block may be located on an adjacent block.

Future Conditions

Although there are several projects under consideration within downtown Midland, the confidential nature of these does not allow them to be quantified at this time. However, one project which is known, is the development of a 30,000 sf Delta College building within the downtown that would initially accommodate approximately 300 daily students. The calculated parking impact from the students and instructors during the peak daytime from this facility would be about 275 parking spaces needed. The block on which the building is to be constructed is currently a 78-space surface lot which would be eliminated. An additional storage building on the site would also be demolished and this site used to construct a 31± space parking lot. The future projections also assume that 40 percent of 94,000 sf of currently vacant building space will be re-occupied adding an additional 90 spaces to the downtown parking demand.

Given these projections, the future daytime parking demand is projected to increase to 2,384 spaces resulting in a “gross surplus” of 1,889 spaces (down from 2,310 currently) and a net surplus of 683 spaces (down from 1,002 currently).

Table 1 – Daytime / Evening Conditions Summary

		Parking Demand	Public Supply	Private Supply	Total Supply	Gross Surplus / (Deficit)	Net Surplus / (Deficit)
Current	Daytime	2,016	1,780	2,546	4,326	2,310	1,002
	Evening	1,318	2,008	2,318	4,326	3,008	1,324
Future	Daytime	2,384	1,780	2,493	4,273	1,889	683
	Evening	1,411	2,008	2,265	4,273	2,862	1,293

Table 1 above summarizes both the daytime and evening conditions. Projecting the parking demand and supply during the evening shows that the gross and net surpluses would be greater if based on the same buildings as the daytime demand since City and County government offices and some other offices and businesses have closed for the day. Some of this decline is offset by increased restaurant traffic. However, as noted, on the date of the turnover and occupancy study there was a well-attended concert at the park which is not reflected in the calculated surplus / deficit values. This generated an estimated 300 to 350 additional vehicles. Also not factored into the surplus deficit calculations would be overflow traffic from patrons to Great Lakes Loons games. With attendance of between 4,000 and 5,000 fans as would be expected during the warmer months, this would mean between 650± spaces and 1,000± spaces may be required from other downtown parking venues.

Recommendations

Rich has prepared a number of recommendations intended to improve the downtown parking user’s experience. It is expected that some recommendations will be able to be implemented relatively quickly and at little costs. Other recommendations may take more time or consensus on the part of the City and downtown users. **Table 2** below summarizes the recommendations which are detailed beginning on page 58.

Table 2 – Parking Recommendation Summary

Recommendation #	Recommendation	Responsibility	Time Frame
1.0	Signage		
1.1	Public Lots Signed / Identified	City and DDA	6 - 12 Months
1.2	Direction Signs	City and DDA	As budgets permit
1.3	Wayfinding Signs	City and DDA	As budgets permit
2.0	Enforcement		
2.1	Enforcement Technology	City	6 - 12 Months
2.2	Use of Volunteers	City	6 - 12 Months
2.3	Adjust Fine Schedule	City	To be determined
3.0	Maintenance		
3.1	Parking Lots / Garage	City	Immediate
3.1.1	Engineering Assessment Larkin Street Garage	City	Completed
3.2	On-Street Striping	City	Immediate
3.3	Maintenance Sinking Fund	City	12 - 24 Months
4.0	Larking Street Parking Structure		
4.1	Install Public Parking Signage	City and DDA	6 - 12 Months
4.2	Either eliminate few paid spaces / or complete paid system	City and DDA	Immediate
4.3	Market the garage as for transient (short-term) use but if unsuccessful, market garage as for employee parking (covered spaces)	City and DDA	Immediate
5.0	Handicap Parking		
5.1	Adjust spaces affected by improperly placed signs or "street furniture" that affect wheelchair ramps or passenger access.	City	0 - 6 Months
6.0	Paid Parking System		
6.1	Either eliminate few paid spaces / or complete paid system	City	
7.0	Special Event Parking		
7.1	Identify and publicize alternative parking locations	City and DDA	Immediate
7.2	Designated Handicap Spaces near event	City	6 - 12 Months
8.0	Maintain 3-hour on-street Time Limit	City	Immediate
9.0	Bicycle Parking	City and DDA	As budgets permit
10.0	Future Planning / Employee Parking	City and DDA	As budgets permit
10.1	Monitor future development plans for changes to surplus and deficits on adjacent blocks which may require consideration of additional parking alternatives	City and DDA	To be determined
10.2	Consider opportunities to designate less convenient parking as designated employee parking areas	City and DDA	To be determined

SECTION 2 – PARKING SUPPLY ANALYSIS

Introduction

The City of Midland contracted with Rich & Associates to complete a comprehensive assessment of the downtown parking needs. Downtown Midland is a walkable community with retail establishments, restaurants, churches, City and County Governmental office buildings, hotel and residential communities, as well as waterfront activities. These uses coupled with the new Delta College development and future development interest within the downtown have the potential to place additional pressure on the current parking system.

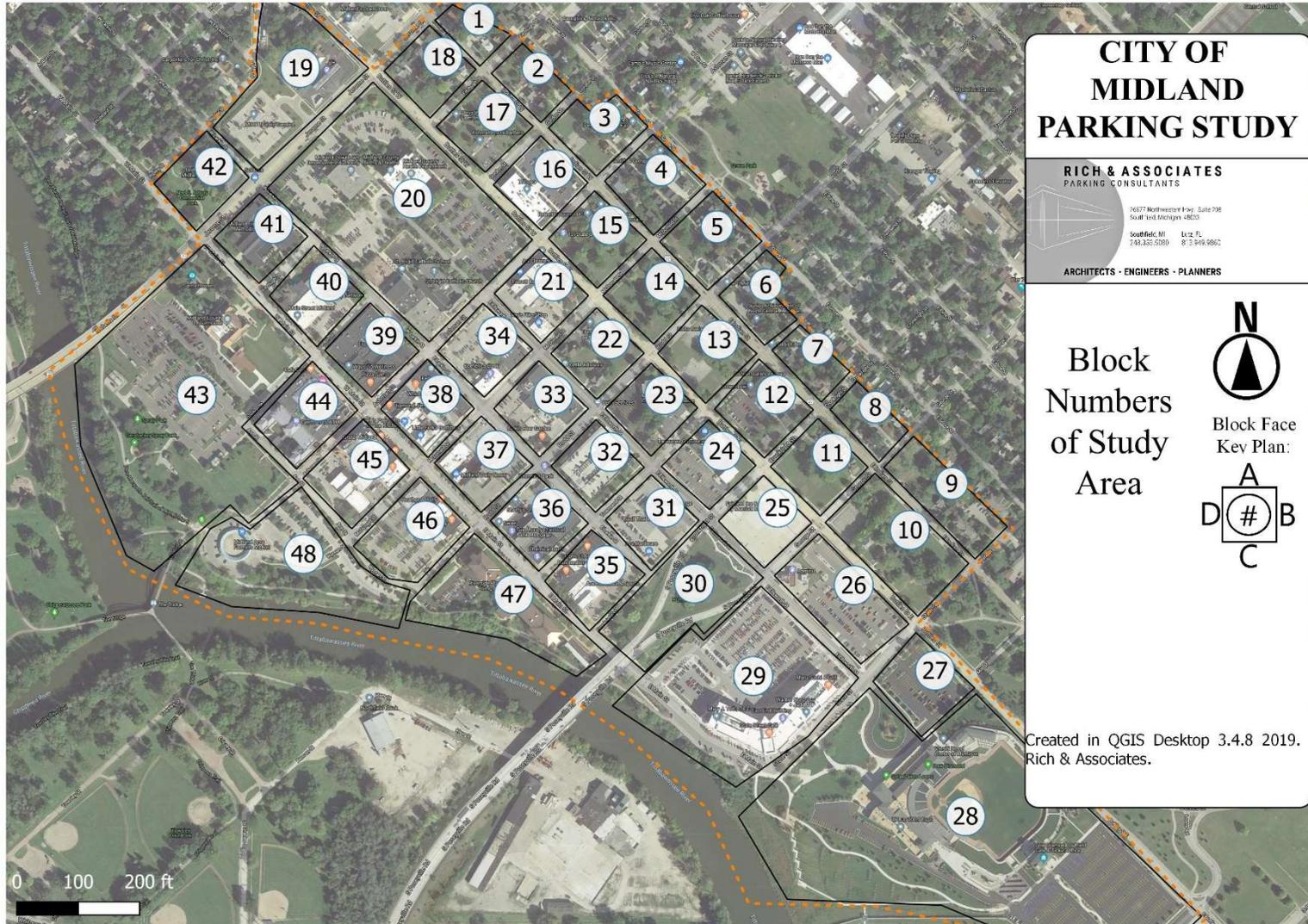
This parking study, prepared for the City of Midland, serves to examine the existing parking system from both a qualitative and quantitative standpoint and will assess whether the current parking supply could be more efficiently managed and utilized or if additional parking strategies are needed to meet the current and future development demands.

A primary goal of the parking analysis is determining if new parking will be required based on recent and anticipated future developments. At this point, the planned Delta College facility is the only project that has been publicly revealed. Other projects being contemplated are still confidential.

Study Area

The study area, as defined by the City of Midland, is illustrated on **Map 1** on Page 5 and is comprised of 48 blocks within the downtown with the Tittabawassee River, Jerome St, Indian St, and State Street as the boundaries and also includes the Dow Diamond parking areas.

Map 1 – Parking Study Area



Parking Inventory

Fieldwork for the parking section of this study involved a review of the current parking supply. Within the downtown area, the parking supply consists of public and private, on-street and off-street parking, as well as, the Larkin Parking Structure.

Table 3 below summarizes the existing downtown parking supply. There is a total of 4,959 parking spaces within the study area. Of these spaces 555 are on-street spaces and 1,225 are public off-street spaces. The remaining 3,179 spaces are private.

While the 555 on-street parking spaces are free for public use, there are 65 spaces with unlimited time restrictions and 434 with three-hour limits. The remaining spaces fall into 15 or 30-minute restricted, handicap accessible, or loading zone spaces.

Table 3 – Parking Supply Summary

Public Parking Supply			
	On-Street	555	11%
	Off-Street	1225	25%
	Public Parking Totals	1780	36%
Off-Street Private Parking Supply			
	Private Parking Totals	3179	64%
	Total Parking Supply	4,959	

The proportion of public parking is actually slightly misleading because this includes the lot belonging to the H properties behind the H Hotel and the County Lot to the west along the highway. With the concurrence of the H properties, the 275 spaces owned by the H properties in this lot operate as public parking although it is actually privately controlled. Given this caveat, the City of Midland has an effective public supply equating to 36 percent of the parking within the study area. If the 275 spaces owned by the H Hotel in this lot were classified as strictly private, then the City would only control about 30 percent of the downtown parking supply. Based on Rich & Associates experience and best practices, we have found it is desirable for the municipality to control at least 50 percent of the supply to allow for successful parking management. This allows the municipality to effectively manage parking in terms of changing demand, allocation, and enforcement. Additionally, when the majority of the parking supply is available to patrons, it makes it easier for them to park once and visit multiple establishments. Currently, the City of Midland does not meet this benchmark.

Table 4 on page 7 details the parking supply available on each block within the study area. Comprehensive inventories of the on-street (**Table 5**, page 8) and off-street (**Table 6**, page 9) supply have also been provided. Estimated number of spaces were used in areas where spaces were not clearly marked.

Table 4 – Downtown Parking Supply by Block

Block #	1	2	3	4	6	7	9	12	13	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	TOTALS				
PUBLIC OFF-STREET																																															
Reg	0	0	0	0	0	0	0	0	0	0	0	0	0	104	225	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	275	0	0	53	0	257	914			
Hcp	0	0	0	0	0	0	0	0	0	0	0	0	0	3	11	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	7	0	0	3	0	14	43				
15 Min	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	5				
30 Min	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	11			
3 Hr	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	0	0	0	0	0	0	0	0	0	18	3	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	45			
10 Hr Meter	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	50	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	62				
Permit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	53	32	0	57	0	0	0	0	0	0	0	0	0	0	0	0	0	0	142				
Permit Hcp	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3				
SUBTOTALS	0	0	0	0	0	0	0	0	0	0	0	0	0	107	258	0	0	0	0	0	0	0	0	0	71	90	0	79	0	6	0	0	0	5	0	0	282	0	0	56	0	271	1225				
PRIVATE OFF-STREET																																															
Reg	0	0	2	6	10	10	23	60	10	38	75	19	66	30	190	63	30	34	79	71	239	117	588	429	45	222	41	23	32	6	49	26	22	42	0	14	150	50	8	29	73	11	3032				
Hcp	0	0	0	0	0	0	1	2	0	1	4	1	8	1	10	1	0	3	5	3	7	10	45	16	1	6	1	1	4	1	2	0	0	3	0	1	6	0	0	0	0	3	0	147			
SUBTOTALS	0	0	2	6	10	10	24	62	10	39	79	20	74	31	200	64	30	37	84	74	246	127	633	445	46	228	42	24	36	7	51	26	22	45	0	15	156	50	8	29	76	11	3179				
PUBLIC ON-STREET																																															
Public Unlimited	4	7	6	0	0	0	0	0	0	0	8	12	0	28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	65		
1 Hr	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	
2 Hr	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	9	0	0	0	0	12			
3 Hr	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	95	8	23	9	10	27	23	25	29	22	22	14	0	22	22	19	22	34	0	434				
15 Min	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	4				
30 Min	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3				
HC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	1	1	1	1	1	1	1	1	0	2	1	1	1	2	0	20			
LZ	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	6	1	0	1	0	1	0	1	0	1	2	0	0	15				
SUBTOTALS	4	7	6	0	0	0	0	0	0	0	8	12	0	28	8	0	0	0	0	0	0	0	101	8	23	9	10	31	33	27	30	26	23	16	3	36	25	20	23	38	0	555					
SUMMARY																																															
Totals	4	7	8	6	10	10	24	62	10	39	87	32	74	166	466	64	30	37	84	74	246	127	633	546	125	341	51	113	67	46	78	56	48	73	16	18	474	75	28	108	114	282	4959				

Source: Rich & Associates

Note This is a private lot owned by the H Hotel and operates as a public lot unless needed by the Hotel for special events.

Table 5 – On-Street Parking Supply

Block	Face	Description	Public Unlimited	1 Hr	2 Hr	3 Hr	15 Min	30 Min	HC	LZ	Total
1	b		4								
		Block 1 Total	4	0	0	0	0	0	0	0	4
2	b		3								
	d		4								
		Block 2 Total	7	0	0	0	0	0	0	0	7
3	d		6								
		Block 3 Total	6	0	0	0	0	0	0	0	6
16	d		8								
		Block 16 Total	8	0	0	0	0	0	0	0	8
17	b		6								
	d		6								
		Block 17 Total	12	0	0	0	0	0	0	0	12
19	d		28								
		Block 19 Total	28	0	0	0	0	0	0	0	28
20	b					8					
		Block 20 Total	0	0	0	8	0	0	0	0	8
29	a					8					
	ba					9			6		
	bb					13					
	ca					40					
	cb					25					
		Block 29 Total	0	0	0	95	0	0	6	0	101
31	c					8					
		Block 31 Total	0	0	0	8	0	0	0	0	8
32	b					8					
	c					9					
	d					6					
		Block 32 Total	0	0	0	23	0	0	0	0	23
33	b					7					
	c					2					
		Block 33 Total	0	0	0	9	0	0	0	0	9
34	b					4					
	c					6					
		Block 34 Total	0	0	0	10	0	0	0	0	10
35	a					2				3	
	b					8					
	c					9			1		
	d					8					
		Block 35 Total	0	0	0	27	0	0	1	3	31
36	a					4				3	
	b					7					
	c					12			1		
	d							3		3	
		Block 36 Total	0	0	0	23	0	3	1	6	33
37	a					3					
	b					8					
	c					8			1		
	d					6				1	
		Block 37 Total	0	0	0	25	0	0	1	1	27
38	a					6					
	b					5					
	c					8			1		
	d					10					
		Block 38 Total	0	0	0	29	0	0	1	0	30
39	b					7				1	
	c					6	2		1		
	d					9					
		Block 39 Total	0	0	0	22	2	0	1	1	26
40	c					15			1		
	d					7					
		Block 40 Total	0	0	0	22	0	0	1	0	23
41	b					7			1	1	
	c					7					
		Block 41 Total	0	0	0	14	0	0	1	1	16
42	c					3					
		Block 42 Total	0	0	3	0	0	0	0	0	3
43	a					22	2		2	1	
	b					9					
		Block 43 Total	0	0	9	22	2	0	2	1	36
44	a					8			1		
	b					7					
	d					7				2	
		Block 44 Total	0	0	0	22	0	0	1	2	25
45	a					8			1		
	b					8					
	d					3					
		Block 45 Total	0	0	0	19	0	0	1	0	20
46	a					8			1		
	b					7					
	d					7					
		Block 46 Total	0	0	0	22	0	0	1	0	23
47	a			2		24			2		
	d					10					
		Block 47 Total	0	2	0	34	0	0	2	0	38
Total On-Street Parking Supply			65	2	12	434	4	3	20	15	555

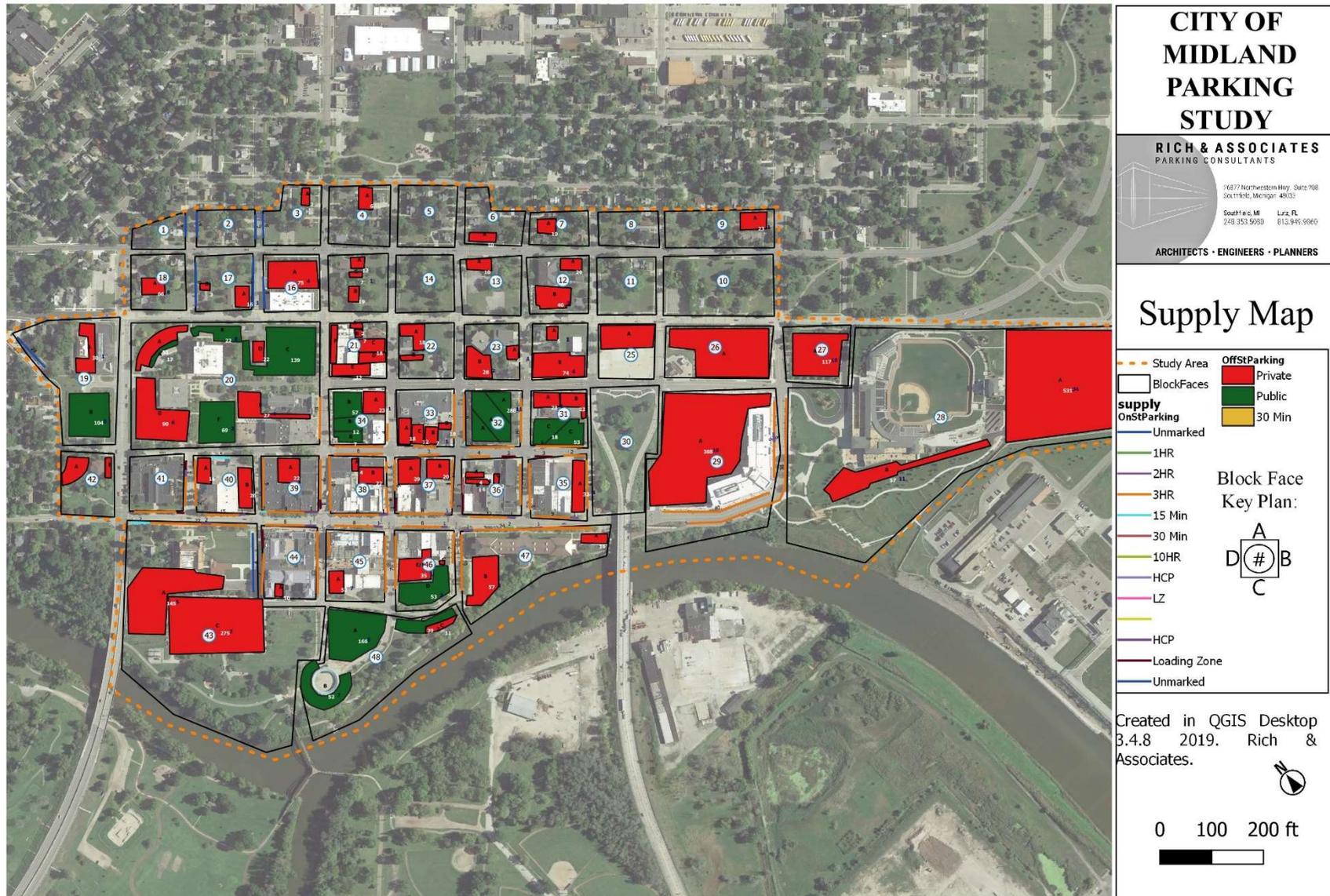
Table 6 – Off-Street Parking Supply

Block	Ltr	Description	Public Lot Capacity								Private Lot Capacity			
			Reg	Hcp	15 Min	30 Min	3 Hr	10 Hr Meter	Permit	Permit Hcp	TOTAL	Reg	Hcp	TOTAL
3	A	Private Lot			0	0	0	0	0	0		2	0	
		Total Block 3	0	0	0	0	0	0	0	0	0	2	0	2
4	A	Private Lot			0	0	0	0	0	0		6	0	
		Total Block 4	0	0	0	0	0	0	0	0	0	6	0	6
6	A	Private Lot			0	0	0	0	0	0		10	0	
		Total Block 6	0	0	0	0	0	0	0	0	0	10	0	10
7	A	Private Lot			0	0	0	0	0	0		10	0	
		Total Block 7	0	0	0	0	0	0	0	0	0	10	0	10
9	A	Private Lot			0	0	0	0	0	0		23	1	
		Total Block 9	0	0	0	0	0	0	0	0	0	23	1	24
12	A	Private Lot			0	0	0	0	0	0		20	0	
12	B	Private Lot			0	0	0	0	0	0		40	2	
		Total Block 12	0	0	0	0	0	0	0	0	0	60	2	62
13	A	Private Lot			0	0	0	0	0	0		10	0	
		Total Block 13	0	0	0	0	0	0	0	0	0	10	0	10
15	A	Private Lot			0	0	0	0	0	0		12	0	
15	B	Private Lot			0	0	0	0	0	0		19	0	
15	C	Private Lot			0	0	0	0	0	0		7	1	
		Total Block 15	0	0	0	0	0	0	0	0	0	38	1	39
16	A	Private Lot			0	0	0	0	0	0		75	4	
		Total Block 16	0	0	0	0	0	0	0	0	0	75	4	79
17	A	Private Lot			0	0	0	0	0	0		16	1	
17	B	Private Lot			0	0	0	0	0	0		3	0	
		Total Block 17	0	0	0	0	0	0	0	0	0	19	1	20
18	A	Private Lot			0	0	0	0	0	0		66	8	
		Total Block 18	0	0	0	0	0	0	0	0	0	66	8	74
19	A	Private Lot			0	0	0	0	0	0		30	1	
19	B	Public Lot	104	3	0	0	0	0	0	0				
		Total Block 19	104	3	0	0	0	0	0	0	107	30	1	31
20	A	Private Lot			0	0	0	0	0	0		51	0	
20	A	Public Lot	17											
20	B	Public Lot	22	8	0	0	0	0	0	0				
20	C	Public Lot	139	0	0	0	0	0	0	0				
20	D	Private Lot			0	0	0	0	0	0		22	0	
20	E	Private Lot			0	0	0	0	0	0		27	4	
20	F	Public Lot	47	3	0	5	17	0	0	0				
20	G	Private Lot			0	0	0	0	0	0		90	6	
		Total Block 20	225	11	0	5	17	0	0	0	258	190	10	200
21	A	Private Lot			0	0	0	0	0	0		2	0	
21	B	Private Lot			0	0	0	0	0	0		7	0	
21	C	Private Lot			0	0	0	0	0	0		18	0	
21	D	Private Lot			0	0	0	0	0	0		10	0	
21	E	Private Lot			0	0	0	0	0	0		12	0	
21	F	Everett Carpet Lot		0	0	0	0	0	0	0		14	1	
		Total Block 21	0	0	0	0	0	0	0	0	0	63	1	64
22	A	Private Lot			0	0	0	0	0	0		18	0	
22	B	Private Lot			0	0	0	0	0	0		12	0	
		Total Block 22	0	0	0	0	0	0	0	0	0	30	0	30
23	A	Private Lot			0	0	0	0	0	0		6	1	
23	B	Private Lot			0	0	0	0	0	0		28	2	
		Total Block 23	0	0	0	0	0	0	0	0	0	34	3	37
24	A	Private Lot			0	0	0	0	0	0		5	1	
24	B	Private Lot			0	0	0	0	0	0		74	4	
		Total Block 24	0	0	0	0	0	0	0	0	0	79	5	84
25	A	Private Lot			0	0	0	0	0	0		71	3	
		Total Block 25	0	0	0	0	0	0	0	0	0	71	3	74
26	A	Private Lot			0	0	0	0	0	0		239	7	
		Total Block 26	0	0	0	0	0	0	0	0	0	239	7	246

Table 6 – Off-Street Parking Supply (Con't)

Block	Ltr	Description	Public Lot Capacity								Private Lot Capacity			
			Reg	Hcp	15 Min	30 Min	3 Hr	10 Hr Meter	Permit	Permit Hcp	TOTAL	Reg	Hcp	TOTAL
27	A	Private Lot			0	0	0	0	0	0		117	10	
		Total Block 27	0	0	0	0	0	0	0	0	0	117	10	127
28	A	Private Lot			0	0	0	0	0	0		531	34	
28	B	Private Lot			0	0	0	0	0	0		57	11	
		Total Block 28	0	0	0	0	0	0	0	0	0	588	45	633
29	A	Private Lot			0	0	0	0	0	0		388	16	
29	B	Private Lot			0	0	0	0	0	0		41	0	
		Total Block 29	0	0	0	0	0	0	0	0	0	429	16	445
31	A	Private Lot			0	0	0	0	0	0		23	1	
31	B	Private Lot			0	0	0	0	0	0		22	0	
31	C	Public Lot	0	0	0	0	18	0	53	0				
		Total Block 31	0	0	0	0	18	0	53	0	71	45	1	46
32	A	Parking Garage 1st	0	5	0	0	3	50	32			0	0	
		Parking Garage Fl	0	0	0	0	0	0	0	0		222	6	
		Total Block 32	0	5	0	0	3	50	32	0	90	222	6	228
33	A	Private Lot			0	0	0	0	0	0		4	0	
33	B	Private Lot			0	0	0	0	0	0		7	1	
33	C	Private Lot			0	0	0	0	0	0		12	0	
33	D	Private Lot			0	0	0	0	0	0		18	0	
		Total Block 33	0	0	0	0	0	0	0	0	0	41	1	42
34	A	Public Lot	0	0	0	0	7	12	57	3				
34	B	Private Lot			0	0	0	0	0	0		23	1	
		Total Block 34	0	0	0	0	7	12	57	3	79	23	1	24
35	A	Private Lot			0	0	0	0	0	0		32	4	
		Total Block 35	0	0	0	0	0	0	0	0	0	32	4	36
36	A	Private Lot			0	0	0	0	0	0		2	0	
36	B	Private Lot			0	0	0	0	0	0		4	1	
36	C	30 Min Limit	0	0	0	6	0	0	0	0		0	0	
		Total Block 36	0	0	0	6	0	0	0	0	6	6	1	7
37	A	Private Lot			0	0	0	0	0	0		29	0	
37	B	Private Lot			0	0	0	0	0	0		20	2	
		Total Block 37	0	0	0	0	0	0	0	0	0	49	2	51
38	A	Private Lot			0	0	0	0	0	0		4	0	
38	B	Private Lot			0	0	0	0	0	0		22	0	
		Total Block 38	0	0	0	0	0	0	0	0	0	26	0	26
39	A	Private Lot			0	0	0	0	0	0		22	0	
		Total Block 39	0	0	0	0	0	0	0	0	0	22	0	22
40	A	Private Lot			0	0	0	0	0	0		16	0	
40	B	15 Min		0	5	0	0	0	0	0			0	
40	C	Private Lot			0	0	0	0	0	0		26	3	
		Total Block 40	0	0	5	0	0	0	0	0	5	42	3	45
42	A	Private Lot			0	0	0	0	0	0		13	0	
42	B	Private Lot			0	0	0	0	0	0		1	1	
		Total Block 42	0	0	0	0	0	0	0	0	0	14	1	15
43	A	Private Lot			0	0	0	0	0	0		5	1	
43	B	Private Lot			0	0	0	0	0	0		40	5	
43	C	Private Lot - **	275	7	0	0	0	0	0	0		105		
		Total Block 43	275	7	0	0	0	0	0	0	282	150	6	156
44	A	Private Lot			0	0	0	0	0	0		50	0	
		Total Block 44	0	0	0	0	0	0	0	0	0	50	0	50
45	A	Private Lot			0	0	0	0	0	0		8	0	
		Total Block 45	0	0	0	0	0	0	0	0	0	8	0	8
46	A	Private Lot			0	0	0	0	0	0		19	0	
46	B	Private Lot			0	0	0	0	0	0		8	0	
46	C	Private Lot			0	0	0	0	0	0		2	0	
46	D	Public Lot	18	2	0	0	0	0	0	0				
46	E	Public Lot	35	1	0	0	0	0	0	0				
		Total Block 46	53	3	0	0	0	0	0	0	56	29	0	29
47	A	Private Lot			0	0	0	0	0	0		16	0	
47	B	Private Lot			0	0	0	0	0	0		57	3	
		Total Block 47	0	0	0	0	0	0	0	0	0	73	3	76
48	A	Public Lot	166	5	0	0	0	0	0	0				
48	B	Public Lot	39	2	0	0	0	0	0	0				
48	B	Private Lot			0	0	0	0	0	0		11		
48	C	Public Lot	52	7	0	0	0	0	0	0				
		Total Block 48	257	14	0	0	0	0	0	0	271	11	0	11
		Totals	914	43	5	11	45	62	142	3	1,225	3,032	147	3,179

Map 2 – Parking Supply



SECTION 3 – TURNOVER & OCCUPANCY ANALYSIS

The Turnover and Occupancy analysis performed by Rich is designed to not only show how the current parking supply is being used but perhaps more importantly to serve as a benchmark to calibrate the parking demand model. Although the analysis is done only on one day, the selected date is intended to be representative of “typical” day conditions during the busy part of the year. In other communities, when Rich has conducted multiple days of counts, there are of course variations. However, the variations in the occupancy are generally not so significant given similar weather conditions to change the conclusions regarding occupancy.

As the adjacent figure shows from a recent previous study conducted for another municipality over 12 hours per day for nine days, it has also been our experience that the number of vehicle violations does

not change dramatically from day to day without some change in the availability of other parking or some other event. In the table above, the higher vehicle counts on the Saturday in May compared to the June and July counts was the fact that the May Saturday count coincided with Cinco de Mayo. The total number of different vehicles counted in this municipality on the Thursday changed by 15 cars between the May counts and July counts. On the Friday counts, the difference was 30 cars daily. Again, even one day of counts is generally conducted on a “typical” day without any advance notice so that employees are not warned that we are monitoring license plates. Although there may be days where more or fewer cars are found to be in violation, this is typically within a few tenths of a percent.

This analysis shows how parking is being utilized in the downtown both in public and private parking lots and the on-street spaces. This analysis was conducted on Thursday, June 27th between 9:00 AM and 9:00 PM and covered approximately 88% of the total parking supply within the downtown area. The analysis was conducted on Thursday because it is often representative of a typical day to benchmark the activity for the study. One unique condition of this assessment was a concert during the evening in the area of the Farmer’s Market that brought a significant number of evening visitors to the downtown just for this event.

South Side of Tracks On-Street Spaces						
Month	Day of Week	# Spaces	Car Count	Avg Turnover	Total # of occupied Spaces	Avg Stay (# times car observed) # / # cars
May	Thursday	232	894	3.85	1,108	1.24
	Friday	232	915	3.94	1,117	1.22
	Saturday	232	955	4.12	1,240	1.30
May Average				3.97		1.25
June	Thursday	234	904	3.86	1,207	1.34
	Friday	234	885	3.78	1,152	1.30
	Saturday	234	889	3.80	1,128	1.27
June Average				3.81		1.30
July	Thursday	234	909	3.88	1,139	1.25
	Friday	234	905	3.87	1,118	1.24
	Saturday	234	874	3.74	1,199	1.37
July Average				3.83		1.29
South Side Average				3.87		1.28

Figure 1 - Results from multi-day counts conducted in another municipality demonstrating relative consistency in vehicle volumes

Turnover

For most patrons, the on-street parking located directly outside of their desired destination is considered to be the most convenient. As long as traffic volumes or speeds do not create issues for someone attempting to park, this on-street parking will often be the preferred choice. Therefore, it is important to understand if the established time limits are being abused by employees (or others) parking in these spaces for extended periods. The turnover analysis allows Rich to determine the number of vehicles parking for extended periods. In the case of Midland, the turnover and occupancy circuits were conducted every two hours. In 231 on-street spaces, Rich records a portion of the license plate number. On subsequent circuits it is noted if the same vehicle is there, a different vehicle or if the space is empty. Therefore, this methodology provides both occupancy information and lengths of stay data. The spaces analyzed had painted stall markings so that the surveyors could accurately account for parked vehicles. On block faces where the stalls are not striped, only the occupancy or number of vehicles parked could be recorded.

As the parking supply data showed, most on-street parking in Midland is time limited to three hours. Therefore, with observations conducted every two hours, any vehicle observed in the same space three times or more (meaning the car has remained parked at least four hours) was considered in violation. Of the 531 different vehicles recorded in the 231 spaces studied, 33 vehicles were parked more than three hours equating to a violation rate of 6.2 percent. This is only slightly above a best practice whereby no more than five percent of vehicles should be in violation. This violation rate indicates that, for the most part, patrons are abiding by the time limits and is not a cause for great concern. There were only 11 cars that remained parked in the same space six hours or more which were likely downtown employees. Therefore, as noted above, although there may be days with more violations, we do not think that the volumes would be significantly greater.

Table 7 – Summary On-street Violations

Spaces	Number of Cars Observed in Same Space					Total Cars	Average Turnover
	1X	2X	3X	4X	5X		
231	415	83	22	9	2	531	2.30
Cars in Violation			33				
Violation Rate			6.21%				

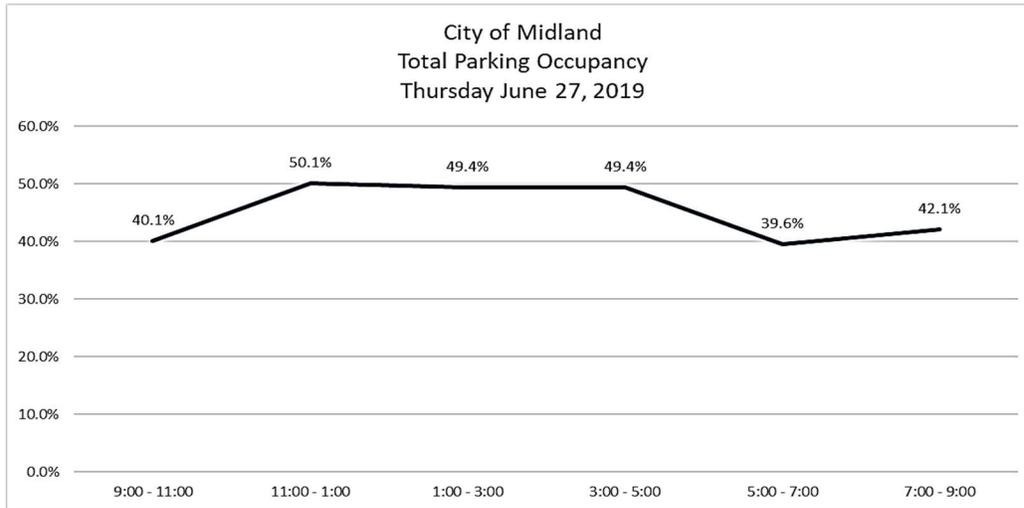
Occupancy

The occupancy counts serve both as a tool to see how the existing parking is being utilized throughout the day as well as a benchmark to which the parking demand model can be compared. When the model reflects conditions as they are actually observed, it lends confidence in the model. The occupancy data can be analyzed by looking at total occupancy which gives an indication of the “parking health” of the community. Additional analysis looking at how the public parking is being utilized (both on-street and off-street) compared to the privately controlled spaces can help in understanding how the parking is or should be managed.

Figure 1 on the following page shows that the observed occupancy remained relatively consistent at nearly 50 percent of the observed spaces occupied between 11:00 am and about 5:00 pm. There was a slight drop in the overall observed occupancy which would be expected as downtown employees leave

for the day but then an increase as residents and visitors arrived downtown to take advantage of the many restaurants and other downtown activities. The detailed occupancy count results can be found in the appendix.

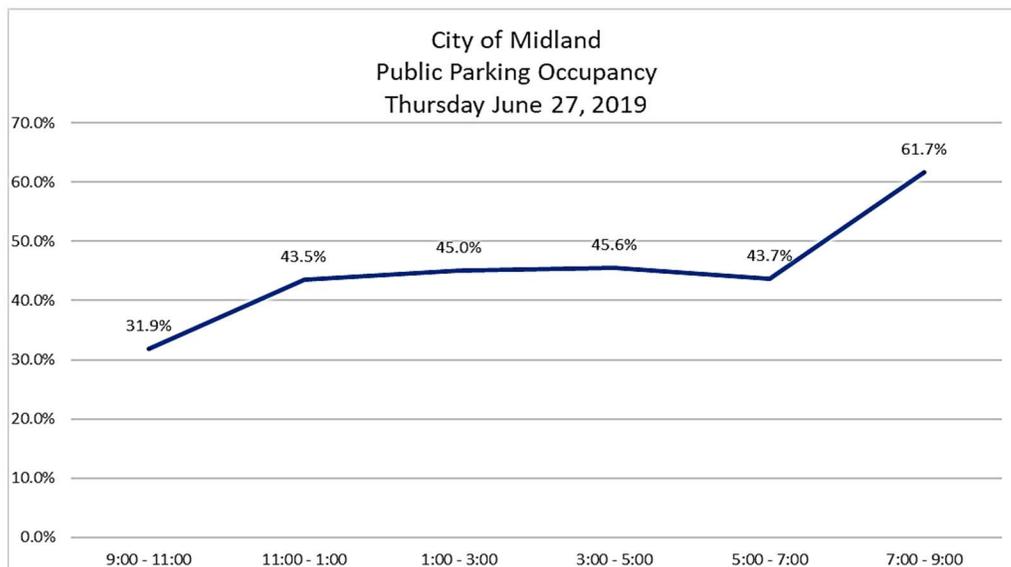
Figure 1 – Total Observed Parking Occupancy



Public Parking

As noted in the supply tables, the City has an effective public parking supply of 1,780 spaces. As part of the occupancy study, Rich analyzed 1,692± (95%) of these spaces. Through most of the day, the pattern of occupancy mirrored the overall total with about 45 percent of the public parking supply occupied. However, unlike the total graph shown above, the amount of “public parking” occupied during the 7:00 pm – 9:00 pm series of observations showed a dramatic increase to 62 percent of the designated public supply occupied. This is demonstrated by **Figure 2** below.

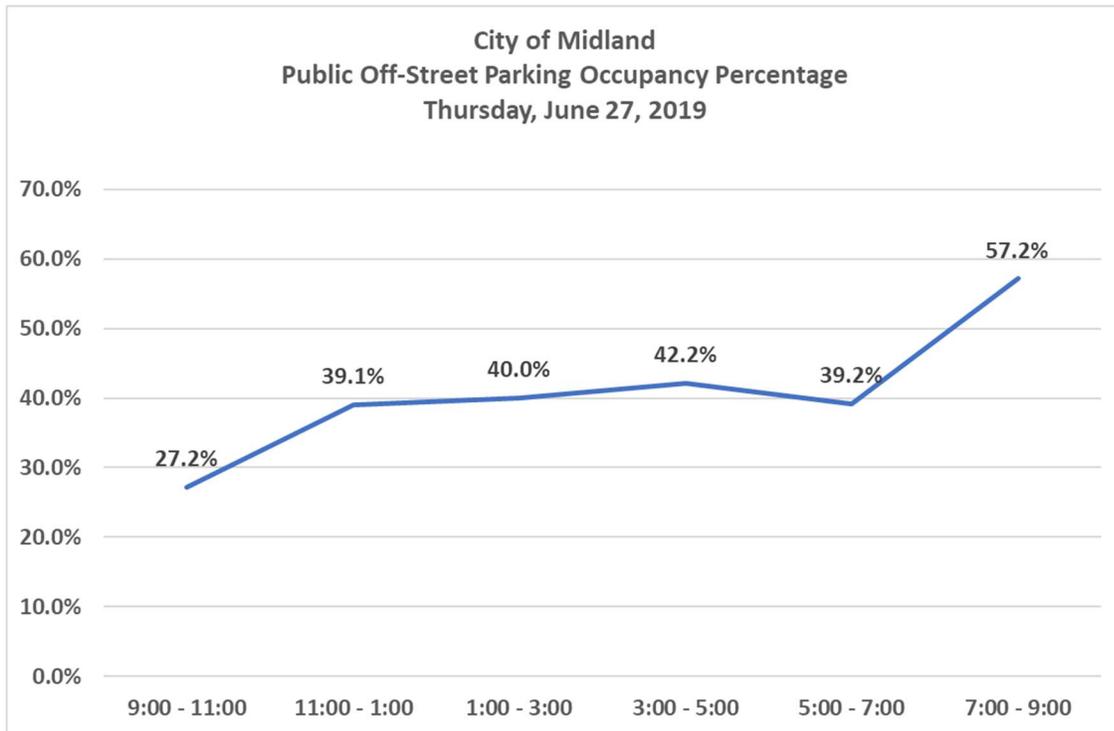
Figure 2 – Observed Public Parking Occupancy



Public – Off-street Parking

Separating the analysis of the public parking into its on-street and off-street components shows that the publicly provided off-street parking was only about 40 percent occupied throughout much of the “typical day” observed. As noted, the concert event by the River combined with other evening activities downtown resulted in a sharp increase in the use of available public off-street parking from about 40 percent to 57 percent. This is demonstrated by **Figure 3** below.

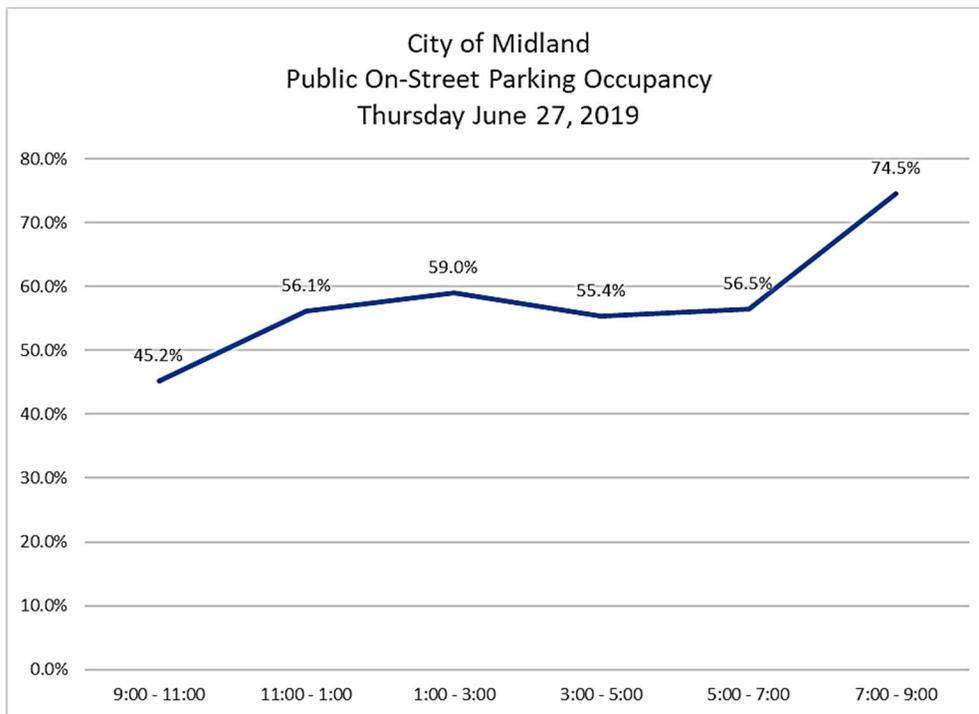
Figure 3 – Total Public Off-Street Occupancy



Public – On-street Parking

The on-street parking within Downtown Midland showed a similar increase in parking utilization in the evening hours. As is typical, the proportion of occupied spaces during much of the day is higher than the off-street because these on-street spaces are often the most convenient to destinations. Through much of the day, the on-street spaces were between 55 percent and 60 percent occupied compared to just 40 percent through much of the day for the off-street public spaces. During the evening peak, the on-street spaces peaked (as shown by **Figure 4** below) at 75 percent of the spaces occupied. Because of the timing of the increase it appears that much of this increase is from downtown patrons as opposed to evening restaurant staff. This is because in other communities studied by Rich, where on-street parking becomes a preferred choice of these staff members, the increase in on-street parking utilization begins around 3:00 – 4:00 pm as these employees arrive for their evening shifts. Often this is because in many cases, enforcement when present ends by 5:00 or 6:00 pm and the employees know that because of their time of arrival they will not be noted as in violation or if they are parked past the time limit, their chances of being cited are slim because the enforcement is close to ending for the day.

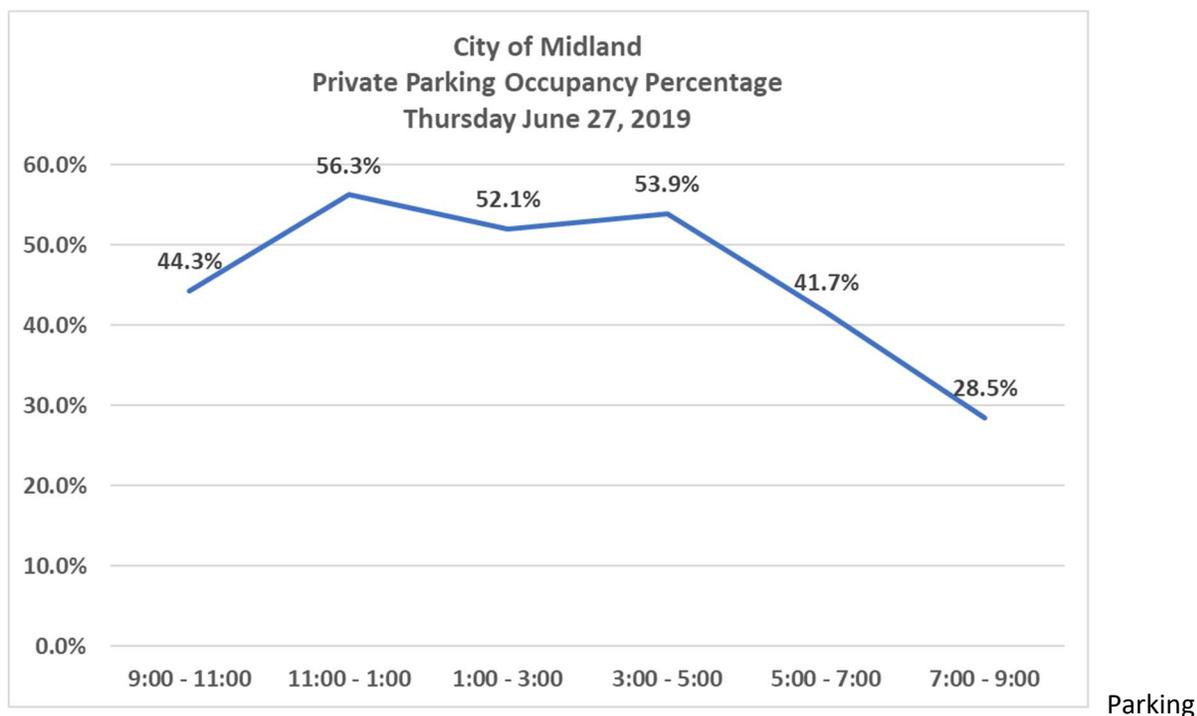
Figure 4 – Observed On-Street Parking Occupancy



Private – Off-street Parking

Rich also conducted occupancy observations of approximately 62 percent of the privately controlled spaces within Downtown Midland. Spaces not included in the calculations were spaces at the ballpark and the controlled and gated space by the DOW East End Building. Ungated spaces at this building were included however. The observed privately controlled spaces peaked at 56 percent occupancy during the 11:00 am – 1:00 pm circuit. During the latter part of the afternoon, only between about 52 or 53 percent of the privately controlled spaces were occupied, followed by a steady decline throughout the evening observations. At the time that the public supply was peaking (7:00 pm – 9:00 pm), the privately controlled spaces were just 28 percent occupied. These results suggest an opportunity to make arrangements to use some of these available private spaces during the evening hours that may free up additional public parking. The private results are shown by **Figure 5** below.

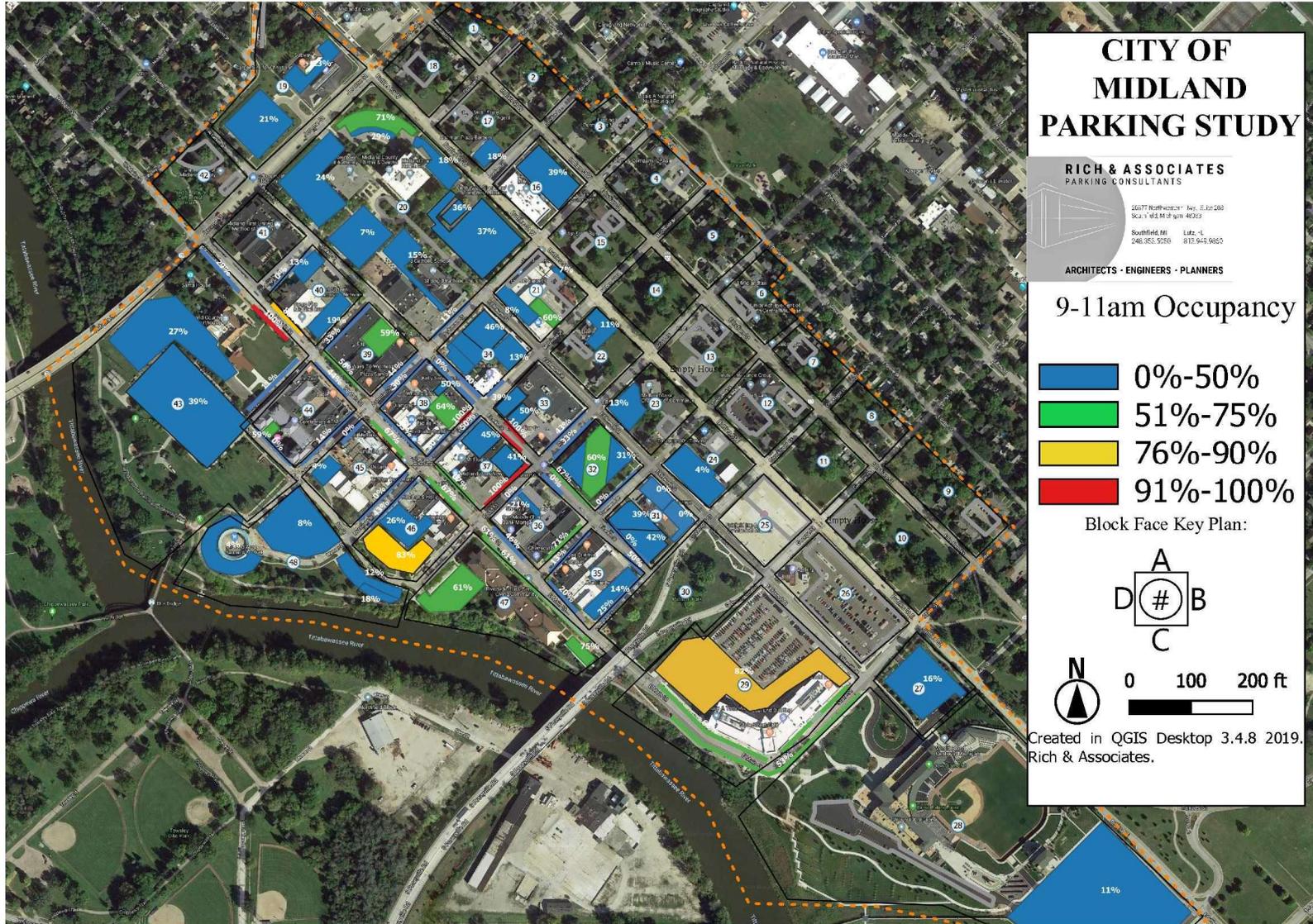
Figure 5 – Observed Private Parking Occupancy



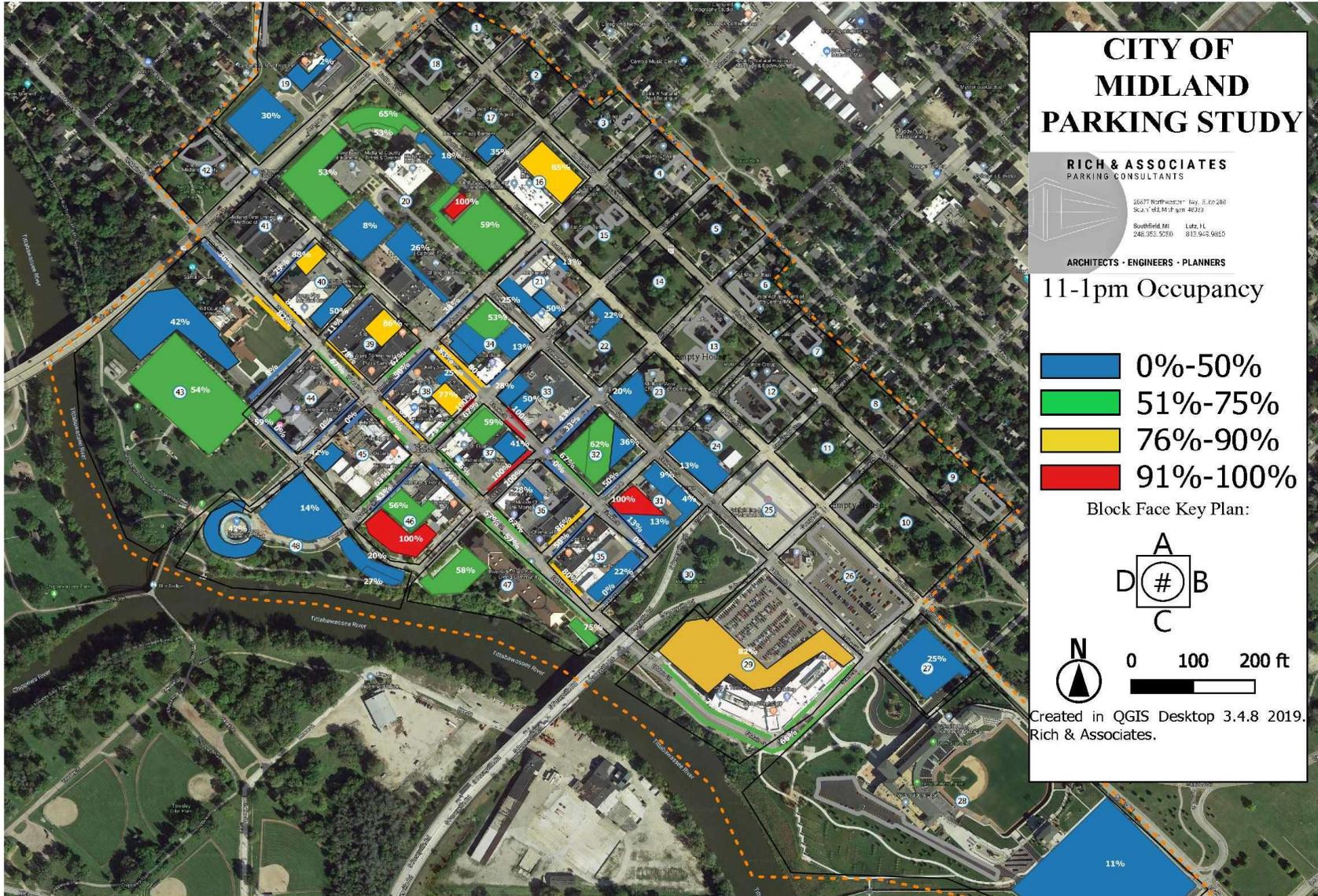
Occupancy Maps

While the discussion and graphs demonstrate the proportions of parking occupied at various points of the day, they do not show where the parking is occupied. On the following six pages are a series of maps which show the proportion of occupancy in each of the observed lots and on-street spaces coinciding with each of the six observation periods. These maps clearly demonstrate during the evening hours the focus near the water from attendees to the downtown concert and evening restaurant activity.

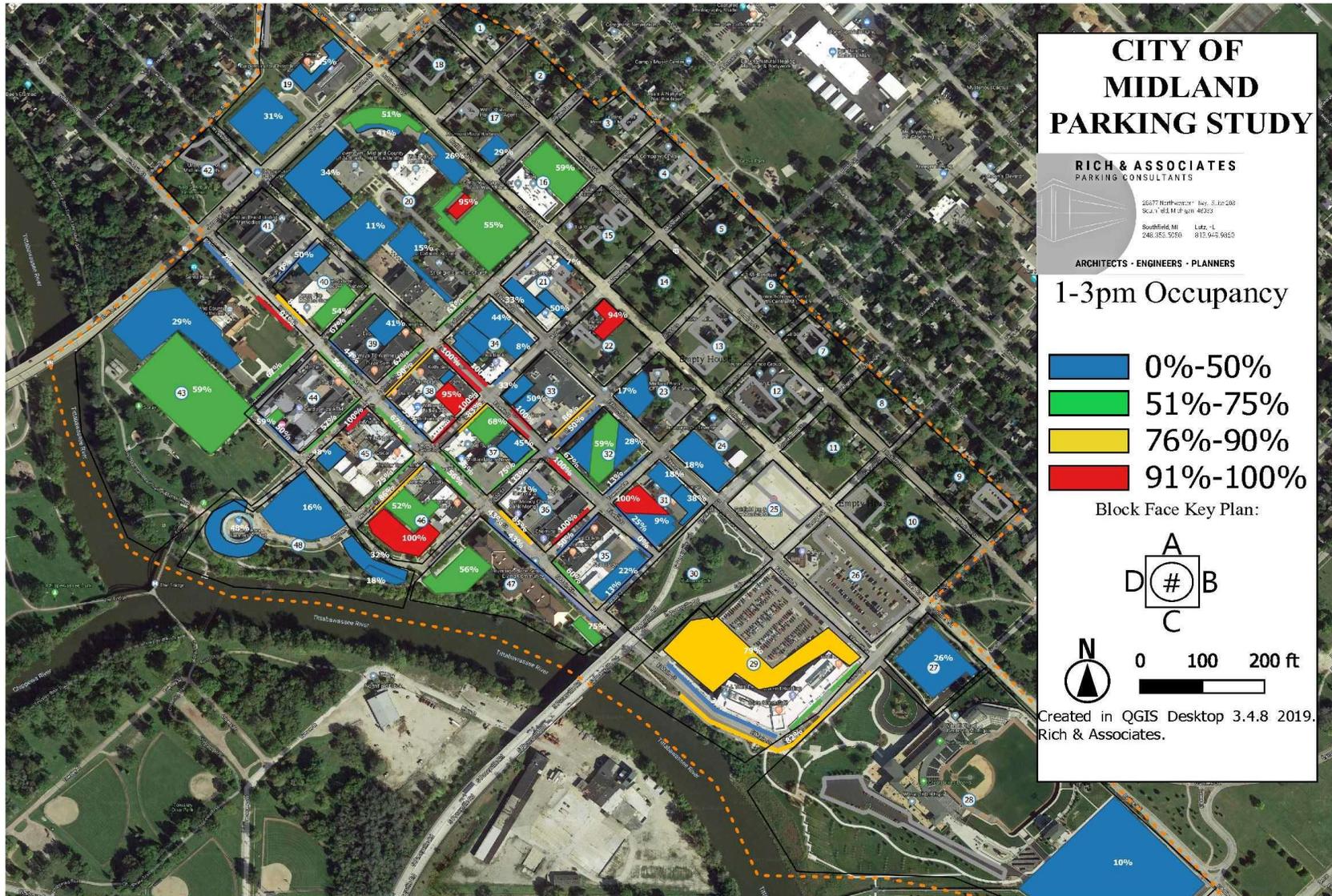
Map 3 – Occupancy: Thursday June 27, 2019 9:00 am – 11:00 am



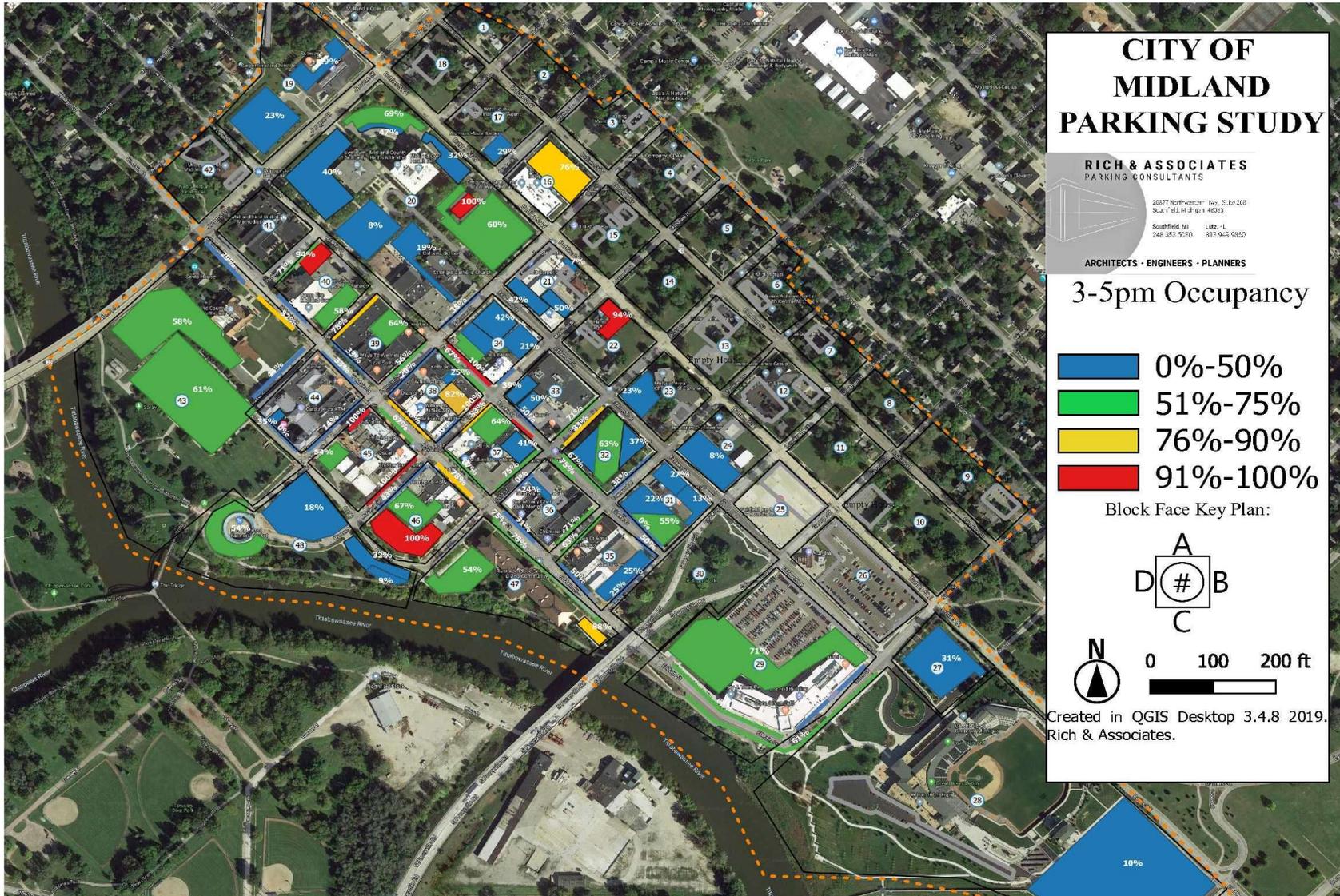
Map 4 – Occupancy: Thursday June 27, 2019 11:00 am – 1:00 pm



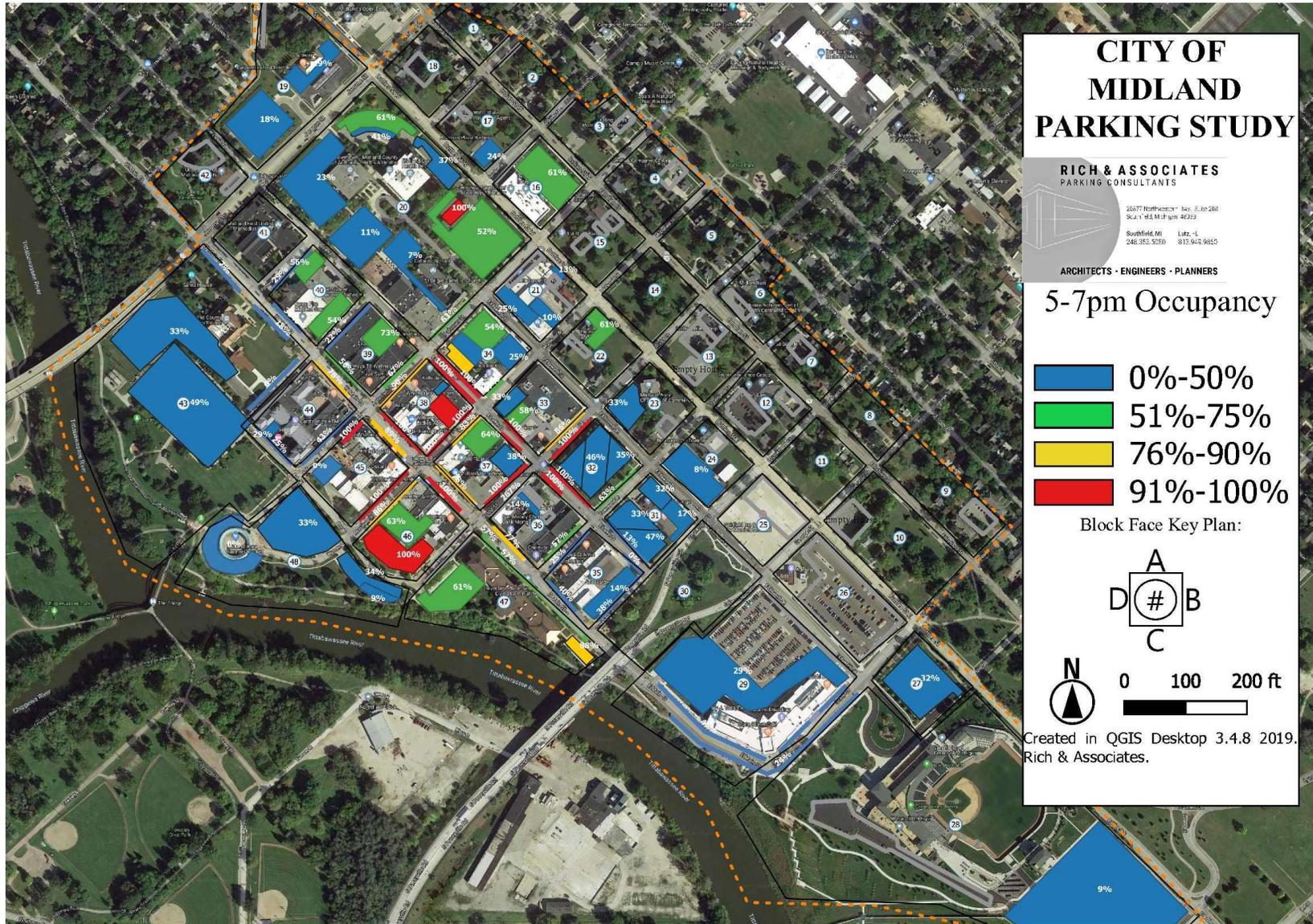
Map 5 – Occupancy: Thursday June 27, 2019 1:00 pm – 3:00 pm



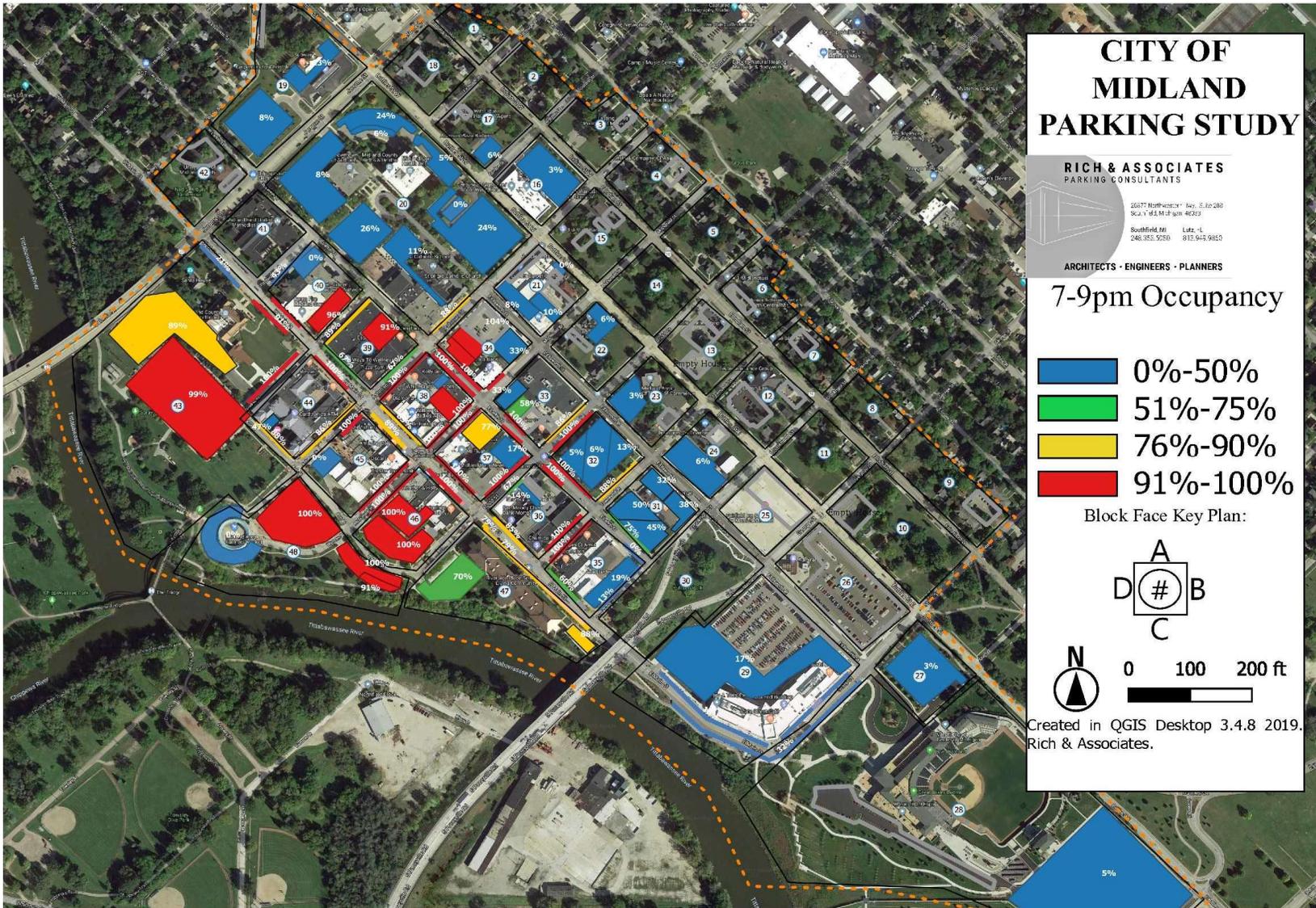
Map 6 – Occupancy: Thursday June 27, 2019 3:00 pm – 5:00 pm



Map 7 – Occupancy: Thursday June 27, 2019 5:00 pm – 7:00 pm



Map 8 – Occupancy: Thursday June 27, 2019 7:00 pm – 9:00 pm



SECTION 4 - PARKING DEMAND

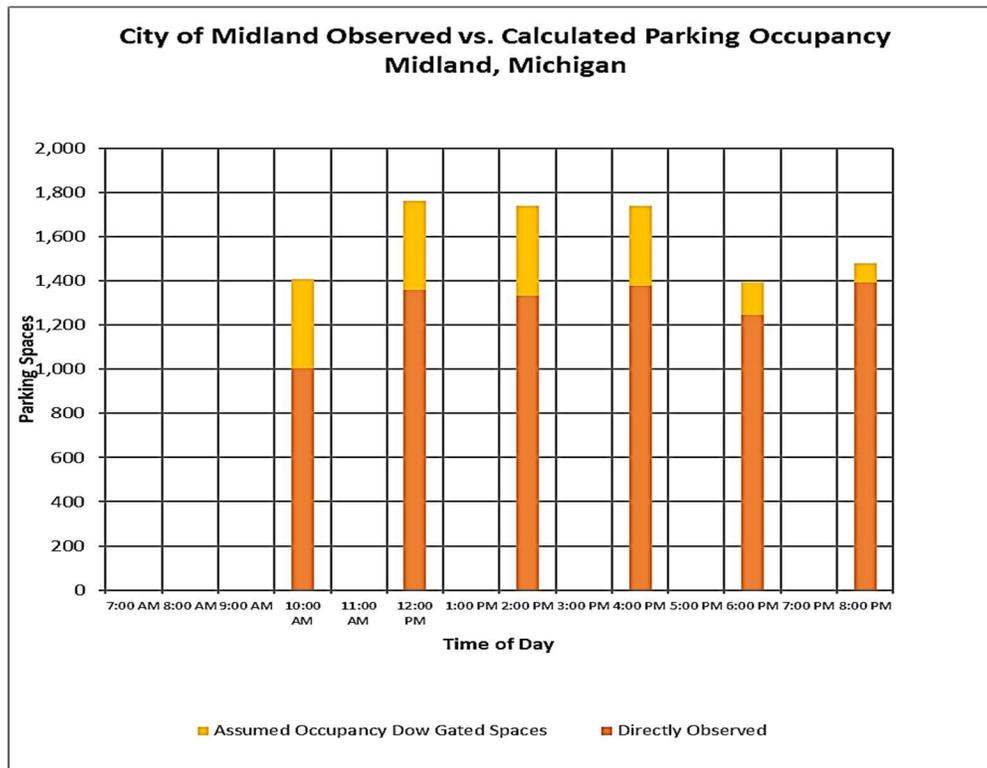
Parking Demand Model

As noted previously a second purpose of the occupancy counts are to serve as a benchmark to which the calculated parking demand can be compared. A close correlation between the values as calculated and the observed values lends confidence in the calculations.

Rich employs a proprietary shared-use model based on the Urban Land Institutes (ULI) *Shared Use Manual*. Shared use assumes that the same spaces needed by one group (for example restaurants) with a peak time later in the day can be the same spaces occupied by a group (for example office) whose peak occurs earlier in the day.

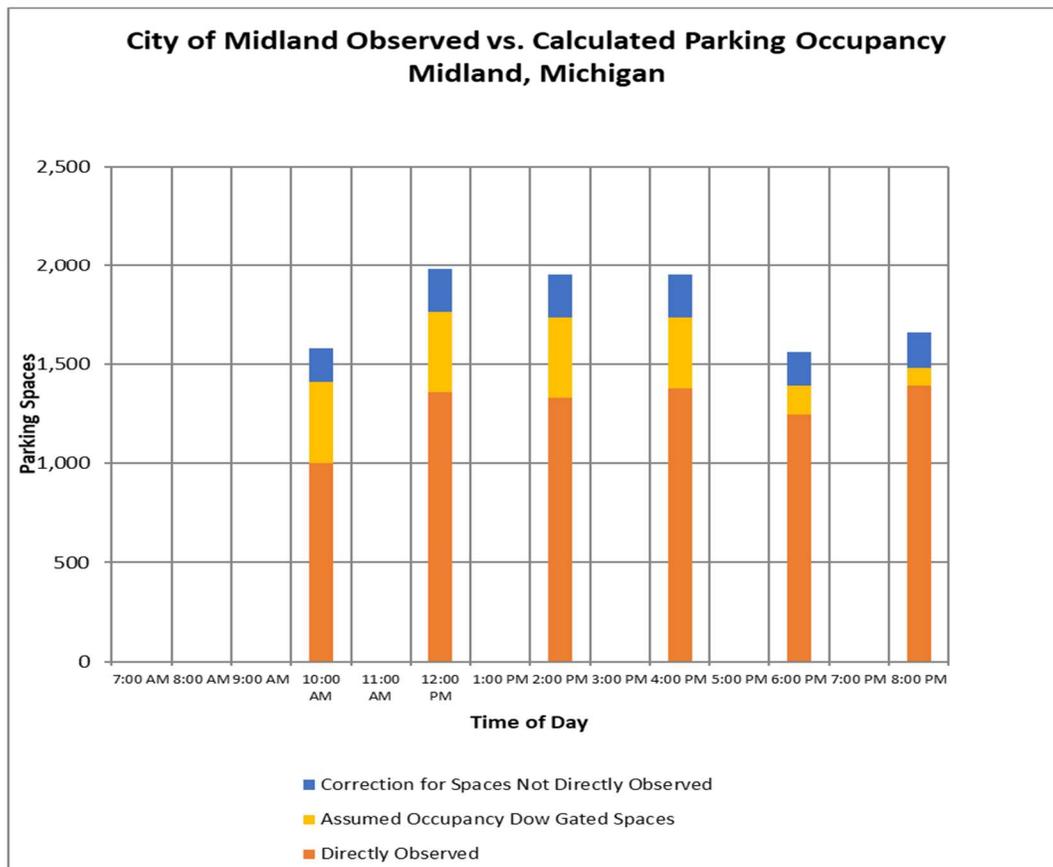
In order to use the results of the occupancy counts to compare to the overall downtown parking demand, it was necessary to make a number of adjustments. Because Rich is calculating the parking demand downtown using the square footage in the Dow East End Building, the parking spaces in the gated lots must be accounted for since these spaces were inaccessible to the surveyors. Rich did this by *assuming* that 80 percent of the approximately 508 spaces within the gates are occupied during each of the first three circuits through the downtown. The spaces which were not gated, are included in the direct observations. For the final three circuits, Rich applied the proportion of occupancy of the ungated spaces at the Dow Building to the 508 spaces within the gates to estimate the occupancy of the gated lots. This is demonstrated by **Figure 6** below.

Figure 6 – Observed Parking with Dow Lot Occupancy



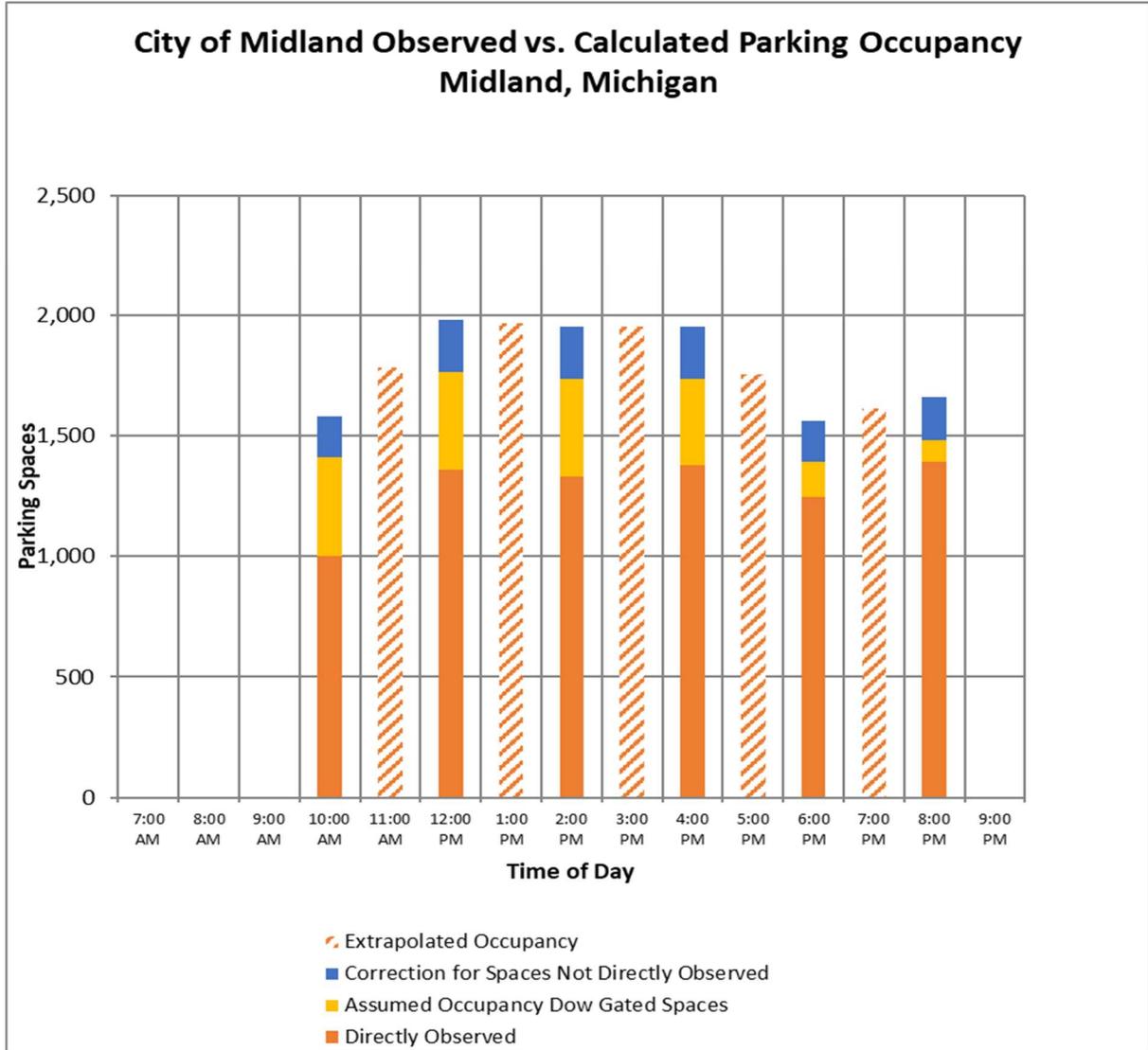
The next step of the process is to account for spaces within the downtown that were not directly observed. This is due to the fact that following an efficient route through the downtown within the defined time periods not every space may be able to be directly observed. Therefore, Rich corrects for these missing spaces by applying the same occupancy percentage for the spaces *directly observed* to the missing (not directly observed) spaces. For example, during the initial circuit, 40 percent of the observed spaces were occupied. Approximately 430 spaces were not directly observed. Applying the 40 percent occupancy rate to the 430 spaces resulted in 173± additional spaces to be added to the observations. This same proportional correction was then applied to each subsequent circuit and this addition is demonstrated by **Figure 7**.

Figure 7 – Observed Occupancy with Correction for Spaces Not Observed



Because the shared-use model calculates the parking needs on an hourly basis where the observations were conducted every two hours, the final step of the process seeks to extrapolate for the in-between periods. This is simply the mid-point between two observations as demonstrated by **Figure 8** on the following page.

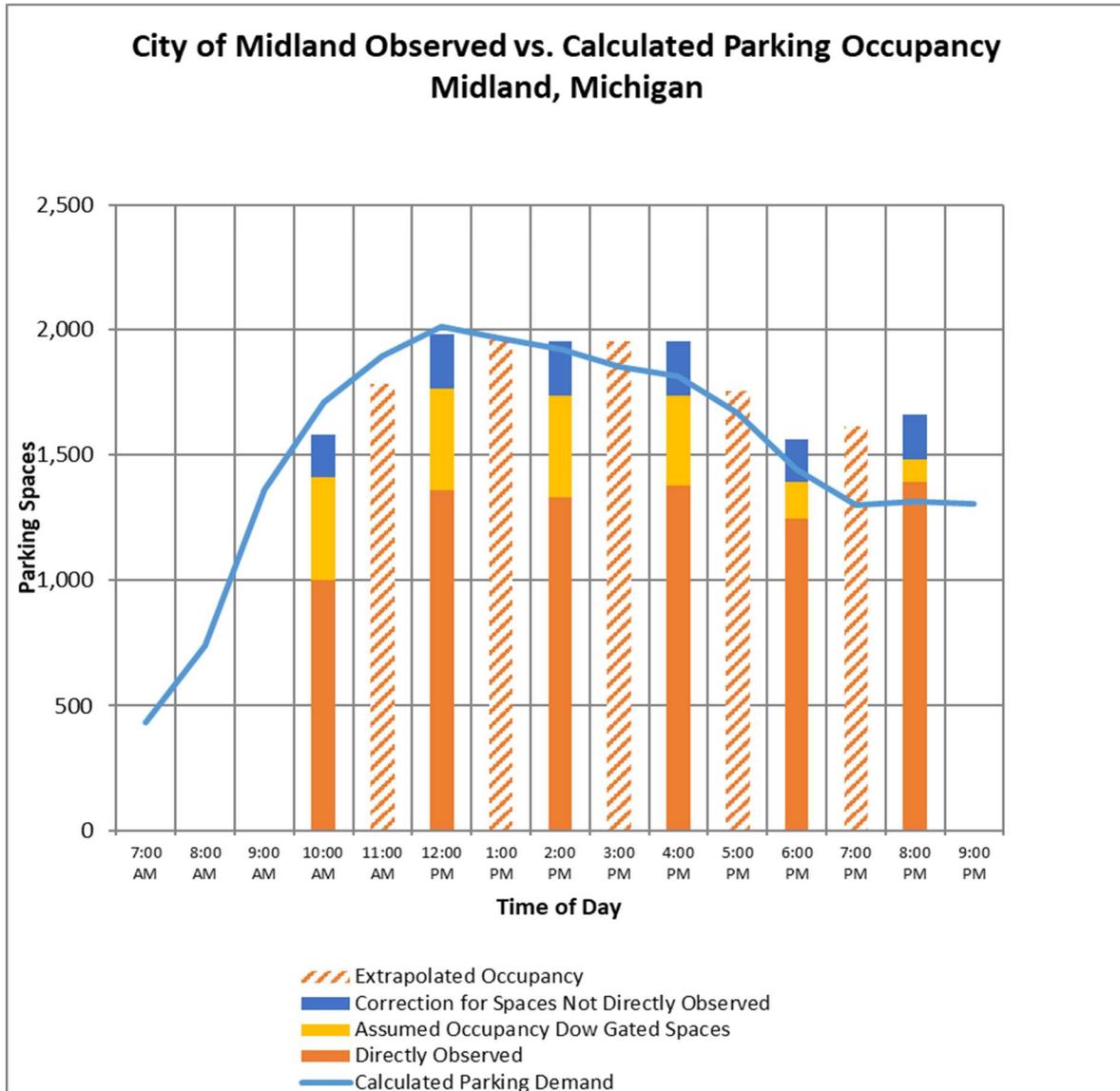
Figure 8 – Corrected Occupancy with Extrapolated Values



With these values as a benchmark, Rich then compares the calculated parking demand using the proprietary shared-use model to these values. This comparison is shown by **Figure 9** on page 27.

As Figure 9 shows, through much of the day, the calculated demand reasonably compares to the “observed” conditions. The difference during the mid-afternoon *may* be due to setup for the concert while the evening discrepancy is most certainly due to concert goers who cannot be reflected within the building demand calculations.

Figure 9 – Observed vs. Calculated Parking Demand



Also as shown in Figure 9, peak daytime occupancy occurred coincident with the 11:00 am – 12:00 pm time period and at this time, the calculated demand was very close to the *observed* conditions.

Land Use Data

In calculating the parking demand as shown in Figure 9 above, Rich used land use data provided by the City and collected from the County Assessors website for square footage values. Rich then applied a subjective land use type based on the field data collected by Rich staff for the type of business or use at each address. This information is summarized by **Table 8** below. As the data shows there is approximately 800,000 sf of occupied building space within the study area.

Table 8 – Land Use Summary

Retail	104,523
Personal Service	31,303
Office	318,417
Bar / Restaurant	59,259
Banks	17,272
Medical Office	11,395
Government	168,136
Community	85,596
Occupied Square Footage	795,901
Vacant Square Footage	124,063
Total (Non-Residential / Non - Hotel)	919,964
Residential (Units)	79
Senior Residential (Units)	150
Hotel (Guest Rooms)	180

Table 9 on the following page shows these various land uses allocated by block.

Table 9 – Land Use Allocation by Block

Block	RT Retail	PS Personal Service	OF Office	BR Bar / Restaurant	BK Bank (Financial)	MO Med Office	GV Gov't	MU Mixed Use	CM Community	RS Residential (Units)	SRS Senior Living Residential (Units)	HT Hotel (Guest Rooms)	VCR Vacant Residential Units	VC Vacant
Block 1 Total														
Block 2 Total														
Block 3 Total	0	935	0	0	0	0	0	0	0	0	0	0	0	0
Block 4 Total	0	0	2,252	0	0	0	0	0	0	5	0	0	0	0
Block 5 Total														
Block 6 Total	0	0	1,211	0	0	0	0	0	0	0	0	0	0	0
Block 7 Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Block 8 Total														
Block 9 Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Block 10 Total														
Block 11 Total														
Block 12 Total	0	0	31,836	0	0	0	0	0	0	0	0	0	0	0
Block 13 Total	0	731	0	0	0	0	0	0	0	0	0	0	0	0
Block 14 Total														
Block 15 Total	0	0	676	0	0	0	0	0	0	0	0	0	0	0
Block 16 Total	0	0	30,263	0	0	0	0	0	0	0	0	0	0	0
Block 17 Total	0	0	944	0	0	0	0	0	0	0	0	0	0	0
Block 18 Total	0	0	0	0	0	0	0	0	0	16	0	0	0	0
Block 19 Total	3,520	0	0	0	0	0	0	0	0	0	0	0	0	0
Block 20 Total	0	0	0	0	0	0	137,316	0	43,808	0	0	0	0	0
Block 21 Total	15,884	720	0	0	0	0	0	0	0	4	0	0	0	0
Block 22 Total	0	2,025	11,916	0	0	0	0	0	0	6	0	0	0	0
Block 23 Total	0	0	9,656	0	0	0	5,764	0	0	0	0	0	0	2,790
Block 24 Total	3,608	0	0	0	0	0	0	0	0	0	0	0	0	30,000

Table 9 – Land Use Allocation by Block (Continued)

Block	RT Retail	PS Personal Service	OF Office	BR Bar / Restaurant	BK Bank (Financial)	MO Med Office	GV Gov't	MU Mixed Use	CM Community	RS Residential (Units)	SRS Senior Living Residential (Units)	HT Hotel (Guest Rooms)	VCR Vacant Residential Units	VC Vacant
Block 25 Total	0	0	0	0	0	0	0	0	0	0	0	77	0	0
Block 26 Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Block 27 Total														
Block 28 Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Block 29 Total	0	17,185	77,923	0	0	11,395	0	0	0	0	0	0	0	0
Block 30 Total														
Block 31 Total	0	0	0	5,880	0	0	0	0	0	0	0	0	0	0
Block 32 Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Block 33 Total	0	0	9,292	0	0	0	0	0	0	0	0	0	0	0
Block 34 Total	0	0	3,960	0	3,960	0	0	0	0	0	0	0	0	0
Block 35 Total	40,544	0	1,025	3,345	0	0	0	0	0	0	0	0	0	9,325
Block 36 Total	0	4,000	5,594	0	6,157	0	0	0	0	0	0	0	0	6,400
Block 37 Total	2,130	2,130	46,910	6,720	0	0	0	0	0	0	0	0	0	0
Block 38 Total	18,004	1,400	22,689	11,400	1,200	0	0	0	0	6	0	0	0	4,746
Block 39 Total	6,003	0	26,986	2,000	0	0	0	0	0	3	0	0	0	4,903
Block 40 Total	0	0	11,219	0	0	0	0	0	0	0	0	0	0	36,218
Block 41 Total	0	0	0	0	0	0	0	0	41,788	0	0	0	0	0
Block 42 Total	0	0	4,646	0	0	0	0	0	0	0	0	0	0	0
Block 43 Total	0	0	0	0	0	0	25,056	0	0	0	0	0	0	0
Block 44 Total	5,265	0	0	6,538	0	0	0	0	0	10	0	103	6	0
Block 45 Total	1,200	0	10,239	17,094	0	0	0	0	0	25	0	0	0	29,681
Block 46 Total	8,365	2,177	9,180	6,282	5,955	0	0	0	0	4	0	0	0	0
Block 47 Total	0	0	0	0	0	0	0	0	0	0	150	0	0	0
Block 48 Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Downtown	104,523	31,303	318,417	59,259	17,272	11,395	168,136	0	85,596	79	150	180	6	124,063

Daytime Parking Demand

With the land use allocated as shown by **Table 9** pages 29 and 30, the next step in the process applied the calculated parking generation factor at the 12:00 noon period as determined by the shared use model. The parking generation factor is a calculated value for the number of parking spaces per one-thousand square feet for most uses or per hotel room or dwelling unit (for residential uses). This value is not a zoning requirement but a calculated value derived such that the calculated demand approximates the observed conditions when all land uses are combined. It varies depending on the time of day because the shared-use model applies different percentages for when the peak occurs. For example, at 10:00 am the ULI shared-use model assumes that retail uses would only be about 55 percent of their peak needs (100%) which occur between 1:00 and 2:00 pm. At this same time, office uses are about 88 percent of their peak which occurs at noon and then declines throughout the remainder of the day. The ULI has calculated these percentages at hourly intervals throughout the day for many land uses. The Rich model applies these percentages (or Rich adjusted percentages as necessary) to initial generation rates to derive the hourly parking demand factor for each land use type. The intent is to arrive at parking demand that closely mirrors the observed conditions.

Table 10 on the following page shows the daytime calculated parking demand at the 12:00 noon peak for the existing condition by block and land use. This shows that the combined parking demand for the 48 included blocks within the downtown totaled 2,016± spaces. It should be noted however that this does not include any parking demand from the ballpark nor does it include the parking supply on either block 27 or 28. Although there may be non-baseball activities during the daytime hours within the concourse, for the most part it would be expected that the parking needs could be met by the available parking on blocks 27 and 28. However, baseball demand would be expected to occur during the evening hours or on weekend days and this potential impact on downtown parking needs is discussed beginning on **page 40**.

Table 10 – Daytime Parking Demand

	Retail	Personal Service	Office	Bar / Restaurant	Bank (Financial)	Med Office	Gov't	Community	Residential (Units)	Senior Living Residential (Units)	Hotel (Guest Rooms)	Vacant Residential Units	Vacant	Total Parking Demand
	1.51	5.40	2.20	3.90	2.49	2.02	2.30	0.46	1.06	0.21	0.84	0.00	0.00	
Block 1 Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Block 2 Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Block 3 Total	0	5	0	0	0	0	0	0	0	0	0	0	0	5
Block 4 Total	0	0	5	0	0	0	0	0	5	0	0	0	0	10
Block 5 Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Block 6 Total	0	0	3	0	0	0	0	0	0	0	0	0	0	3
Block 7 Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Block 8 Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Block 9 Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Block 10 Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Block 11 Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Block 12 Total	0	0	70	0	0	0	0	0	0	0	0	0	0	70
Block 13 Total	0	4	0	0	0	0	0	0	0	0	0	0	0	4
Block 14 Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Block 15 Total	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Block 16 Total	0	0	67	0	0	0	0	0	0	0	0	0	0	67
Block 17 Total	0	0	2	0	0	0	0	0	0	0	0	0	0	2
Block 18 Total	0	0	0	0	0	0	0	0	17	0	0	0	0	17
Block 19 Total	5	0	0	0	0	0	0	0	0	0	0	0	0	5
Block 20 Total	0	0	0	0	0	0	153	20	0	0	0	0	0	173
Block 21 Total	24	4	0	0	0	0	0	0	4	0	0	0	0	32
Block 22 Total	0	11	26	0	0	0	0	0	6	0	0	0	0	43
Block 23 Total	0	0	21	0	0	0	13	0	0	0	0	0	0	34
Block 24 Total	5	0	0	0	0	0	0	0	0	0	0	0	0	5
Block 25 Total	0	0	0	0	0	0	0	0	0	0	65	0	0	65
Block 26 Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Block 27 Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Block 28 Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Block 29 Total	0	93	171	0	0	23	0	0	0	0	0	0	0	287
Block 30 Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Block 31 Total	0	0	0	23	0	0	0	0	0	0	0	0	0	23
Block 32 Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Block 33 Total	0	0	20	0	0	0	0	0	0	0	0	0	0	20
Block 34 Total	0	0	9	0	10	0	0	0	0	0	0	0	0	19
Block 35 Total	61	0	2	13	0	0	0	0	0	0	0	0	0	76
Block 36 Total	0	22	12	0	15	0	0	0	0	0	0	0	0	49
Block 37 Total	3	12	103	26	0	0	0	0	0	0	0	0	0	144
Block 38 Total	27	8	50	44	3	0	0	0	6	0	0	0	0	138
Block 39 Total	9	0	59	8	0	0	0	0	3	0	0	0	0	79
Block 40 Total	0	0	25	0	0	0	163	0	0	0	0	0	0	188
Block 41 Total	0	0	0	0	0	0	0	19	0	0	0	0	0	19
Block 42 Total	0	0	10	0	0	0	0	0	0	0	0	0	0	10
Block 43 Total	0	0	0	0	0	0	58	0	0	0	0	0	0	58
Block 44 Total	8	0	0	25	0	0	0	0	11	0	87	0	0	131
Block 45 Total	2	0	23	67	0	0	0	0	27	0	0	0	0	119
Block 46 Total	13	12	20	24	15	0	0	0	4	0	0	0	0	88
Block 47 Total	0	0	0	0	0	0	0	0	0	32	0	0	0	32
Block 48 Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Downtown	157	171	699	230	43	23	387	39	83	32	152	0	0	2,016

Parking Demand vs. Supply

Table 11 on page 34 compares the calculated parking demand on each block to the available parking supply on each block. The table details the public (on-street and off-street) parking supply as well as the private off-street parking supply. The comparison of parking demand to the parking supply is shown two different ways. The first compares total parking demand on each block to total parking supply on each block. This is referred to as the Gross Surplus / Deficit and shows that during the daytime hours, downtown Midland has a gross surplus of 2,310± spaces based on the calculated parking demand. However, this figure is slightly misleading particularly during the daytime hours because it assumes that unused privately controlled spaces are available to anyone. In reality, a private property owner with their own parking typically reserves those spaces just for their staff and customers and only while conducting their business. At the conclusion of that business that customer is expected to move their car to make room for the next customer.

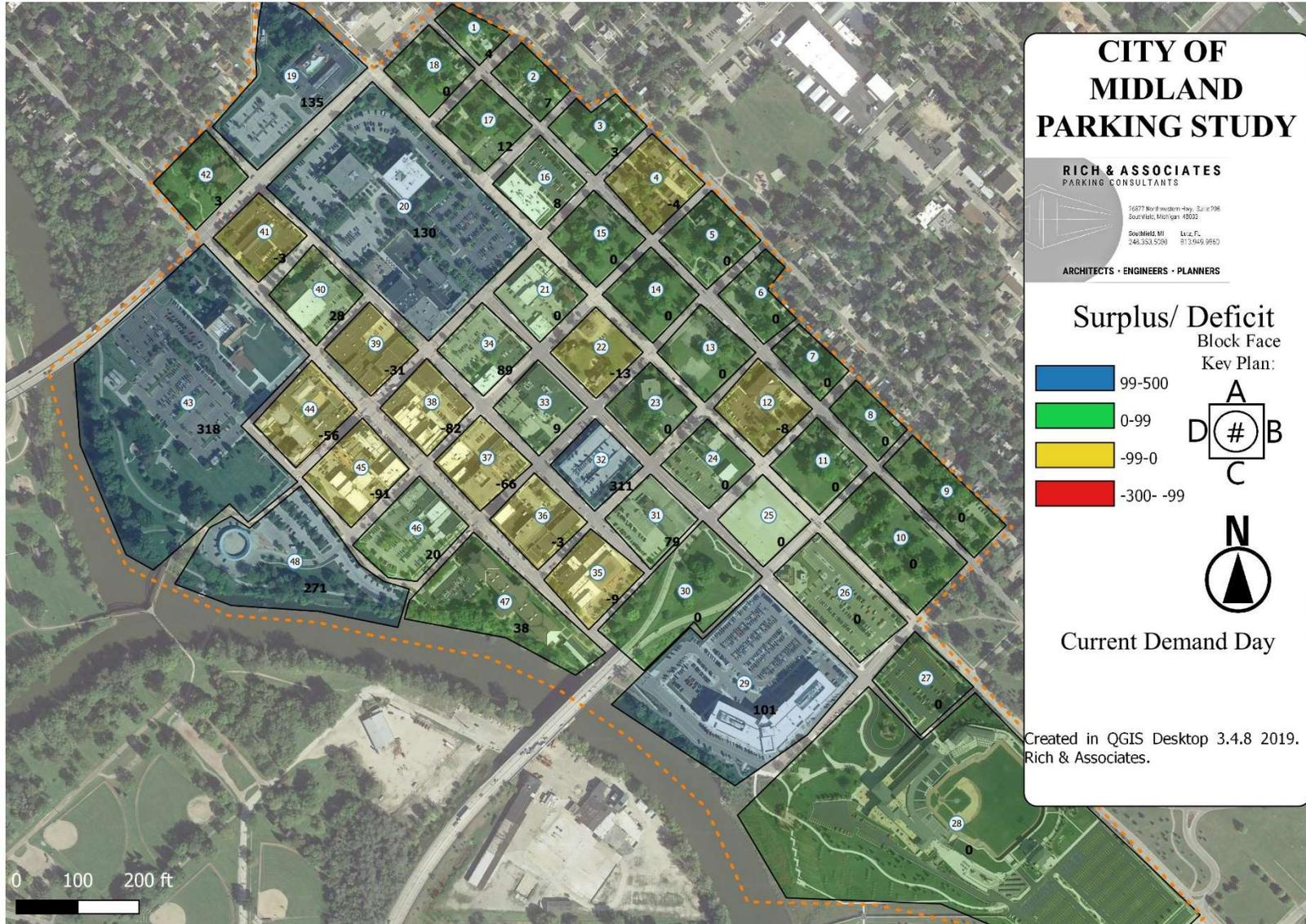
Therefore, a second calculation is shown which applies the parking demand on each block first to the private supply on the block (following the assumption that private spaces would most likely be closest to the destination). If the supply exceeds the demand, any “extra” spaces are discarded since they are not available to other users and the surplus would only be the public spaces on the block. If the demand exceeds the private supply, the public spaces are added to the calculation and the surplus or deficit is the difference between total demand and total supply. This condition reflects the experience most likely to be encountered by someone going to one of the many shops, restaurants or other destinations downtown that does not have its own parking for either staff or visitors but is instead relying upon public parking. This calculation shows that the gross surplus of 2,310 spaces is reduced to a “net surplus” of 1,002 spaces for the existing daytime condition.

The net surplus or deficit (using the “net values”) is shown by **Map 9** on page 35.

Table 11 – Demand vs. Supply Current Daytime

	Total Parking Demand	Public Parking			Private	Total			Gross Surplus / (Deficit)	Net* Surplus / (Deficit)
		On-Street	Off-Street	Total	Off-Street	On-Street	Off-Street	Total		
Block 1 Total	0	4	0	4	0	4	0	4	4	4
Block 2 Total	0	7	0	7	0	7	0	7	7	7
Block 3 Total	5	6	0	6	2	6	2	8	3	3
Block 4 Total	10	0	0	0	6	0	6	6	(4)	(4)
Block 5 Total	0	0	0	0	0	0	0	0	0	0
Block 6 Total	3	0	0	0	10	0	10	10	7	0
Block 7 Total	0	0	0	0	10	0	10	10	10	0
Block 8 Total	0	0	0	0	0	0	0	0	0	0
Block 9 Total	0	0	0	0	24	0	24	24	24	0
Block 10 Total	0	0	0	0	0	0	0	0	0	0
Block 11 Total	0	0	0	0	0	0	0	0	0	0
Block 12 Total	70	0	0	0	62	0	62	62	(8)	(8)
Block 13 Total	4	0	0	0	10	0	10	10	6	0
Block 14 Total	0	0	0	0	0	0	0	0	0	0
Block 15 Total	1	0	0	0	39	0	39	39	38	0
Block 16 Total	67	8	0	8	79	8	79	87	20	8
Block 17 Total	2	12	0	12	20	12	20	32	30	12
Block 18 Total	17	0	0	0	74	0	74	74	57	0
Block 19 Total	5	28	107	135	31	28	138	166	161	135
Block 20 Total	336	8	258	266	200	8	458	466	130	130
Block 21 Total	32	0	0	0	64	0	64	64	32	0
Block 22 Total	43	0	0	0	30	0	30	30	(13)	(13)
Block 23 Total	34	0	0	0	37	0	37	37	3	0
Block 24 Total	5	0	0	0	84	0	84	84	79	0
Block 25 Total	65	0	0	0	74	0	74	74	9	0
Block 26 Total	0	0	0	0	246	0	246	246	246	0
Block 27 Total	0	0	0	0	127	0	127	127	127	0
Block 28 Total	0	0	0	0	0	0	0	0	0	0
Block 29 Total	287	101	0	101	445	101	445	546	259	101
Block 30 Total	0	0	0	0	0	0	0	0	0	0
Block 31 Total	23	8	71	79	46	8	117	125	102	79
Block 32 Total	0	23	90	113	228	23	318	341	341	113
Block 33 Total	20	9	0	9	42	9	42	51	31	9
Block 34 Total	19	10	79	89	24	10	103	113	94	89
Block 35 Total	76	31	0	31	36	31	36	67	(9)	(9)
Block 36 Total	49	33	6	39	7	33	13	46	(3)	(3)
Block 37 Total	144	27	0	27	51	27	51	78	(66)	(66)
Block 38 Total	138	30	0	30	26	30	26	56	(82)	(82)
Block 39 Total	79	26	0	26	22	26	22	48	(31)	(31)
Block 40 Total	25	23	5	28	45	23	50	73	48	28
Block 41 Total	19	16	0	16	0	16	0	16	(3)	(3)
Block 42 Total	10	3	0	3	15	3	15	18	8	3
Block 43 Total	58	36	282	318	156	36	438	474	416	318
Block 44 Total	131	25	0	25	50	25	50	75	(56)	(56)
Block 45 Total	119	20	0	20	8	20	8	28	(91)	(91)
Block 46 Total	88	23	56	79	29	23	85	108	20	20
Block 47 Total	32	38	0	38	76	38	76	114	82	38
Block 48 Total	0	0	271	271	11	0	282	282	282	271
Total Downtown	2,016	555	1,225	1,780	2,546	555	3,771	4,326	2,310	1,002

Map 9 – Surplus/Deficit Current Demand Daytime



Evening Demand vs. Supply

Rich has also prepared parking demand versus supply tables reflecting current evening conditions. While these tables do not account for events such as a concert as was experienced during the date of the occupancy counts, they do show the expected demand from existing retail, restaurant, hotel and downtown residential needs. **Table 12** on page 37 shows that the evening demand from these (and other) uses totals 1,318± spaces.

Table 13 on page 38 summarizes the parking demand and compares it against the available public and private parking supply on each block. This chart shows that the downtown would have a surplus on the gross basis of 3,008 spaces and more than 1,300 spaces on the net basis after discarding surplus private parking. The impact on individual blocks is shown by **Map 10** on page 39.

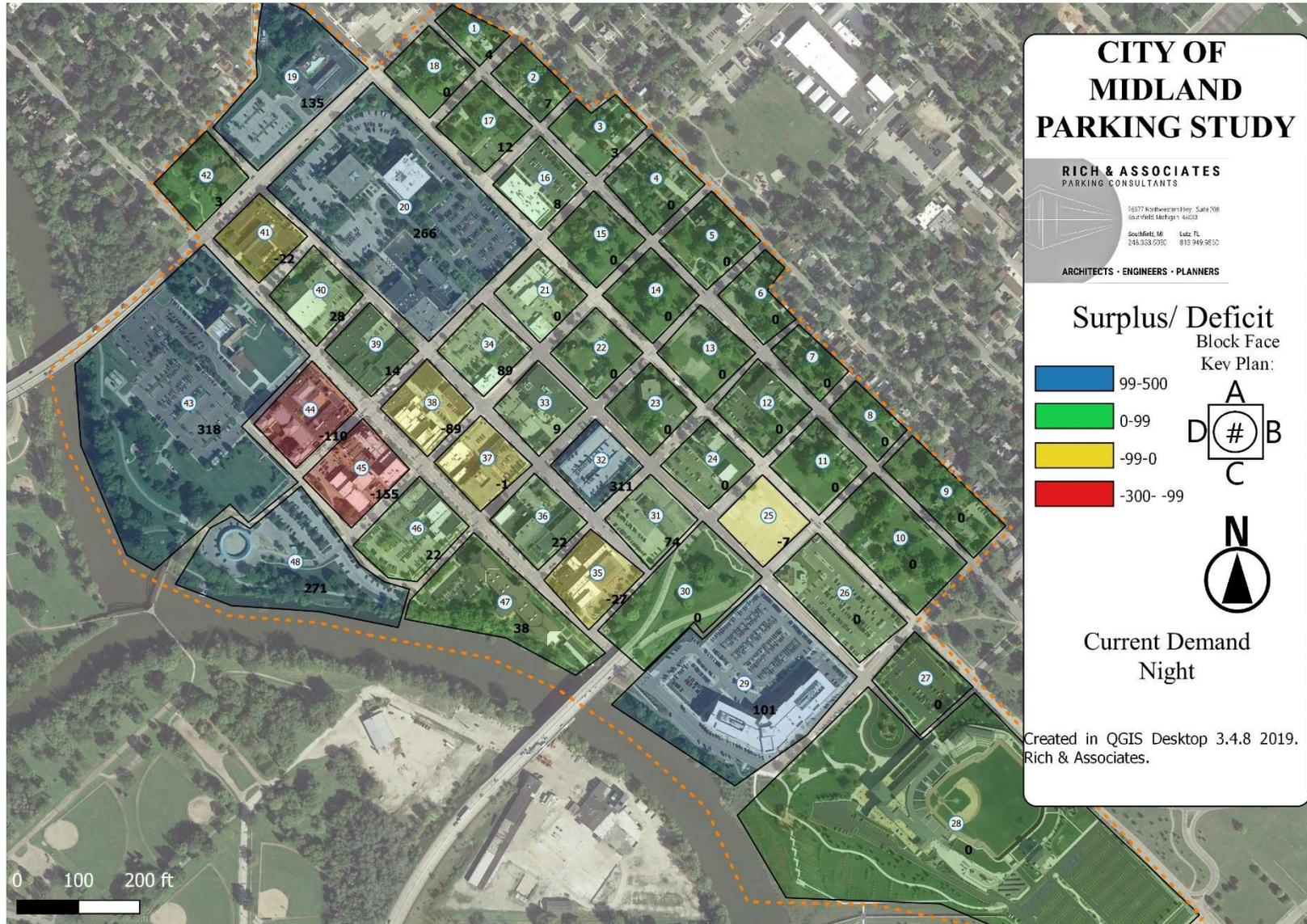
Table 12 – Evening Parking Demand

	RT	PS	OF	BR	BK	MO	GV	MU	CM	RS	SRS	HT	Total Parking Demand
	Retail	Personal Service	Office	Bar / Restaurant	Bank (Financial)	Med Office	Gov't	Mixed Use	Community	Residential (Units)	Senior Living Residential (Units)	Hotel (Guest Rooms)	
	1.60	5.69	0.11	8.71	0.00	0.26	0.11	3.00	0.90	1.23	0.25	1.05	
Block 1 Total	0	0	0	0	0	0	0	0	0	0	0	0	0
Block 2 Total	0	0	0	0	0	0	0	0	0	0	0	0	0
Block 3 Total	0	5	0	0	0	0	0	0	0	0	0	0	5
Block 4 Total	0	0	0	0	0	0	0	0	0	6	0	0	6
Block 5 Total	0	0	0	0	0	0	0	0	0	0	0	0	0
Block 6 Total	0	0	0	0	0	0	0	0	0	0	0	0	0
Block 7 Total	0	0	0	0	0	0	0	0	0	0	0	0	0
Block 8 Total	0	0	0	0	0	0	0	0	0	0	0	0	0
Block 9 Total	0	0	0	0	0	0	0	0	0	0	0	0	0
Block 10 Total	0	0	0	0	0	0	0	0	0	0	0	0	0
Block 11 Total	0	0	0	0	0	0	0	0	0	0	0	0	0
Block 12 Total	0	0	4	0	0	0	0	0	0	0	0	0	4
Block 13 Total	0	4	0	0	0	0	0	0	0	0	0	0	4
Block 14 Total	0	0	0	0	0	0	0	0	0	0	0	0	0
Block 15 Total	0	0	0	0	0	0	0	0	0	0	0	0	0
Block 16 Total	0	0	3	0	0	0	0	0	0	0	0	0	3
Block 17 Total	0	0	0	0	0	0	0	0	0	0	0	0	0
Block 18 Total	0	0	0	0	0	0	0	0	0	20	0	0	20
Block 19 Total	6	0	0	0	0	0	0	0	0	0	0	0	6
Block 20 Total	0	0	0	0	0	0	15	0	39	0	0	0	54
Block 21 Total	25	4	0	0	0	0	0	0	0	5	0	0	34
Block 22 Total	0	12	1	0	0	0	0	0	0	7	0	0	20
Block 23 Total	0	0	1	0	0	0	1	0	0	0	0	0	2
Block 24 Total	6	0	0	0	0	0	0	0	0	0	0	0	6
Block 25 Total	0	0	0	0	0	0	0	0	0	0	0	81	81
Block 26 Total	0	0	0	0	0	0	0	0	0	0	0	0	0
Block 27 Total	0	0	0	0	0	0	0	0	0	0	0	0	0
Block 28 Total	0	0	0	0	0	0	0	0	0	0	0	0	0
Block 29 Total	0	98	9	0	0	3	0	0	0	0	0	0	110
Block 30 Total	0	0	0	0	0	0	0	0	0	0	0	0	0
Block 31 Total	0	0	0	51	0	0	0	0	0	0	0	0	51
Block 32 Total	0	0	0	0	0	0	0	0	0	0	0	0	0
Block 33 Total	0	0	1	0	0	0	0	0	0	0	0	0	1
Block 34 Total	0	0	0	0	0	0	0	0	0	0	0	0	0
Block 35 Total	65	0	0	29	0	0	0	0	0	0	0	0	94
Block 36 Total	0	23	1	0	0	0	0	0	0	0	0	0	24
Block 37 Total	3	12	5	59	0	0	0	0	0	0	0	0	79
Block 38 Total	29	8	2	99	0	0	0	0	0	7	0	0	145
Block 39 Total	10	0	3	17	0	0	0	0	0	4	0	0	34
Block 40 Total	0	0	1	0	0	0	0	0	0	0	0	0	1
Block 41 Total	0	0	0	0	0	0	0	0	38	0	0	0	38
Block 42 Total	0	0	1	0	0	0	0	0	0	0	0	0	1
Block 43 Total	0	0	0	0	0	0	3	0	0	0	0	0	3
Block 44 Total	8	0	0	57	0	0	0	0	0	12	0	108	185
Block 45 Total	2	0	1	149	0	0	0	0	0	31	0	0	183
Block 46 Total	13	12	1	55	0	0	0	0	0	5	0	0	86
Block 47 Total	0	0	0	0	0	0	0	0	0	0	38	0	38
Block 48 Total	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Downtown	167	178	34	516	0	3	19	0	77	97	38	189	1,318

Table 13 – Evening Parking Demand vs. Supply (Existing Conditions)

	Total Parking Demand	Public Parking			Private	Total			Gross Surplus / (Deficit)	Net* Surplus / (Deficit)
		On-Street	Off-Street	Total	Off-Street	On-Street	Off-Street	Total		
Block 1 Total	0	4	0	4	0	4	0	4	4	4
Block 2 Total	0	7	0	7	0	7	0	7	7	7
Block 3 Total	5	6	0	6	2	6	2	8	3	3
Block 4 Total	6	0	0	0	6	0	6	6	0	0
Block 5 Total	0	0	0	0	0	0	0	0	0	0
Block 6 Total	0	0	0	0	10	0	10	10	10	0
Block 7 Total	0	0	0	0	10	0	10	10	10	0
Block 8 Total	0	0	0	0	0	0	0	0	0	0
Block 9 Total	0	0	0	0	24	0	24	24	24	0
Block 10 Total	0	0	0	0	0	0	0	0	0	0
Block 11 Total	0	0	0	0	0	0	0	0	0	0
Block 12 Total	4	0	0	0	62	0	62	62	58	0
Block 13 Total	4	0	0	0	10	0	10	10	6	0
Block 14 Total	0	0	0	0	0	0	0	0	0	0
Block 15 Total	0	0	0	0	39	0	39	39	39	0
Block 16 Total	3	8	0	8	79	8	79	87	84	8
Block 17 Total	0	12	0	12	20	12	20	32	32	12
Block 18 Total	20	0	0	0	74	0	74	74	54	0
Block 19 Total	6	28	107	135	31	28	138	166	160	135
Block 20 Total	54	8	258	266	200	8	458	466	412	266
Block 21 Total	34	0	0	0	64	0	64	64	30	0
Block 22 Total	20	0	0	0	30	0	30	30	10	0
Block 23 Total	2	0	0	0	37	0	37	37	35	0
Block 24 Total	6	0	0	0	84	0	84	84	78	0
Block 25 Total	81	0	0	0	74	0	74	74	(7)	(7)
Block 26 Total	0	0	0	0	246	0	246	246	246	0
Block 27 Total	0	0	0	0	127	0	127	127	127	0
Block 28 Total	0	0	0	0	0	0	0	0	0	0
Block 29 Total	110	101	0	101	445	101	445	546	436	101
Block 30 Total	0	0	0	0	0	0	0	0	0	0
Block 31 Total	51	8	71	79	46	8	117	125	74	74
Block 32 Total	0	23	318	341	0	23	318	341	341	341
Block 33 Total	1	9	0	9	42	9	42	51	50	9
Block 34 Total	0	10	79	89	24	10	103	113	113	89
Block 35 Total	94	31	0	31	36	31	36	67	(27)	(27)
Block 36 Total	24	33	6	39	7	33	13	46	22	22
Block 37 Total	79	27	0	27	51	27	51	78	(1)	(1)
Block 38 Total	145	30	0	30	26	30	26	56	(89)	(89)
Block 39 Total	34	26	0	26	22	26	22	48	14	14
Block 40 Total	1	23	5	28	45	23	50	73	72	28
Block 41 Total	38	16	0	16	0	16	0	16	(22)	(22)
Block 42 Total	1	3	0	3	15	3	15	18	17	3
Block 43 Total	3	36	282	318	156	36	438	474	471	318
Block 44 Total	185	25	0	25	50	25	50	75	(110)	(110)
Block 45 Total	183	20	0	20	8	20	8	28	(155)	(155)
Block 46 Total	86	23	56	79	29	23	85	108	22	22
Block 47 Total	38	38	0	38	76	38	76	114	76	38
Block 48 Total	0	0	271	271	11	0	282	282	282	271
Total Downtown	1,318	555	1,453	2,008	2,318	555	3,771	4,326	3,008	1,354

Map 10 - Surplus/Deficit Current Demand Night



Baseball Impact

The Great Lakes Loons are a Class A affiliate of the Los Angeles Dodgers who play their home games at Dow Diamond. Information provided during the stakeholder interviews revealed that the field seats 6,000 with a usual attendance of about 4,000 to 5,000 during the warmer months. Available proximate parking for attendees totals approximately 950± spaces not including the spaces south of the ball diamond likely used by players and staff. Assuming the 4,000-attendance figure and two-point five (2.5) people per car would result in a parking need of approximately 1,600 spaces (Table 14). This would mean that on many evenings, approximately 650 spaces would be needed from other downtown lots to accommodate just baseball patron demand and this parking need may be competing with other downtown events. At higher attendance figures or lower ratios of people per car the number of needed spaces and impact on downtown parking would obviously be greater.

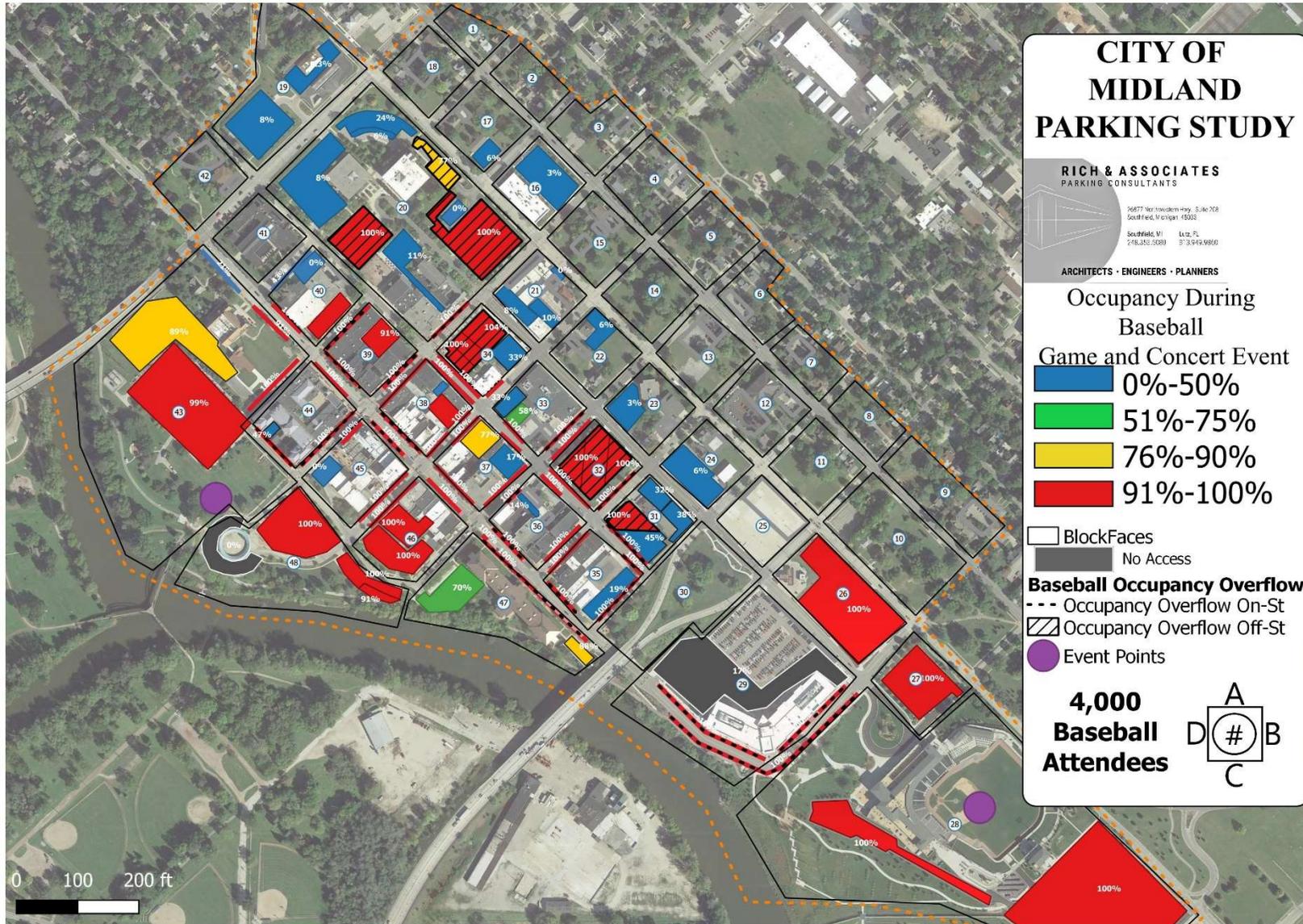
Table 14 – Baseball Attendance Impact

	Game Attendance	
	4,000	5,000
People / Car	Parking Spaces Needed	
2.00	2,000	2,500
Spaces Available on-site	950	950
Additional Spaces Needed Downtown	1,050	1,550
2.25	1,778	2,222
Spaces Available on-site	950	950
Additional Spaces Needed Downtown	828	1,272
2.50	1,600	2,000
Spaces Available on-site	950	950
Additional Spaces Needed Downtown	650	1,050
2.75	1,455	1,818
Spaces Available on-site	950	950
Additional Spaces Needed Downtown	505	868
3.00	1,333	1,667
Spaces Available on-site	950	950
Additional Spaces Needed Downtown	383	717

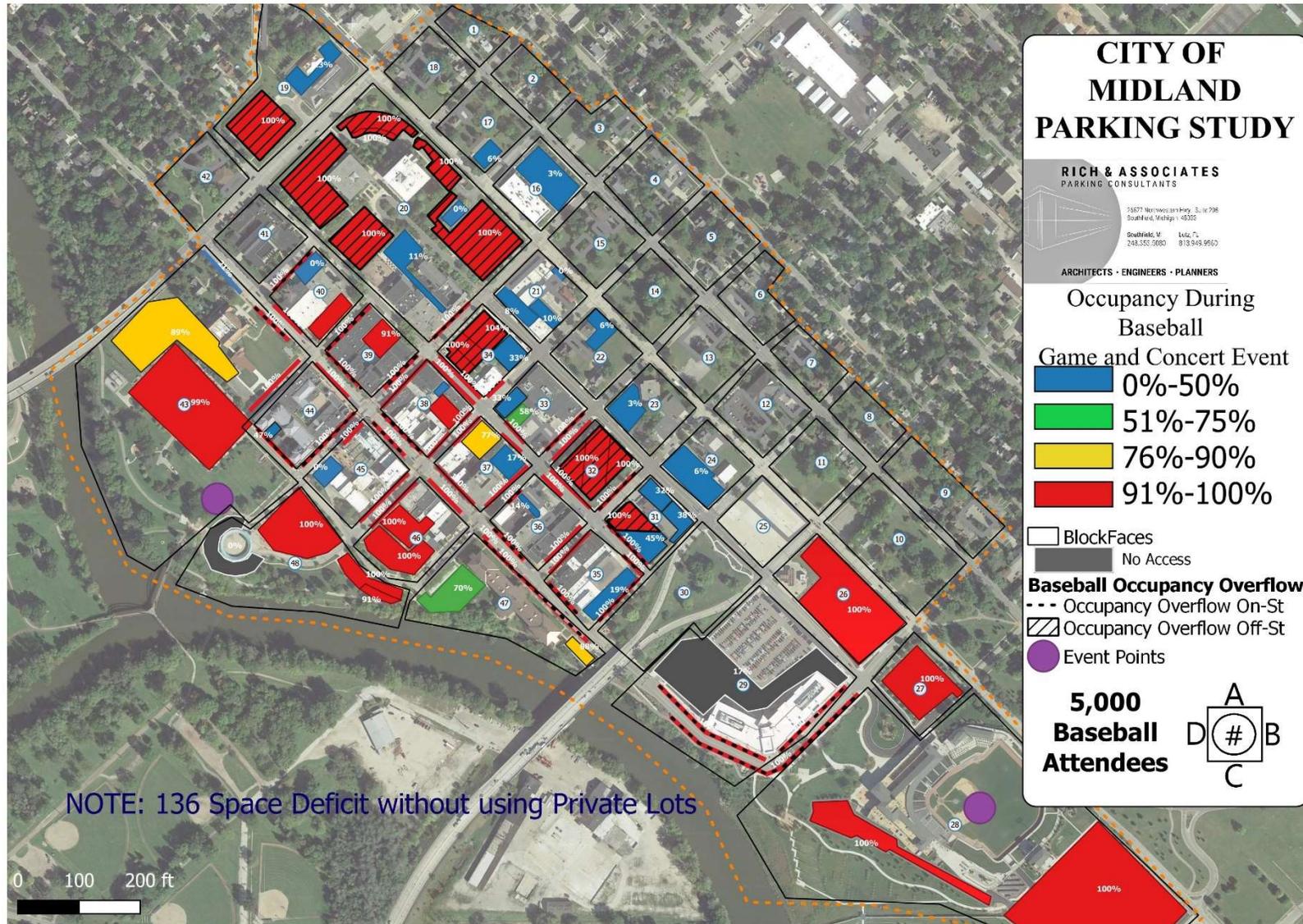
Map 11 on page 41 provides a potential parking scenario if 4,000 people were in attendance for an event at the Dow Diamond. Assuming two-point five (2.5) people per car would result in a parking need of approximately 1,600 spaces. This would mean roughly 650 spaces above those provided at the Dow Diamond would be needed from surrounding downtown lots and on-street parking.

Likewise, **Map 12** on page 42 provides a potential parking scenario if 5,000 people were in attendance for an event at the Dow Diamond. Again, assuming two-point five (2.5) people per car would result in a parking need of approximately 2,000 spaces. This would mean roughly 1050 spaces above those provided at the Dow Diamond would be needed from surrounding downtown lots and on-street parking.

Map 11 – Baseball Impact for 4,000 Attendees



Map 12 – Baseball Impact for 5,000 Attendees



SECTION 5 – FUTURE PARKING

Introduction

One of the particular concerns regarding parking in Downtown Midland is the impact from the impending construction of a 30,000 Delta College facility to be constructed on Block 24 with plans to open by fall 2020. This building would be situated on an existing parking lot and only minimal additional parking will be constructed. While provided data indicated that classes, at least initially, will only occur during the daytime hours, expansion of the daily student volume would likely result in some impact during the evening as well in future years.

In addition to the Delta College facility, the future parking needs assume that existing businesses and facilities would remain in operation as well as assuming that some of the currently vacant square footage would be occupied. For purposes of these initial projections, Rich is calculating the parking demand two years in the future which assumes that Delta College is operating with 300 daily students and that approximately 40 percent of the 94,000 vacant square footage is occupied.

There are also other projects planned for the Downtown that may result in either new construction or repurposing of existing buildings. One of these is on block 40 is a building owned by the Michigan Baseball foundation that is currently vacant. There has been some discussion for use of this building but specific details have not yet been provided. At this point this project and most other are of a confidential nature such that the parking needs and likely impact on downtown parking cannot be quantified in this report.

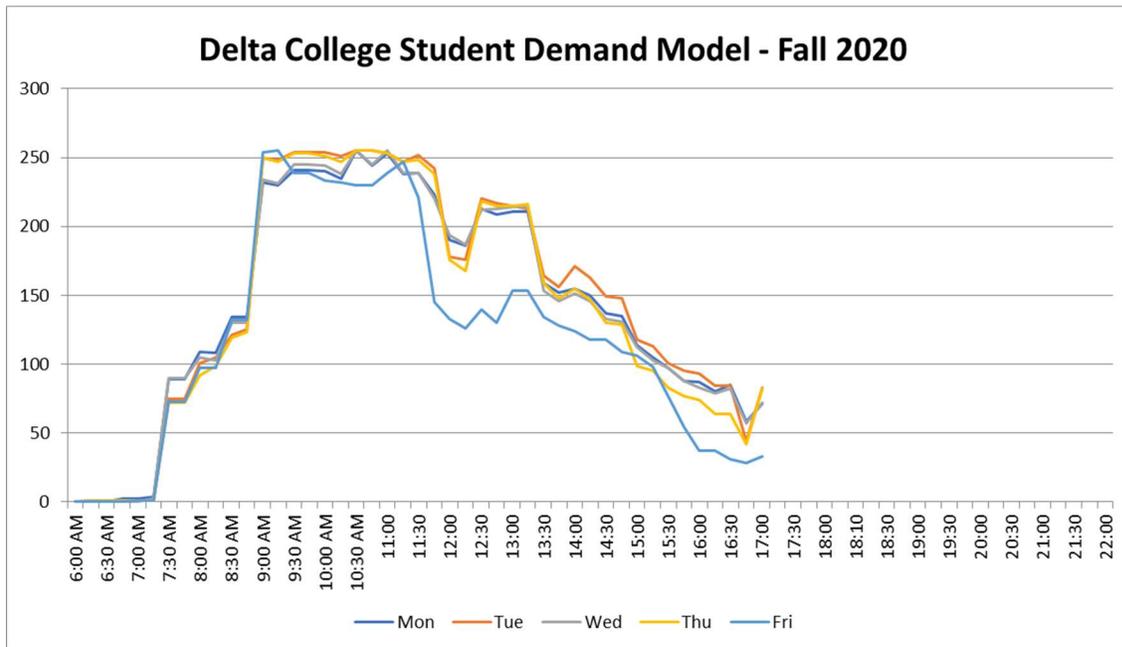
Delta College

The Delta College facility planned for Downtown Midland will be constructed on an existing 78-space surface lot. This lot would be eliminated as well as a small storage building (and its associated six-space parking lot) would be demolished and converted to a 31-space parking lot. The Delta College building encompassing 30,000 square feet is intended to initially accommodate 300 students on a daily basis, increasing to as many as 700 daily students in the future. Given the initial student volume, provided data indicated that classes would primarily occur during the day although at the higher student loads it is likely that classes would need to extend into the evening hours.

Additional data provided indicated that students are expected to be in class from an average of 4 hours to all day depending on the type of class. If in a nursing or science program, these classes typically last all day. In addition to the 300 daily student volume, provided data indicated that there would be about 20 instructors in class at this same time.

Without a class schedule, in order to quantify the parking need, Rich took the number of students in class pattern from a previous college study and prorated the student volume to the 300-daily volume from Delta College. Here we assumed about 85 percent of students would drive and park themselves resulting in a peak volume of 255 cars at approximately 10:30 am on most weekdays. The projected student parking space needs by time of day are demonstrated by **Figure 10** on page 44.

Figure 10 – Projected Delta College Student Parking Needs by Time of Day



Although the model shows declining demand by the 12:00 noon daytime peak as determined for other uses around the downtown, given the number of unknowns at this point, Rich is maintaining the 255-student car peak through the 12:00 noon hour to account for a “worse-case” condition. The addition of 20 teachers brings the required parking need to 275 spaces at peak.

Future Parking Square Footage – Daytime

Future daytime parking needs assume that the existing uses will be maintained in their current configuration. The additional demand anticipated for the future is the result of the Delta College demand as just noted and the re-occupancy of about 40 percent of the existing 94,000 sf of vacant space. **Table 15** on the following page shows the square footage values from most of the existing conditions remain the same.

Table 15 – Future Square Footage Allocation

	Retail	Personal Service	Office	Bar / Restaurant	Bank (Financial)	Med Office	Gov't	Community	Residential (Units)	Senior Living Residential (Units)	Hotel (Guest Rooms)	Vacant Residential Units	Vacant	Delta College
Block 1 Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Block 2 Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Block 3 Total	0	935	0	0	0	0	0	0	0	0	0	0	0	0
Block 4 Total	0	0	2,252	0	0	0	0	0	5	0	0	0	0	0
Block 5 Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Block 6 Total	0	0	1,211	0	0	0	0	0	0	0	0	0	0	0
Block 7 Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Block 8 Total	0													
Block 9 Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Block 10 Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Block 11 Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Block 12 Total	0	0	31,836	0	0	0	0	0	0	0	0	0	0	0
Block 13 Total	0	731	0	0	0	0	0	0	0	0	0	0	0	0
Block 14 Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Block 15 Total	0	0	676	0	0	0	0	0	0	0	0	0	0	0
Block 16 Total	0	0	30,263	0	0	0	0	0	0	0	0	0	0	0
Block 17 Total	0	0	944	0	0	0	0	0	0	0	0	0	0	0
Block 18 Total	0	0	0	0	0	0	0	0	16	0	0	0	0	0
Block 19 Total	3,520	0	0	0	0	0	0	0	0	0	0	0	0	0
Block 20 Total	0	0	0	0	0	0	137,316	43,808	0	0	0	0	0	0
Block 21 Total	15,884	720	0	0	0	0	0	0	4	0	0	0	0	0
Block 22 Total	0	2,025	11,916	0	0	0	0	0	6	0	0	0	0	0
Block 23 Total	0	0	9,656	0	0	0	5,764	0	0	0	0	0	2,790	0
Block 24 Total	0	0	0	0	0	0	0	0	0	0	0	0	0	30,000
Block 25 Total	0	0	0	0	0	0	0	0	0	0	77	0	0	0
Block 26 Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Block 27 Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Block 28 Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Block 29 Total	0	17,185	77,923	0	0	11,395	0	0	0	0	0	0	0	0
Block 30 Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Block 31 Total	0	0	0	5,880	0	0	0	0	0	0	0	0	0	0
Block 32 Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Block 33 Total	0	0	9,292	0	0	0	0	0	0	0	0	0	0	0
Block 34 Total	0	0	3,960	0	3,960	0	0	0	0	0	0	0	0	0
Block 35 Total	40,544	0	1,025	3,345	0	0	0	0	0	0	0	0	9,325	0
Block 36 Total	0	4,000	5,594	0	6,157	0	0	0	0	0	0	0	6,400	0
Block 37 Total	2,130	2,130	46,910	6,720	0	0	0	0	0	0	0	0	0	0
Block 38 Total	18,004	1,400	22,689	11,400	1,200	0	0	0	6	0	0	0	4,746	0
Block 39 Total	6,003	0	26,986	2,000	0	0	0	0	3	0	0	0	4,903	0
Block 40 Total	0	0	11,219	0	0	0	0	0	0	0	0	0	36,218	0
Block 41 Total	0	0	0	0	0	0	0	41,788	0	0	0	0	0	0
Block 42 Total	0	0	4,646	0	0	0	0	0	0	0	0	0	0	0
Block 43 Total	0	0	0	0	0	0	25,056	0	0	0	0	0	0	0
Block 44 Total	5,265	0	0	6,538	0	0	0	0	10	0	103	6	0	0
Block 45 Total	1,200	0	10,239	17,094	0	0	0	0	25	0	0	0	29,681	0
Block 46 Total	8,365	2,177	9,180	6,282	5,955	0	0	0	4	0	0	0	0	0
Block 47 Total	0	0	0	0	0	0	0	0	0	150	0	0	0	0
Block 48 Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Downtown	100,915	31,303	318,417	59,259	17,272	11,395	168,136	85,596	79	150	180	6	94,063	30,000

At this point, the specific uses of each is unknown and therefore, the demand model (**Table 16**) on page 47 simply takes the vacant square footage as was shown on each block multiplies it by 40 percent and applies an “average” parking generation rate of 2.44 spaces per 1,000 gsf to derive the potential parking demand. As more specific information becomes available in the future, the appropriate parking generation rates or code requirements may be applied to derive the specific parking needed by each development.

Table 16 – Future Daytime Parking Demand

	RT	PS	OF	BR	BK	MO	GV	MU	CM	RS	SRS	HT	VCR	VC	VC	Total Parking Demand
	Retail	Personal Service	Office	Bar / Restaurant	Bank (Financial)	Med Office	Gov't	Mixed Use	Community	Residential (Units)	Senior Living Residential (Units)	Hotel (Guest Rooms)	Vacant Residential Units	Vacant	Delta College	
	1.51	5.40	2.20	3.90	2.49	2.02	2.30	3.00	0.46	1.06	0.21	0.84	1.06	2.44	9.17	
Block 1 Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Block 2 Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Block 3 Total	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	5
Block 4 Total	0	0	5	0	0	0	0	0	0	5	0	0	0	0	0	10
Block 5 Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Block 6 Total	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
Block 7 Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Block 8 Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Block 9 Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Block 10 Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Block 11 Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Block 12 Total	0	0	70	0	0	0	0	0	0	0	0	0	0	0	0	70
Block 13 Total	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Block 14 Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Block 15 Total	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Block 16 Total	0	0	67	0	0	0	0	0	0	0	0	0	0	0	0	67
Block 17 Total	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
Block 18 Total	0	0	0	0	0	0	0	0	0	17	0	0	0	0	0	17
Block 19 Total	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
Block 20 Total	0	0	0	0	0	0	316	0	20	0	0	0	0	0	0	336
Block 21 Total	24	4	0	0	0	0	0	0	0	4	0	0	0	0	0	32
Block 22 Total	0	11	26	0	0	0	0	0	0	6	0	0	0	0	0	43
Block 23 Total	0	0	21	0	0	0	13	0	0	0	0	0	0	3	0	37
Block 24 Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	275	275
Block 25 Total	0	0	0	0	0	0	0	0	0	0	0	65	0	0	0	65
Block 26 Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Block 27 Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Block 28 Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Block 29 Total	0	93	171	0	0	23	0	0	0	0	0	0	0	0	0	287
Block 30 Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Block 31 Total	0	0	0	23	0	0	0	0	0	0	0	0	0	0	0	23
Block 32 Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Block 33 Total	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0	20
Block 34 Total	0	0	9	0	10	0	0	0	0	0	0	0	0	0	0	19
Block 35 Total	61	0	2	13	0	0	0	0	0	0	0	0	0	9	0	85
Block 36 Total	0	22	12	0	15	0	0	0	0	0	0	0	0	6	0	55
Block 37 Total	3	12	103	26	0	0	0	0	0	0	0	0	0	0	0	144
Block 38 Total	27	8	50	44	3	0	0	0	0	6	0	0	0	5	0	143
Block 39 Total	9	0	59	8	0	0	0	0	0	3	0	0	0	5	0	84
Block 40 Total	0	0	25	0	0	0	0	0	0	0	0	0	0	35	0	60
Block 41 Total	0	0	0	0	0	0	0	0	19	0	0	0	0	0	0	19
Block 42 Total	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	10
Block 43 Total	0	0	0	0	0	0	58	0	0	0	0	0	0	0	0	58
Block 44 Total	8	0	0	25	0	0	0	0	0	11	0	87	6	0	0	137
Block 45 Total	2	0	23	67	0	0	0	0	0	27	0	0	0	29	0	148
Block 46 Total	13	12	20	24	15	0	0	0	0	4	0	0	0	0	0	88
Block 47 Total	0	0	0	0	0	0	0	0	0	0	32	0	0	0	0	32
Block 48 Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Downtown	152	171	699	230	43	23	387	0	39	83	32	152	6	92	275	2,384

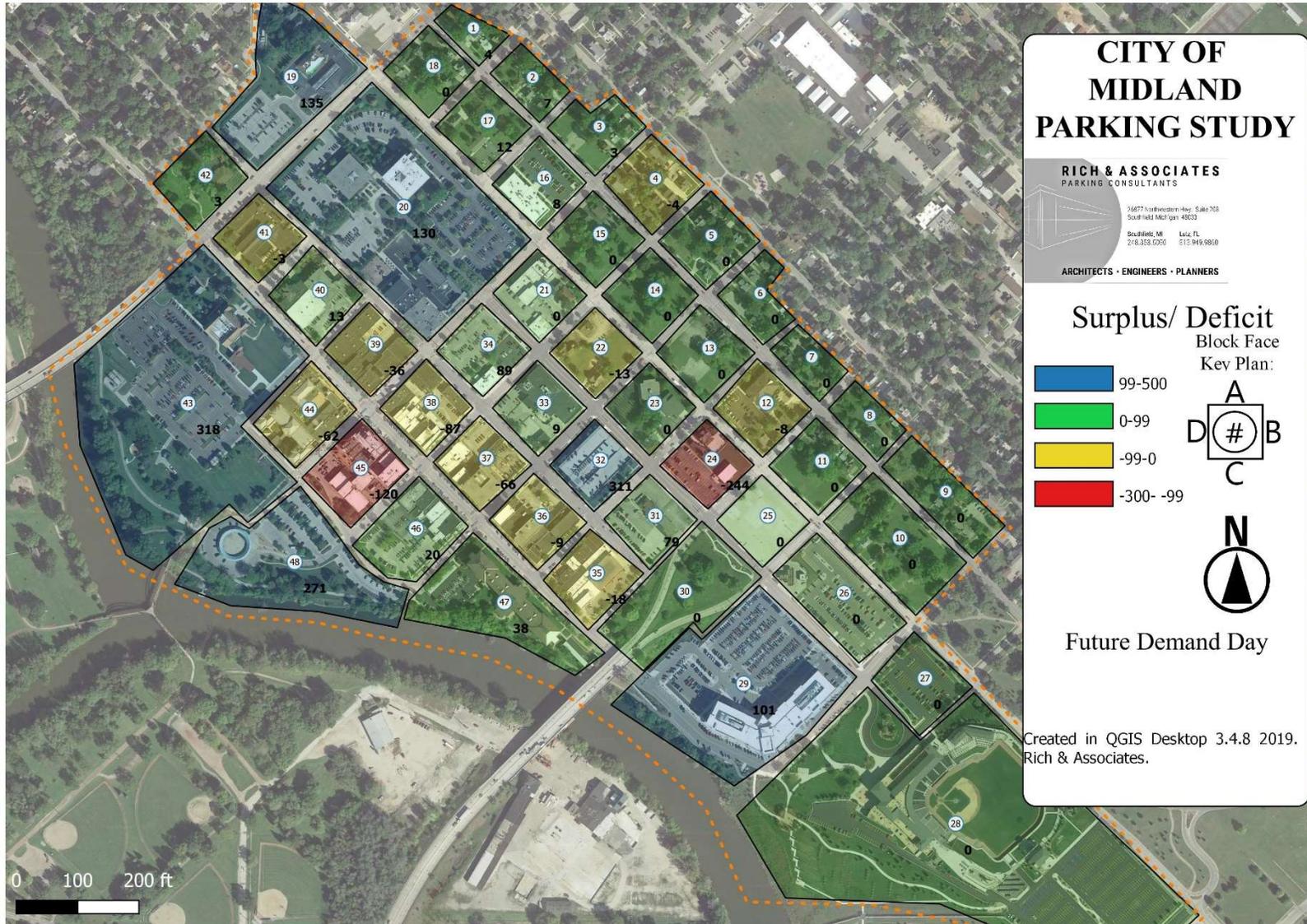
Given these conditions, the future daytime parking need is projected to be 2,384 spaces needed at approximately 12:00 noon. When this demand is compared to the revised total supply¹ of 4,273 spaces, which reflects the loss of the surface lot as the site of the College, downtown would have a gross surplus (total demand minus total supply) of 1,889± spaces during the daytime hours. On the “net basis” which discards surplus private parking, this surplus would be cut by more than half to 683± spaces. Twelve blocks would have deficits which range from three spaces to 244 spaces. The comparison of parking demand versus supply is shown by **Table 17** on page 49. The comparison of parking demand versus supply by block is shown by **Map 13** on page 50.

¹ Excluding the 633± spaces on block 29 (Dow Diamond).

Table 17 – Future Daytime Parking Demand vs. Supply

	Total Parking Demand	Public Parking			Private	Total			Gross Surplus / (Deficit)	Net* Surplus / (Deficit)
		On-Street	Off-Street	Total	Off-Street	On-Street	Off-Street	Total		
Block 1 Total	0	4	0	4	0	4	0	4	4	4
Block 2 Total	0	7	0	7	0	7	0	7	7	7
Block 3 Total	5	6	0	6	2	6	2	8	3	3
Block 4 Total	10	0	0	0	6	0	6	6	(4)	(4)
Block 5 Total	0	0	0	0	0	0	0	0	0	0
Block 6 Total	3	0	0	0	10	0	10	10	7	0
Block 7 Total	0	0	0	0	10	0	10	10	10	0
Block 8 Total	0	0	0	0	0	0	0	0	0	0
Block 9 Total	0	0	0	0	24	0	24	24	24	0
Block 10 Total	0	0	0	0	0	0	0	0	0	0
Block 11 Total	0	0	0	0	0	0	0	0	0	0
Block 12 Total	70	0	0	0	62	0	62	62	(8)	(8)
Block 13 Total	4	0	0	0	10	0	10	10	6	0
Block 14 Total	0	0	0	0	0	0	0	0	0	0
Block 15 Total	1	0	0	0	39	0	39	39	38	0
Block 16 Total	67	8	0	8	79	8	79	87	20	8
Block 17 Total	2	12	0	12	20	12	20	32	30	12
Block 18 Total	17	0	0	0	74	0	74	74	57	0
Block 19 Total	5	28	107	135	31	28	138	166	161	135
Block 20 Total	336	8	258	266	200	8	458	466	130	130
Block 21 Total	32	0	0	0	64	0	64	64	32	0
Block 22 Total	43	0	0	0	30	0	30	30	(13)	(13)
Block 23 Total	37	0	0	0	37	0	37	37	0	0
Block 24 Total	275	0	0	0	31	0	31	31	(244)	(244)
Block 25 Total	65	0	0	0	74	0	74	74	9	0
Block 26 Total	0	0	0	0	246	0	246	246	246	0
Block 27 Total	0	0	0	0	127	0	127	127	127	0
Block 28 Total	0	0	0	0	0	0	0	0	0	0
Block 29 Total	287	101	0	101	445	101	445	546	259	101
Block 30 Total	0	0	0	0	0	0	0	0	0	0
Block 31 Total	23	8	71	79	46	8	117	125	102	79
Block 32 Total	0	23	90	113	228	23	318	341	341	113
Block 33 Total	20	9	0	9	42	9	42	51	31	9
Block 34 Total	19	10	79	89	24	10	103	113	94	89
Block 35 Total	85	31	0	31	36	31	36	67	(18)	(18)
Block 36 Total	55	33	6	39	7	33	13	46	(9)	(9)
Block 37 Total	144	27	0	27	51	27	51	78	(66)	(66)
Block 38 Total	143	30	0	30	26	30	26	56	(87)	(87)
Block 39 Total	84	26	0	26	22	26	22	48	(36)	(36)
Block 40 Total	60	23	5	28	45	23	50	73	13	13
Block 41 Total	19	16	0	16	0	16	0	16	(3)	(3)
Block 42 Total	10	3	0	3	15	3	15	18	8	3
Block 43 Total	58	36	282	318	156	36	438	474	416	318
Block 44 Total	137	25	0	25	50	25	50	75	(62)	(62)
Block 45 Total	148	20	0	20	8	20	8	28	(120)	(120)
Block 46 Total	88	23	56	79	29	23	85	108	20	20
Block 47 Total	32	38	0	38	76	38	76	114	82	38
Block 48 Total	0	0	271	271	11	0	282	282	282	271
Total Downtown	2,384	555	1,225	1,780	2,493	555	3,718	4,273	1,889	683

Map 13 – Surplus/Deficit Future Demand Day



Future Parking Demand – Evening

At this point, Rich is only projecting the parking needs about three years into the future. This assumes that Delta College is still operating with just daytime classes and that about 40 percent of the 94,000 square feet of vacant space is occupied. Given these conditions, the future evening parking demand is only about 100± spaces greater than the existing conditions. **Table 18** on page 52 shows that projected evening parking demand would be about 1,411± spaces. When this demand is compared against the available parking supply as shown by **Table 19** on page 53, the downtown would have a “gross” surplus of 2,862 spaces and 1,293± spaces on the net basis. **Map 14** on page 54 shows the comparison of parking demand to parking supply by block for this future evening condition. It should be noted however that these values do not account for events at the park (such as a concert) which could generate the need for several hundred additional parking spaces nor the impact from large attendance at a baseball game with some patrons forced to park within the downtown as was demonstrated on page 42.

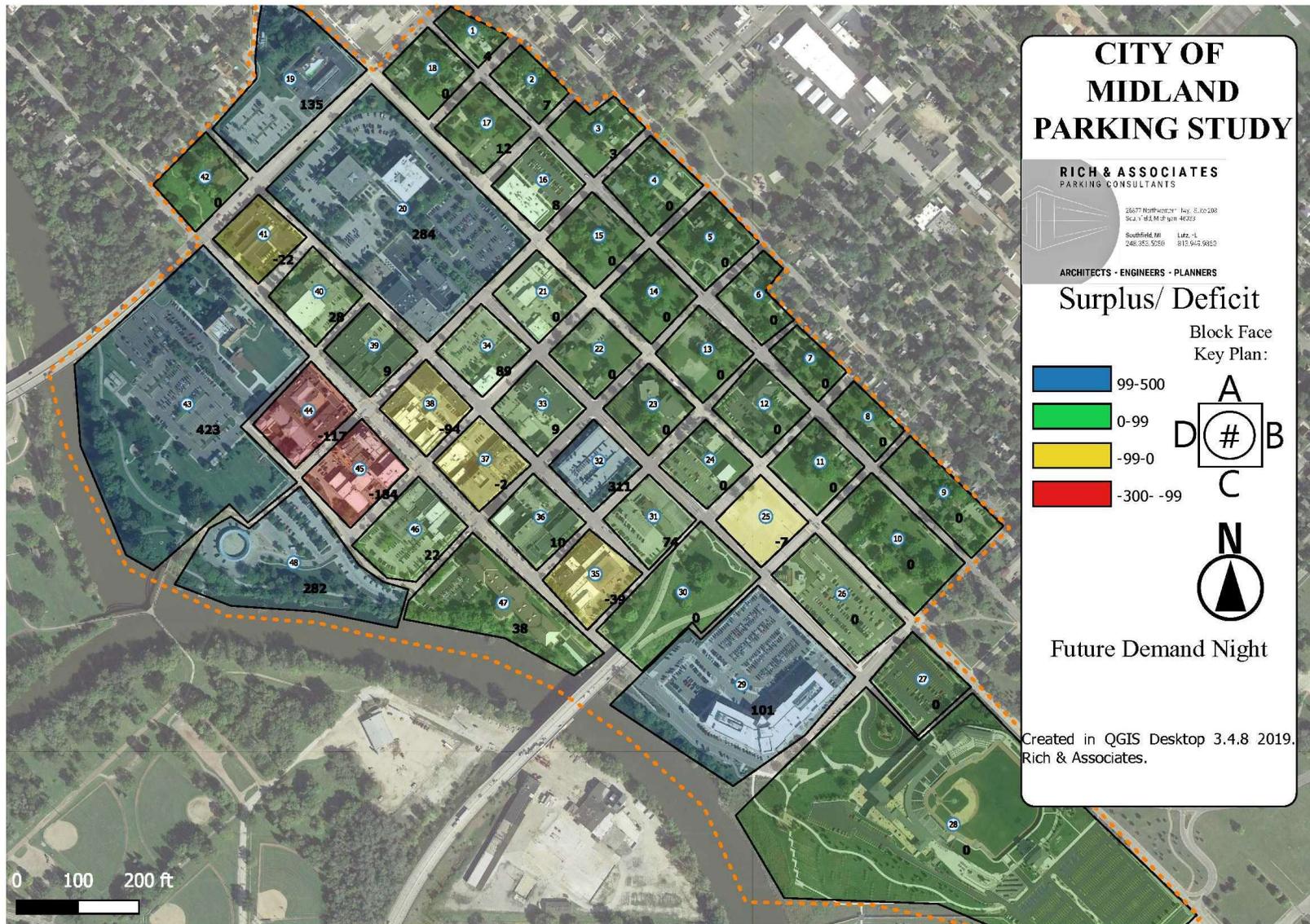
Table 18 – Future Evening Parking Demand

	RT	PS	OF	BR	BK	MO	GV	CM	RS	SRS	HT	VCR	VC	VC	
	Retail	Personal Service	Office	Bar / Restaurant	Bank (Financial)	Med Office	Gov't	Community	Residential (Units)	Senior Living Residential (Units)	Hotel (Guest Rooms)	Vacant Residential Units	Vacant	Delta College	Total Parking Demand
	1.60	5.69	0.11	8.71	0.00	0.26	0.11	0.90	1.23	0.25	1.05	1.23	2.44	0.00	
Block 1 Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Block 2 Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Block 3 Total	0	5	0	0	0	0	0	0	0	0	0	0	0	0	5
Block 4 Total	0	0	0	0	0	0	0	0	6	0	0	0	0	0	6
Block 5 Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Block 6 Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Block 7 Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Block 8 Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Block 9 Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Block 10 Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Block 11 Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Block 12 Total	0	0	4	0	0	0	0	0	0	0	0	0	0	0	4
Block 13 Total	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4
Block 14 Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Block 15 Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Block 16 Total	0	0	3	0	0	0	0	0	0	0	0	0	0	0	3
Block 17 Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Block 18 Total	0	0	0	0	0	0	0	0	20	0	0	0	0	0	20
Block 19 Total	6	0	0	0	0	0	0	0	0	0	0	0	0	0	6
Block 20 Total	0	0	0	0	0	0	15	39	0	0	0	0	0	0	54
Block 21 Total	25	4	0	0	0	0	0	0	5	0	0	0	0	0	34
Block 22 Total	0	12	1	0	0	0	0	0	7	0	0	0	0	0	20
Block 23 Total	0	0	1	0	0	0	1	0	0	0	0	0	3	0	5
Block 24 Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Block 25 Total	0	0	0	0	0	0	0	0	0	0	81	0	0	0	81
Block 26 Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Block 27 Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Block 28 Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Block 29 Total	0	98	9	0	0	3	0	0	0	0	0	0	0	0	110
Block 30 Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Block 31 Total	0	0	0	51	0	0	0	0	0	0	0	0	0	0	51
Block 32 Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Block 33 Total	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
Block 34 Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Block 35 Total	65	0	0	29	0	0	0	0	0	0	0	0	9	0	103
Block 36 Total	0	23	1	0	0	0	0	0	0	0	0	0	6	0	30
Block 37 Total	3	12	5	59	0	0	0	0	0	0	0	0	0	0	79
Block 38 Total	29	8	2	99	0	0	0	0	7	0	0	0	5	0	150
Block 39 Total	10	0	3	17	0	0	0	0	4	0	0	0	5	0	39
Block 40 Total	0	0	1	0	0	0	0	0	0	0	0	0	35	0	36
Block 41 Total	0	0	0	0	0	0	0	38	0	0	0	0	0	0	38
Block 42 Total	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
Block 43 Total	0	0	0	0	0	0	3	0	0	0	0	0	0	0	3
Block 44 Total	8	0	0	57	0	0	0	0	12	0	108	7	0	0	192
Block 45 Total	2	0	1	149	0	0	0	0	31	0	0	0	29	0	212
Block 46 Total	13	12	1	55	0	0	0	0	5	0	0	0	0	0	86
Block 47 Total	0	0	0	0	0	0	0	0	0	38	0	0	0	0	38
Block 48 Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Downtown	161	178	34	516	0	3	19	77	97	38	189	7	92	0	1,411

Table 19 – Future Evening Parking Demand vs. Supply

	Total Parking Demand	Public Parking			Private	Total			Gross Surplus / (Deficit)	Net* Surplus / (Deficit)
		On-Street	Off-Street	Total	Off-Street	On-Street	Off-Street	Total		
Block 1 Total	0	4	0	4	0	4	0	4	4	4
Block 2 Total	0	7	0	7	0	7	0	7	7	7
Block 3 Total	5	6	0	6	2	6	2	8	3	3
Block 4 Total	6	0	0	0	6	0	6	6	0	0
Block 5 Total	0	0	0	0	0	0	0	0	0	0
Block 6 Total	0	0	0	0	10	0	10	10	10	0
Block 7 Total	0	0	0	0	10	0	10	10	10	0
Block 8 Total	0	0	0	0	0	0	0	0	0	0
Block 9 Total	0	0	0	0	24	0	24	24	24	0
Block 10 Total	0	0	0	0	0	0	0	0	0	0
Block 11 Total	0	0	0	0	0	0	0	0	0	0
Block 12 Total	4	0	0	0	62	0	62	62	58	0
Block 13 Total	4	0	0	0	10	0	10	10	6	0
Block 14 Total	0	0	0	0	0	0	0	0	0	0
Block 15 Total	0	0	0	0	39	0	39	39	39	0
Block 16 Total	3	8	0	8	79	8	79	87	84	8
Block 17 Total	0	12	0	12	20	12	20	32	32	12
Block 18 Total	20	0	0	0	74	0	74	74	54	0
Block 19 Total	6	28	107	135	31	28	138	166	160	135
Block 20 Total	54	8	258	266	200	8	458	466	412	266
Block 21 Total	34	0	0	0	64	0	64	64	30	0
Block 22 Total	20	0	0	0	30	0	30	30	10	0
Block 23 Total	5	0	0	0	37	0	37	37	32	0
Block 24 Total	0	0	0	0	31	0	31	31	31	0
Block 25 Total	81	0	0	0	74	0	74	74	(7)	(7)
Block 26 Total	0	0	0	0	246	0	246	246	246	0
Block 27 Total	0	0	0	0	127	0	127	127	127	0
Block 28 Total	0	0	0	0	0	0	0	0	0	0
Block 29 Total	110	101	0	101	445	101	445	546	436	101
Block 30 Total	0	0	0	0	0	0	0	0	0	0
Block 31 Total	51	8	71	79	46	8	117	125	74	74
Block 32 Total	0	23	318	341	0	23	318	341	341	341
Block 33 Total	1	9	0	9	42	9	42	51	50	9
Block 34 Total	0	10	79	89	24	10	103	113	113	89
Block 35 Total	103	31	0	31	36	31	36	67	(36)	(36)
Block 36 Total	30	33	6	39	7	33	13	46	16	16
Block 37 Total	79	27	0	27	51	27	51	78	(1)	(1)
Block 38 Total	150	30	0	30	26	30	26	56	(94)	(94)
Block 39 Total	39	26	0	26	22	26	22	48	9	9
Block 40 Total	36	23	5	28	45	23	50	73	37	28
Block 41 Total	38	16	0	16	0	16	0	16	(22)	(22)
Block 42 Total	1	3	0	3	15	3	15	18	17	3
Block 43 Total	3	36	282	318	156	36	438	474	471	318
Block 44 Total	192	25	0	25	50	25	50	75	(117)	(117)
Block 45 Total	212	20	0	20	8	20	8	28	(184)	(184)
Block 46 Total	86	23	56	79	29	23	85	108	22	22
Block 47 Total	38	38	0	38	76	38	76	114	76	38
Block 48 Total	0	0	271	271	11	0	282	282	282	271
Total Downtown	1,411	555	1,453	2,008	2,265	555	3,718	4,273	2,862	1,293

Map 14 – Surplus/Deficit Future Demand Night



SECTION 6 - PUBLIC INPUT

There were two public meeting sessions, individual in-person or phone conversations, and public surveys made available to the public for input. Discussions included comments and concerns specific to parking in downtown Midland.

Survey responses indicate that over 96 percent of the people that come downtown drive their own vehicle, are only willing to walk less than 1 to 2 blocks to their destination and 60 percent of them park on-street. The responses from people who visit indicate that they spend an average of 1 to 3 hours in the downtown once or twice a week. Some of the more prominent comments and concerns are listed below.

Parking Comments and Concerns:

Parallel Parking

- People really dislike the parallel parking.
- Get rid of the parallel parking and you will have more spaces.
- I don't come downtown because of the parallel parking.
- I have almost been hit every time I get out of my vehicle on Main Street.
- People run the stop signs downtown, parallel parking and Main Street decorations have eliminated safe parking.
- The parallel parking is MUCH better (and safer) than the previous angled parking.

Enforcement

- Effective enforcement would go a long way.
- The idea of free parking, and then having a parking enforcement officer is silly.
- I think the person in charge of enforcing parking doesn't have the tools or technology to do her job effectively. She used to chalk tires and people would just go move them. By the time she makes it back through she is well past the 3-hour mark and most of the chronic offenders have only ever gotten one ticket.
- I would like to see a little tougher enforcement of the rules. It can be frustrating, as someone who parks where they're supposed to, to see people use a spot all day and not get a ticket.

Signage

- During events the signs indicating a 3-hour limit should also say 'except during events.'
- I recommend keeping the street parking 3-hour limit during the day and make it unlimited in the evenings.
- The parking needs to be better signed.
- Direct people to the public parking.
- Clear signage as to where parking is and when it is free would be helpful.
- It would be nice if there were signs so we could have enough spots held for the workers.

Paid Parking

- There should not be any fees to park, no matter where one chooses to park.
- There should not be a fee to pay in the public lots. If there is going to be a charge it should be for the on-street parking.
- I would not come downtown if I had to pay for parking.
- The parking permits are a waste and more revenue could be made by returning downtown to meter parking.
- It's unfair to require paid parking for those who work downtown.

Parking Garage

- People hang out at the parking garage. Kids with skateboards.
- Trash needs to be emptied more often and the elevator needs to be cleaned more often.
- The location of the existing parking ramp is in a poor location to visit Main Street. A new parking facility on or very near to Main Street would be ideal. Appropriate rate would be expected.
- Many people are unaware or misinformed about the Larkin Parking Garage availability.

Loading Zones

- Please give consideration to creating truck loading zones where there is parallel parking. Oftentimes I must go into a lane of oncoming traffic to get around a truck that has stopped on Main Street to unload.
- Consider resigning the loading zones to allow for parking in the evenings.

Handicap Spaces

- There are not enough handicap spaces available on Main Street.
- I would be willing to bring my spouse, who is in a wheelchair, to help determine if the spaces are designed correctly. For example, we use a van with a side exit access. We can get the ramp down – but can't exit because the ADA signs are in the way.

General Comments

- We don't have an employee policy, but we try to park in customer spots for long stays.
- Need close, well lighted, overnight parking for the caregivers that service residents of Riverside Place.
- What about asking businesses, like the East End and Loons to allow public parking on off business hours and have signs directing visitors that way?
- Post "Employee only" for county cars only section.
- Day to day parking is fine.
- Too many businesses and employees of businesses use the best on-street parking spots.

Bicycle Comments and Concerns:

General Comments

- No lights downtown so pedestrians and bikers just walk when they want. Unsafe.
- I used to bike all over downtown and I was smart enough to stay off main streets. Now these current bikers are arrogant about owning the roads.
- An increase in clearly defined, safe and connected bike lanes so that you can travel all throughout Midland, not just on the rail trail.

Bus Transportation Comments and Concerns:

General Comments

- I do think a bus system (not dial-a-ride, a full system) could alleviate problems.
- People don't get to choose where their employers are located and to make employees pay to park at work in a city that isn't easily walkable and doesn't offer decent public transportation is ridiculous. If you want employees to foot the bill for city parking improvements that are really meant for visitors then you should at least offer some bus routes.

Special Event Comments and Concerns:

General Comments

- When events are going on, parking is not enough.
- If there are events downtown, we spend a lot of time driving around looking for parking because all of the side streets are full.
- There is no way elderly people could walk multiple blocks to get to event locations.
- Events take away parking and accessibility from residents at Riverside.
- I like how employees have designated parking lot. But sometimes during events, visitors take employee parking spaces.
- During the farmers market, and other city events, parking is crazy!

SECTION 7 - RECOMMENDATIONS

As a result of the parking study completed for the City of Midland, Rich and Associates have developed a series of recommendations which are designed to increase the positive perceptions by downtown users of the parking system. While there are existing pockets of deficit conditions, the existing overall surplus of the parking system should mean that spaces should be available within a reasonable walking distance. The primary issue identified by Rich is that many of the publicly available parking areas are not clearly identified or that some require payment at a meter while the vast majority of public parking is free. This means that the paid spaces will be the last choice sought even though they may be convenient to some destinations.

1.0 Signage

1.1 Public Lots Signed

Discussion: Generally, most patrons coming downtown would like to be assured that when they park, they are parking legally and won't be cited or towed for parking in the wrong location. For these reasons, it is critical that public lots be clearly identified. If lots have a combination of reserved by permit and general public spaces, it is also important that these different types of spaces be clearly identified with both signs and striping (when possible). Public lots should be identified with a Lot Name sign. Ideally, the lot name uses intersecting streets or street names to help someone in navigating back to the lot rather than just identified with a letter or number. If there are any restrictions in the lot (such as no overnight parking or time limits), this information should be clearly stated on the lot identification sign.



Action: Begin process to develop Lot Identification Signs. Each public lot should be clearly identified. Any spaces within the lot which are intended for permit use should also be clearly signed.

Of particular importance in this regard, the existing Larkin Street structure currently has no signs indicating that it has public parking on the ground floor during the daytime hours. Also, there are not any signs on the interior of the garage that all parking is available for public use after hours and on weekends.

Responsibility: City and DDA

Time Frame: 6 – 12 months

1.2 Direction Signs

Discussion: While local residents and other frequent visitors may be comfortable knowing where the publicly available parking lots are located, infrequent visitors and other downtown guests will often be looking for signs that direct them to publicly available parking. A signage program for Downtown Midland would consist of signs of several types. In all cases, the signs should be of a consistent color, font and logo so that once a sign is seen, drivers can know to look for similar signs. An initial sign such as Public Parking Ahead can be provided on main roads into downtown. At decision points, signs with directional arrows will help direct patrons to available public lots.



Action: As budgets permit develop signage program. Public lot identification signs (recommendation 1.1) above should be the initial priority but develop directional signs as budgets permit.

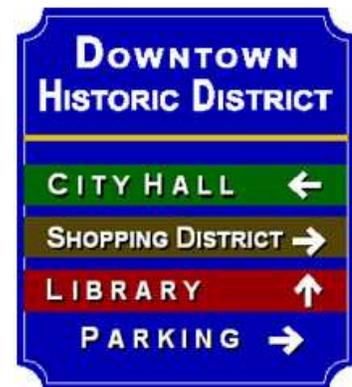
Responsibility: City and DDA

Time Frame: As budgets permit

1.3 Wayfinding Signs

Discussion: Helping patrons navigate from their parking area to their destination and back again is the function of wayfinding signs. There are two types of wayfinding signs, Vehicle Wayfinding and Pedestrian Wayfinding. The difference is in the scale of the signs so that they are easily read either from moving vehicle or pedestrian. Pedestrian wayfinding signs are typically placed near the exits from parking areas to direct downtown patrons to key destinations.

Action: Begin program for developing family of vehicle and pedestrian wayfinding signs. As budgets permit, expand the number and placement of signs. Local businesses can have their name and location prominently placed on signs to help defray costs.



Responsibility: City and DDA

Time Frame: Planning immediate, placement as budgets permit.

2.0 Enforcement

Discussion: Enforcement plays a critical role in any downtown environment. It is not necessary to conduct enforcement all day every day but should be designed to discourage the habitual offenders. Without proper enforcement, the most convenient on and off-street parking spaces will often be monopolized by downtown employees. Any time limits of on-street spaces designed to encourage turnover of the spaces will be similarly ignored. The result is a perception of insufficient parking and increased frustration by downtown patrons who may seek other alternatives. For the downtown office uses that don't depend on patron traffic, employees improperly parking is not a problem but local shops and restaurants that depend on the availability of convenient parking for their customers and visitors will be negatively and often severely affected. Currently, enforcement is handled by one part-time person with a well-known schedule. Additionally, the system of recording violations noting the position of the tire valve, is easily defeated by slightly moving the vehicle.

Enforcement is a two-part process. Not only must violators be cited, but those citations have to be collected. If parkers don't feel that there will be a citation for violating the regulations, then the rules will be ignored. Similarly, if citations are issued but there are no repercussions for ignoring the citation, again the rules will be ignored. Even if citations are issued and collected, a low probability of getting caught or a low fine rate can also encourage persons to ignore the rules. If someone is cited infrequently, they may consider the parking fine their cost of parking, particularly if the fine amount is low. As such, proper enforcement may require a multi-faceted and stepped approach involving new enforcement technology, staffing, fine levels and revisions to City parking ordinances.

2.1 Parking Enforcement Technology



Discussion: Parking enforcement technology that allows the enforcement officer to record license plate numbers prevents the patron from defeating the enforcement by simply moving the vehicle. Technology that uses license plate data can show that the vehicle was previously parked and its location. A parking patron attempting to defeat the on-street time limits by simply moving to a different spot on the same block, across the street or around the corner will be prevented from defeating the time limits because with license plate data, the system can show that the vehicle has already been recorded. Combined with proper city ordinances that restrict on-street parking to defined time limits within the downtown boundaries can work to ensure that employees are not abusing on-street parking. This is because on-street parking as the most convenient is generally intended for short-term use by customers and visitors. Use by employees

parking, even if in different spaces, defeats this convenience. However, the use of license plate technology is likely not cost effective for part-time enforcement. Similarly, the parking system does not yet show a significant problem with vehicles overstaying the time limits, which may be because vehicles moved to different spaces. Also, the study did not show a serious parking congestion issue except during peak hours in the evenings on certain blocks. However, this may become more of an issue in the future

as some currently confidential development projects come to fruition and create additional downtown parking demand.

Action: Begin process of investigating technology system that can work with City systems and cannot be defeated by slight movements of vehicle. Systems that use license plates to record vehicle data would be preferred, often with photos. At the time of this report, the simplest system of chalking tires (even though easily defeated) is not permitted within Michigan. Since new enforcement technology systems can be expensive, it is likely that the City may need to budget for new system including personnel. May require recruiting and training of volunteers to assist with the enforcement function in order to justify the costs of new technology.

Responsibility: City

Time Frame: 6 – 12 Months

2.2 Volunteers / Random Schedule

Discussion: The current parking enforcement system uses one part-time staffer who works two defined days during the week. This schedule is not only well known but it was reported that once the enforcement person is making their rounds, there is a grapevine whereby businesses will warn each other so that steps can be taken to defeat the enforcement process by moving vehicles. Given this schedule and these conditions, it is not likely that the expense of a more robust enforcement system would be cost effective.

Action: At the very least move to a system of random enforcement without defined times and days. Not only should the route be random and vary, so should the hours. Currently the route is monitored once in the morning and then again in the afternoon. With just the one person, on some days, the route should be monitored and then at the end of the two-hour or three-hour time limit, monitored again and then a third time. The intent is to discourage the abuse of parking regulations. Another possibility would be to recruit and train volunteers to assist with the enforcement efforts. This is possible in Michigan (see Appendix) so long as there is no violation of any collective bargaining agreement with the City's law enforcement officers.

Responsibility: City

Time Frame: 6 – 12 Months (Will require training and may require modifications to local ordinances.)

2.3 Fine Schedule

Discussion: Currently, on-street parking on most streets within downtown Midland is time limited to three hours. Fines for exceeding this time limit (as stated on the signs) is \$10.00. The fines currently double if not paid within seven calendar days. Given the defined schedule noted above, it appears likely that many violators may be able to avoid receiving multiple citations in any given month simply by moving their vehicle as needed. Getting caught infrequently may mean that their monthly parking costs may be as little as \$10.00 or \$20.00 per month.

Action: Given the possible infrequency of receiving citations, receiving multiple citations within a defined time period (6 months – 1 year) should mean that subsequent violations carry higher fine amounts. This is intended to discourage violations. However, it may require that real-time information be available to the enforcement officer to indicate the multiple violations for the subject vehicle. This may need to be done in combination with the upgraded technology recommendation. Similarly, Rich recommends that initial violations be given a “courtesy ticket”. This simply thanks the patron who innocently overstays the limit for shopping and visiting downtown Midland but carries no fine. Any subsequent violations within a defined time period (6 months to one year) would have the scheduled fine attached.

1st Violation – Courtesy Ticket

2nd Violation – \$10.00 fine (\$20.00 if not paid within 7 calendar days, \$30.00 after 14 days).

3rd Violation - \$20.00 fine (\$40.00 if not paid within 7 calendar days, \$50.00 after 14 days).

4th Violation - \$40.00 fine (\$50.00 if not paid within 7 calendar days).

Responsibility: City

Time Frame: To be determined since this may require use of technology to provide real-time data to the enforcement officer.

3.0 Maintenance

Discussion: In order for parking areas to be used, patrons must feel that both they and their vehicle will be safe in that parking area. This may be due in part to their perception of the parking area. A clean well-maintained parking lot or facility will appear more attractive than one with obvious issues.

3.1 Parking Lots

Action: This means that parking areas should be reviewed on at least an annual basis and any deficiencies (cracked or spalling parking surface, potholes, faded stall markings, rusted or missing signs, insufficient lighting from inoperative light fixtures) noted and properly budgeted and repaired. Addressing problems while small will be more cost-effective in the long-run.

Responsibility: City

Time Frame: Immediate

3.1.1 Parking Garage Maintenance

Action: In July 2019, the City commissioned another engineering firm to conduct an assessment of the Larkin Street Parking Structure. Rich will defer to this firm's expertise and opinions since they conducted a more extensive evaluation than Rich's visual observations. Had this engineering assessment not been performed, Rich would have recommended a more detailed structural assessment of the garage to either confirm or refute Rich's visual observations.



The engineering firm has reported that the garage is actually in good condition for a 30-year old facility although they did note areas of deterioration that will require remedial efforts. The engineering firm has also developed a recommended program of repairs which is estimated to cost \$900,000 over 10 years. This suggests that, at a minimum, the Larkin Street Garage still has a minimum 10-year service life. As such, the cost of remediation is far below the cost to replace these spaces.

Responsibility: City

Time Frame: As soon as possible

3.2 On-Street Striping

Discussion: Having defined stall markings in on-street spaces helps in ensuring the efficient use of the valuable curb space. Where on-street stalls are not marked, patrons may either leave too much space between vehicles or squeeze into a space leaving too little room for another car to easily get out of the curb space. Stall markings also help define that parking is permitted on the block face. It is also important that the stall markings be properly sized. In a recent study conducted for another municipality, Rich reviewed various code specifications for the length of parallel on-street spaces and determined that 23 feet is the most common dimension.

Action: 1) Where on-street parking is permitted but not defined by stall markings, paint stall markings on the roadway in combination with proper signage. 2) At least annually, review the condition of existing on-street stall markings and note where repainting is necessary.

Responsibility: City

Time Frame: Immediate

3.3 Maintenance Sinking Fund

Discussion: In many cases necessary repairs and maintenance tasks get deferred either due to a lack of financial resources or maintenance resources. While a municipality must have the proper tools and equipment to perform some maintenance and repair functions, deferring repairs should not be due to a lack of repair dollars. Rich recommends that money be set aside into a sinking fund so that when repairs become necessary, the funds are available, particularly for larger repairs to perform them. Simple items such as repainting stall markings should have a budget set aside while other long-term repairs should have dollars saved and allocated for them. Many patrons will feel that once a lot is constructed that there are not any costs associated with it. In fact, even asphalt surface parking lots will deteriorate over time and need replacement. Based on data collected at Rich's offices, this was determined to cost approximately \$1,700 per space for replacement of the parking surface and repair of drainage and lighting system. It was also reported that such repairs need to be completed every 15 to 18 years.

Action: Each on-street parking space should have \$25.00 per year set aside for repainting of stall markings as necessary. Each surface parking lot should have at least \$100 per space per year set aside while a parking structure should have \$150 to \$200 per space per year set aside for long-term maintenance such as replacement of expansion joints and other maintenance functions.

Responsibility: City

Time Frame: 12 to 24 months

4.0 Larkin Street Parking Garage Utilization

Discussion: The Larkin Street Parking Structure is partially owned by the City and partially owned by Chemical Bank. Chemical Bank owns and parks employee vehicles on the 3rd floor of the garage and leases the 2nd floor from the City also for use by employees. The City sells permits for some first-floor spaces with most of the balance of spaces metered for public use. In Rich's opinion, perhaps the greatest deficiency which contributes to the lack of utilization of this facility is the lack of signage indicating the public parking availability followed closely by the payment requirement. Although the first floor of the garage is available for public use all hours and the 2nd and 3rd floors available for public use during non-business hours (nights and weekends), there is no signage on either the exterior or within the interior of the garage to indicate public parking. The added fact that during "business hours" the first floor of the garage requires payment while most on-street and many off-street lots are free also makes this a less desirable location. Finally, the apparent condition of the garage with, in Rich's opinion, insufficient lighting levels and visible corrosion, adds to the poor opinion of the facility.

Action: As noted in Recommendation 1.1 the Larkin Street Garage should have signs indicating that the garage is available for public parking. Two large blade type signs, approximately 4' x 18' would be estimated to cost about \$160,000. Smaller, public parking signs placed on the faces of the garage should be able to be done for much less. In addition to these signs, signage should be placed at the garage entrance indicating that public parking is restricted to the first floor between 8:00 am and 5:00 pm weekdays. Signs could be placed on the ramp to the 2nd floor that states that public parking is available after 5:00 pm weekdays and all-day on weekends and holidays.

Rich also recommends, consistent with the paid parking recommendation 6.0 to either implement paid parking throughout the downtown or if the decision is to maintain free parking, then eliminate the meters within the garage. The garage is presently not located close to the high levels of utilization that would make it a preferred location warranting the payment requirement. However, should the decision be made to implement paid parking, on-street parking because of its greater convenience should be priced higher than off-street parking. In order to encourage utilization of the garage, the first floor could be priced slightly lower than some other off-street lots that are more convenient. The City, in turn, would market this fact that parking in the garage is lower cost.

Another option to increase the utilization of the garage could be to sell downtown employees permits to park on the first floor. While we believe that the garage should be marketed and intended for transient use, should visitors continue to be reluctant to use the facility, then it should be marketed to employees. This may free up some on-street or other off-street parking for customer use. The fact that first floor parking would offer protection from sun and snow should also be a desirable factor to employees.

As noted with the maintenance recommendation 3.1.1, the repairs to the garage should be completed as soon as possible. We would also recommend that, at a minimum, upgraded lighting be installed on the public floor and at the entrance and exit from the garage. A diagram showing the collected light readings at various points within the garage is in the Appendix of this report.

5.0 Barrier Free Requirements – ADA Standards

Discussion:

Off-Street Parking

Per the request of the City of Midland, Rich & Associates performed a review of the available off-street ADA parking spaces within the study area. Table 20 details the ADA parking requirements for the number of parking spaces to be provided in various sized parking lots.

Overall, the City of Midland has a **SURPLUS** of 2 barrier free parking spaces in its publicly available off-street lots. Table 21 on page 66 shows the deficit or surplus number of spaces per lot (shown as a barrier free parking spaces). It is permissible in the ADA regulations that the spaces required in one lot can be provided for in another lot if the relocated accessible spaces would be along a more accessible pathway. However, the aggregate total of spaces must still be provided. Currently, the City of Midland has met the minimum requirements.

Table 20 – ADA Parking Requirements

Total number of parking spaces required (per facility)	(Column A) Minimum number of accessible spaces (car and van)	Minimum number of van accessible parking spaces (one of six accessible spaces)
1-25	1	1
26-50	2	1
50-75	3	1
76-100	4	1
101-150	5	1
151-200	6	1
201-300	7	2
301-400	8	2
401-500	9	2
501-600	2% of total	1/6 of Column A*
1001 and over	20, plus 1 for each 100 or fraction thereof, over 1000	1/6 of Column A*

*One of every six accessible spaces, or fraction thereof, must be 'van-accessible.'

https://www.ada.gov/restriping_parking/restriping2015.html

Table 21 – Off-street ADA Parking Requirements

Block	Ltr	Description	Public Lot Capacity				ADA Required	ADA Required / (-) Deficient
			Reg	Hcp	Permit	Permit Hcp		
19	B	Public Lot	104	3	0	0	5	(2)
20	B	Public Lot	57	8	0	0	3	5
20	C	Public Lot	139	0	0	0	5	(5)
20	F	Public Lot	47	3	0	0	2	1
31	C	Public Lot	0	0	53	0	1	(1)
32	A	Public Lot	155	0	107	11	6	5
34	A	Public Lot	0	0	57	3	4	(1)
36	C	30 Min Limit	0	0	0	0	1	(1)
40	B	15 Min		0	0	0	1	(1)
43	C	Private Lot - **	275	7	0	0	7	0
46	D	Public Lot	18	2	0	0	1	1
46	E	Public Lot	35	1	0	0	2	(1)
48	A	Public Lot	166	5	0	0	6	(1)
48	B	Public Lot	50	2	0	0	3	(1)
48	C	Public Lot	52	7	0	0	3	4
								2

** Private Lot (275 spaces) owned by H Hotel - operates as a public lot when not needed by the Hotel for special events

On-Street Parking

In addition to the off-street spaces noted above, the City of Midland is also providing some barrier free spaces on street. These are provided primarily along Main Street but there are some barrier free spaces along State Street (east side of Dow Building). Currently, providing barrier free spaces on street is **not required**. However, the United States Access Board has developed a draft guideline in 2011 for on-street parking minimums that **has not yet been updated, finalized or adopted**.

This data regarding barrier free on-street parking is provided for informational purposes only. On-street barrier free spaces are not required yet the City is providing 20 barrier free spaces on street, primarily along Main and State Streets.

About the Rulemaking on Public Rights-of-Way

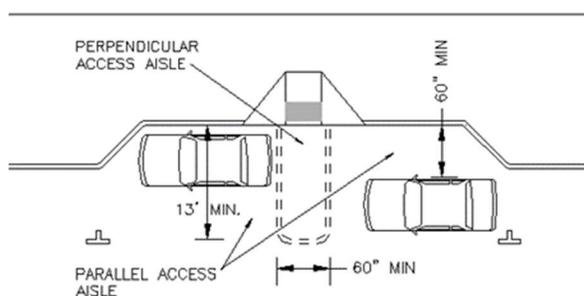


Sidewalks, street crossings, and other elements in the public right-of-way can pose challenges to accessibility. The (United States Access) Board's ADA and ABA Accessibility Guidelines focus mainly on facilities on sites. While they address certain features common to public sidewalks, such as curb ramps, further guidance is necessary to address conditions and constraints unique to public rights-of-way.

The Board is developing new guidelines for public rights-of-way that will address various issues, including access for blind pedestrians at street crossings, wheelchair access to on-street parking, and various constraints posed by space limitations, roadway design practices, slope, and terrain. The new guidelines will cover pedestrian access to sidewalks and streets, including crosswalks, curb ramps, street furnishings, pedestrian signals, parking, and other components of public rights-of-way. The Board's aim in developing these guidelines is to ensure that access for persons with disabilities is provided wherever a pedestrian way is newly built or altered, and that the same degree of convenience, connection, and safety afforded the public generally is available to pedestrians with disabilities. Once these guidelines are adopted by the Department of Justice, they will become enforceable standards under title II of the ADA.

Once the standards are adopted, it is expected that the number of required on-street accessible spaces will be based on the values as noted in Table R214 below. The guidelines also detail how parallel on-street spaces will need to be designed to accommodate access. This information is detailed below.

X02.6.1.4 Parallel parking spaces. Where accessible parallel parking is provided, a parallel access aisle at least 60 inches (1525 mm) wide shall be provided at street level the full length of the accessible parking space. The parallel access aisle shall connect at the head or foot of the parking space to a 60-inch wide minimum perpendicular access aisle that shall extend the full width of the parking space. Two parallel parking spaces may share a perpendicular access aisle. The vehicular travel lane shall not encroach on any required access aisle. The area between any curb and the pedestrian access route shall comply with Section X02.1.5 in order to allow the deployment of a side lift from a wheelchair accessible space and shall be connected to the pedestrian access route.



EXCEPTION: Where the width of the public pedestrian right-of-way between the extension of the normal curb and boundary of the public right-of-way is less than 12 feet (3660 mm), a parallel access aisle is not required at parallel parking spaces.

Where the dimensions or existing site conditions do not allow proper access from the roadway, the spaces should be provided at the ends of a block where they can use the curb ramps.

Adoption of the standards will not require that the City immediately move to provide the required number of spaces or rework the roadway to accommodate the design of the spaces to the graphics above but do so only when changes are made to the adjoining roadway to the extent that the provision of the parking spaces is within the scope of the work. In other words, patching of the roadway would not mean that the spaces would be required.

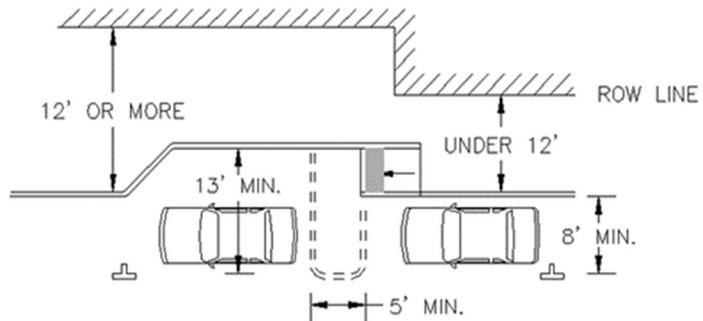


Table R214 On-Street Parking Spaces (Not Adopted)

Total Number of Marked or Metered Parking Spaces on the Block Perimeter	Minimum Required Number of Accessible Parking Spaces
1 to 25	1
26 to 50	2
51 to 75	3
76 to 100	4
101 to 150	5
151 to 200	6
201 and over	4% of total

X02.6.1.10 Obstructions. Obstructions such as street furniture, fire hydrants, parking meters, signs, mailboxes, landscaping, and trash receptacles shall not be placed adjacent to the accessible space in a manner that may interfere with the operation of a side lift or a passenger side transfer.

During the data collection process, Rich received feedback from surveys and stakeholders regarding the functionality of some on-street handicap accessible spaces. As the proposed guidelines (X02.6.1.10 Obstructions) notes, signs, trash receptables and other “street furniture” are not to be placed so as to interfere with the operation of a side lift or passenger transfer. There were several instances noted where such items are present and negatively affect the functionality of the handicap accessible space.

Either moving the obstruction or where this is not possible, relocating the handicap accessible space should be priority and, in many cases, can likely be done for relatively little costs. Other issues such as where the existing on-street barrier free spaces are not long enough to allow for rear vehicle wheelchair lifts would likely require extending the space which at the same time would result in the loss of some on-street supply. This could be done but should not be done to every handicap accessible space but perhaps on a strategic basis.



Action: Make appropriate adjustments where signs affect functionality of on-street barrier free spaces.

Responsibility: City

Time Frame: 0 – 6 Months

6.0 Paid Parking

Discussion: For long-term parking in certain lots, the City sells annual permits (\$250.00 per year) as well as some parking garage spaces (\$335.00 per year). Other city owned spaces within the parking garage are metered as are spaces in several City owned public lots. These metered spaces are very underutilized. They are also controlled by antiquated mechanical meters at just \$0.20 per hour. The balance of parking in most other City lots and all on-street parking is free. This means that the paid spaces will be the last places sought. Current parking revenues from these metered spaces are only about \$10,000 per year.



The relatively low revenues earned from permits (estimated at less than \$50,000 annually) and meters means that the majority of parking operating costs are paid from the General Fund. Parking revenues are generally intended to help control parking as well as to offset the costs of operating a parking system. The low rates and revenues likely mean that neither is being accomplished from the current paid parking system in Midland. This leaves two choices for the City.

- 1) The City could implement a comprehensive paid parking system where the most convenient on-street and off-street spaces are paid while the less convenient spaces are still free. The use of the paid parking would be with the intent of having those who use the parking system, provide the funds necessary to support the costs of operating and maintaining the parking system.

Although based on a limited sample, survey results from Business Owners felt that on-street parking should continue to be free.

- 2) The City could maintain the paid parking permits for employee use while eliminating the paid metered spaces in the garage and surface lots. The low utilization of these spaces suggests that other choices are being sought first. With increased enforcement, these spaces could carry time limitations (3-hour limit) so that they are not monopolized by employees.

Action: Eliminate the paid meter spaces. This would ideally increase the utilization of these spaces.

Responsibility: City

Time Frame: Immediate

7.0 Event Parking

Discussion: The City of Midland hosts a number of events throughout the year including the twice weekly farmers market and summer concerts in the park by the Tridge. There is also a children’s water park here. These events and facilities have a significant impact on the use of parking in the vicinity of these events.

7.1 – Identify and publicize alternative parking locations

Discussion: As part of the occupancy study, Rich witnessed multiple vehicles attempting to park in these lots well after the time that the lots here became full as vehicles would drive down the hill, circulate through the lots looking for a space and eventually travel back up the hill to seek alternative parking. There was no formal direction or signs to indicate the full-occupancy of the parking or to direct patrons to alternative locations.

Action: Place signs at alternative parking locations (public and/or private) where parking is permitted during concerts or other large events in the downtown. For events such as concerts where patrons are likely to stay for extended periods and the spaces in these lots are not likely to turnover as patrons come and go like at the farmer’s market, place signs at the top of the hill when parking in the lots near the Tridge are full to discourage vehicles from driving and congesting the area and creating additional pedestrian / vehicle conflict.

Responsibility: City and DDA

Time Frame: Immediate



7.2 – Designated handicap accessible spaces near event

Discussion: It is understandable that the hill from Main Street to the park may present some challenges for someone with mobility issues to park elsewhere and then walk up or down the hill. This obviously could incentivize friends or family members to seek out spaces in the lot rather than other locations. One option would be to have designated drop off locations where benches or other seating is provided for persons with mobility issues to wait while the friend or family member parks in alternative locations. Other options could be providing a number of “temporary” spaces designated for vehicles with proper handicap permits in the vicinity of the Tridge.

Action: Designate one or two rows of parking as handicap accessible spaces during large events requiring a valid handicap permit or plate. Monitor the use of these spaces over time and adjust the number of spaces for subsequent events as necessary. However, one issue is that since these spaces usually operate as normal parking spaces and as such are designed to typical standards (approximately 9 feet wide by 18 feet long) they will not be designed with the necessary clearances to accommodate wheelchair ramps. This may require having a drop-off / pick up area for such passengers.

Responsibility: City – May require opinion of City attorney on legality to provide and enforce.

Time Frame: 6 – 12 Months

8.0 Time Limit On-street Parking

Discussion: Rich generally recommends that on-street parking be limited to two hours. This is intended to encourage turnover of the most convenient spaces. Patrons wishing to stay longer are generally directed to off-street lots. Customer / visitor survey results showed a very high proportion preferring to park on-street in Midland. It was also suggested that the higher average age in Midland makes these convenient spaces preferable.

Action: Maintain the three-hour limit for on-street parking in Midland.

Responsibility: City

Time Frame: Immediate



9.0 Bicycle Parking

Discussion: The City of Midland has a bike sharing service as well as numerous bike racks throughout the downtown (See **Map 15** on following page for locations). The availability of the park and trail can encourage biking into the downtown and at the same time encouraging bike use can reduce the need for automobile parking during the warmer months. However, encouraging bike use is a multi-step process. Not only must riders have a place to securely park their bike (which appears adequate given the number of bike racks around the downtown), the travel paths must be perceived as safe. Currently, in Downtown Midland there are limited defined bike lanes which are not continuous whereas in other locations there are simply signs encouraging drivers to “Share the Road”.

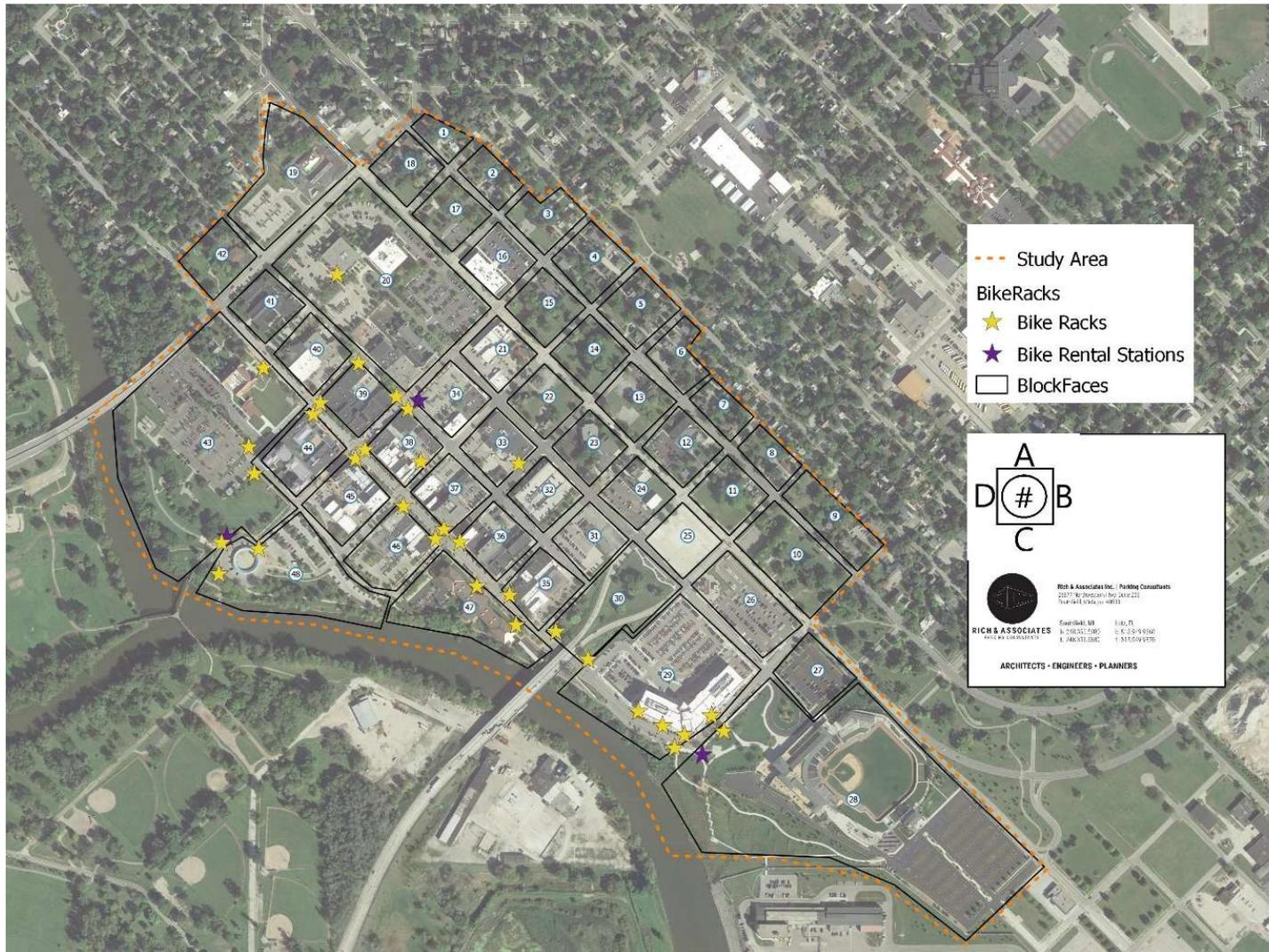
Action: Maintain the existing number of bike racks. Any future additional development may require additional bike racks proximate to these new locations. Where possible, seek opportunities to provide continuous defined bike lanes for rider safety.

Responsibility: City and DDA

Time Frame: As budgets permit.



Map 15 – Bike Rack Locations



10.0 Future Planning / Employee Parking

Discussion: The analysis has demonstrated how certain blocks are either currently or will be in deficit conditions. While having a block with a deficit is not necessarily a cause for concern as very often other blocks are intended to provide the publicly available parking to offset the deficiency. The issue in the future is when numerous blocks near each other have deficiencies and the blocks generally within a maximum two-block walk have insufficient parking to offset these deficiencies. This is where developing additional parking may need to be considered. In the case of Midland, there are several projects proposed for which detailed information has not been made public that could increase the parking demand on certain blocks and may (depending on where they are constructed), reduce the parking supply. This could exacerbate the future conditions as they are known at this time.

Another issue that may help in this regard is to encourage employees to park further away rather than on or near the “core” blocks along Main Street. This can be accomplished by designating less convenient parking as reserved (with a permit) employee parking.

Action: Monitor future development plans for their impact on certain blocks. As the surplus on adjacent blocks declines or deficits on nearby blocks increases that cannot be reasonably accommodated on nearby blocks within a reasonable walking distance, consider additional parking supply alternatives. Helping to ensure that employee parking is encouraged to use less convenient parking may require that surface lots near Main Street be restricted to 3-hour parking to discourage use by employees.

Responsibility: City and DDA

Time Frame: To be determined

Appendix

Occupancy Counts

Block	Description	TYPE	Spaces	9:00 - 11:00	11:00 - 1:00	1:00 - 3:00	3:00 - 5:00	5:00 - 7:00	7:00 - 9:00
17	Lot A	OC	17	17.6%	35.3%	29.4%	29.4%	23.5%	5.9%
16	Lot A	OC	79	39.2%	84.8%	59.5%	75.9%	60.8%	2.5%
21	Lot A	OC	15	6.7%	13.3%	6.7%	6.7%	13.3%	0.0%
21	Lot E	OC	12	8.3%	25.0%	33.3%	41.7%	25.0%	8.3%
20	Face B	TC	8	12.5%	37.5%	62.5%	37.5%	62.5%	87.5%
39	Face B	TC	9	44.4%	66.7%	66.7%	55.6%	66.7%	66.7%
44	Face B	TC	7	14.3%	0.0%	57.1%	14.3%	42.9%	85.7%
44	H HOTEL (underground)	OC	50	58.0%	58.0%	58.0%	34.0%	28.0%	46.0%
43	Lot C	OC	277	39.4%	53.8%	58.8%	61.0%	48.7%	98.9%
43	Lot B	OC	45	26.7%	42.2%	28.9%	57.8%	33.3%	88.9%
43	Face B	OC	9	11.1%	0.0%	66.7%	44.4%	0.0%	111.1%
44	Face D	OC	9	0.0%	0.0%	44.4%	0.0%	22.2%	77.8%
39	Face D	TC	9	33.3%	11.1%	66.7%	77.8%	22.2%	88.9%
40	United Way Lot	OC	26	19.2%	50.0%	53.8%	57.7%	53.8%	96.2%
40	United Way Lot - HC	OC	3	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
40	Face D	TC	7	0.0%	28.6%	0.0%	71.4%	28.6%	42.9%
40	Lot A	OC	16	12.5%	87.5%	50.0%	93.8%	56.3%	0.0%
20	Lot F	OC	72	6.9%	8.3%	11.1%	8.3%	11.1%	26.4%
20	Lot G Church	OC	29	10.3%	62.1%	31.0%	24.1%	13.8%	17.2%
29	Lot G (3 hour)	OC	16	0.0%	12.5%	6.3%	25.0%	25.0%	6.3%
20	Lot G (City Staff)	OC	22	50.0%	54.5%	45.5%	68.2%	36.4%	0.0%
20	Lot G (Church Staff)	OC	22	36.4%	72.7%	50.0%	40.9%	22.7%	4.5%
20	Lot G (City Visitor)	OC	1	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%
20	Lot G (City Lot - HC only)	OC	6	0.0%	0.0%	0.0%	0.0%	216.7%	0.0%
20	Lot A (Staff Parking)	OC	17	211.8%	194.1%	152.9%	205.9%	182.4%	70.6%
20	Lot A (Visitor Parking)	OC	17	29.4%	52.9%	41.2%	47.1%	41.2%	5.9%
20	Lot B	OC	57	17.5%	17.5%	26.3%	31.6%	36.8%	5.3%
20	Lot B - HC	OC	8	0.0%	0.0%	0.0%	0.0%	0.0%	12.5%
20	Lot D (Staff parking)	OC	22	36.4%	109.1%	95.5%	100.0%	100.0%	0.0%
20	Lot C	OC	139	36.7%	59.0%	54.7%	59.7%	51.8%	24.5%
20	Lot E	OC	27	14.8%	25.9%	14.8%	18.5%	7.4%	11.1%
20	Lot E - HC	OC	4	25.0%	0.0%	0.0%	0.0%	0.0%	25.0%
19	Lot B	OC	104	21.2%	29.8%	30.8%	23.1%	18.3%	7.7%
19	Lot B - HC	OC	3	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
19	Lot A	OC	31	22.6%	32.3%	45.2%	19.4%	19.4%	22.6%
38	Face D	TC	10	30.0%	50.0%	90.0%	20.0%	90.0%	100.0%
45	Face D	TC	3	0.0%	0.0%	100.0%	100.0%	100.0%	100.0%
48	Lot A	OC	166	7.8%	13.9%	16.3%	18.1%	33.1%	100.0%
48	Lot A - HC	OC	5	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
48	Lot B	OC	52	3.8%	42.3%	48.1%	53.8%	0.0%	0.0%
48	Lot B - HC	OC	7	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
48	Lot C - by river (RSVP for Riverside)	OC	11	18.2%	27.3%	18.2%	9.1%	9.1%	90.9%
48	Lot C	OC	41	12.2%	19.5%	31.7%	31.7%	34.1%	100.0%
47	Lot B - Riverside Place	OC	57	61.4%	57.9%	56.1%	54.4%	61.4%	70.2%
47	Lot B - Riverside Place - pickup spaces	OC	3	0.0%	0.0%	0.0%	66.7%	0.0%	33.3%
48	Lot D	OC	35	82.9%	114.3%	117.1%	125.7%	111.4%	100.0%
48	Lot D - HC	OC	1	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
48	Private Lot E / F	OC	30	23.3%	50.0%	46.7%	60.0%	56.7%	90.0%
45	Face B	OC	8	0.0%	62.5%	75.0%	100.0%	100.0%	237.5%
46	Face D	OC	7	42.9%	42.9%	85.7%	42.9%	85.7%	128.6%
37	Face D	TC	6	50.0%	66.7%	83.3%	83.3%	83.3%	100.0%
32	Garage Ground fl - RSVD	OC	33	24.2%	30.3%	24.2%	36.4%	30.3%	6.1%
32	Garage Ground Floor 3 -Hour	OC	3	66.7%	66.7%	0.0%	66.7%	66.7%	33.3%
32	Garage Ground Floor Meter	OC	32	9.4%	9.4%	15.6%	18.8%	21.9%	28.1%
32	Garage ground fl HC Only	OC	5	40.0%	40.0%	20.0%	40.0%	20.0%	0.0%
32	Garage Lower Ground Floor Permit / Metered	OC	18	72.2%	88.9%	61.1%	66.7%	66.7%	0.0%
32	Garage Ramp 1 to 2 RSVD Right Side	OC	20	70.0%	80.0%	65.0%	80.0%	60.0%	5.0%
32	Garage Floor 2 All RSVD	OC	72	95.8%	94.4%	94.4%	95.8%	65.3%	11.1%
32	Garage Ramp 2 to 3	OC	22	59.1%	68.2%	68.2%	68.2%	45.5%	13.6%
32	Garage Floor 3	OC	79	35.4%	41.8%	31.6%	31.6%	26.6%	3.8%
32	Garage Ramp 3 to 2	OC	22	59.1%	68.2%	68.2%	72.7%	54.5%	0.0%
32	Garage ramp 2 to 1 (RSVD)	OC	20	75.0%	85.0%	75.0%	85.0%	80.0%	5.0%

Block	Description	TYPE	Spaces	9:00 - 11:00	11:00 - 1:00	1:00 - 3:00	3:00 - 5:00	5:00 - 7:00	7:00 - 9:00
32	Face B (3 hour)	OC	8	0.0%	50.0%	12.5%	37.5%	62.5%	87.5%
36	Face B (Right Side)	OC	7	71.4%	85.7%	100.0%	71.4%	57.1%	100.0%
35	Face D (Left Side)	OC	8	12.5%	50.0%	50.0%	62.5%	25.0%	100.0%
36	Face D	OC	3	0.0%	200.0%	133.3%	0.0%	266.7%	66.7%
32	Face D	OC	6	33.3%	33.3%	50.0%	83.3%	100.0%	100.0%
23	Lot B	OC	30	13.3%	20.0%	16.7%	23.3%	33.3%	3.3%
22	Lot A	OC	18	11.1%	22.2%	94.4%	94.4%	61.1%	5.6%
21	Lot D	OC	10	60.0%	50.0%	50.0%	50.0%	10.0%	10.0%
34	Comerica Bank Lot	OC	24	12.5%	12.5%	8.3%	20.8%	25.0%	33.3%
34	Face B	OC	3	33.3%	0.0%	0.0%	33.3%	66.7%	100.0%
38	Face B	TC	1	100.0%	100.0%	100.0%	100.0%	100.0%	200.0%
38	Lot B	OC	22	63.6%	77.3%	95.5%	81.8%	100.0%	100.0%
38	Lot A	OC	4	50.0%	25.0%	50.0%	25.0%	50.0%	0.0%
38	Face B	TC	4	50.0%	75.0%	100.0%	50.0%	100.0%	100.0%
37	Face B	OC	8	100.0%	100.0%	75.0%	75.0%	100.0%	112.5%
33	Face B	OC	7	42.9%	42.9%	85.7%	71.4%	85.7%	85.7%
24	Lot B	OC	78	3.8%	12.8%	17.9%	7.7%	7.7%	6.4%
31	Lot A	OC	22	0.0%	9.1%	18.2%	27.3%	31.8%	31.8%
31	Lot B	OC	24	0.0%	4.2%	37.5%	12.5%	16.7%	37.5%
31	Face C	TC	8	0.0%	12.5%	25.0%	0.0%	12.5%	75.0%
31	Lot C - Public Lot - Permit Spaces	OC	53	41.5%	13.2%	9.4%	54.7%	47.2%	45.3%
31	Public Lot - 3 Hour Spaces	OC	18	38.9%	161.1%	172.2%	22.2%	33.3%	50.0%
32	Face C	TC	9	66.7%	66.7%	66.7%	66.7%	100.0%	100.0%
33	Face C	OC	2	100.0%	100.0%	100.0%	50.0%	100.0%	100.0%
33	Lot C	OC	12	50.0%	50.0%	50.0%	50.0%	58.3%	58.3%
33	Lot D	OC	18	38.9%	27.8%	33.3%	38.9%	33.3%	33.3%
34	Face C	TC	5	40.0%	80.0%	100.0%	100.0%	100.0%	120.0%
34	Public Lot - 3 Hour Spaces	OC	7	28.6%	42.9%	42.9%	57.1%	85.7%	100.0%
34	Public Lot - Metered Spaces	OC	12	25.0%	25.0%	16.7%	16.7%	16.7%	91.7%
34	Public Lot - Permit	OC	57	45.6%	52.6%	43.9%	42.1%	54.4%	103.5%
34	Public Lot - HC Only	OC	3	0.0%	0.0%	0.0%	33.3%	0.0%	66.7%
39	Lot A	OC	22	59.1%	86.4%	40.9%	63.6%	72.7%	90.9%
38	FACE A	TC	6	0.0%	83.3%	100.0%	66.7%	100.0%	116.7%
37	Lot A	OC	29	34.5%	44.8%	51.7%	48.3%	48.3%	58.6%
37	FACE A	TC	3	100.0%	100.0%	100.0%	100.0%	100.0%	200.0%
37	FACE A	TC	2	100.0%	100.0%	100.0%	100.0%	100.0%	0.0%
37	FACE A	TC	1	100.0%	100.0%	100.0%	100.0%	100.0%	0.0%
37	Lot B	OC	22	54.5%	54.5%	59.1%	54.5%	50.0%	22.7%
36	Face A	TC	4	0.0%	0.0%	100.0%	75.0%	100.0%	150.0%
38	Lot B	OC	13	46.2%	61.5%	46.2%	53.8%	30.8%	30.8%
35	Face A	OC	2	50.0%	0.0%	0.0%	50.0%	0.0%	0.0%
35	Ace Hardware Lot	OC	36	13.9%	22.2%	22.2%	25.0%	13.9%	19.4%
35	Face B	OC	8	25.0%	0.0%	12.5%	25.0%	37.5%	12.5%
29	3 Hour S side of Dow Bldg.	OC	38	52.6%	65.8%	81.6%	60.5%	23.7%	31.6%
27	Lot A	OC	117	16.2%	16.2%	16.2%	16.2%	16.2%	16.2%
27	Lot A HC ONLY	OC	10	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
29	Face B - On-Street	OC	15	60.0%	66.7%	66.7%	40.0%	46.7%	33.3%
29	Face C - On-Street	OC	40	67.5%	75.0%	30.0%	67.5%	45.0%	17.5%
29	Dow Medical Spaces Entry Driveway	OC	36	97.2%	94.4%	91.7%	58.3%	11.1%	5.6%
29	Dow Medical Spaces Lot	OC	52	80.8%	76.9%	71.2%	73.1%	19.2%	7.7%
29	Dow Visitor	OC	32	90.6%	84.4%	87.5%	78.1%	59.4%	31.3%
29	Dow MSU Spaces	OC	22	50.0%	68.2%	63.6%	77.3%	36.4%	36.4%
35	Face C	TC	10	20.0%	80.0%	60.0%	50.0%	40.0%	60.0%
36	Face C	TC	13	46.2%	61.5%	84.6%	30.8%	76.9%	84.6%
37	Face C	TC	9	66.7%	55.6%	55.6%	66.7%	77.8%	100.0%
38	Face C	TC	9	33.3%	88.9%	33.3%	77.8%	100.0%	88.9%
39	Face C	TC	9	55.6%	77.8%	44.4%	33.3%	55.6%	66.7%
40	Face C	TC	16	87.5%	81.3%	87.5%	50.0%	37.5%	100.0%
43	Face C	OC	23	17.4%	21.7%	4.3%	17.4%	4.3%	13.0%
43	Face A	TC	11	100.0%	81.8%	90.9%	81.8%	18.2%	90.9%
44	Face A	TC	9	44.4%	66.7%	55.6%	33.3%	77.8%	100.0%
45	Face A	TC	9	66.7%	66.7%	66.7%	66.7%	88.9%	88.9%
46	FACE A	TC	9	66.7%	44.4%	55.6%	77.8%	100.0%	100.0%
47	Face A	TC	28	60.7%	57.1%	42.9%	75.0%	57.1%	78.6%
47	Riverside Residential Lot	OC	16	75.0%	75.0%	75.0%	87.5%	87.5%	87.5%
			3135	36.3%	47.9%	47.0%	48.3%	42.2%	45.3%

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).

(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 shall 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.

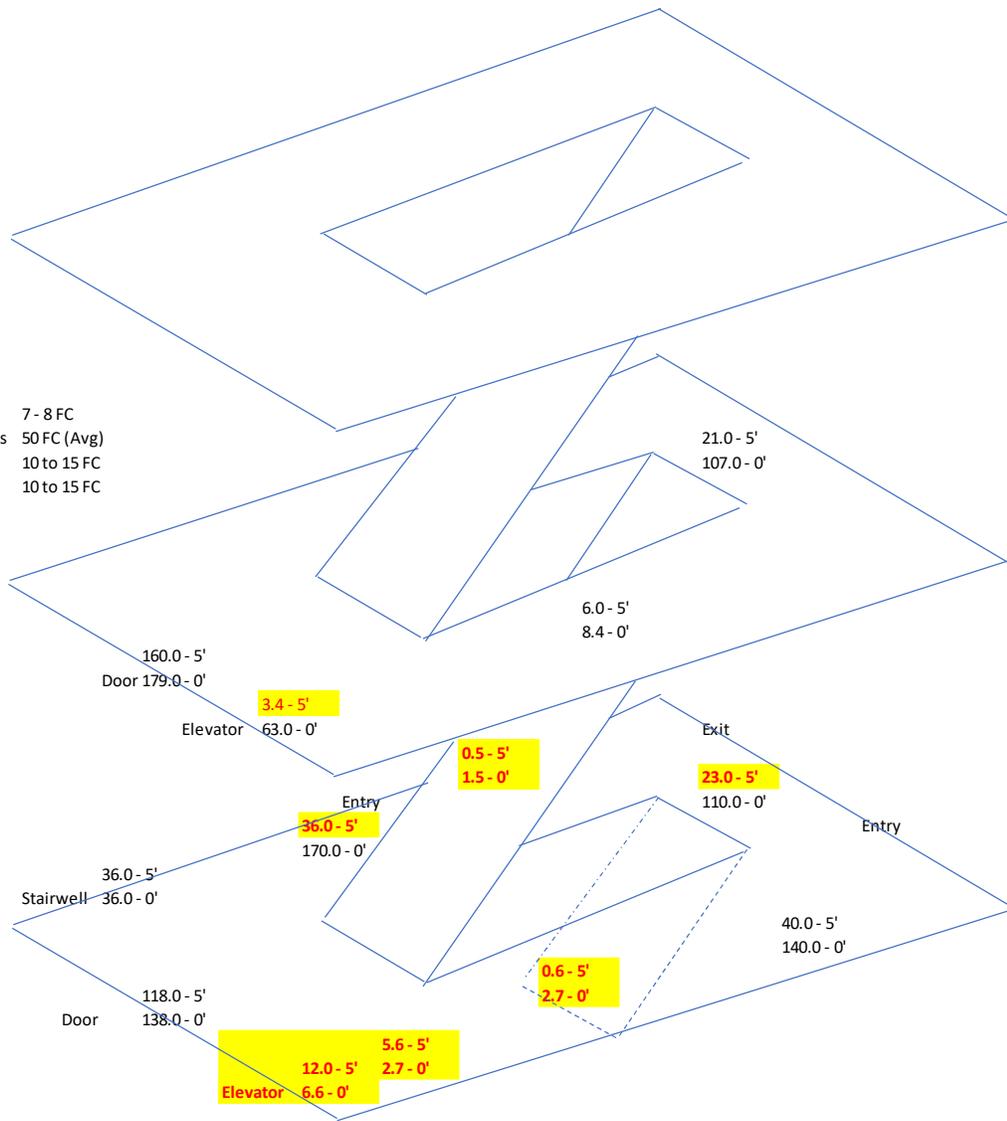
(b) "Local unit of government" means a state university or college or a county, city, village, or township.

History: Add. 1989, Act 89, Eff. Sept. 19, 1989 ;-- Am. 1992, Act 230, Imd. Eff. Oct. 16, 1992 ;-- Am. 2000, Act 268, Eff. Oct. 1, 2000 ;-- Am. 2004, Act 49, Imd. Eff. Apr. 1, 2004 ;-- Am. 2008, Act 171, Imd. Eff. July 2, 2008 ;-- Am. 2010, Act 211, Imd. Eff. Nov. 17, 2010

Larkin Parking Garage Light Level Readings

Minimums

- Parking Area 7 - 8 FC
- Vehicle Entry / Exit areas 50 FC (Avg)
- Lobbies 10 to 15 FC
- Corridors / Stairs 10 to 15 FC



Parking Garage Light level readings. Values in Footcandles at 5' above floor and at floor level