

Historic Downtown West Des Moines Business District Parking Analysis

Introduction

This analysis looks at existing and future parking conditions in what is commonly known as the Valley Junction Business District in Historic West Des Moines. It focuses on addressing typical daily parking demand. This area hosts many special events which create their own unique parking challenges. Parking demand for such events are outside the scope of this analysis.

Study Area

The Historic Downtown West Des Moines neighborhood generally includes the area bound by 1st Avenue to the east, Grand Avenue to the north and west, and Lincoln Street to the south. This area contains the City's original business district, commonly known as Historic Valley Junction Business District. This business district is the focus of the parking analysis and generally encompasses the nine blocks along 5th Street between Locust Street and Railroad Avenue. The map below shows the main primary blocks of the business district. The 500 block of 5th Avenue, north of Locust Street, is currently zoned as a part of the business district. However, much of this block remains in single-family residential use. In working through the update to the Master Plan for this area it was clear that the community did not want to see the traditional business district extended north of Locust Street. Therefore, the area north of Locust was excluded from this parking analysis.



LOCATION OF THE PARKING STUDY AREA

The subject area is zoned VJHB – Valley Junction Historic Business District, which permits uses such as professional offices, restaurants, specialty retail stores, and other personal services. The business district is laid out in a grid pattern. For purposes of the analysis, it has been divided into nine blocks. Each block is between 470 and 520 feet long and approximately 340 feet wide. The core area of the historic downtown is from Block 5 to Block 8, which has the lowest number of vacant lots and buildings, and congregates the greatest variety in types of businesses.

Public Parking

West Des Moines has designated varied time limits for public parking in the historic downtown area. However, those time limits are not actively enforced. Currently all public parking in the study area is free for shoppers/tenants.

On-Street Parking

On-street parking stalls are located on 5th Street, Maple Street, Elm Street, and Walnut Street. Most of the on-street parking stalls are public with posted time limits, but the on-street parking on Walnut Street has no parking time restriction. Most of the time-limited, on-street parking spots allow up to four hours of parking time. Locations such as the east section of Maple Street by 4th Street (1-hour) and the north section of 5th Street near Locust Street (30-minute) impose parking times no longer than one hour. It should be noted that the time limits for the on-street parking locations are only effective between 9 a.m. and 6 p.m. seven days a week. In addition, the said locations prohibit parking between 2 a.m. and 6 a.m.



*EXISTING PARKING MAP ON HISTORIC VALLEY JUNCTION
FOUNDATION WEB SITE*

Off-Street Parking

Public off-street parking facilities exist in Blocks 3, 5, 6, 7, 8, and 9. The parking lots are located behind businesses or facing secondary streets and alleys with uniform directional signs installed at the entrances of the parking lots. The public parking lots are paved, striped, and well-maintained. The City allows for up to 24 hours of parking in the public parking lots.

Accessible Parking

Public handicapped-accessible parking is also available at multiple spots in the downtown area. The ten on-street, accessible parking stalls are located on 5th Street. The remainder of the 21 accessible parking stalls are in several parking lots in Blocks 3, 5, 6, 7, 8, and 9. In the parking study, additional accessible parking stalls have been suggested in Blocks 3 to 8 to comply with ADA design guidelines and more evenly cover the downtown business district.

Private Parking

Private parking spaces in the district are located throughout the area. The maintenance conditions of the private parking lots vary from property to property. Some of the private parking areas are not paved or striped. To prevent visitors from parking on their properties, some property owners have installed clear warning signage.



SIGNED PRIVATE PARKING SPACES

Parking Counts

According to the existing parking survey conducted by City Staff and Teska Associates, Inc. on November 5th and 6th, 2021, there are 1,135 parking stalls in the Valley Junction Business District.

Total Existing Parking Spaces

TYPE	TOTAL	PERCENTAGE
On-street parking (no limit)	32	2%
On-street parking (4-hour)	361	27%
On-street parking (1-hour)	7	1%
On-street parking (30-min)	10	1%
Public Parking lot (24-hour)	476	36%
Private	427*	33%
TOTAL	1,313	100%

*This includes 249 marked (striped) spaces and 178 estimated unmarked spaces

The following table shows the available parking spaces per block.

Existing Parking Spaces by Block

BLOCK	PRIVATE STRIPED PARKING	PRIVATE UNMARKED PARKING	TOTAL PRIVATE PARKING	PUBLIC PARKING	ACCESSIBLE PARKING	ADDITIONAL ACCESSIBLE PARKING SUGGESTED
1	80	13	93	32	2	0
2	16	32	48	31	2	0
3	19	0	19	137	5	1
4	38	0	38	53	0	2
5	10	0	10	187	1	6
6	4	44	48	167	7	1
7	18	10	28	119	4	4
8	41	27	68	117	6	1
9	23	52	75	43	4	0
TOTAL	249	178	427	886	31	15

PUBLIC PARKING UTILIZATION

A parking occupancy survey was conducted on November 5th and 6th (a Friday and Saturday), 2021. The survey was designed to count on-street and off-street parking utilization for Blocks 1 to 9 between 9 a.m. and 7 p.m. The weather was good on both days, and the downtown area was busy and active. The survey charts reveal several findings:

- On weekdays, on-street parking has two peak periods: 12 p.m. to 1 p.m. and 6 p.m. to 7 p.m.; off-street parking has the highest occupancy rate between 12 p.m. and 1 p.m.
- On weekends, on-street parking occupancy will peak between 12 p.m. and 2 p.m., and off-street parking occupancy will be the highest between 1 p.m. and 2 p.m.
- Except for Block 7, the occupancy rates of off-street parking during peak hours are significantly lower than that of on-street regardless of weekdays or weekends.
- Blocks 5 to 8 usually have the highest occupancy rates of both off-street and on-street parking during all types of peak hours.
- Highest occupancies of on-street parking during peak hours (i.e., 11 a.m. – 1 p.m.) on the studied weekday can reach 80% to 95%. On-street parking on 5th Street in the 100 block is virtually full at lunchtime on the Saturday studied.
- There was always plenty of off-street parking available in the evening, suggesting the addition of restaurants or bars with an evening peak should not be a problem. Lots were typically only about 30% full in the evening, with block 7 (100 block of 5th, west side) being 65% full in the evening.

Generally, the parking survey indicates that parking utilization in the evening is lower than during daytime despite the higher parking-demand per square foot of restaurants and pubs. Meanwhile,

retail and service uses in the area typically have earlier closing hours. They contribute more parking availability to the evening visitors whose destinations are eating, drinking, and entertainment establishments. The nature of the staggered business schedules by the downtown businesses helps even the existing parking capacity in the area and avoid surges of parking demand as all the off-street parking facilities have significant capacity. However, on-street parking during the peak lunchtime hours will continue to be limited in the 100 and 200 blocks of 5th Street.

The parking counts indicate that the highest demand for parking in the downtown area is generally around lunchtime and lasts no longer than three hours per day on both weekdays and weekends. Four out of five identified peak hours for parking do not last more than one hour, which suggests that motorists do not intend to stay for long hours in the downtown area, and the turnover of parking lots is frequent. The usage of parking facilities is uneven, as the parking facilities on Blocks 5 to 8 (100 and 200 blocks) can reach 85% of occupancy during busy hours while the rest of the blocks only receive a medium- to low-level of utilization throughout a day. According to industry standards, a parking system operates most efficiently at an occupancy rate between 85 and 95 percent of capacity (Pierce, Willson, & Shoup, 2015).

Anticipated Impacts on Existing Parking Facilities Resulting from Approved New Developments

As the City has been receiving a surge of interests in developing the historic downtown, it is worth evaluating the potential demand on parking generated by those new developments, as well as any future infill developments.

From 2020 to 2022, there were four major redevelopment proposals for the historic downtown approved by the City: two residential-plus-commercial mixed-use developments, one restaurant-plus-commercial development, and one event-venue business. The new developments will add 21 apartments, approximately 14,100 square feet of commercial space, 4,500 square feet of restaurant space, and 1,630 square feet of office space in the downtown. Given the existence of significant public parking, there is currently no parking requirement for development within the Valley Junction Historic Business District. However, using the off-street parking schedule in the City's zoning ordinance for other areas of the community, and figuring in a 30% reduction for shared parking, 123 additional parking spaces are anticipated to be needed to accommodate these four developments.

For the purposes of analyzing possible locations for the additional parking demand, we consider 500 feet or one block as a typical walkable distance. Therefore, all available parking stalls in the covered blocks (within 500' of the new development) are included in the calculations on the following page. The table shows anticipated parking spaces for each development and maximum parking spaces in the adjacent blocks that could accommodate each mentioned development.

Additional Parking Demand and Supply for Current Development Projects

BLOCK	DEVELOPMENT ADDRESS	DEVELOPMENT TYPE	ANTICIPATED ADDITIONAL PARKING DEMAND	NEAREST BLOCKS FOR PARKING	MAXIMUM NUMBER OF AVAILABLE PARKING SPACES			
					OFF-STREET PUBLIC PARKING	ON-STREET PUBLIC PARKING	PRIVATE PARKING	TOTAL
3	304 5th St	Residential + Commercial	17	1,2,3,4,5,6	306	301	256	863
4	315 5th St	Residential + Commercial + Office	21	1,2,3,4,5,6	306	301	256	863
6	209 5th St	Event Venue	33	3,4,5,6,7,8	433	351	211	995
8	111 5th St	Restaurant + Commercial	52	5,6,7,8	368	226	154	748

The 2021 parking utilization study indicated that Block 7 (100 block of 5th, west side) receives the highest occupancy rate of parking in average throughout the day, which can reach 95% during the peak times. In addition, Blocks 5 to 8 concentrate the highest demand on parking due to the allocations of restaurant and retail businesses concentrating between Elm Street and Railroad Avenue. Since the parking facility usage rates between weekdays and weekends are consistent, we adopted the weekday parking survey results for the parking impact analysis for the new and future developments in the downtown area.

Peak Occupancy of Parking Spaces on a Weekday (noon)

BLOCK	NUMBER OF AVAILABLE ON-STREET PARKING SPACES	HIGHEST NUMBER OF PARKING SPACES TAKEN	% OF OCCUPANCY	NUMBER OF AVAILABLE OFF-STREET PARKING SPACES (1)	HIGHEST NUMBER OF PARKING SPACES TAKEN (2)	% OF OCCUPANCY (3)	TOTAL % COMBINING BOTH ON-STREET AND OFF-STREET
1	32	22	69	93	0	0	18%
2	31	23	74	48	0	0	29%
3	72	56	78	84	36	46	59%
4	53	33	62	38	0	0	36%
5	61	51	84	136	71	52	62%
6	52	47	90	163	79	66	59%
7	42	40	95	105	71	75	76%
8	71	55	77	118	23	25	41%
9	0	0	0	118	17	26	14%

(1) Includes both public and private off-street spaces

(2) Only public space utilization was counted on the field inventory in November 2021. For example, in Block 1 there are no public parking lots – hence zero spaces taken.

(3) Percent of occupancy for off-street parking is based only on public parking areas (utilization of private off-street spaces was not included in the parking counts)

Projected Parking Utilization Upon Completion of Current Development Projects

Block	Address	Development Type	New Parking Demand	Nearest Blocks for Parking	Existing Parking Stalls	Current Peak Occupied Spaces	%	Peak Occupancy with New Projects	New %
3	304 5 th St	Residential/Commercial	17	1,2,3,4,5,6	863	418	48%	489	57%
4	315 5 th St	Residential/Commercial/Office	21	1,2,3,4,5,6	863	418	48%	489	57%
6	209 5 th St	Event Venue	33	3,4,5,6,7,8	995	562	56%	694	70%
8	111 5 th St	Restaurant/Commercial	77	5,6,7,8	748	437	58%	531	71%

Based on the analysis above, all blocks in the downtown area still have sufficient parking spaces for the approved new developments during peak times. The highest occupancy percentages would appear in Blocks 6 and 8, increasing from 56% to 71% due to the demand on parking spaces for an event venue and restaurant. However, this is during the peak lunchtime period. If the event venue and restaurant have the expected peak parking demand in the evening, there should be plenty of spaces available to accommodate the demand – particularly within nearby off-street parking lots. It is likely that available on-street parking during the peak lunch time hours will be limited. The mixed-use developments in Blocks 3 and 4 would also increase public parking utilization by approximately 10% but would not overwhelm the remaining parking spaces.

A Long-Term Vision for Future Development Opportunities

With an active and unique business and residential environment, Historic West Des Moines remains an attractive area for continued redevelopment. In looking at the long-term development potential for the historic downtown area, several additional potential locations and parcels could be redeveloped based on the height criteria in the newly adopted design guidelines. Exhibit 2 at the end of this document shows these locations. Many of the existing one-story buildings are in good condition, and it would not make economic sense to tear them down to construct a two-story structure. However, to examine a ‘worst case scenario’ this analysis makes that assumption. **It is important to note that there are no current development proposals for any of these sites, and many of these locations will likely remain just as they currently are** (although specific tenants will likely come and go given the nature of the district). In this most intensive scenario, the existing availability of public parking infrastructure in the downtown area would be reduced but should still be able to meet demand.

The table on the following page illustrates the locations of possible new developments and their scale and anticipated parking demand.

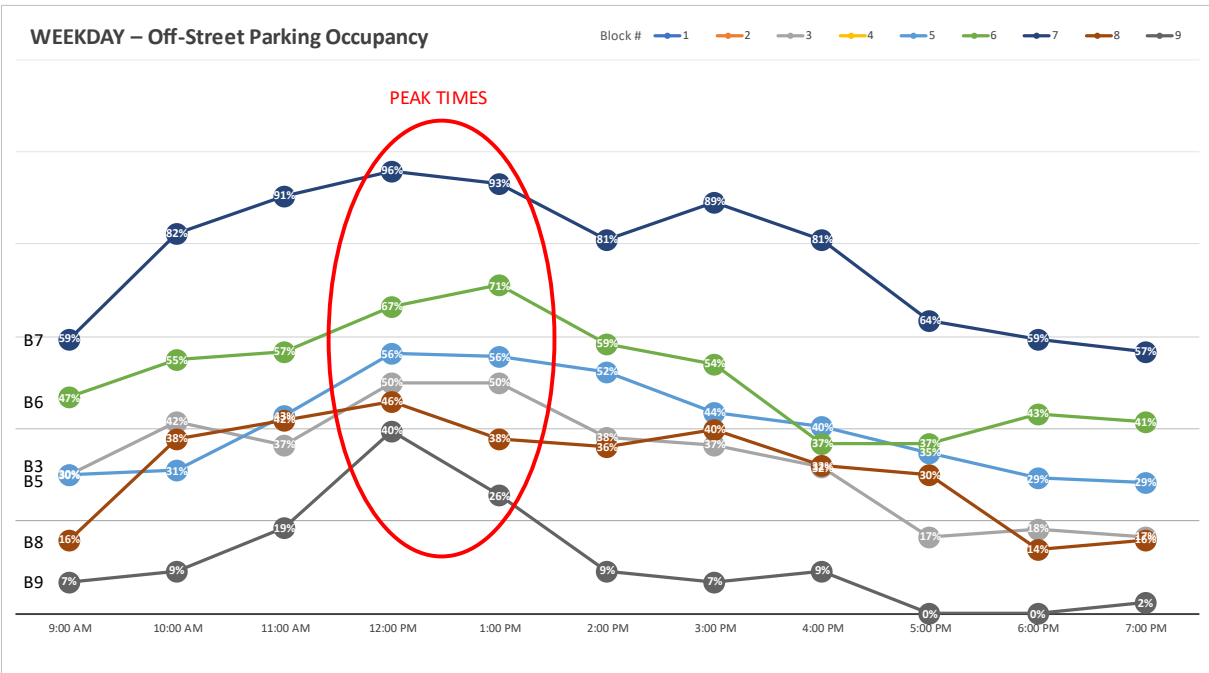
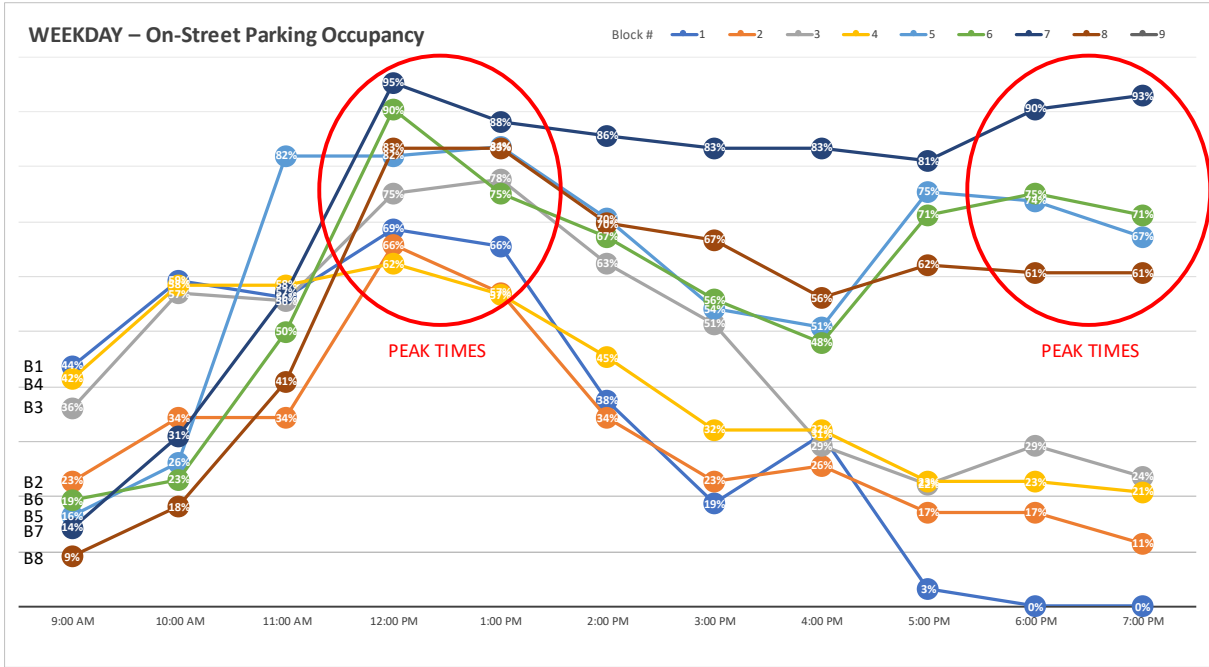
B L K	Address	# of Stories	Possible Development Type	Additional parking demand	Nearest Blocks for Parking	Available Parking Stalls	Current Peak Occupancy	%	New Peak Occupancy	New % at Peak Occupancy
2	437 5th St	2	Residential + Commercial	5	1,2,3,4	451	170	38%	278	62%
	433 5th St	2	Residential + Commercial	5	1,2,3,4	451	170	38%	278	62%
	425 5th St	2	Residential + Commercial	5	1,2,3,4	451	170	38%	278	62%
	421 5th St	2	Restaurant + Commercial	5	1,2,3,4	451	170	38%	278	62%
	417 5th St	2	Residential + Commercial	5	1,2,3,4	451	170	38%	278	62%
	415 5th St	2	Residential + Commercial	5	1,2,3,4	451	170	38%	278	62%
	411/ 413 5th	2	Residential + Commercial	5	1,2,3,4	451	170	38%	278	62%
	409 5th St	2	Residential + Commercial	5	1,2,3,4	451	170	38%	278	62%
	405 5th St	2	Residential + Commercial	5	1,2,3,4	451	170	38%	278	62%
3	324 5th St	2	Residential + Commercial	5	1,2,3,4,5 ,6	863	412	48%	577	67%
	308 5th St	3	Residential + Commercial	10	1,2,3,4,5 ,6	863	412	48%	577	67%
4	333 5th St	2	Residential + Commercial	5	1,2,3,4,5 ,6	863	412	48%	577	67%
	325 5th St	2	Residential + Commercial	5	1,2,3,4,5 ,6	863	412	48%	577	67%
5	512 Elm St	2	Residential + Commercial	5	3,4,5,6,7 ,8	991	556	56%	763	77%
	214 5th St	2	Residential + Commercial	3	3,4,5,6,7 ,8	991	556	56%	763	77%
6	233/ 235 5th	2	Residential + Commercial	3	3,4,5,6,7 ,8	991	556	56%	763	77%
	227 5th St	2	Residential + Commercial	2	3,4,5,6,7 ,8	991	556	56%	763	77%
	225 5th St	2	Residential + Commercial	5	3,4,5,6,7 ,8	991	556	56%	763	77%
	215 5th St	2	Residential + Commercial	6	3,4,5,6,7 ,8	991	556	56%	763	77%
7	128 5th St	2	Residential + Commercial	2	5,6,7,8,9	862	437	51%	581	67%
	110 5th St	2	Residential + Commercial	5	5,6,7,8,9	862	437	51%	581	67%
	517 Railroad	2	Residential + Commercial	5	5,6,7,8,9	862	437	51%	581	67%
	123 5th St	2	Residential + Commercial	2	5,6,7,8,9	862	437	51%	581	67%
8	401 Railroad	2	Residential + Commercial	12	5,6,7,8,9	862	437	51%	581	67%

RECOMMENDATIONS

Based on this analysis, it is our recommendation for the City to continue to manage and optimize the utilization of parking facilities in the historic downtown area before planning and constructing any new parking infrastructure. Currently, and assuming anticipated demand from active development projects, it is our opinion that there is not a parking problem in the Historic West Des Moines Business District. While on-street parking may be full at peak periods, there should always be available spaces in the City's existing off-street parking lots on normal (non-event) days. Parking utilization will change over time depending on the specific mix of businesses and their peak parking demand periods. It is also extremely unlikely that every lot in the business district would be developed to its maximum density as illustrated in this analysis. If there ever was a parking problem in the future, we would suggest exploring the following options – generally in the order listed.

1. Continue to work closely with the Historic Valley Junction Foundation to provide parking maps on web sites, apps, and printed materials. Social media posts and distributable publications of downtown parking maps will also expand public recognition of the walkable distance between their downtown destinations and parking areas, guiding them to utilize spare parking resources instead of competing for the most nearby alternatives.
2. Enforce signed hour restrictions for existing parking areas.
3. Encourage new residential units to provide at least 1 space per unit, either on-site or within 300' of the unit. These do not need to be new parking spaces, they can be a designated space within an existing parking lot.
4. Explore electronic display signs that present real-time numbers of available parking stalls in public parking lots and off-premises parking lot directional signage may help some drivers realize the existence of off-street parking facilities. This would especially function well for off-street parking facilities, which are less visible than on-street parking stalls due to their locations behind the buildings on 5th Street.
5. Explore electronic systems to charge for parking, with higher rates for peak parking periods.
6. Introduce a trolley system or similar approach to connect existing parking lots to downtown businesses. At peak periods, this would potentially be helpful and cost efficient compared to building more parking facilities.

ATTACHMENTS



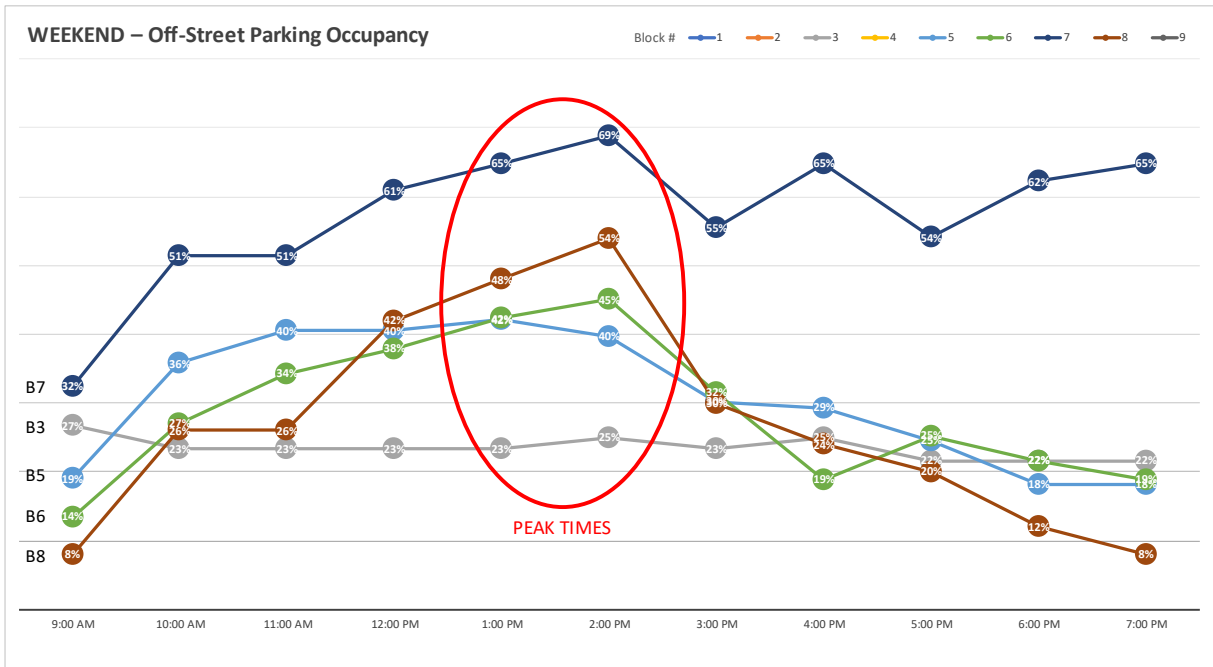
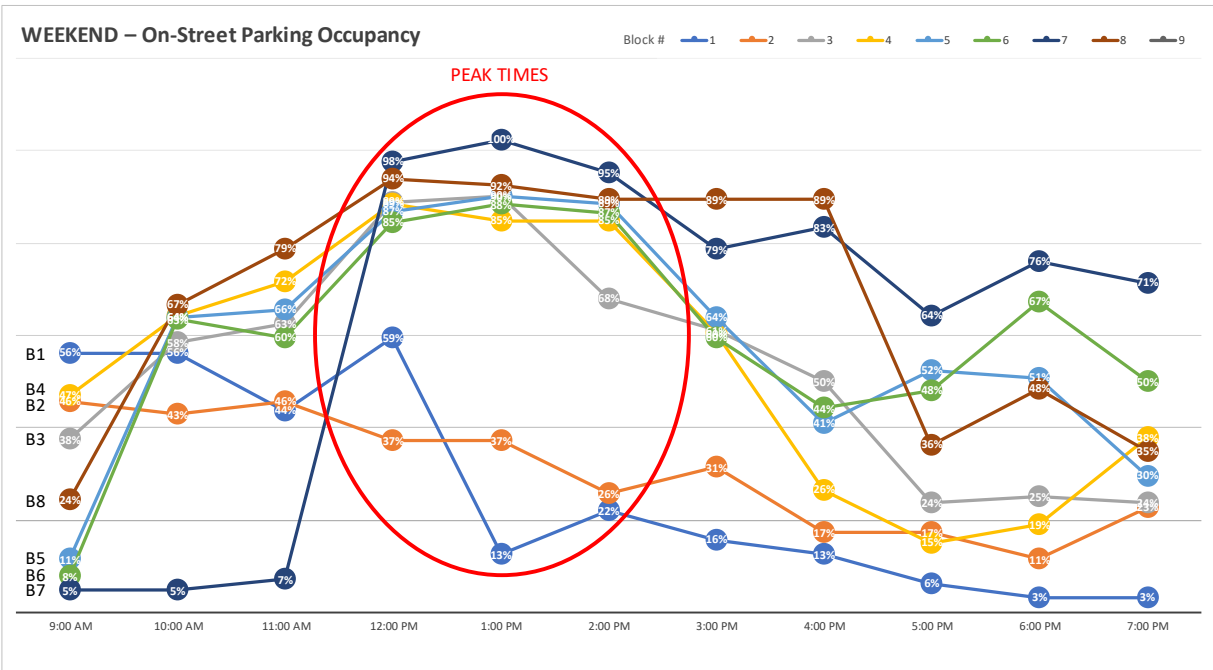


Exhibit 1 – Current Development

2020-2022 Major New Developments in the Historic Downtown of WDM



Exhibit 2 – Maximum Development Opportunities

2020-2022 Major New Developments in the Historic Downtown of WDM

