

TECHNICAL MEMORANDUM

Date: July 18, 2022

To: David Beach
City of Milwaukee

From: Tammi Czewski, P.E., PTOE
Traffic Analysis & Design, Inc.

Project: WisDOT Project ID 2225-15-00
N. Lake Drive, E. Newberry Boulevard to E. Edgewood Avenue
City of Milwaukee
Amendment No. 3 to Work Order No. 5
Master Contract ID 0695-97-29

Subject: **Lake Drive On-Street Parking Study**

INTRODUCTION

Traffic Analysis & Design, Inc. (TADI) is completing an on-street parking study associated with the reconstruction of N. Lake Drive from E. Newberry Boulevard to E. Edgewood Avenue in the City of Milwaukee, Milwaukee County, Wisconsin. This technical memorandum was prepared to document the existing and future (post-construction) weekday and Saturday on-street parking supply, peak demand, and peak occupancy for each block segment and cross-street within the study limits along the N. Lake Drive study corridor. The N. Lake Drive block segments and cross-street segments (N. Lake Drive to N. Shepard Avenue) evaluated for this study are shown on [Exhibit 1](#).

EXISTING PARKING EVALUATION

Existing Parking Supply

Through a combination of Google Earth aerial, Google Earth street-view photography, and field visits, the existing parking supply along each block segment of N. Lake Drive and the cross-street study segments were determined. Parking supply for all on-street spaces were calculated at about 25 feet per space and adjusted accordingly where Google Earth images show vehicles

more densely parked. The existing parking supply was calculated along each street segment in the study area excluding signed no parking areas, fire hydrants, driveways, and an approximate 15-foot buffer from each intersection curb.

Each parking sign within the study area was reviewed to determine weekday restrictions that vary throughout the day. These signs were used to determine the parking supply for the following time periods:

- AM: 6:00-9:00 a.m. (represents overnight to early morning parking activity)
- Midday: 10:00 a.m.-2:00 p.m. (represents peak midday/workday parking activity)
- PM: 4:00-8:00 p.m. (represents peak after school to after work parking activity)

The measured parking supply for each study area street segment is shown on [Exhibit 1](#). The generalized parking restrictions/parking signs on these segments are shown on [Exhibit 2](#).

Existing Parking Demand

TADI documented in-field parking demand along each street segment in the study area on typical weekdays and Saturdays during the spring when the University of Wisconsin-Milwaukee (UWM) was in session and during the summer when UWM was not in session. The parking demand data collection dates are:

- UWM in session (School Weekday): April 26 & April 28, 2022
- UWM in session (School Saturday): April 7 & April 30, 2022
- UWM not in session (Summer Weekday): June 15 & June 20, 2022
- UWM not in session (Summer Saturday): July 9, 2022

On each day, the number of occupied on-street parking spaces was recorded every hour during the AM, Midday, and PM time periods, with parking demand separated between the east and west sides of N. Lake Drive and the north and south sides of the cross-street. The highest total peak hourly parking demand on N. Lake Drive for each time period was selected as the peak parking data evaluated further in this study. Due to parking variations by day and season, the peak hours for this study vary between the weekday and Saturday data when UWM is in session and not in session. The peak parking periods for each analysis scenario are shown in [Table 1](#). The tables showing the parking demand data collected for each hour on each street segment are in [Appendix A](#).

Table 1. Parking Demand Peak Hours

Analysis Scenario	AM Peak	Midday Peak	PM Peak
School-Weekday	7AM - 8AM	1PM - 2PM	5PM - 6PM
School-Saturday	8AM - 9AM	1PM - 2PM	7PM - 8PM
Summer-Weekday	8AM - 9AM	12PM-1PM	6PM-7PM
Summer-Saturday	8AM - 9AM	1PM - 2PM	6PM-7PM

Existing Parking Occupancy

The peak parking data for each time period and analysis scenario was compiled for the N. Lake Drive street segments and the cross-street segments with results shown in summary tables and map graphics. The summary tables show the parking supply, parking demand, occupancy

percentage, and number of spaces available before the segment reaches 95% occupancy (when motorists may consider the parking “full” along the street segment). The map graphics show color-coded occupancy ranges (e.g., 0%-25%, 25%-50%, ...95%-100%) and no parking areas for each street segment. The summary tables and map graphics for each scenario are identified as follows:

- [Table 2 & Exhibit 3](#): Existing Peak Occupancy - School Weekday (UWM in Session)
- [Table 3 & Exhibit 4](#): Existing Peak Occupancy - School Saturday (UWM in Session)
- [Table 4 & Exhibit 5](#): Existing Peak Occupancy - Summer Weekday (UWM not in Session)
- [Table 5 & Exhibit 6](#): Existing Peak Occupancy - Summer Saturday (UWM not in Session)

Table 2. Existing Peak Occupancy Summary – School Weekday (UWM in Session)

Street Segments	Side of Road	Parking Supply	Peak Parking								
			Weekday AM			Weekday Midday			Weekday PM		
			Demand	Occupancy	Avail Spcs	Demand	Occupancy	Avail Spcs	Demand	Occupancy	Avail Spcs
Lake Drive Segments											
Edgewood Avenue to Newport Avenue	W E	23 25	1 0	4% 0%	20 23	3 0	13% 0%	18 23	1 0	4% 0%	20 23
Newport Avenue to Hartford Avenue	W E	6 15	0 0	0% 0%	5 14	0 1	0% 7%	5 13	0 0	0% 0%	5 14
Hartford Avenue to Hampshire Street	W E	17 16	0 0	0% 0%	16 15	0 1	0% 6%	16 14	0 0	0% 0%	16 15
Hampshire Street to Kenwood Boulevard	W E	NP NP									
Kenwood Boulevard to Linwood Avenue	W E	15 18	0 0	0% 0%	14 17	0 0	0% 0%	14 17	0 0	0% 0%	14 17
Linwood Avenue to Locust Street	W E	19 24	0 0	0% 0%	18 22	2 0	11% 0%	16 22	4 11	21% 46%	14 11
Locust Street to Newberry Boulevard	W E	16 19	1 0	6% 0%	14 18	1 0	6% 0%	14 18	1 2	6% 11%	14 16
Cross-Street Segments											
Edgewood Avenue	N	10	0	0%	9	0	0%	9	0	0%	9
	S	10	2	20%	7	2	20%	7	0	0%	9
Newport Avenue	N	NP									
	S	15	2	13%	12	0	0%	14	0	0%	14
Hartford Avenue	N*	6	0	0%	5	0	0%	5	0	0%	5
	S	14	1	7%	12	14	100%	0	9	64%	4
Hampshire Street	N	15	3	20%	11	4	27%	10	4	27%	10
	S	15	10	67%	4	11	73%	3	10	67%	4
Kenwood Boulevard	N	16	5	31%	10	4	25%	11	0	0%	15
	S	16	4	25%	11	2	13%	13	2	13%	13
Linwood Avenue	N	16	0	0%	15	0	0%	15	0	0%	15
	S	17	0	0%	16	0	0%	16	0	0%	16
Locust Street	N	14	1	7%	12	0	0%	13	2	14%	11
	S	10	1	10%	8	2	20%	7	1	10%	8
Newberry Boulevard	N	11	0	0%	10	0	0%	10	0	0%	10
	S	12	0	0%	11	0	0%	11	0	0%	11

*Parking restrictions (No Parking 7A-7P) on the north side of Hartford result in six (6) spaces available on weekdays.

Table 3. Existing Peak Occupancy Summary – School Saturday (UWM in Session)

Street Segments	Side of Road	Parking Supply	Peak Parking								
			Saturday AM			Saturday Midday			Saturday PM		
			Demand	Occupancy	Avail Spcs	Demand	Occupancy	Avail Spcs	Demand	Occupancy	Avail Spcs
Lake Drive Segments											
Edgewood Avenue to Newport Avenue	W E	23 25	3 0	13% 0%	18 23	2 0	9% 0%	19 23	2 0	9% 0%	19 23
Newport Avenue to Hartford Avenue	W E	6 15	0 1	0% 7%	5 13	0 0	0% 0%	5 14	0 0	0% 0%	5 14
Hartford Avenue to Hampshire Street	W E	17 16	0 1	0% 6%	16 14	0 1	0% 6%	16 14	0 0	0% 0%	16 15
Hampshire Street to Kenwood Boulevard	W E	NP NP									
Kenwood Boulevard to Linwood Avenue	W E	15 18	0 0	0% 0%	14 17	1 0	7% 0%	13 17	0 0	0% 0%	14 17
Linwood Avenue to Locust Street	W E	19 24	0 1	0% 4%	18 21	0 2	0% 8%	18 20	0 0	0% 0%	18 22
Locust Street to Newberry Boulevard	W E	16 19	1 0	6% 0%	14 18	4 0	25% 0%	11 18	1 1	6% 5%	14 17
Cross-Street Segments											
Edgewood Avenue	N S	10 10	0 1	0% 10%	9 8	0 1	0% 10%	9 8	0 0	0% 0%	9 9
Newport Avenue	N S	NP 15									
		15	1	7%	13	1	7%	13	2	13%	12
Hartford Avenue	N S	15 14	0 3	0% 21%	14 10	1 4	7% 29%	13 9	0 2	0% 14%	14 11
Hampshire Street	N S	15 15	3 10	20% 67%	11 4	5 5	33% 33%	9 9	6 5	40% 33%	8 9
Kenwood Boulevard	N S	16 16	2 0	13% 0%	13 15	3 1	19% 6%	12 14	2 1	13% 6%	13 14
Linwood Avenue	N S	16 17	0 0	0% 0%	15 16	0 0	0% 0%	15 16	3 0	19% 0%	12 16
Locust Street	N S	14 10	2 0	14% 0%	11 9	1 0	7% 0%	12 9	2 1	14% 10%	11 8
Newberry Boulevard	N S	11 12	0 0	0% 0%	10 11	0 1	0% 8%	10 10	0 0	0% 0%	10 11

Table 4. Existing Peak Occupancy Summary – Summer Weekday (UWM not in Session)

Street Segments	Side of Road	Parking Supply	Peak Parking								
			Weekday AM			Weekday Midday			Weekday PM		
			Demand	Occupancy	Avail Spcs	Demand	Occupancy	Avail Spcs	Demand	Occupancy	Avail Spcs
Lake Drive Segments											
Edgewood Avenue to Newport Avenue	W E	23 25	3 1	13% 4%	18 22	5 6	22% 24%	16 17	1 0	4% 0%	20 23
Newport Avenue to Hartford Avenue	W E	6 15	0 0	0% 0%	5 14	0 2	0% 13%	5 12	0 0	0% 0%	5 14
Hartford Avenue to Hampshire Street	W E	17 16	1 0	6% 0%	15 15	6 0	35% 0%	10 15	1 0	6% 0%	15 15
Hampshire Street to Kenwood Boulevard	W E	NP NP									
Kenwood Boulevard to Linwood Avenue	W E	15 18	0 1	0% 6%	14 16	0 1	0% 6%	14 16	0 1	0% 6%	14 16
Linwood Avenue to Locust Street	W E	19 24	0 3	0% 13%	18 19	2 1	11% 4%	16 21	1 3	5% 13%	17 19
Locust Street to Newberry Boulevard	W E	16 19	0 0	0% 0%	15 18	1 0	6% 0%	14 18	2 1	13% 5%	13 17
Cross-Street Segments											
Edgewood Avenue	N	10	0	0%	9	1	10%	8	1	10%	8
	S	10	2	20%	7	3	30%	6	1	10%	8
Newport Avenue	N	NP									
	S	15	1	7%	13	3	20%	11	2	13%	12
Hartford Avenue	N*	6	1	17%	4	0	0%	5	2	33%	3
	S	14	5	36%	8	5	36%	8	1	7%	12
Hampshire Street	N	15	4	27%	10	9	60%	5	7	47%	7
	S	15	8	53%	6	7	47%	7	5	33%	9
Kenwood Boulevard	N	16	7	44%	8	6	38%	9	1	6%	14
	S	16	3	19%	12	7	44%	8	2	13%	13
Linwood Avenue	N	16	0	0%	15	0	0%	15	1	6%	14
	S	17	0	0%	16	0	0%	16	1	6%	15
Locust Street	N	14	0	0%	13	1	7%	12	3	21%	10
	S	10	1	10%	8	2	20%	7	1	10%	8
Newberry Boulevard	N	11	0	0%	10	1	9%	9	0	0%	10
	S	12	2	17%	9	1	8%	10	1	8%	10

*Parking restrictions (No Parking 7A-7P) on the north side of Hartford result in six (6) spaces available on weekdays.

Table 5. Existing Peak Occupancy Summary – Summer Saturday (UWM not in Session)

Street Segments	Side of Road	Parking Supply	Peak Parking								
			Saturday AM			Saturday Midday			Saturday PM		
			Demand	Occupancy	Avail Spcs	Demand	Occupancy	Avail Spcs	Demand	Occupancy	Avail Spcs
Lake Drive Segments											
Edgewood Avenue to Newport Avenue	W E	23 25	2 2	9% 8%	19 21	3 1	13% 4%	18 22	9 11	39% 44%	12 12
Newport Avenue to Hartford Avenue	W E	6 15	0 0	0% 0%	5 14	0 0	0% 0%	5 14	0 0	0% 0%	5 14
Hartford Avenue to Hampshire Street	W E	17 16	0 0	0% 0%	16 15	0 0	0% 0%	16 15	0 0	0% 0%	16 15
Hampshire Street to Kenwood Boulevard	W E	NP NP									
Kenwood Boulevard to Linwood Avenue	W E	15 18	0 0	0% 0%	14 17	2 0	13% 0%	12 17	0 6	0% 33%	14 11
Linwood Avenue to Locust Street	W E	19 24	0 0	0% 0%	18 22	2 10	11% 42%	16 12	5 22	26% 92%	13 0
Locust Street to Newberry Boulevard	W E	16 19	1 1	6% 5%	14 17	0 0	0% 0%	15 18	0 1	0% 5%	15 17
Cross-Street Segments											
Edgewood Avenue	N S	10 10	0 0	0% 0%	9 9	0 0	0% 0%	9 9	1 0	10% 0%	8 9
Newport Avenue	N S	NP 15									
Hartford Avenue	N S	15 14	0 3	0% 21%	14 10	2 2	13% 14%	12 11	0 2	0% 14%	14 11
Hampshire Street	N S	15 15	4 9	27% 60%	10 5	4 7	27% 47%	10 7	8 12	53% 80%	6 2
Kenwood Boulevard	N S	16 16	6 2	38% 13%	9 13	10 8	63% 50%	5 7	6 3	38% 19%	9 12
Linwood Avenue	N S	16 17	0 0	0% 0%	15 16	0 0	0% 0%	15 16	0 0	0% 0%	15 16
Locust Street	N S	14 10	1 0	7% 0%	12 9	1 1	7% 10%	12 8	2 2	14% 20%	11 7
Newberry Boulevard	N S	11 12	0 0	0% 0%	10 11	0 0	0% 0%	10 11	0 0	0% 0%	10 11

Using different colors, the exhibits show the different occupancy thresholds (no parking allowed, 0%-25%, 25%-50%, 50%-75%, 75%-95%, and over 95%) along each study area street segment. When school is in session for UWM, several street segments on E. Hartford Avenue and E. Hampshire Street are more than 50% occupied during the weekday. The south side of E. Hartford Avenue is fully occupied (100% occupied) during the weekday midday peak period, but the north side of that same street segment is less than 25% occupied. Only one segment of E. Hampshire Street is 50-75% occupied on Saturdays when school is in session. During these same time periods, all street segments along N. Lake Drive are less than 50% occupied.

In the summer when school is not in session for UWM, weekday parking lessens with only the E. Hampshire Street segment having parking occupancy between 50-75%. Summer Saturday parking, however, increases with 75-95% parking occupancy on E. Hampshire Street and 50-

75% parking occupancy on E. Kenwood Boulevard. Parking occupancies also increase on N. Lake Drive, with several segments having 25-50% occupancy during the Midday and PM peak periods, and one segment (E. Linnwood Avenue to E. Locust Street) having 75-95% occupancy.

FUTURE PARKING EVALUATION

Future Parking Supply

The City of Milwaukee provided proposed alternative cross-sections for the reconstruction of N. Lake Drive. Of the alternatives, only one impacts the parking supply along the roadway. This alternative eliminates on-street parking along the west side of N. Lake Drive between E. Kenwood Boulevard and E. Newberry Boulevard. On-street parking along the east side of N. Lake Drive remains. The future parking supply is shown on [Exhibit 7](#).

Future Parking Occupancy

The parking occupancy summary for the N. Lake Drive street segments was updated to reflect the alternative with the reduced parking supply along the west side of the roadway. The parking demand for these west-side segments was added to the east side of the same segment. The future parking demand tables and corresponding exhibits are shown as follows:

- [Table 6 & Exhibit 8](#): Future Peak Occupancy - School Weekday (UWM in Session)
- [Table 7 & Exhibit 9](#): Future Peak Occupancy - School Saturday (UWM in Session)
- [Table 8 & Exhibit 10](#): Future Peak Occupancy - Summer Weekday (UWM not in Session)
- [Table 9 & Exhibit 11](#): Future Peak Occupancy - Summer Saturday (UWM not in Session)

Table 6. Future Peak Occupancy Summary – School Weekday (UWM in Session)

Street Segments	Side of Road	Parking Supply	Peak Parking								
			Weekday AM			Weekday Midday			Weekday PM		
			Demand	Occupancy	Avail Spcs	Demand	Occupancy	Avail Spcs	Demand	Occupancy	Avail Spcs
Lake Drive Segments											
Edgewood Avenue to Newport Avenue	W E	23 25	1 0	4% 0%	20 23	3 0	13% 0%	18 23	1 0	4% 0%	20 23
Newport Avenue to Hartford Avenue	W E	6 15	0 0	0% 0%	5 14	0 1	0% 7%	5 13	0 0	0% 0%	5 14
Hartford Avenue to Hampshire Street	W E	17 16	0 0	0% 0%	16 15	0 1	0% 6%	16 14	0 0	0% 0%	16 15
Hampshire Street to Kenwood Boulevard	W E	NP NP									
Kenwood Boulevard to Linwood Avenue	W E	NP 18									
Linwood Avenue to Locust Street	W E	NP 24	0 0	0% 0%	17 22	0 2	0% 8%	17 20	0 15	0% 63%	17 7
Locust Street to Newberry Boulevard	W E	NP 19									
			1	5%	17	1	5%	17	3	16%	15

Table 7. Future Peak Occupancy Summary – School Saturday (UWM in Session)

Street Segments	Side of Road	Parking Supply	Peak Parking								
			Saturday AM			Saturday Midday			Saturday PM		
			Demand	Occupancy	Avail Spcs	Demand	Occupancy	Avail Spcs	Demand	Occupancy	Avail Spcs
Lake Drive Segments											
Edgewood Avenue to Newport Avenue	W	23	3	13%	18	2	9%	19	2	9%	19
	E	25	0	0%	23	0	0%	23	0	0%	23
Newport Avenue to Hartford Avenue	W	6	0	0%	5	0	0%	5	0	0%	5
	E	15	1	7%	13	0	0%	14	0	0%	14
Hartford Avenue to Hampshire Street	W	17	0	0%	16	0	0%	16	0	0%	16
	E	16	1	6%	14	1	6%	14	0	0%	15
Hampshire Street to Kenwood Boulevard	W	NP									
	E	NP									
Kenwood Boulevard to Linwood Avenue	W	NP									
	E	18	0	0%	17	1	6%	16	0	0%	17
Linwood Avenue to Locust Street	W	NP									
	E	24	1	4%	21	2	8%	20	0	0%	22
Locust Street to Newberry Boulevard	W	NP									
	E	19	1	5%	17	4	21%	14	2	11%	16

Table 8. Future Peak Occupancy Summary – Summer Weekday (UWM not in Session)

Street Segments	Side of Road	Parking Supply	Peak Parking								
			Weekday AM			Weekday Midday			Weekday PM		
			Demand	Occupancy	Avail Spcs	Demand	Occupancy	Avail Spcs	Demand	Occupancy	Avail Spcs
Lake Drive Segments											
Edgewood Avenue to Newport Avenue	W E	23 25	3 1	13% 4%	18 22	5 6	22% 24%	16 17	1 0	4% 0%	20 23
Newport Avenue to Hartford Avenue	W E	6 15	0 0	0% 0%	5 14	0 2	0% 13%	5 12	0 0	0% 0%	5 14
Hartford Avenue to Hampshire Street	W E	17 16	1 0	6% 0%	15 15	6 0	35% 0%	10 15	1 0	6% 0%	15 15
Hampshire Street to Kenwood Boulevard	W E	NP NP									
Kenwood Boulevard to Linwood Avenue	W E	NP 18									
Linwood Avenue to Locust Street	W E	NP 24									
Locust Street to Newberry Boulevard	W E	NP 19									

Table 9. Future Peak Occupancy Summary – Summer Saturday (UWM not in Session)

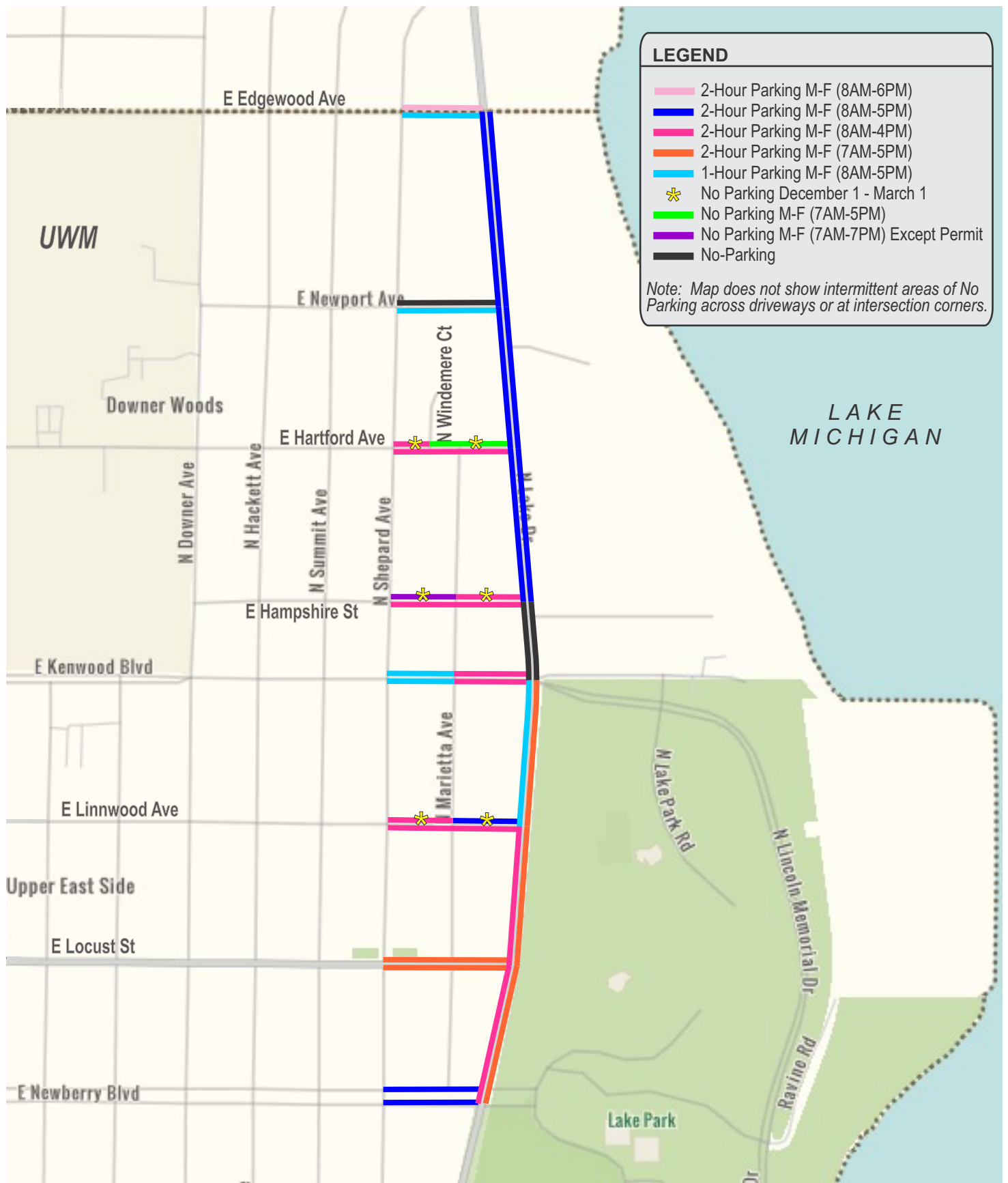
Street Segments	Side of Road	Parking Supply	Peak Parking								
			Saturday AM			Saturday Midday			Saturday PM		
			Demand	Occupancy	Avail Spcs	Demand	Occupancy	Avail Spcs	Demand	Occupancy	Avail Spcs
Lake Drive Segments											
Edgewood Avenue to Newport Avenue	W E	23 25	2 2	9% 8%	19 21	3 1	13% 4%	18 22	9 11	39% 44%	12 12
Newport Avenue to Hartford Avenue	W E	6 15	0 0	0% 0%	5 14	0 0	0% 0%	5 14	0 0	0% 0%	5 14
Hartford Avenue to Hampshire Street	W E	17 16	0 0	0% 0%	16 15	0 0	0% 0%	16 15	0 0	0% 0%	16 15
Hampshire Street to Kenwood Boulevard	W E	NP NP									
Kenwood Boulevard to Linwood Avenue	W E	NP 18									
Linwood Avenue to Locust Street	W E	NP 24	0 0	0% 0%	17 22	2 12	11% 50%	15 10	6 27	33% 113%	11 -5
Locust Street to Newberry Boulevard	W E	NP 19									
			2	11%	16	0	0%	18	1	5%	17

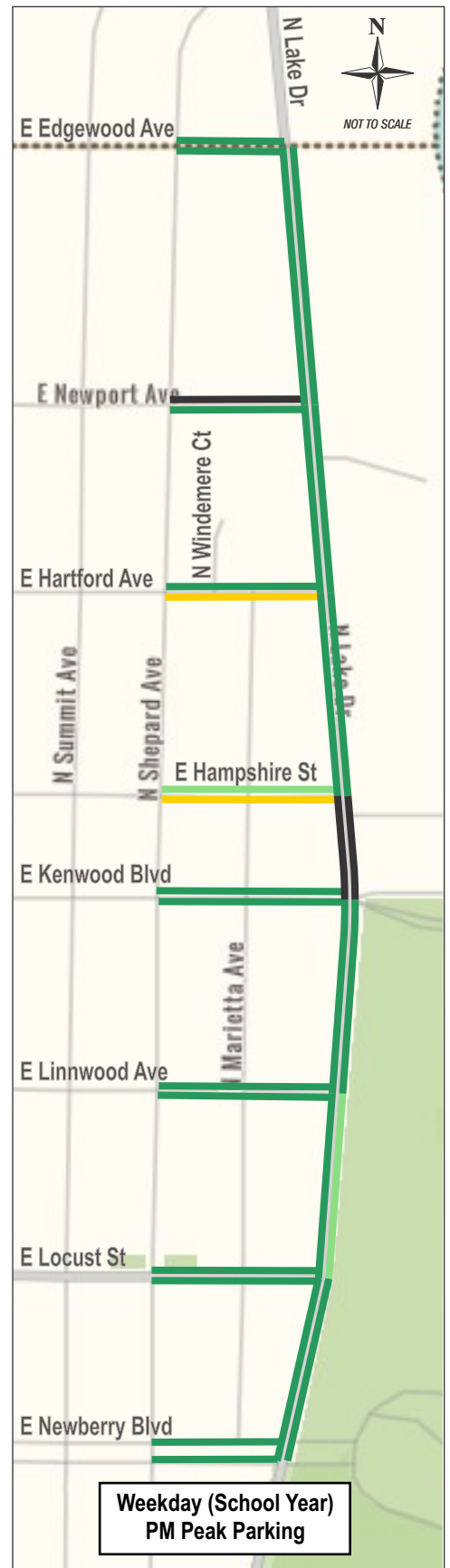
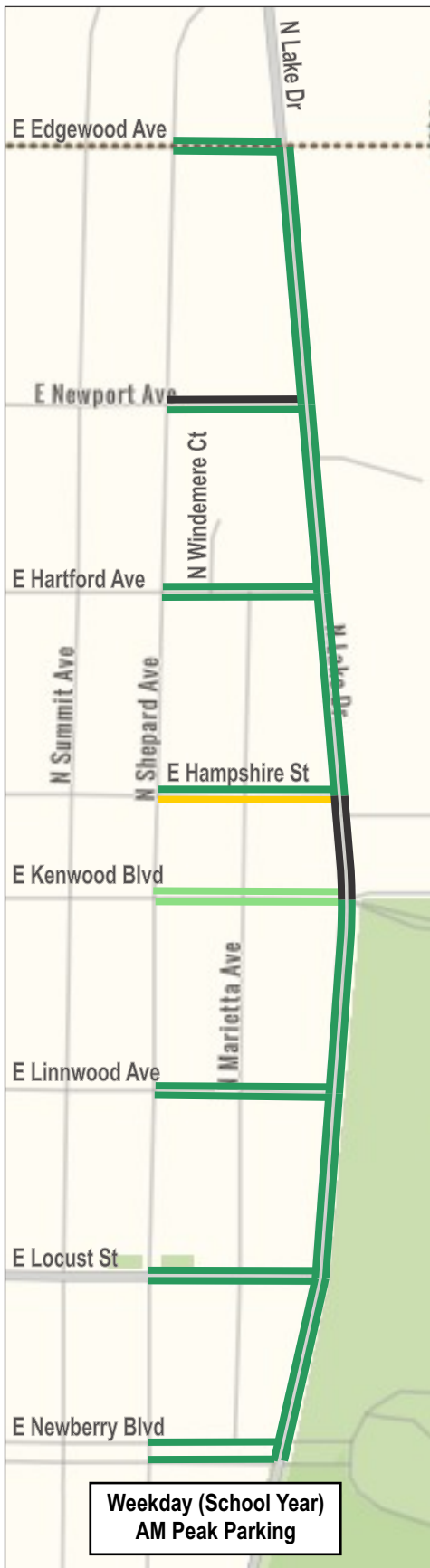
The reduced parking supply does not result in parking occupancy issues on weekdays or Saturdays when UWM is in session, or on summer weekdays when UWM is not in session. On summer Saturdays when UWM is not in session, however, the parking demand on N. Lake Drive between E. Linwood Avenue and E. Locust Street is greater than 100%. Based on the data in [Table 9](#) above, the adjacent street segments on N. Lake Drive have ample capacity to accommodate extra parked vehicles while maintaining parking occupancy levels less than 75%. There is also ample capacity along E. Linwood Avenue and E. Locust Street to accommodate the extra parked vehicles.

CONCLUSION

Based on the data collected for this study, the parking occupancy along most of the N. Lake Drive study area is relatively low (0-50% occupancy) on weekdays and Saturdays regardless of whether school is in session or not in session at UWM. Only the N. Lake Drive street segment between E. Linwood Avenue and E. Locust Street exceeded 50% occupancy (this segment reached 92% occupancy on a summer Saturday during the PM peak period). During this same time period, the occupancy of the adjacent street segments on N. Lake Drive and the nearby cross-streets did not exceed 33%, leaving ample parking supply available to accommodate additional parked vehicles if future construction eliminates west side on-street parking on N. Lake Drive between E. Kenwood Boulevard to E. Newberry Boulevard.

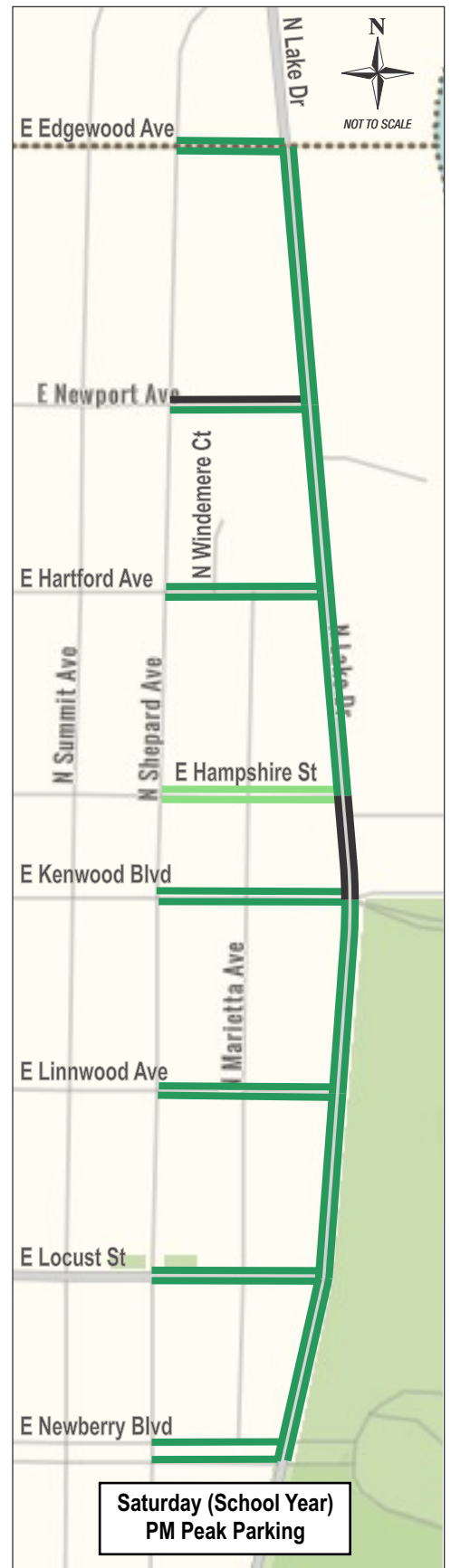
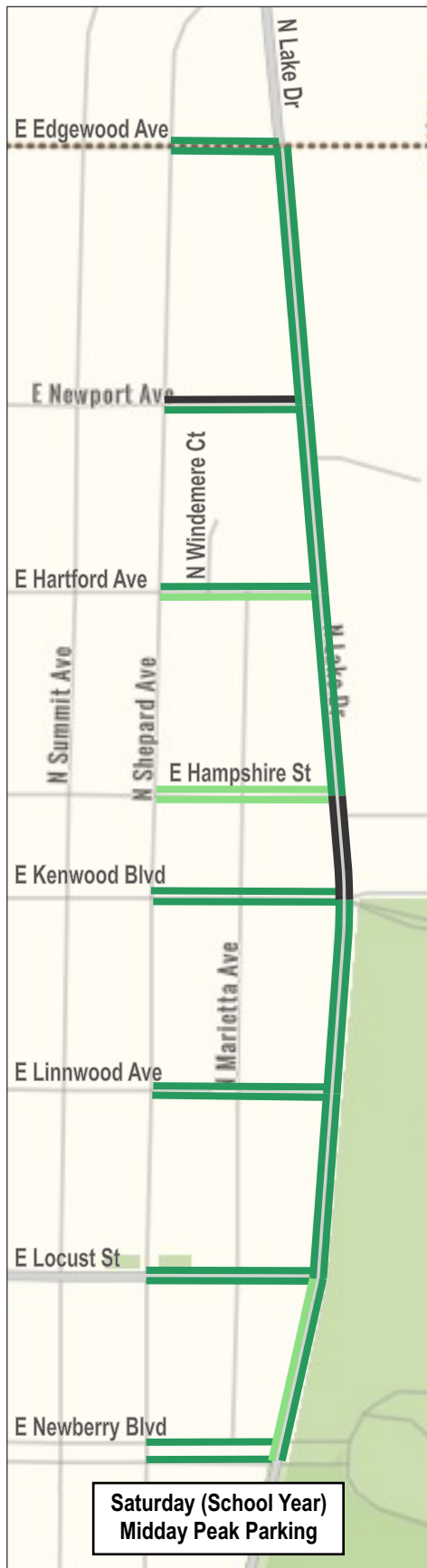
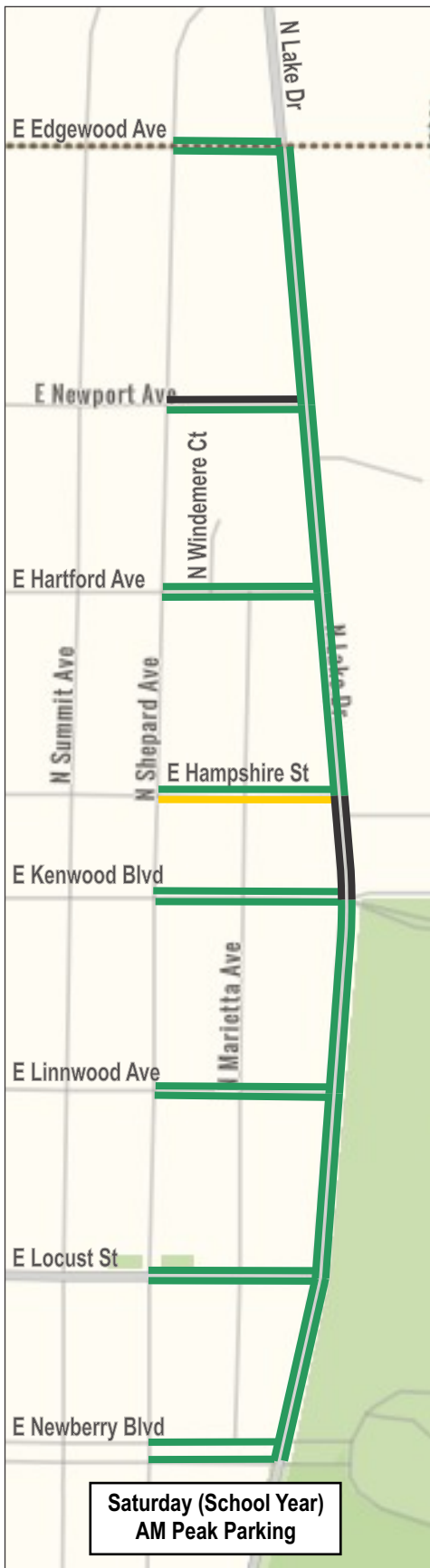






LEGEND

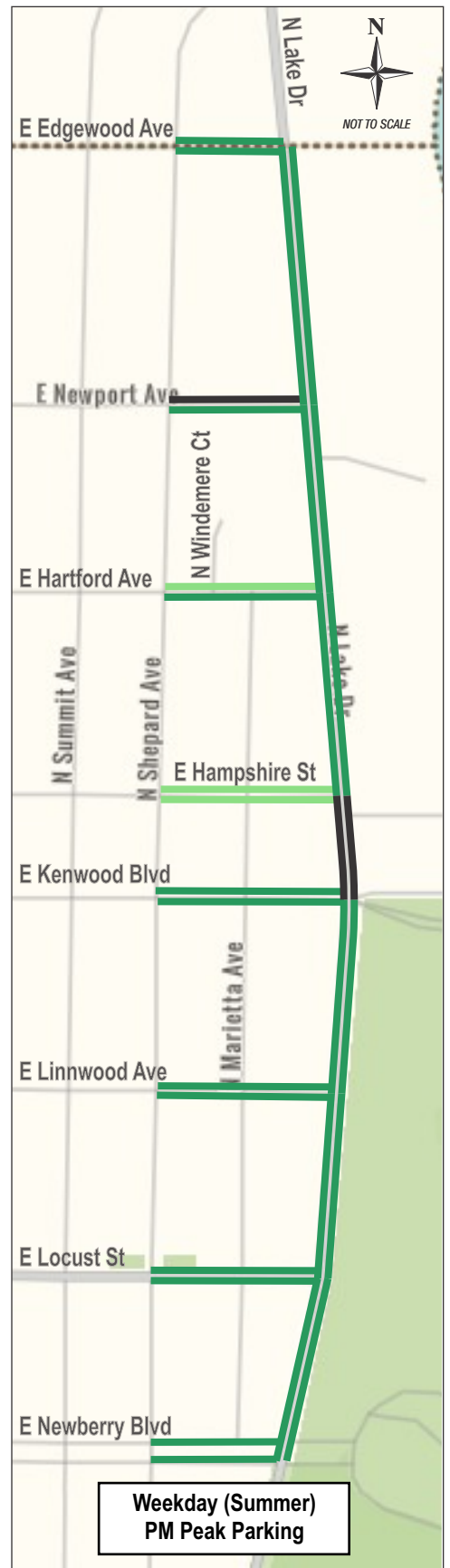
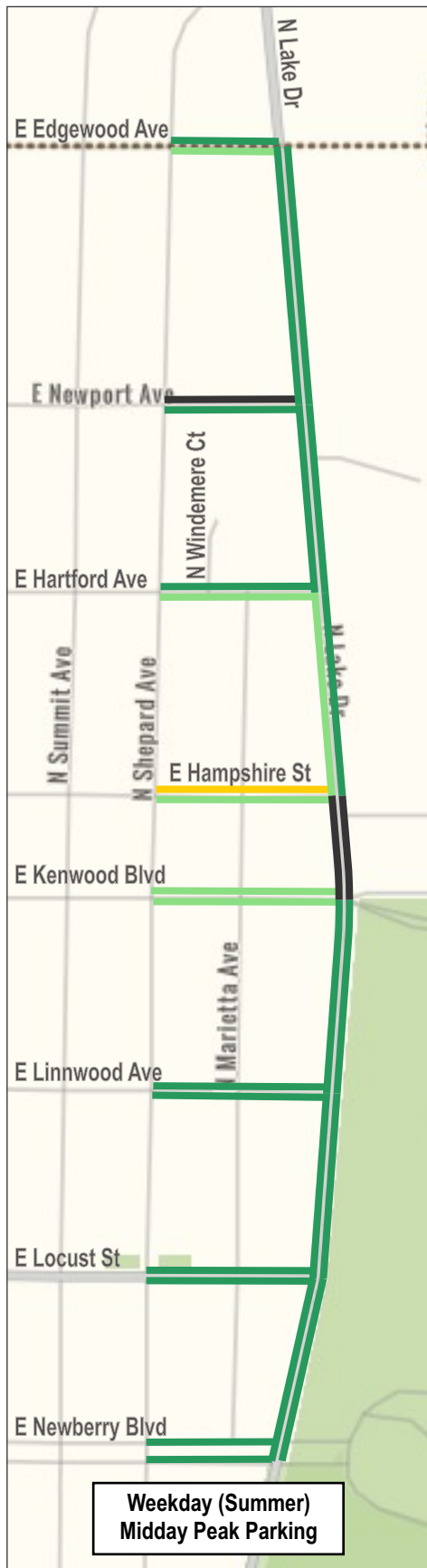
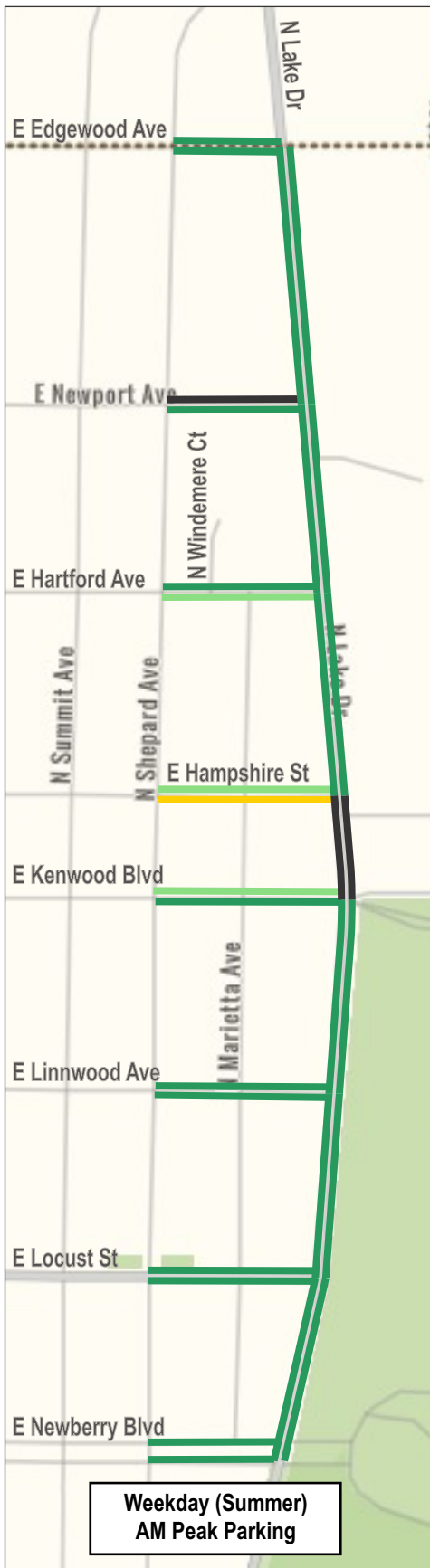
- | | |
|---|---|
| 0%-25% Occupancy | 75%-95% Occupancy |
| 25%-50% Occupancy | 95%-100%+ Occupancy |
| 50%-75% Occupancy | No Parking |



LEGEND

- 0%-25% Occupancy
- 25%-50% Occupancy
- 50%-75% Occupancy
- 75%-95% Occupancy
- 95%-100%+ Occupancy
- No Parking

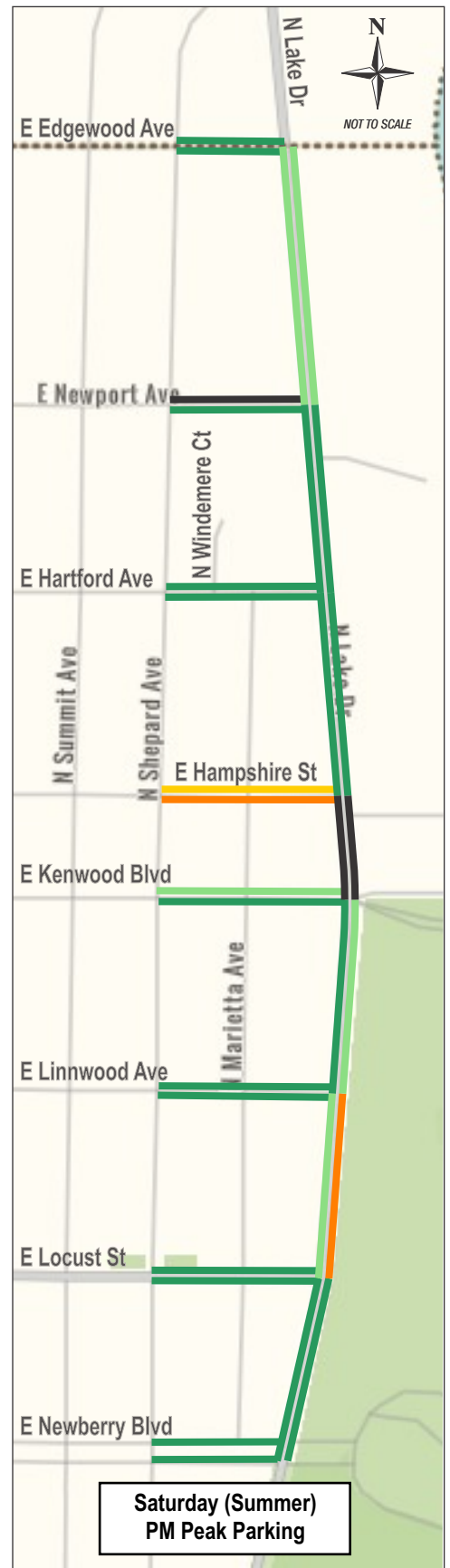
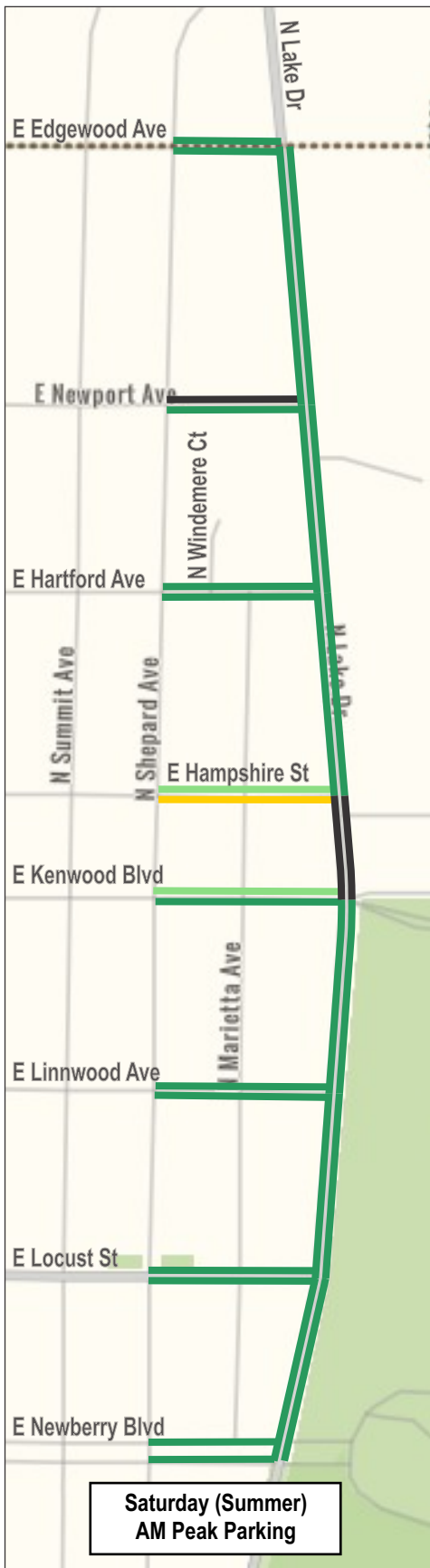
**EXHIBIT 4
EXISTING PEAK OCCUPANCY
SCHOOL SATURDAY
(UWM IN SESSION)**



LEGEND

- 0%-25% Occupancy
- 25%-50% Occupancy
- 50%-75% Occupancy
- 75%-95% Occupancy
- 95%-100%+ Occupancy
- No Parking

**EXHIBIT 5
EXISTING PEAK OCCUPANCY
SUMMER WEEKDAY
(UWM NOT IN SESSION)**

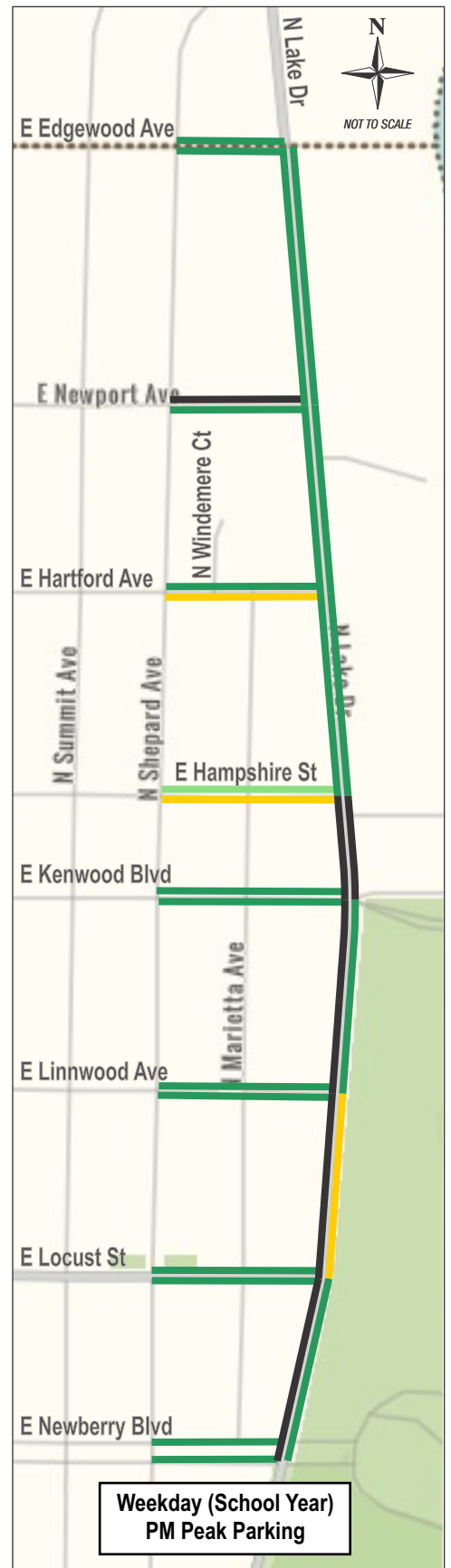
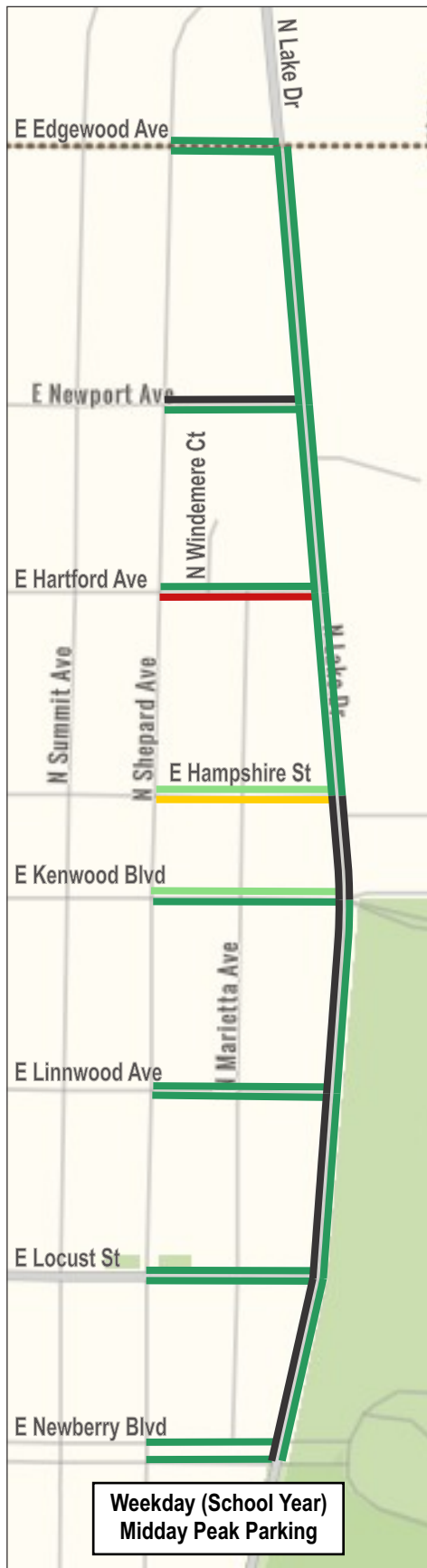
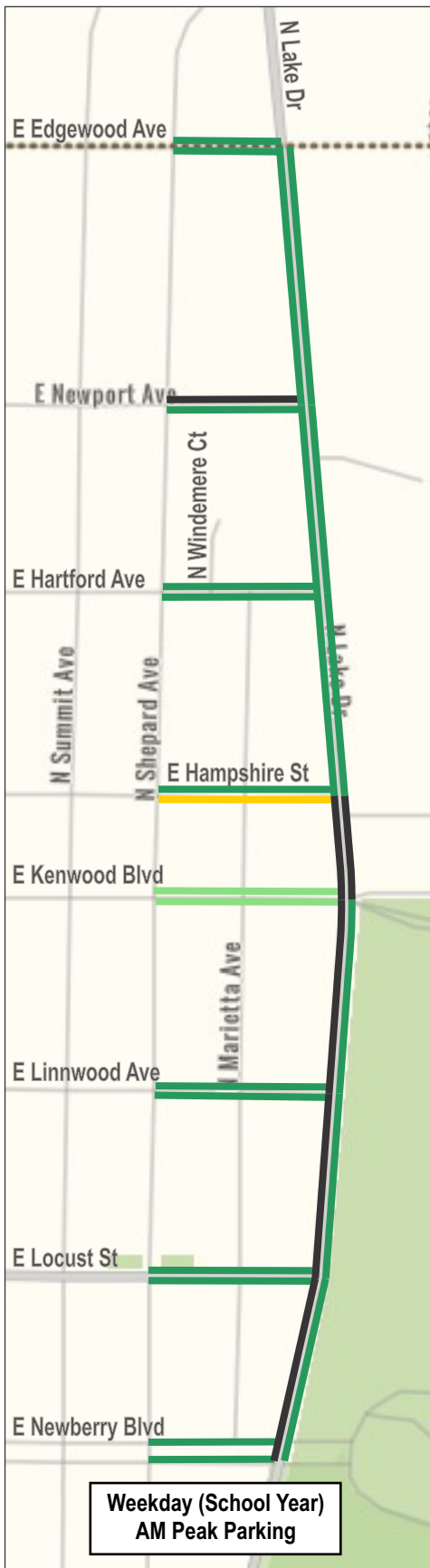


LEGEND

- | | |
|---|---|
| — 0%-25% Occupancy | — 75%-95% Occupancy |
| — 25%-50% Occupancy | — 95%-100%+ Occupancy |
| — 50%-75% Occupancy | — No Parking |

**EXHIBIT 6
EXISTING PEAK OCCUPANCY
SUMMER SATURDAY
(UWM NOT IN SESSION)**

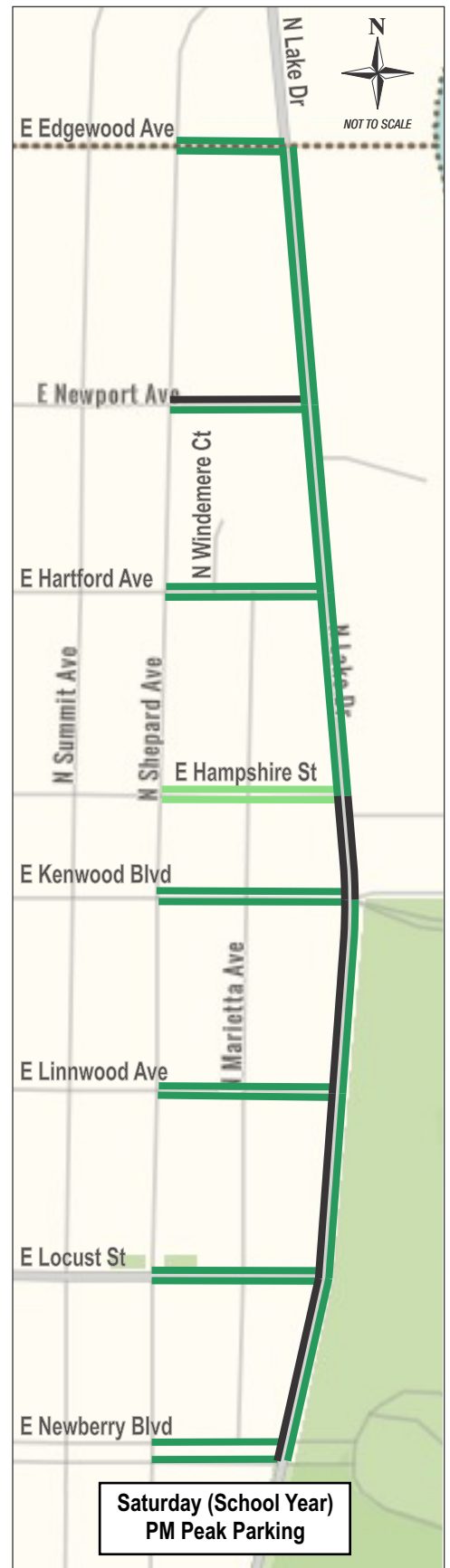
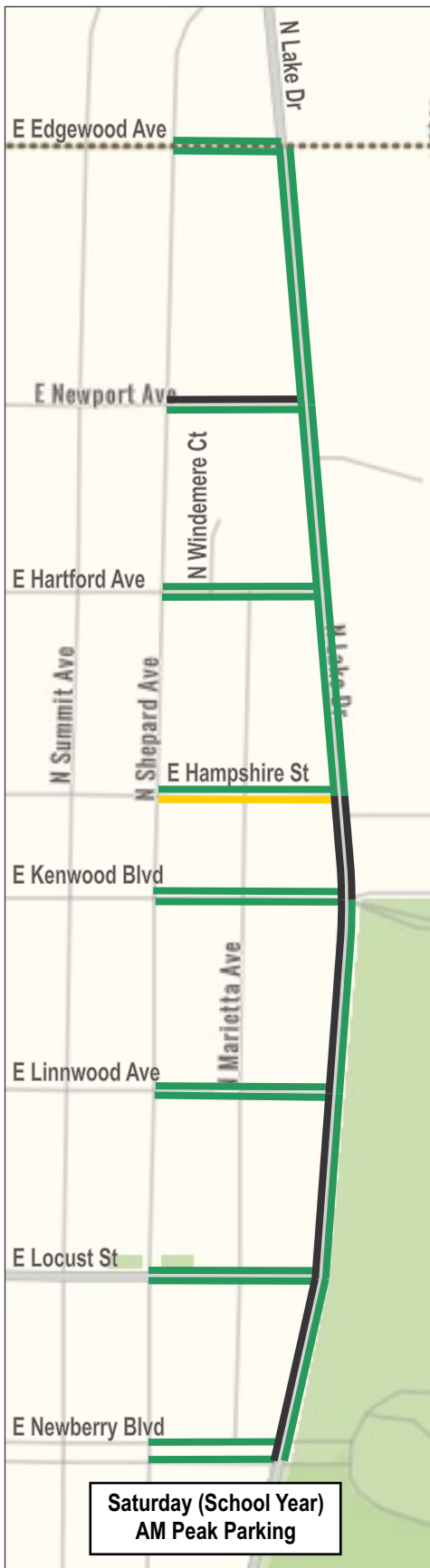




LEGEND

- 0%-25% Occupancy
- 25%-50% Occupancy
- 50%-75% Occupancy
- 75%-95% Occupancy
- 95%-100%+ Occupancy
- No Parking

**EXHIBIT 8
WEEKDAY PEAK OCCUPANCY
UWM IN SESSION (SCHOOL YEAR)
FUTURE SUPPLY**



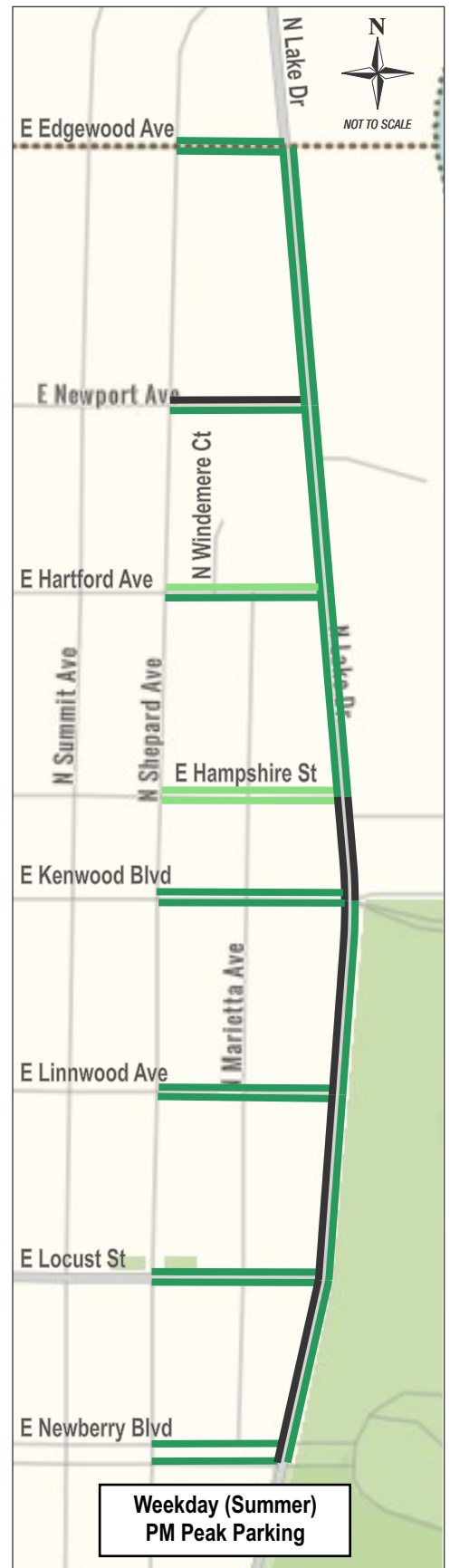
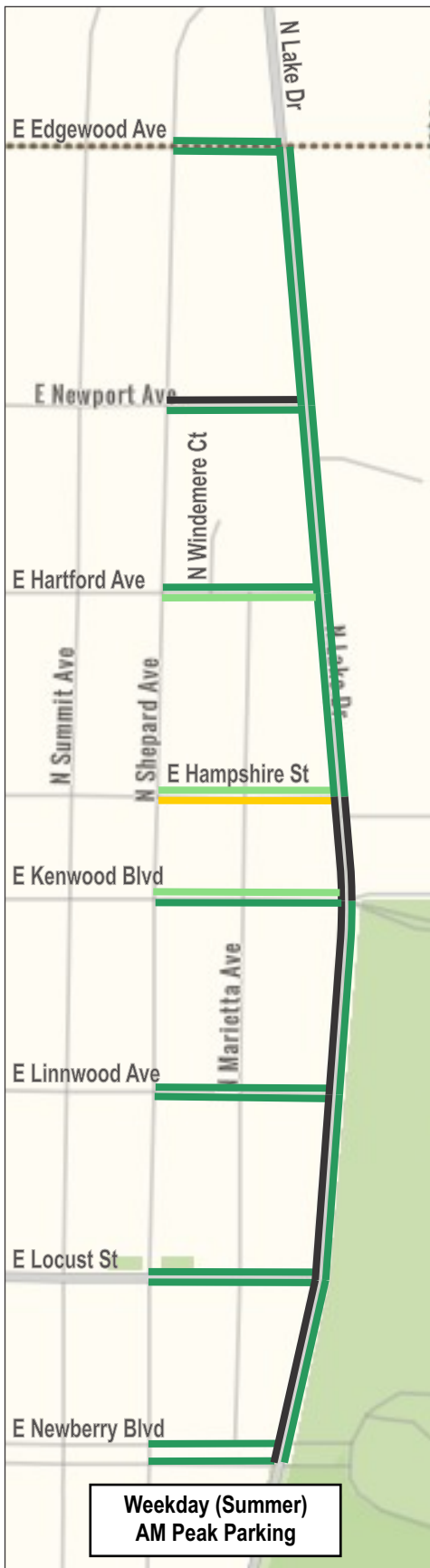
2839: 7-18-2022

LEGEND

- | | |
|-------------------|---------------------|
| 0%-25% Occupancy | 75%-95% Occupancy |
| 25%-50% Occupancy | 95%-100%+ Occupancy |
| 50%-75% Occupancy | No Parking |

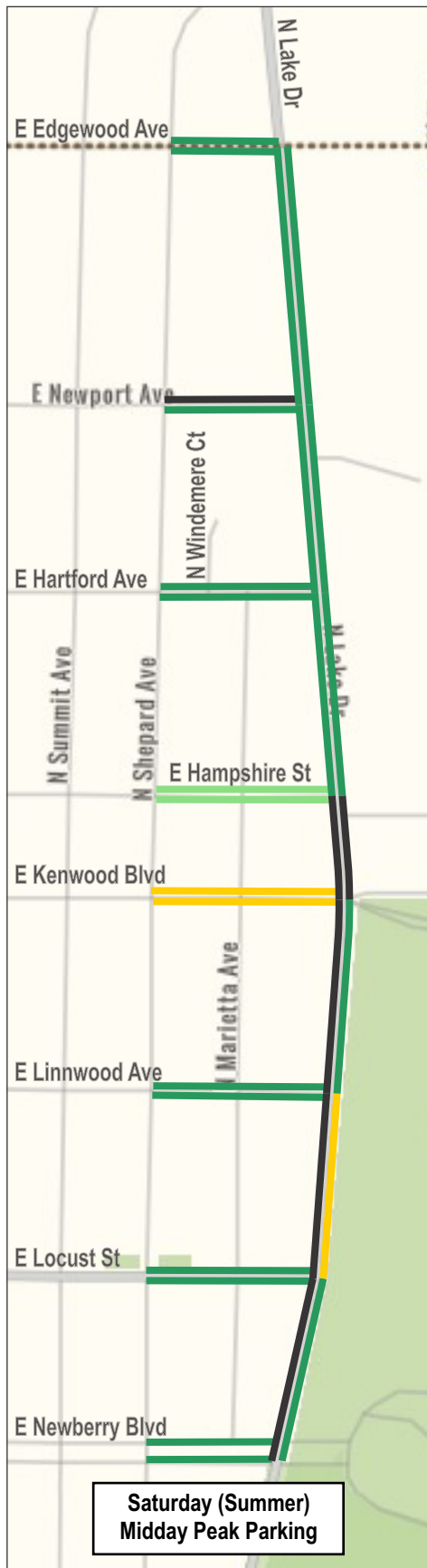
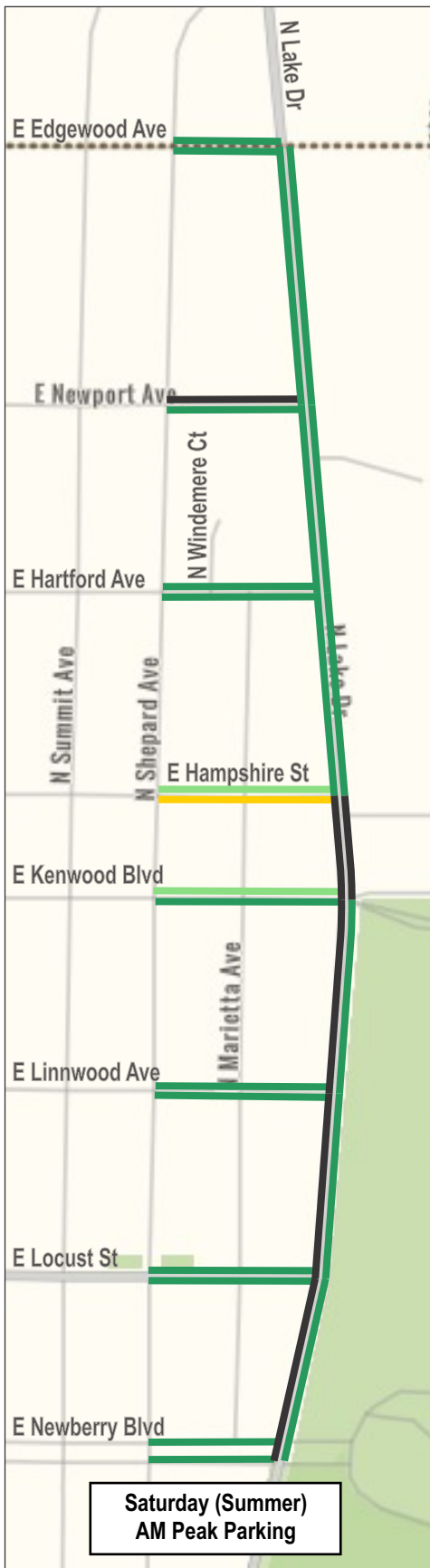
**EXHIBIT 9
SATURDAY PEAK OCCUPANCY
UWM IN SESSION (SCHOOL YEAR)
FUTURE SUPPLY**

LAKE DRIVE PARKING STUDY - MILWAUKEE, WISCONSIN



LEGEND

- | | |
|-------------------|---------------------|
| 0%-25% Occupancy | 75%-95% Occupancy |
| 25%-50% Occupancy | 95%-100%+ Occupancy |
| 50%-75% Occupancy | No Parking |



LEGEND

- | | |
|-------------------|---------------------|
| 0%-25% Occupancy | 75%-95% Occupancy |
| 25%-50% Occupancy | 95%-100%+ Occupancy |
| 50%-75% Occupancy | No Parking |

**EXHIBIT 11
SATURDAY PEAK OCCUPANCY
UWM NOT IN SESSION (SUMMER)
FUTURE SUPPLY**

APPENDIX

PARKING COUNT DATA

Weekday Parking Use: Week of April 26-28, 2022 (UWM in Session)

Lake Drive Segments	Side of Road	Parking Supply	Weekday AM			Weekday Midday				Weekday PM			
			6 AM - 7 AM	7 AM - 8 AM	8 AM - 9 AM	10 AM - 11 AM	11 AM - 12 PM	12 PM - 1 PM	1 PM - 2 PM	4 PM - 5 PM	5 PM - 6 PM	6 PM - 7 PM	7 PM - 8 PM
Edgewood Avenue to Newport Avenue	West	23	1	1	1	2	3	2	3	1	1	1	1
	East	25	0	0	0	1	0	0	0	0	0	0	0
Newport Avenue to Hartford Avenue	West	6	0	0	0	0	0	0	0	0	0	0	0
	East	15	0	0	0	0	0	0	1	0	0	0	0
Hartford Avenue to Hampshire Street	West	17	0	0	0	1	0	0	0	2	0	0	0
	East	16	0	0	0	0	0	0	1	0	0	0	0
Hampshire Street to Kenwood Boulevard	West	NP	0	0	0	0	0	0	0	0	0	0	0
	East	NP	0	0	0	0	0	0	0	0	0	0	0
Kenwood Boulevard to Linwood Avenue	West	15	0	0	0	0	0	0	0	0	0	0	1
	East	18	0	0	0	0	0	0	0	0	0	0	1
Linwood Avenue to Locust Street	West	19	0	0	0	2	1	2	2	2	4	3	0
	East	24	0	0	0	0	0	0	0	1	11	6	1
Locust Street to Newberry Boulevard	West	16	1	1	1	1	2	1	1	1	1	0	1
	East	19	0	0	0	0	0	0	0	0	2	0	0
Total Lake Drive Occupancy			2	2	2	7	6	5	8	7	19	10	5
Total Side Street Occupancy		197	19	29	23	35	40	36	39	35	28	20	17
Total Study Area Occupancy		410	21	31	25	42	46	41	47	42	47	30	22

Weekday Parking Use: Week of April 26-28, 2022 (UWM in Session)

Cross-Street Segments	Side of Road	Parking Supply	Weekday AM			Weekday Midday				Weekday PM			
			6 AM - 7 AM	7 AM - 8 AM	8 AM - 9 AM	10 AM - 11 AM	11 AM - 12 PM	12 PM - 1 PM	1 PM - 2 PM	4 PM - 5 PM	5 PM - 6 PM	6 PM - 7 PM	7 PM - 8 PM
Edgewood Avenue	North	10	0	0	0	0	1	0	0	3	0	0	0
	South	10	0	2	1	3	3	3	2	0	0	0	0
Newport Avenue	North	NP	0	0	0	0	0	0	0	0	0	0	0
	South	15	2	2	1	1	0	0	0	1	0	0	0
Hartford Avenue	North*	6	0	0	0	1	1	0	0	1	0	1	0
	South	14	0	1	3	13	14	13	14	11	9	3	1
Hampshire Street	North	15	3	3	3	4	5	5	4	3	4	3	3
	South	15	11	10	10	8	10	10	11	9	10	10	10
Kenwood Boulevard	North	16	1	5	2	3	2	3	4	1	0	1	1
	South	16	0	4	0	1	1	1	2	2	2	1	1
Linwood Avenue	North	16	0	0	0	0	1	0	0	0	0	0	0
	South	17	0	0	0	0	1	0	0	0	0	0	0
Locust Street	North	14	1	1	1	1	0	1	0	2	2	1	0
	South	10	1	1	2	0	0	0	2	1	1	0	1
Newberry Boulevard	North	11	0	0	0	0	1	0	0	0	0	0	0
	South	12	0	0	0	0	0	0	0	1	0	0	0
Total Side Street Occupancy		197	19	29	23	35	40	36	39	35	28	20	17

*Parking restrictions (No Parking 7A-7P) on the north side of Hartford result in six (6) spaces available on weekdays.

Saturday Parking Use: April 30 & April 7, 2022 (UWM in Session)

Lake Drive Segments	Side of Road	Parking Supply	Saturday AM			Saturday Midday				Saturday PM			
			6 AM - 7 AM	7 AM - 8 AM	8 AM - 9 AM	10 AM - 11 AM	11 AM - 12 PM	12 PM - 1 PM	1 PM - 2 PM	4 PM - 5 PM	5 PM - 6 PM	6 PM - 7 PM	7 PM - 8 PM
Edgewood Avenue to Newport Avenue	West	23	3	3	3	2	2	2	2	0	1	1	2
	East	25	0	0	0	0	0	0	0	0	0	0	0
Newport Avenue to Hartford Avenue	West	6	0	0	0	1	0	0	0	0	0	0	0
	East	15	0	0	1	0	2	0	0	0	0	0	0
Hartford Avenue to Hampshire Street	West	17	0	0	0	0	0	0	0	0	0	1	0
	East	16	0	1	1	1	2	1	1	0	0	0	0
Hampshire Street to Kenwood Boulevard	West	NP	0	0	0	0	0	0	0	0	0	0	0
	East	NP	0	0	0	0	0	0	0	0	0	0	0
Kenwood Boulevard to Linwood Avenue	West	15	0	0	0	0	2	1	1	0	0	0	0
	East	18	0	0	0	0	0	0	0	0	0	0	0
Linwood Avenue to Locust Street	West	19	0	1	0	0	0	0	0	0	1	0	0
	East	24	0	0	1	0	0	3	2	0	0	0	0
Locust Street to Newberry Boulevard	West	16	1	1	1	1	1	3	4	1	1	1	1
	East	19	0	0	0	1	1	0	0	1	1	0	1
Total Lake Drive Occupancy			4	6	7	6	10	10	10	2	4	3	4
Total Side Street Occupancy		206	19	22	22	22	22	22	23	21	20	24	24
Total Study Area Occupancy		419	23	28	29	28	32	32	33	23	24	27	28

Saturday Parking Use: April 30 & April 7, 2022 (UWM in Session)

Cross-Street Segments	Side of Road	Parking Supply	Saturday AM			Saturday Midday				Saturday PM			
			6 AM - 7 AM	7 AM - 8 AM	8 AM - 9 AM	10 AM - 11 AM	11 AM - 12 PM	12 PM - 1 PM	1 PM - 2 PM	4 PM - 5 PM	5 PM - 6 PM	6 PM - 7 PM	7 PM - 8 PM
Edgewood Avenue	North	10	0	0	0	0	2	0	0	0	0	0	0
	South	10	1	1	1	1	1	2	1	0	0	0	0
Newport Avenue	North	NP	0	0	0	0	0	0	0	0	0	0	0
	South	15	0	1	1	2	1	1	1	1	2	3	2
Hartford Avenue	North	15	0	0	0	0	0	1	1	0	0	0	0
	South	14	4	4	3	3	3	4	4	1	1	3	2
Hampshire Street	North	15	2	2	3	4	3	3	5	5	5	5	6
	South	15	10	10	10	7	8	6	5	6	6	6	5
Kenwood Boulevard	North	16	1	2	2	2	2	2	3	1	0	1	2
	South	16	0	0	0	1	1	1	1	0	1	2	1
Linwood Avenue	North	16	0	0	0	0	0	0	0	3	3	2	3
	South	17	0	0	0	0	0	0	0	0	0	0	0
Locust Street	North	14	1	2	2	1	1	1	1	2	2	2	2
	South	10	0	0	0	0	0	0	0	1	0	0	1
Newberry Boulevard	North	11	0	0	0	0	0	0	0	1	0	0	0
	South	12	0	0	0	1	0	1	1	0	0	0	0
Total Side Street Occupancy		206	19	22	22	22	22	22	23	21	20	24	24

Weekday Parking Use: June 15 (AM & Midday) & June 20 (PM), 2022 (UWM Not in Session)

Lake Drive Segments	Side of Road	Parking Supply	Weekday AM			Weekday Midday				Weekday PM			
			6 AM - 7 AM	7 AM - 8 AM	8 AM - 9 AM	10 AM - 11 AM	11 AM - 12 PM	12 PM - 1 PM	1 PM - 2 PM	4 PM - 5 PM	5 PM - 6 PM	6 PM - 7 PM	7 PM - 8 PM
Edgewood Avenue to Newport Avenue	West	23	2	3	3	5	6	5	4	1	1	1	1
	East	25	0	0	1	1	1	6	2	1	1	0	0
Newport Avenue to Hartford Avenue	West	6	0	0	0	0	0	0	0	0	0	0	0
	East	15	0	0	0	0	0	2	0	0	0	0	0
Hartford Avenue to Hampshire Street	West	17	0	0	1	5	5	6	6	1	0	1	0
	East	16	0	0	0	0	0	0	0	0	0	0	0
Hampshire Street to Kenwood Boulevard	West	NP	0	0	0	0	0	0	0	0	0	0	0
	East	NP	0	0	0	0	0	0	0	0	0	0	0
Kenwood Boulevard to Linwood Avenue	West	15	0	0	0	1	2	0	1	0	0	0	0
	East	18	0	0	1	1	1	1	1	0	1	1	0
Linwood Avenue to Locust Street	West	19	0	0	0	4	2	2	2	2	1	1	1
	East	24	1	1	3	2	2	1	1	1	1	3	4
Locust Street to Newberry Boulevard	West	16	0	0	0	1	1	1	0	0	0	2	2
	East	19	0	0	0	0	0	0	0	0	0	1	2
Total Lake Drive Occupancy			3	4	9	20	20	24	17	6	5	10	10
Total Side Street Occupancy		197	26	32	34	37	42	46	40	34	31	29	25
Total Study Area Occupancy		410	29	36	43	57	62	70	57	40	36	39	35

Weekday Parking Use: June 15 (AM & Midday) & June 20 (PM), 2022 (UWM Not in Session)

Cross-Street Segments	Side of Road	Parking Supply	Weekday AM			Weekday Midday				Weekday PM			
			6 AM - 7 AM	7 AM - 8 AM	8 AM - 9 AM	10 AM - 11 AM	11 AM - 12 PM	12 PM - 1 PM	1 PM - 2 PM	4 PM - 5 PM	5 PM - 6 PM	6 PM - 7 PM	7 PM - 8 PM
Edgewood Avenue	North	10	0	0	0	0	1	1	1	0	0	1	0
	South	10	0	2	2	2	4	3	2	1	3	1	1
Newport Avenue	North	NP	0	0	0	0	0	0	0	0	0	0	0
	South	15	0	0	1	2	3	3	2	5	3	2	1
Hartford Avenue	North*	6	1	1	1	2	1	0	0	3	1	2	2
	South	14	2	3	5	6	6	5	8	3	3	1	0
Hampshire Street	North	15	6	4	4	6	8	9	8	6	6	7	7
	South	15	8	8	8	7	3	7	6	7	4	5	3
Kenwood Boulevard	North	16	5	7	7	6	5	6	6	2	1	1	0
	South	16	1	4	3	3	7	7	4	2	2	2	6
Linwood Avenue	North	16	0	0	0	0	0	0	0	2	4	1	1
	South	17	0	0	0	0	0	0	0	0	1	1	1
Locust Street	North	14	2	0	0	1	0	1	1	1	1	3	2
	South	10	1	1	1	1	3	2	1	0	1	1	0
Newberry Boulevard	North	11	0	0	0	1	0	1	1	2	1	0	0
	South	12	0	2	2	0	1	1	0	0	0	1	1
Total Side Street Occupancy			197			37	42	46	40	34	31	29	25

Saturday Parking Use: July 9, 2022 (UWM Not in Session)

Lake Drive Segments	Side of Road	Parking Supply	Saturday AM			Saturday Midday				Saturday PM			
			6 AM - 7 AM	7 AM - 8 AM	8 AM - 9 AM	10 AM - 11 AM	11 AM - 12 PM	12 PM - 1 PM	1 PM - 2 PM	4 PM - 5 PM	5 PM - 6 PM	6 PM - 7 PM	7 PM - 8 PM
Edgewood Avenue to Newport Avenue	West	23	2	2	2	4	2	1	3	4	5	9	12
	East	25	1	2	2	1	1	1	1	1	3	11	10
Newport Avenue to Hartford Avenue	West	6	0	0	0	0	0	0	0	0	0	0	0
	East	15	0	0	0	0	0	0	0	0	4	0	0
Hartford Avenue to Hampshire Street	West	17	0	0	0	0	0	0	0	0	0	0	0
	East	16	0	0	0	1	1	0	0	0	0	0	4
Hampshire Street to Kenwood Boulevard	West	NP	0	0	0	0	0	0	0	0	0	0	0
	East	NP	0	0	0	0	0	0	0	0	0	0	0
Kenwood Boulevard to Linwood Avenue	West	15	0	0	0	1	1	1	2	1	1	0	0
	East	18	0	0	0	1	1	0	0	5	6	6	4
Linwood Avenue to Locust Street	West	19	0	0	0	0	1	3	2	14	8	5	3
	East	24	0	0	0	1	4	6	10	23	24	22	14
Locust Street to Newberry Boulevard	West	16	0	1	1	0	1	0	0	1	1	0	0
	East	19	0	0	1	0	1	0	0	1	1	1	1
Total Lake Drive Occupancy			3	5	6	9	13	12	18	50	53	54	48
Total Side Street Occupancy		206	25	24	25	36	40	37	35	37	40	39	34
Total Study Area Occupancy		419	28	29	31	45	53	49	53	87	93	93	82

Saturday Parking Use: July 9, 2022 (UWM Not in Session)

Cross-Street Segments	Side of Road	Parking Supply	Saturday AM				Saturday Midday					Saturday PM			
			6 AM - 7 AM	7 AM - 8 AM	8 AM - 9 AM		10 AM - 11 AM	11 AM - 12 PM	12 PM - 1 PM	1 PM - 2 PM		4 PM - 5 PM	5 PM - 6 PM	6 PM - 7 PM	7 PM - 8 PM
Edgewood Avenue	North	10	0	0	0		0	0	0	0		0	0	1	0
	South	10	0	0	0		0	0	0	0		0	0	0	0
Newport Avenue	North	NP	0	0	0		0	0	0	0		2	1	1	0
	South	15	0	0	0		1	1	1	0		1	1	2	2
Hartford Avenue	North	15	0	0	0		0	0	1	2		0	1	0	0
	South	14	3	3	3		3	3	2	2		3	2	2	2
Hampshire Street	North	15	4	4	4		7	6	4	4		5	7	8	6
	South	15	8	8	9		8	9	8	7		12	13	12	10
Kenwood Boulevard	North	16	6	6	6		8	10	10	10		7	6	6	6
	South	16	2	2	2		7	8	8	8		4	4	3	4
Linwood Avenue	North	16	0	0	0		0	0	0	0		0	0	0	0
	South	17	0	0	0		0	0	0	0		0	0	0	0
Locust Street	North	14	1	1	1		1	1	1	1		2	3	2	2
	South	10	1	0	0		1	2	1	1		1	2	2	2
Newberry Boulevard	North	11	0	0	0		0	0	0	0		0	0	0	0
	South	12	0	0	0		0	0	1	0		0	0	0	0
Total Side Street Occupancy		206	25	24	25		36	40	37	35		37	40	39	34