

MEMORANDUM

DATE: January 3, 2023

TO: William D. Adams
JW Capital Partners, LLC
34 Washington Street, Suite 230
Wellesley, MA 02481

FROM: Robert J. Michaud, P.E. – Managing Principal 
Daniel A. Dumais, P.E. – Senior Transportation Engineer

RE: **Proposed Mixed-Use Development (Exchange Place) – Area Parking Evaluation**
57 Main Street, Marlborough, MA

MDM Transportation Consultants, Inc. (MDM) has prepared this parking assessment for a proposed mixed-use development to be located at 57 Main Street in Marlborough, Massachusetts. The location of the site relative to adjacent roadways is shown in **Figure 1**. Specifically, this evaluation provides an overview of the local zoning parking requirements for the Marlborough Village area, includes an inventory of several City owned parking lots, provides a comparison to a prior 2014 Downtown Parking Analysis prepared by the Metropolitan Area Planning Council (MAPC), and provides a shared parking analysis.

Key Findings are as follows:

- *Proposed Programming and Parking Requirements.* The project is proposed to include a 99-unit/116 Bedroom multi-family apartment building with 5,050± sf of ground-level retail/restaurant space. As allowed under zoning, a total parking supply of 80 spaces is required for the Site provided that a “shared” car service is provided at the building. The current plan is to have a car share on-site via a company called Envoy. Per section 650-34E(1)(a)[2] of the City’s Zoning Ordinances, off-site spaces may be utilized within City owned parking lots that are located with 1,000 feet of the development to fulfill the requirement subject to a payment-in-lieu for each publicly owned spaces counted towards the minimum requirement. Parking for the project is proposed to include 25 on-site garage spaces and 55-off-site spaces to be utilized within City owned parking lots. The retail/restaurant space does not require designated on-site parking within the Marlborough Village district.

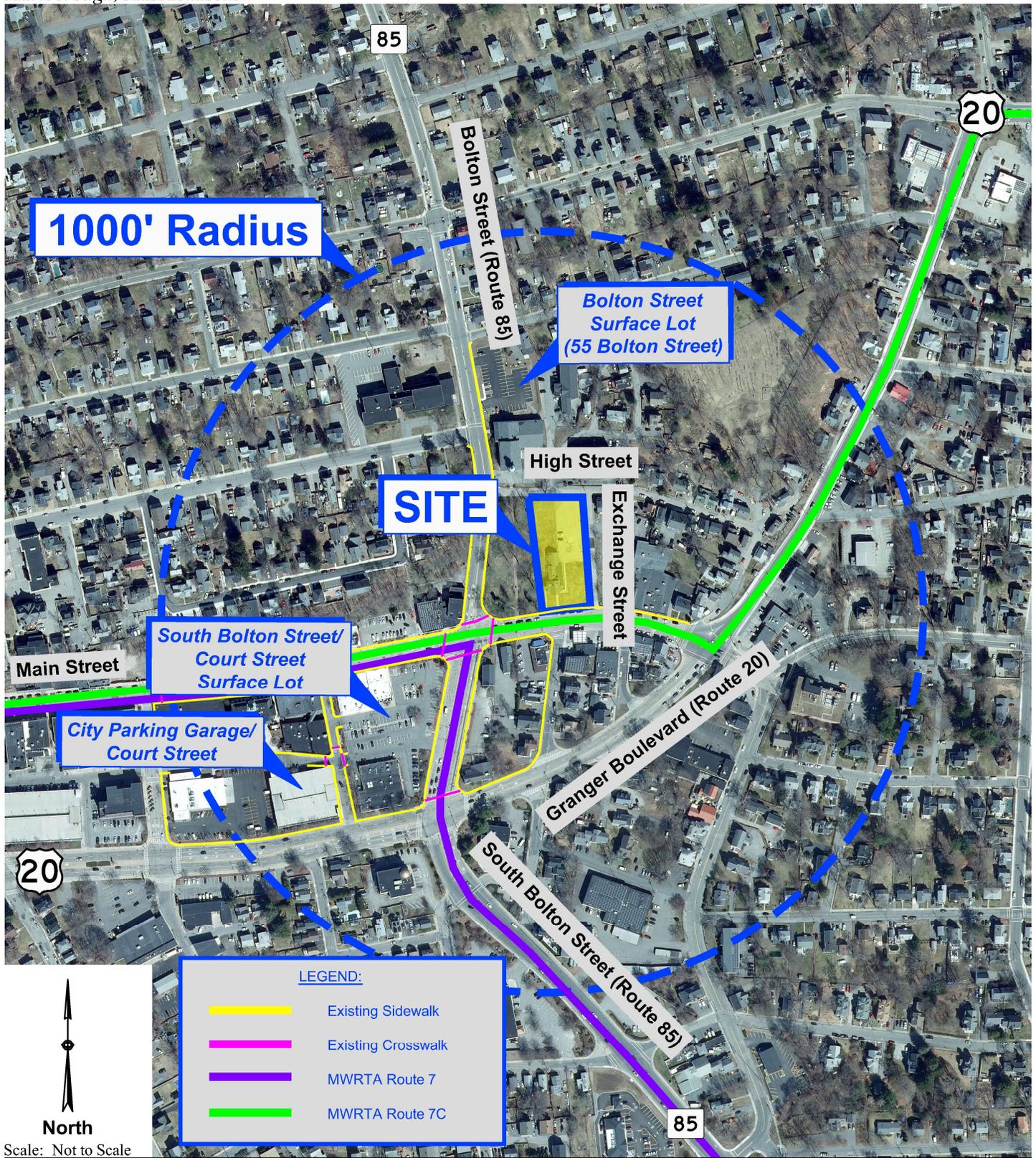


Figure 1

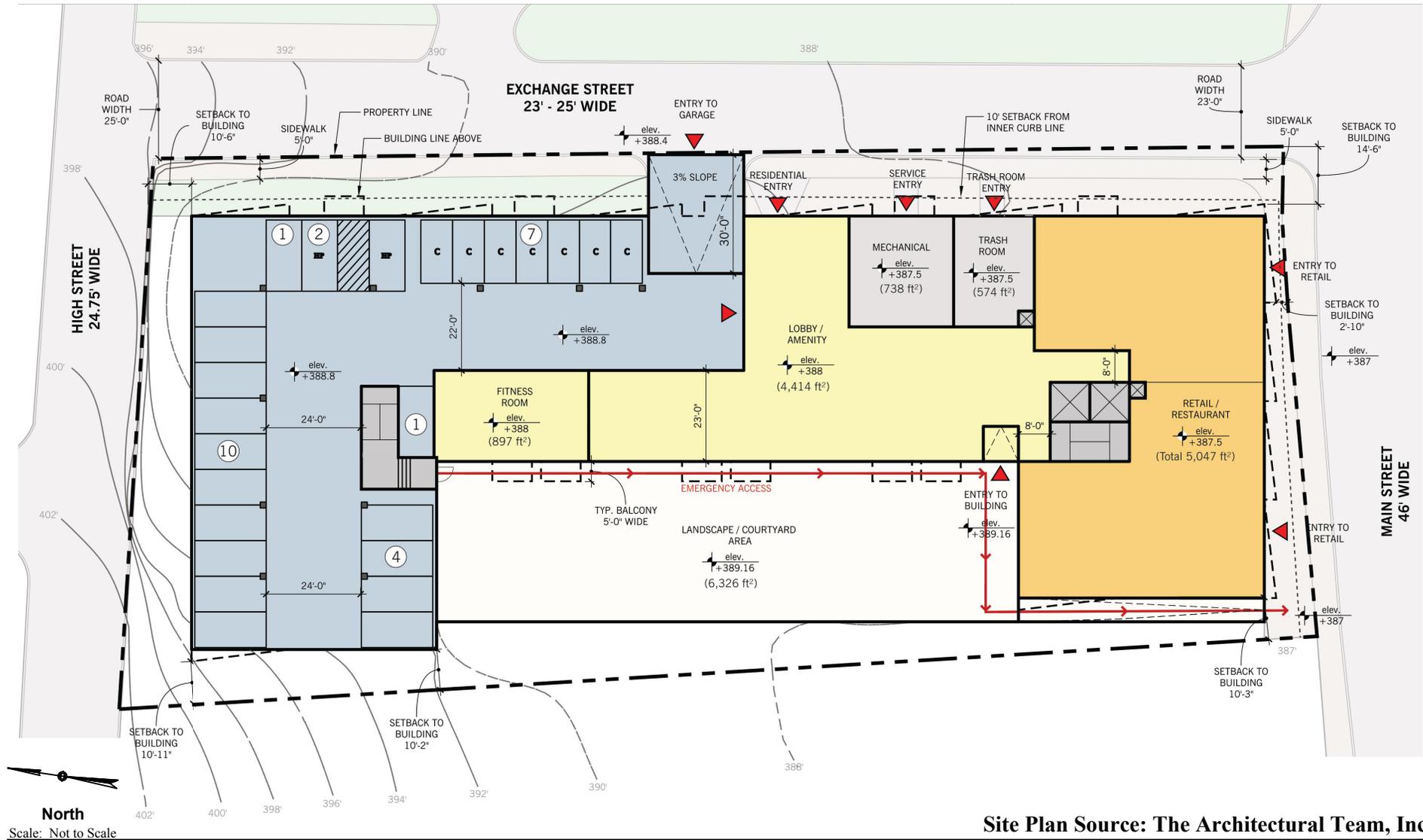
- *Inventoried Parking Supply.* The three City owned lots that were inventoried include a total of 316± marked parking spaces including 282 unrestricted spaces, 10 electric vehicle spaces, 15 accessible spaces, and 9 reserved spaces. The parking lot at 55 Bolton Street is located approximately 400 feet to the north of the Site and provides 49 marked parking spaces. The uncovered parking lot between Bolton Street and Court Street is located approximately 500 feet to the west of the Site and provides 113 marked parking spaces. The two surface lots currently have overnight parking restriction between 2:00 AM and 7:00 AM. The 3-story parking garage on Court Street is located approximately 800 feet to the west of the Site and provides 154 marked parking spaces. The garage currently has an overnight parking restriction between 2:00 AM and 7:00 AM for cars parked on the ground floor, but no overnight restriction exists for the second and third floors.

- *Observed Peak Parking Demand.* The analysis indicated that on weekdays the peak parking demands for the City lots occur during the midday period (1:00 pm) with a peak parking demand between 215 and 250 vehicles. The overnight periods were observed to have a peak parking demand of approximately 50 to 60 vehicles which results in a surplus of more than 80%. Likewise, on a Saturday the peak parking demand of 152 vehicles occurred during the midday period (1:00 pm). The overnight period (12:00 am – 4:00 am) were observed to have a peak parking demand of approximately 55 vehicles which results in a surplus of more than 80%.

In summary, there is an overall surplus of parking within the three City lots (55 Bolton Street Lot, South Bolton/Court Street Lot, and Court Street Garage) to accommodate the project. The Proponent shall continue to work with the City to identify appropriate parking protocols and requirements as well as any potential changes in parking policies within the City owned lots to accommodate overnight parking.

SITE DESCRIPTION

The project is proposed to include a 99-unit/116 Bedroom multi-family apartment building with 5,050± sf of ground-level retail/restaurant space. On-site parking will be provided for 25 vehicles within an on-site parking garage with access/egress via Exchange Street. The preliminary site layout plan prepared by Architectural Group; Inc. is shown in **Figure 2**.



Site Plan Source: The Architectural Team, Inc.

Figure 2

PARKING ANALYSIS

Parking Inventory – City Parking Lots – 2014 MAPC Study

A Downtown Parking Analysis was prepared by MAPC in 2014 that inventoried City parking provided in the area including the Court Street Garage and South Bolton/Court Street Lot. The 55 Bolton Street Lot did not exist at the time of the study.

The 2014 MAPC study provided parking observation on just a single weekday, Tuesday, November 19, 2013, between the hours of 9:00 am and 2:00 pm. The report indicated that the Court Street Garage and South Bolton/Court Street Lots were observed to have a peak parking demand of 186 vehicles at 11:00 am resulting in a surplus of at least 81 spaces (30%) during the critical weekday midday period. MDM notes that the Newton Street Garage and its 229 spaces, falling just outside the 1,000 feet from the Site, was observed to be at least 50% vacant through the entire study period. Relevant pages from the 2014 MAPC study are included in the **Attachments**.

Parking Inventory – City Parking Lots – December 2022

The parking inventory for three (3) City owned off-site parking locations within 1,000 feet of the Site were observed over a 24-hour period on Tuesday, December 20, 2022, Friday, December 16, 2022, and Saturday, December 17, 2022. Industry standards as outlined by Urban Land Institute (ULI) in the third edition of *Shared Parking* indicates that the parking observations were conducted during the peak month conditions for shopping center uses, restaurant uses, office uses, and residential uses which are all located within the Marlborough Village area. The three City owned lots that were inventoried include a total of 316± marked parking spaces including 282 unrestricted spaces, 10 electric vehicle spaces, 15 accessible spaces, and 9 reserved spaces. **Figure 1** depicts the City owned lots with respect to the Site with the key aspects of each lot as follows:

- *55 Bolton Street Lot:* The parking lot at 55 Bolton Street is located approximately 400 feet to the north of the Site and provides 49 marked parking spaces. The lot provides 3 handicap spaces and 6 charging stations for electric vehicles. The lot currently has an overnight parking restriction between 2:00 AM and 7:00 AM. This lot was observed to accommodate drop-off and pick-up activity for adjacent Freeman School during the weekday mornings and midday periods.
- *South Bolton/Court Street Lot:* This uncovered parking lot between Bolton Street and Court Street is located approximately 500 feet to the west of the Site and provides 113 marked parking spaces. This City of Marlborough lot provides 6 handicap spaces and 9 spaces reserved specifically for nearby businesses, leaving 98 spaces available for public use. The lot currently has an overnight parking restriction between 2:00 AM and 5:00 AM.

- *Court Street Garage:* This 3-story parking garage on Court Street is located approximately 800 feet to the west of the Site and provides 154 marked parking spaces. This City of Marlborough garage provides 6 handicap spaces and 4 charging stations for electric vehicles, leaving 144 spaces available for public use. The garage currently has an overnight parking restriction between 2:00 AM and 7:00 AM for cars parked on the ground floor, but no overnight restriction exists for the second and third floors. Commercial vehicles utilizing this garage are also restricted to only the ground floor parking spaces.

Observed Peak Parking Demand

A parking accumulation survey was conducted to identify parking trends at the three City owned lots and included continuous observations over 24-hour periods on a Tuesday, Friday, and Saturday in December 2022. Hourly parking graphs are provided in **Figure 3**, **Figure 4**, and **Figure 5** with detailed parking data provided in the **Attachments**.

As shown in **Figures 3 – 5**:

- *Weekday.* The analysis indicated that the peak parking demands for the City lots occur during the midday period (1:00 pm) with a peak parking demand of between 215 and 250 vehicles. The overnight periods were observed to have a peak parking demand of approximately 50 to 60 vehicles which results in a surplus of more than 80%.
- *Saturday.* The peak parking demand of 152 vehicles occurred on a Saturday during the midday period (1:00 pm). The overnight period (12:00 am – 4:00 am) were observed to have a peak parking demand of approximately 55 vehicles which is results which results in a surplus of more than 80%.

Zoning Parking Requirements

A total parking supply of 80 spaces is required for the Site provided that a “shared” car service is provided at the building. The current plan is to have a car share on-site via a company called Envoy. Per section 650-34E(1)(a)[2] of the City’s Zoning Ordinances, off-site spaces may be utilized within City owned parking lots that are located with 1,000 feet of the development to fulfill the requirement subject to a payment-in-lieu for each publicly owned spaces counted towards the minimum requirement with a 10% reduction if a car share space is provided. Parking for the project is proposed to include 25 on-site garage spaces and 55-off-site spaces to be utilized within City owned parking lots. The retail/restaurant space does not require on-site parking within the Marlborough Village District.

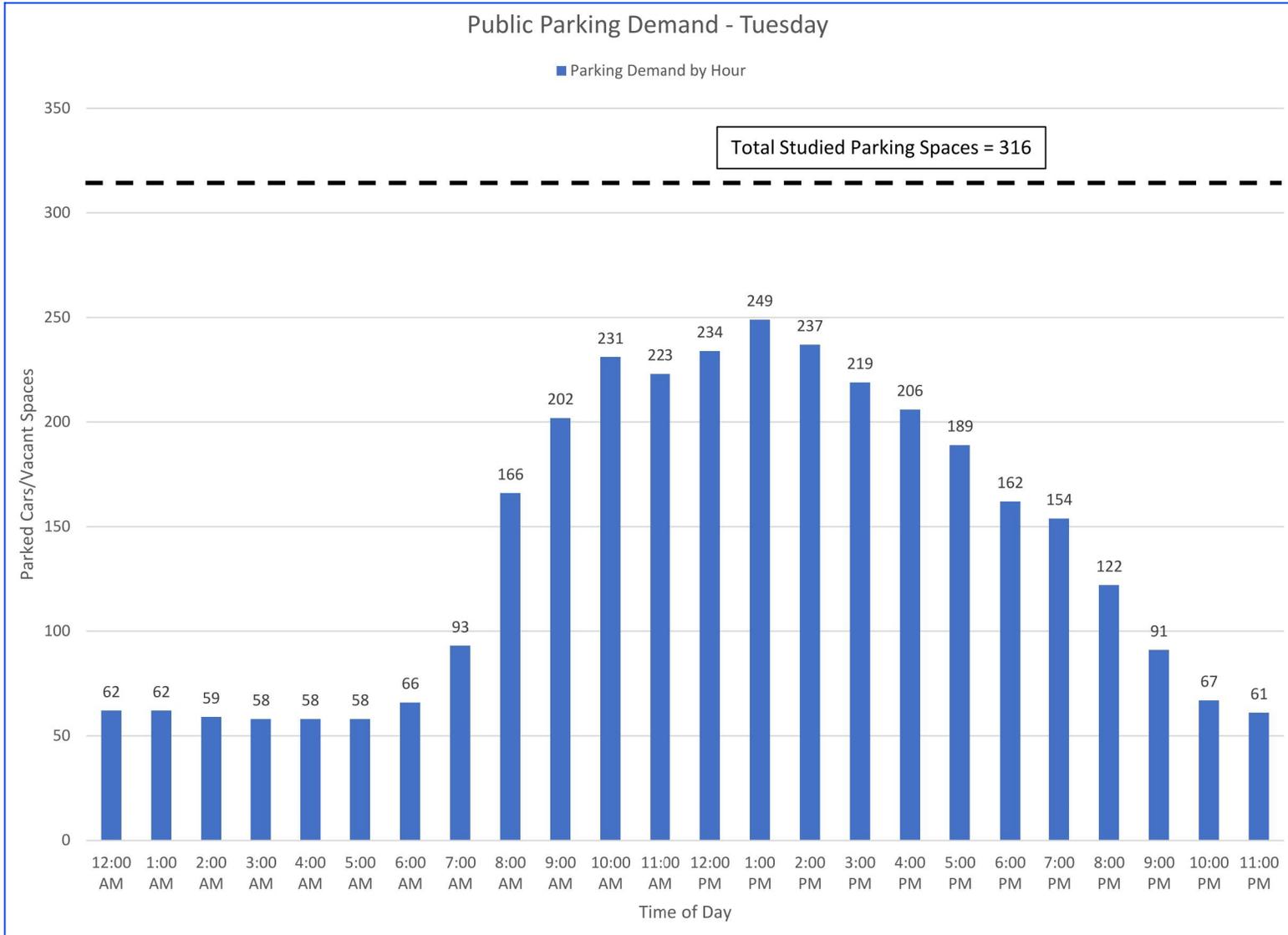


Figure 3

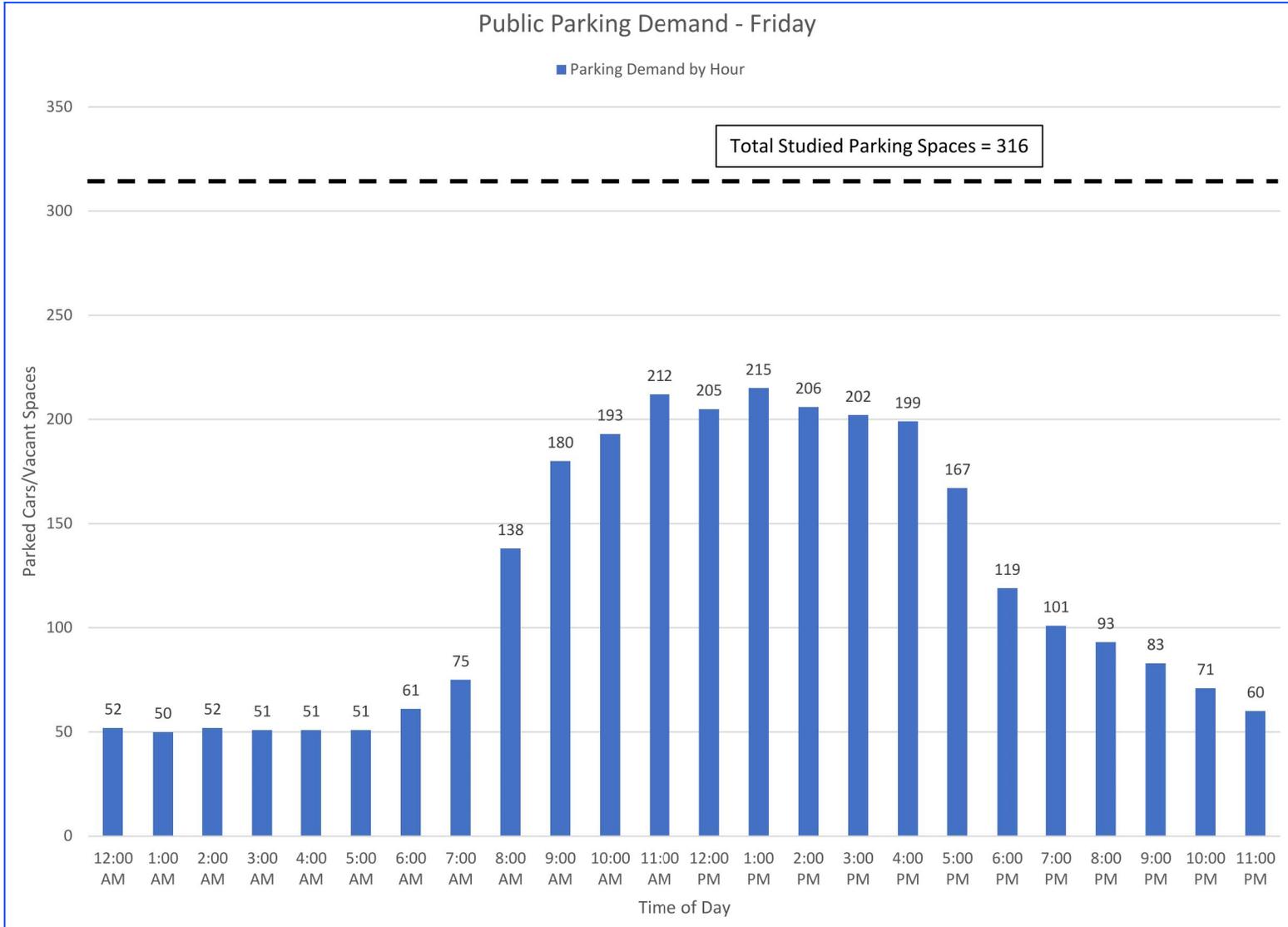


Figure 4

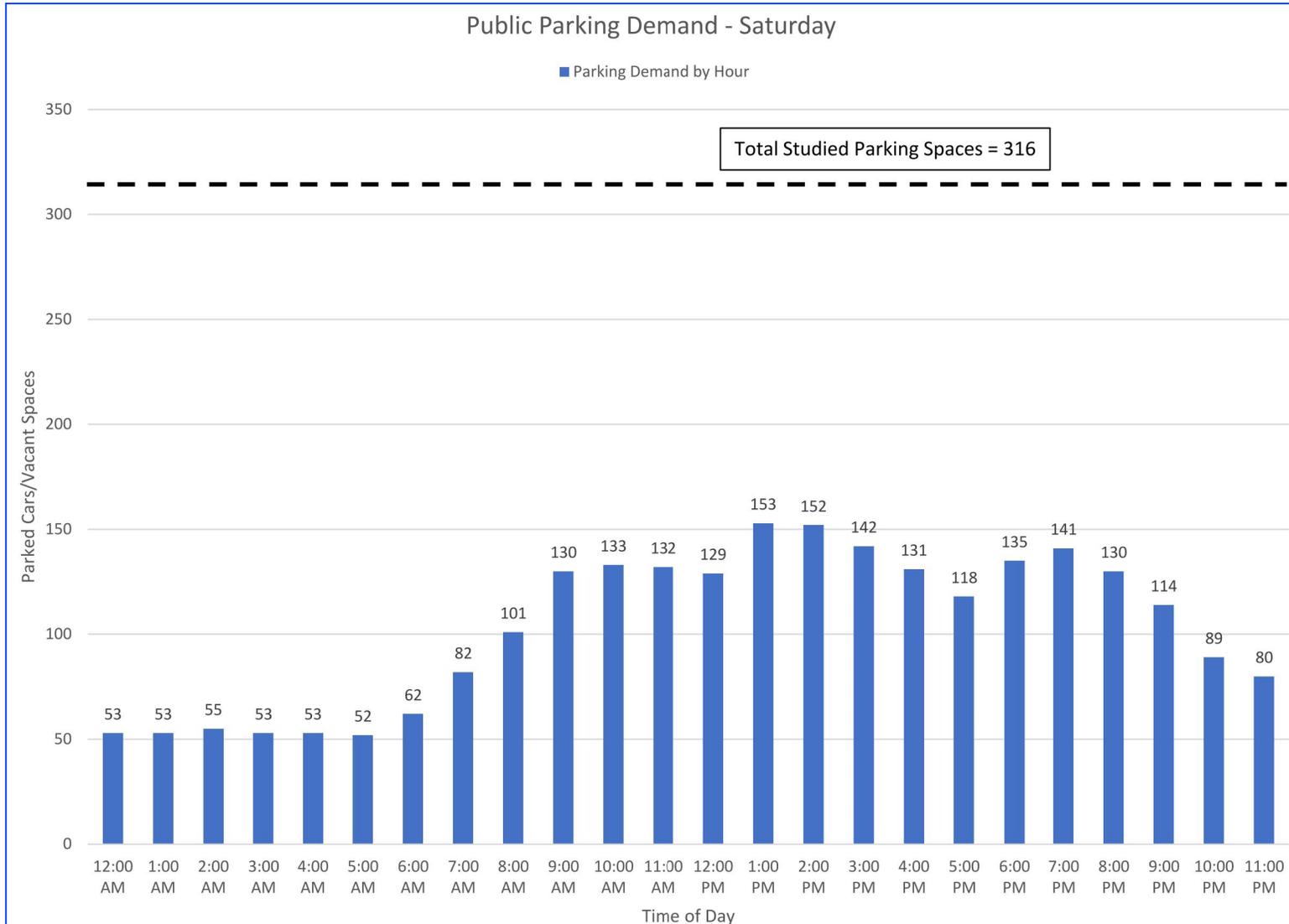


Figure 5

Time-of-day factors published by Institute of Transportation Engineers (ITE) in *Parking Generation*¹ were used to model hourly the parking demands for the proposed residential use. The parking characteristic of the 55 off-site spaces throughout the day on a weekday and Saturday are shown in **Figure 6** and **Figure 7**. The published ITE time-of-day factors and detailed calculations for the multifamily residential project are provided in the **Attachments**.

As shown in **Figure 6** and **Figure 7**:

- *Weekday*. The analysis indicated that the peak parking demands for a multifamily residential project generally occur overnight between the hours of 12:00 am and 4:00 am with parking demands that are 35% to 50% less during the typical daytime hours (8:00 am to 6:00 pm) which are the critical parking periods for the City lots.
- *Saturday*. The analysis indicated that the peak parking demands for a multifamily residential project generally occur overnight between the hours of 12:00 am and 4:00 am with parking demands that are 35% less during the critical midday period (1:00 pm).

Shared Parking Analysis

The observed parking vacancies for the three City lots (55 Bolton Street Lot, South Bolton/Court Street Lot, and Court Street Garage with the removal of electric vehicle (10), accessible spaces (15), and reserved spaces (9) result in 282 available spaces was then compared to the peak hourly parking demands for the residential units as shown in **Figure 8** (Tuesday), **Figure 9** (Friday), and **Figure 10** (Saturday).

As shown in **Figures 8 – 10**:

- *Weekday*. There is ample parking available for the multifamily residential project during the overnight period between the hours of 12:00 am and 4:00 am on both a weekday and Friday. During the critical midday periods for the Marlborough Village area parking is more constrained at times but can accommodate the demands of the proposed Site with a surplus of up to 14% excluding accessible, EV, and reserved spaces. Field observations indicate that the 55 Bolton Street Lot was observed to accommodate drop-off and pick-up activity for adjacent Freeman School on Tuesday, December 20, during the weekday morning drop-off period (8:15 – 8:45 am) and midday pick-up period (1:45 – 2:15 pm). This activity appears to be occasional and possible due to a school event as it did not occur on Friday, December 16, 2022. During all other time periods studied, the lot was observed to have a vacancy rate of at least 85%.

¹*Parking Generation*, 5th Edition; Institute of Transportation Engineers; Washington, DC; January 2019.

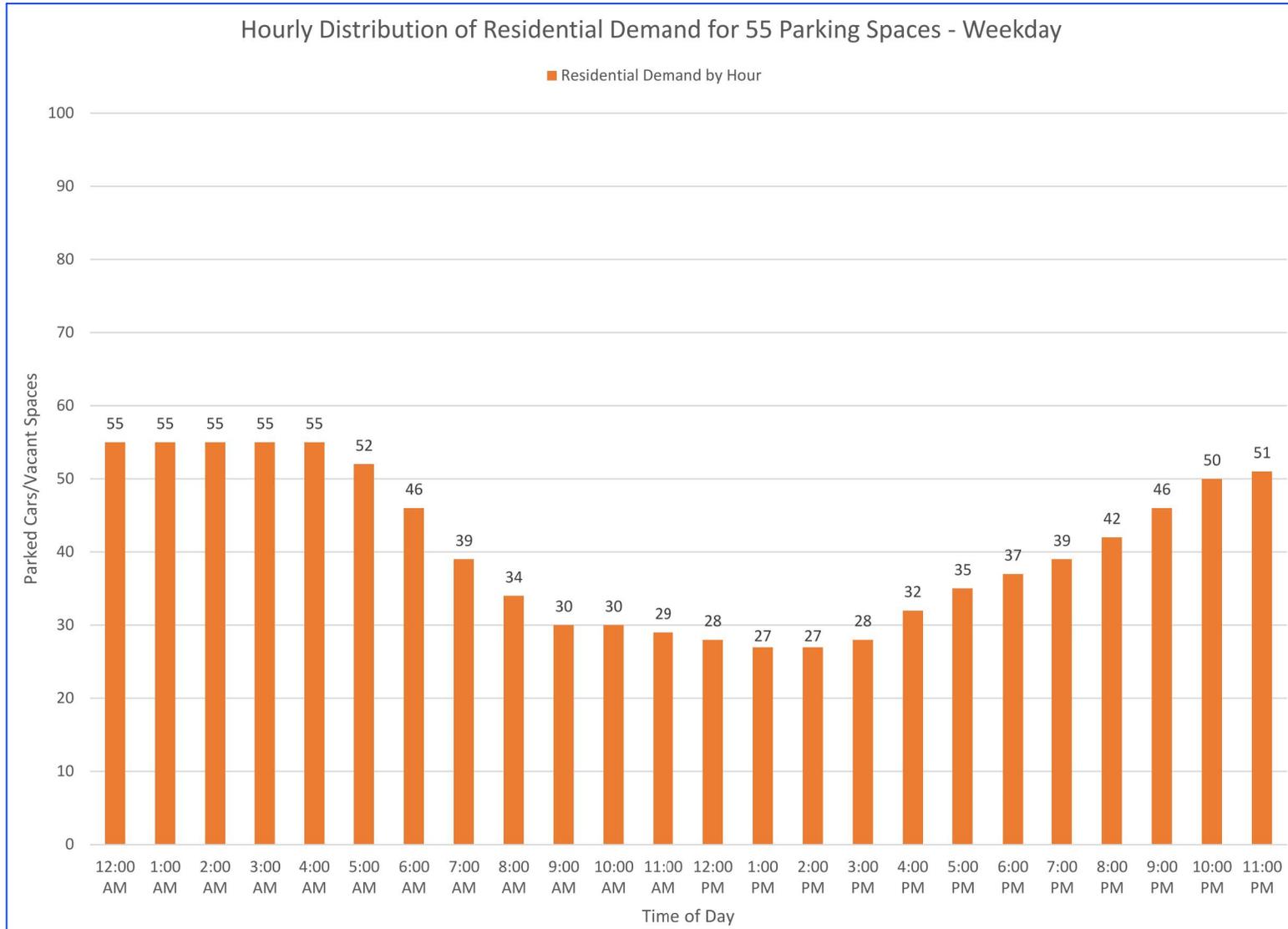


Figure 6

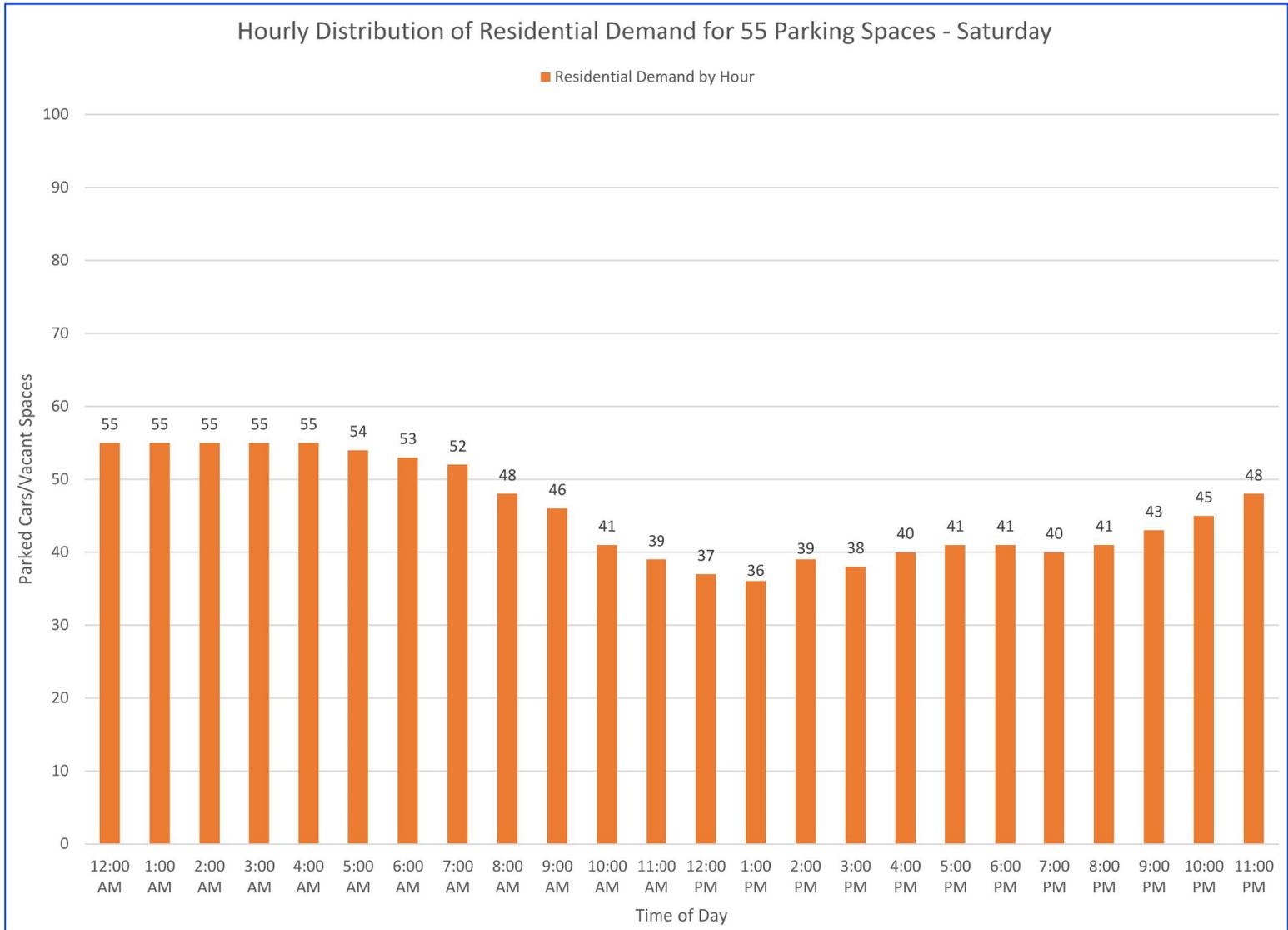


Figure 7

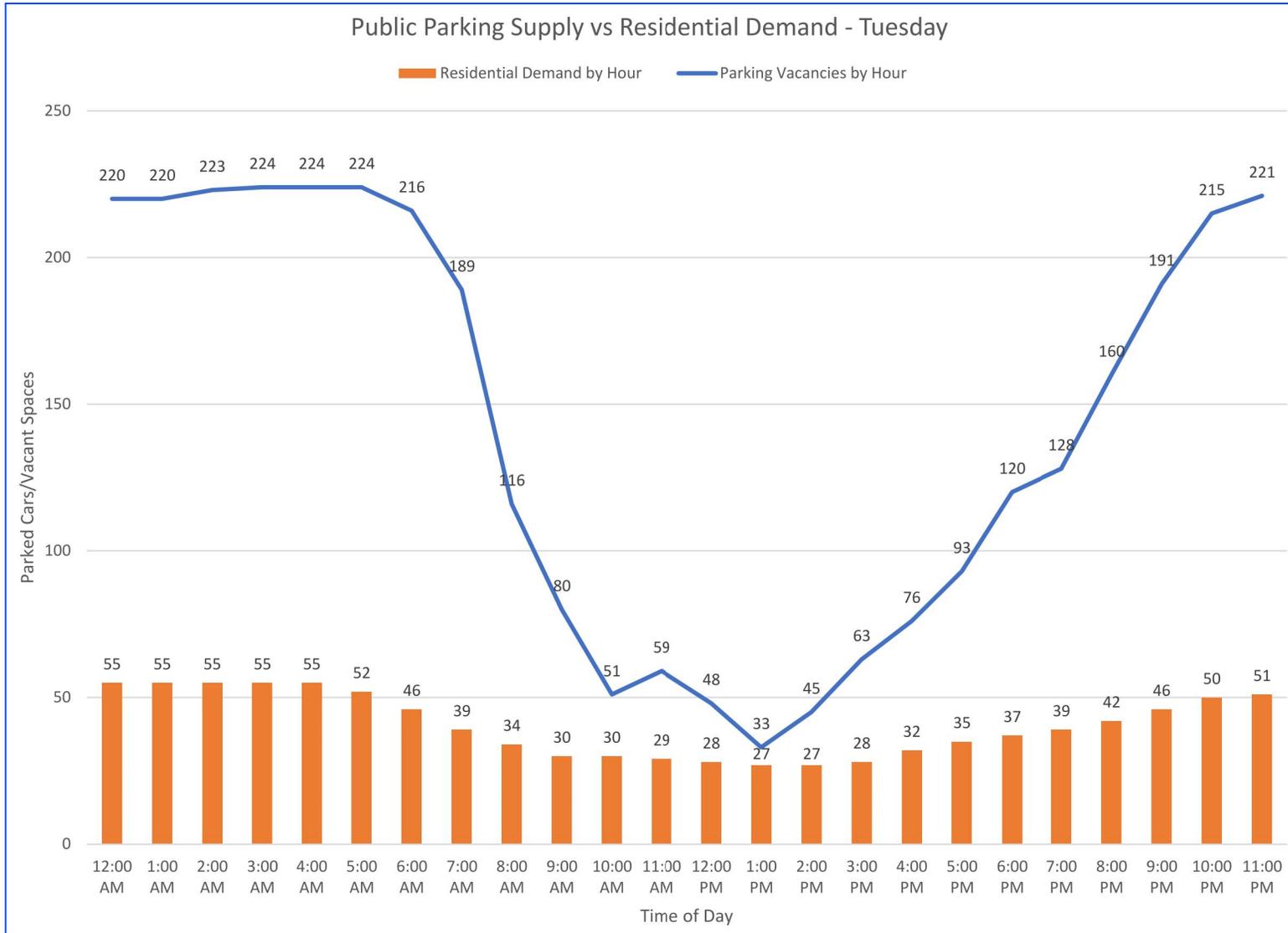


Figure 8

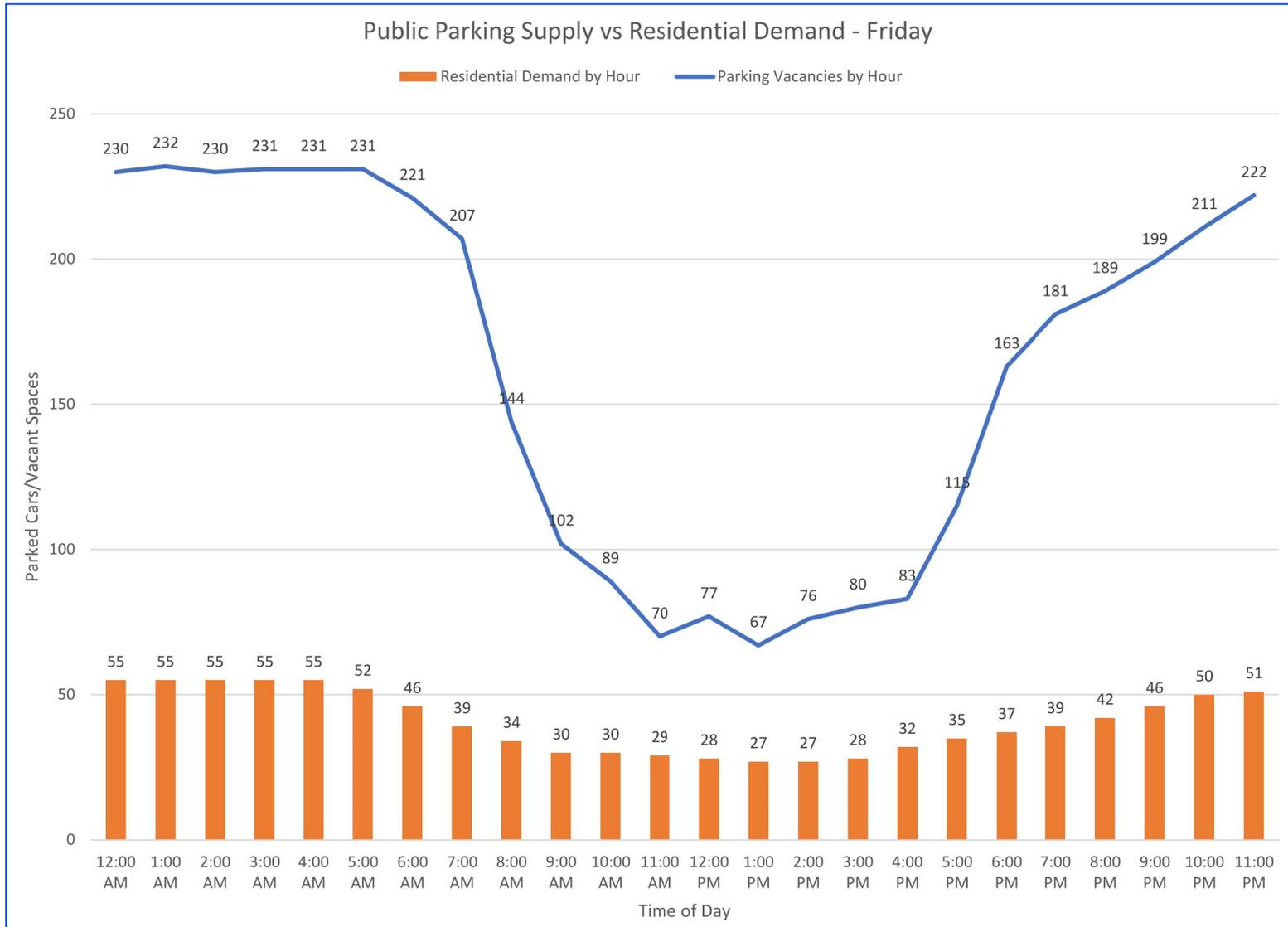


Figure 9

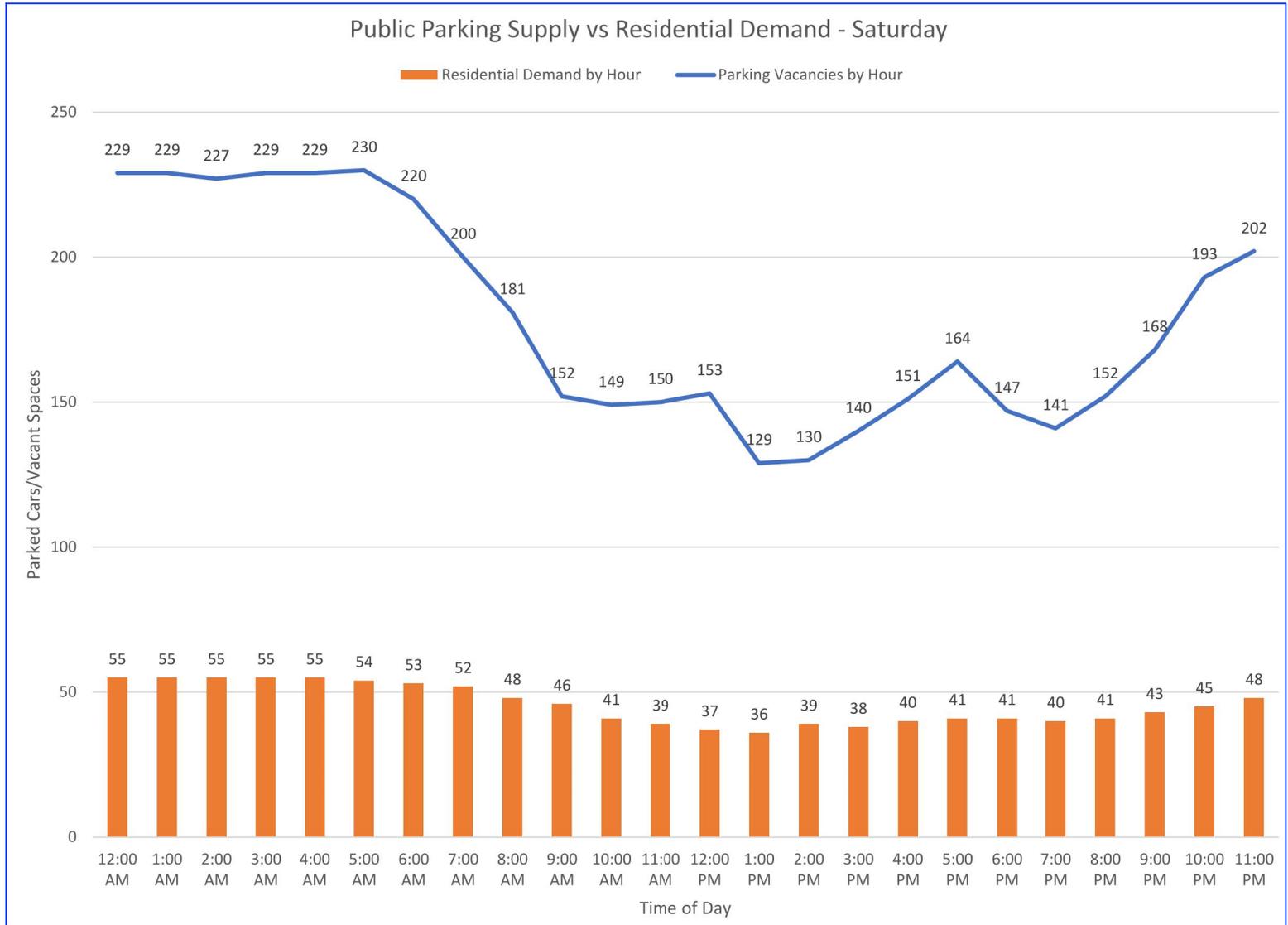


Figure 10

- *Saturday.* There is ample parking available for the multifamily residential project during the overnight period between the hours of 12:00 am and 4:00 am and within the critical midday periods for the Marlborough Village area with a surplus of more than 30%.

SUMMARY AND CONCLUSIONS

In summary, there is ample parking available for the multifamily residential project during the overnight periods on both weekdays and Saturdays between the hours of 12:00 am and 4:00 am within the three City lots (55 Bolton Street Lot, South Bolton/Court Street Lot, and Court Street Garage). Likewise, during the critical midday period the parking within the Marlborough Village area parking is more constrained at times but can accommodate the demands of the proposed Site with a surplus of up to 14% exclusive of accessible, EV, and reserved spaces. MDM notes that a portion of the parking spaces currently have a nighttime restriction.

While located just outside the 1,000-foot parameter, the Newton Street Garage Lot should be considered given its proximity to the Site within a ¼ mile (5-minute walk) and historical vacancy throughout the day at more than 50%. The Proponent shall continue to work with the City to identify appropriate parking protocols and requirements as well as any potential changes in parking policies within the City owned lots to accommodate overnight parking.

ATTACHMENTS

- 2014 MAPC Downtown Parking Study
- Detailed Parking Data
- ITE Parking Information

□ 2014 MAPC Downtown Parking Study

Figure 2 Downtown Parking Restrictions and Number of Spaces

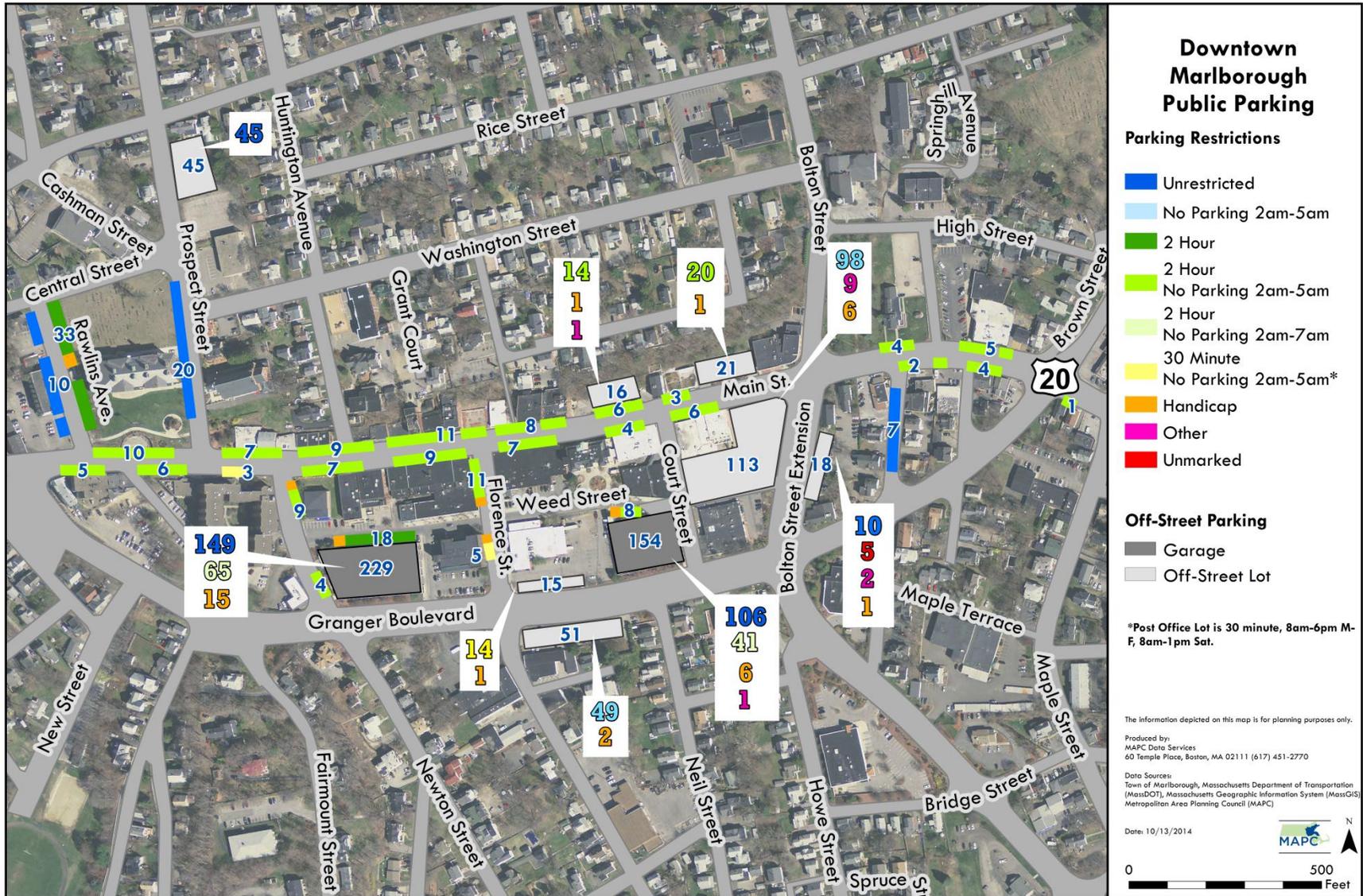


Table 1. Parking Capacity by Type¹

Location	Type of Parking					
	2 Hour (No Parking 2-5am)	30 Min	No Parking 2-5am/ 7am	No regulation	Handicap	Private/ Other
Garage Spaces						
Garage: Newton Street	-	-	65	149	15	-
Garage: Court Street	-	-	41	106	6	1
<i>Garage Subtotal (383 spaces)</i>	<i>0</i>	<i>0</i>	<i>106</i>	<i>255</i>	<i>21</i>	<i>1</i>
Off-Street Lot Spaces						
Lot: Prospect Street	-	-	-	45*	-	-
Lot: Post Office	-	14	-	-	1	-
Lot: Granger Boulevard	-	-	49	-	2	-
Lot: Main Street (at Court Street)	14	-	-	-	1	1
Lot: Main Street (at Bolton Street)	20	-	-	-	1	-
Lot: Bolton Street (west side)	98**	-	-	-	6	9**
Lot: Bolton Street (east side)	-	-	-	10	1	7
<i>Off-Street Lot Subtotal (279 spaces)</i>	<i>132</i>	<i>14</i>	<i>49</i>	<i>55</i>	<i>12</i>	<i>17</i>
On-Street Parking Spaces						
Main St – Rawlins to Prospect (N)	10	-	-	-	-	-
Main St – Prospect to Newton (N)	7	-	-	-	-	-
Main St – Newton to Florence (N)	20	-	-	-	-	-
Main St – Florence to Court (N)	14	-	-	-	-	-
Main St – Court to Bolton (N)	3	-	-	-	-	-
Main St – Bolton to Exchange (N)	4	-	-	-	-	-
Main St – Exchange to Granger (N)	5	-	-	-	-	-
Main St – Granger to Windsor (S)	5	-	-	-	-	-
Main St – Windsor to Prospect (S)	6	-	-	-	-	-
Main St – Prospect to Newton (S)	-	3	-	-	-	-
Main St – Newton to Florence (S)	16	-	-	-	-	-
Main St – Florence to Court (S)	11	-	-	-	-	-
Main St – Court to Bolton (S)	6	-	-	-	-	-
Main St – Bolton to Ames (S)	2	-	-	-	-	-
Main St – Ames to Granger (S)	4	-	-	-	-	-
Main St – Granger to Maple (S)	1	-	-	-	-	-
Rawlins Ave – Central to Main (W)	-	-	-	10	-	-
Rawlins Ave – Central to Main (E)	32***	-	-	-	1	-
Prospect St – Central to Main (E)	-	-	-	20	-	-
Newton St – Main to Weed	8	-	-	-	1	-
Newton St – Weed to Granger	4	-	-	-	-	-
Florence St – Main to Weed	10	-	-	-	1	-
Florence St – Weed to Granger	-	4	-	-	1	-
Weed St – Newton to Florence	17***	-	-	-	1	-
Weed St – Florence to Court	7	-	-	-	1	-
Cotting Ave – Main to Granger	-	-	-	7	-	-
<i>On-Street Subtotal (242 spaces)</i>	<i>192</i>	<i>7</i>	<i>0</i>	<i>37</i>	<i>6</i>	<i>0</i>
Grand Total (904 spaces)	324	21	155	347	39	18

Parking space and restriction data collected in November 2013 **Demarcation of public and private parking unclear
 * Estimated number due to lack of striping within the lot *** No overnight restrictions posted

Parking Occupancy

In order to document parking occupancy, the number of vehicles in the study area was observed at 9am, 11am, and 1pm, in order to gain an in-depth understanding of how parking is utilized in Downtown Marlborough. The study was able to determine the parking occupancy by time of day for each parking location and type of parking space. This parking data helps to identify peak demand times and areas with the highest parking demand. A summary of the on-street and off-street parking occupancy is shown below in **Table 2**. The occupancies by time of day are also shown in chart form in **Figure 3**.

The peak for garage parking was observed at 11:00am, when 56% of spaces were occupied. The peak for off-street parking lots and on-street spaces was observed to be 1:00pm, when 66% and 68% of spaces were occupied, respectively. Overall, the peak parking was observed at 1:00pm, when 60% of all spaces were occupied. Parking occupancies during the peak hour are illustrated in **Figure 4**.

In general, 85% occupancy is a desirable target. At 85% occupancy, most spaces are full but arriving drivers will easily find an open space. For on-street parking, 85% occupancy means about one open space on each block. At lower occupancy, there is more parking than necessary, taking up space that could more productively be used for something else. At occupancy higher than 85%, drivers find it difficult to find a space, leading them to circle around and generate excess traffic, or simply leave the area. When occupancy exceeds 85% in some areas, introducing pricing can help balance supply and demand, and direct drivers to use parking areas, such as garages, that have more space available.

In Downtown Marlborough, our study revealed that parking was always available on-street, in surface lots, and in the garages. Surface parking lots and on-street parking were the most popular destinations, followed by garage parking. Currently there is no signage directing visitors and business patrons to the free garages. Improving signage could greatly increase the use of the garages and help maintain on-street parking for short-term uses.

Table 2. Percent of Occupied Spaces by Time of Day

Parking Location	Total Number of Spaces	Weekday Observations		
		9:00 am	11:00 am	1:00 pm
Garage Spaces				
Garage: Newton Street	229	40%	48%	44%
Garage: Court Street	154	62%	66%	60%
<i>Garage Subtotal</i>	383	49%	56%	50%
Off-Street Lot Spaces				
Lot: Prospect Street	45	18%	18%	22%
Lot: Post Office	15	40%	47%	80%
Lot: Granger Boulevard	51	69%	73%	96%
Lot: Main Street (at Court Street)	16	50%	25%	63%
Lot: Main Street (at Bolton Street)	21	-	38%	105%
Lot: Bolton Street (west side)	113	51%	74%	65%
Lot: Bolton Street (east side)	18	28%	67%	50%
<i>Off-Street Lot Subtotal</i>	279	43%	57%	66%

Parking Location	Total Number of Spaces	Weekday Observations		
		9:00 am	11:00 am	1:00 pm
On-Street Parking Spaces				
Main St – Rawlins to Prospect (N)	10	90%	80%	80%
Main St – Prospect to Newton (N)	7	86%	57%	71%
Main St – Newton to Florence (N)	20	60%	70%	80%
Main St – Florence to Court (N)	14	57%	71%	86%
Main St – Court to Bolton (N)	3	0%	67%	100%
Main St – Bolton to Exchange (N)	4	25%	0%	25%
Main St – Exchange to Granger (N)	5	100%	100%	60%
Main St – Granger to Windsor (S)	5	100%	80%	120%
Main St – Windsor to Prospect (S)	6	67%	17%	67%
Main St – Prospect to Newton (S)	3	33%	33%	100%
Main St – Newton to Florence (S)	16	88%	94%	69%
Main St – Florence to Court (S)	11	45%	73%	82%
Main St – Court to Bolton (S)	6	0%	17%	33%
Main St – Bolton to Ames (S)	2	100%	100%	50%
Main St – Ames to Granger (S)	4	100%	75%	100%
Main St – Granger to Maple (S)	1	0%	0%	0%
Rawlins Ave – Central to Main (W)	10	80%	90%	60%
Rawlins Ave – Central to Main (E)	33	45%	45%	67%
Prospect St – Central to Main (W)	20	40%	65%	85%
Newton St – Main to Weed	9	56%	67%	67%
Newton St – Weed to Granger	4	25%	0%	25%
Florence St – Main to Weed	11	91%	64%	27%
Florence St – Weed to Granger	5	80%	60%	80%
Weed St – Newton to Florence	18	22%	72%	61%
Weed St – Florence to Court	8	50%	63%	50%
Cotting Ave – Main to Granger	7	57%	43%	43%
<i>On-Street Subtotal</i>	242	57%	63%	68%
Grand Total	904	49%	58%	60%

Parking analysis performed on Tuesday, November 19, 2013. Prospect Street counts were taken on September 22, 2014. Shading indicates the highest occupancy rate of the day.

□ Detailed Parking Data

Time of Day	Peak Parked Cars By Hour				Unrestricted	
	Court St Garage	Court St Surface Lot	55 Bolton St Lot	Total		
Supply	154	113	49	316	Vacancies	
Friday 12/16/2022	12:00 AM	48	3	1	52	230
	1:00 AM	47	2	1	50	232
	2:00 AM	48	3	1	52	230
	3:00 AM	47	3	1	51	231
	4:00 AM	47	3	1	51	231
	5:00 AM	47	3	1	51	231
	6:00 AM	57	3	1	61	221
	7:00 AM	69	5	1	75	207
	8:00 AM	100	31	7	138	144
	9:00 AM	121	54	5	180	102
	10:00 AM	125	63	5	193	89
	11:00 AM	128	77	7	212	70
	12:00 PM	121	78	6	205	77
	1:00 PM	124	85	6	215	67
	2:00 PM	120	81	5	206	76
	3:00 PM	122	78	2	202	80
	4:00 PM	115	82	2	199	83
	5:00 PM	89	76	2	167	115
	6:00 PM	62	56	1	119	163
	7:00 PM	70	30	1	101	181
	8:00 PM	75	17	1	93	189
	9:00 PM	69	13	1	83	199
	10:00 PM	67	3	1	71	211
	11:00 PM	56	3	1	60	222

Time of Day		Peak Parked Cars By Hour				Unrestricted
		Court St Garage	Court St Surface Lot	55 Bolton St Lot	Total	
Supply		154	113	49	316	Vacancies
Saturday 12/17/2022	12:00 AM	49	3	1	53	229
	1:00 AM	49	3	1	53	229
	2:00 AM	47	7	1	55	227
	3:00 AM	47	5	1	53	229
	4:00 AM	47	5	1	53	229
	5:00 AM	48	3	1	52	230
	6:00 AM	58	3	1	62	220
	7:00 AM	75	6	1	82	200
	8:00 AM	79	20	2	101	181
	9:00 AM	82	44	4	130	152
	10:00 AM	84	43	6	133	149
	11:00 AM	80	46	6	132	150
	12:00 PM	78	49	2	129	153
1:00 PM	82	68	3	153	129	
2:00 PM	83	66	3	152	130	
3:00 PM	79	59	4	142	140	
4:00 PM	76	52	3	131	151	
5:00 PM	62	53	3	118	164	
6:00 PM	71	62	2	135	147	
7:00 PM	71	68	2	141	141	
8:00 PM	69	59	2	130	152	
9:00 PM	70	43	1	114	168	
10:00 PM	66	22	1	89	193	
11:00 PM	61	18	1	80	202	

Time of Day		Peak Parked Cars By Hour				Unrestricted
		Court St Garage	Court St Surface Lot	55 Bolton St Lot	Total	
Supply		154	113	49	316	Vacancies
Tuesday 12/20/2022	12:00 AM	52	9	1	62	220
	1:00 AM	52	9	1	62	220
	2:00 AM	52	6	1	59	223
	3:00 AM	52	5	1	58	224
	4:00 AM	52	5	1	58	224
	5:00 AM	52	5	1	58	224
	6:00 AM	59	6	1	66	216
	7:00 AM	77	15	1	93	189
	8:00 AM	107	43	16	166	116
	9:00 AM	122	75	5	202	80
	10:00 AM	119	88	24	231	51
	11:00 AM	113	96	14	223	59
	12:00 PM	117	97	20	234	48
1:00 PM	120	109	20	249	33	
2:00 PM	120	97	20	237	45	
3:00 PM	117	98	4	219	63	
4:00 PM	108	96	2	206	76	
5:00 PM	88	99	2	189	93	
6:00 PM	87	74	1	162	120	
7:00 PM	83	69	2	154	128	
8:00 PM	80	40	2	122	160	
9:00 PM	65	24	2	91	191	
10:00 PM	56	10	1	67	215	
11:00 PM	55	5	1	61	221	

□ ITE Parking Information

Land Use: 221 Multifamily Housing (Mid-Rise)

Description

Mid-rise multifamily housing includes apartments, townhouses, and condominiums located within the same building with at least three other dwelling units and with between three and 10 levels (floors) of residence. Multifamily housing (low-rise) (Land Use 220), multifamily housing (high-rise) (Land Use 222), and affordable housing (Land Use 223) are related land uses.

Time of Day Distribution for Parking Demand

The following table presents a time-of-day distribution of parking demand on a weekday (one general urban/suburban study site), a Saturday (two general urban/suburban study sites), and a Sunday (one dense multi-use urban study site).

Hour Beginning	Percent of Peak Parking Demand		
	Weekday	Saturday	Sunday
12:00–4:00 a.m.	100	100	100
5:00 a.m.	94	99	–
6:00 a.m.	83	97	–
7:00 a.m.	71	95	–
8:00 a.m.	61	88	–
9:00 a.m.	55	83	–
10:00 a.m.	54	75	–
11:00 a.m.	53	71	–
12:00 p.m.	50	68	–
1:00 p.m.	49	66	33
2:00 p.m.	49	70	40
3:00 p.m.	50	69	27
4:00 p.m.	58	72	13
5:00 p.m.	64	74	33
6:00 p.m.	67	74	60
7:00 p.m.	70	73	67
8:00 p.m.	76	75	47
9:00 p.m.	83	78	53
10:00 p.m.	90	82	73
11:00 p.m.	93	88	93

ITE Parking Hourly Distribution

Residential Parking Curve LUC 221
 55 Spaces Per Zoning Demand 55
 Time of Day Percent of Peak Parked Cars by Hour

Friday	12:00 AM	1	55
	1:00 AM	1	55
	2:00 AM	1	55
	3:00 AM	1	55
	4:00 AM	1	55
	5:00 AM	0.94	52
	6:00 AM	0.83	46
	7:00 AM	0.71	39
	8:00 AM	0.61	34
	9:00 AM	0.55	30
	10:00 AM	0.54	30
	11:00 AM	0.53	29
	12:00 PM	0.5	28
	1:00 PM	0.49	27
	2:00 PM	0.49	27
	3:00 PM	0.5	28
	4:00 PM	0.58	32
	5:00 PM	0.64	35
	6:00 PM	0.67	37
	7:00 PM	0.7	39
	8:00 PM	0.76	42
	9:00 PM	0.83	46
	10:00 PM	0.9	50
	11:00 PM	0.93	51

ITE Parking Hourly Distribution

Residential Parking Curve LUC 221
 55 Spaces Per Zoning Demand 55
 Time of Day Percent of Pea Parked Cars by Hour

Tuesday	12:00 AM	1	55
	1:00 AM	1	55
	2:00 AM	1	55
	3:00 AM	1	55
	4:00 AM	1	55
	5:00 AM	0.94	52
	6:00 AM	0.83	46
	7:00 AM	0.71	39
	8:00 AM	0.61	34
	9:00 AM	0.55	30
	10:00 AM	0.54	30
	11:00 AM	0.53	29
	12:00 PM	0.5	28
	1:00 PM	0.49	27
	2:00 PM	0.49	27
	3:00 PM	0.5	28
	4:00 PM	0.58	32
	5:00 PM	0.64	35
	6:00 PM	0.67	37
	7:00 PM	0.7	39
	8:00 PM	0.76	42
	9:00 PM	0.83	46
	10:00 PM	0.9	50
	11:00 PM	0.93	51