









# **Downtown Parking Study**

Town of Hudson

**PREPARED FOR** 

Town of Hudson Planning and Community Development Department **PREPARED BY** 



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# **Executive Summary**

A comprehensive parking study in Downtown Hudson was last completed in 2014. Since then, Downtown Hudson has been experiencing a significant economic and cultural renaissance and has become a premier destination within the Boston region. An updated parking study was needed to ensure the Downtown has a well-managed parking system that supports the changing needs of residents, visitors, and businesses.

The primary objectives of this study are to provide an accurate view of the current usage of the municipal parking assets serving Downtown, identify opportunities for improving the parking experience for all users, and recommend strategies for better managing the parking assets.

The study area boundaries, shown in Figure ES-1, cover the Downtown Business zoning district and some adjacent residential streets.





# **Existing Conditions**

An understanding of the current utilization of the Downtown parking system was gathered from parking occupancy and parking during data collected by VHB in May. Thursday May 11th and Saturday May 13th were chosen as representative of typical but busy parking days. Parking occupancy counts were made of all off-street and on-street public parking from 8:00 am to 8:00 pm on both days. Parking duration data was collected both days for the on-street parking and for the South Street Municipal Lot.

## **Parking Supply**

The public parking serving Downtown is depicted in Figure ES-2. There are 648 public parking spaces in the study area, consisting of 357 off-street spaces and 291 on-street spaces.

The on-street parking includes 230 time-limited parking spaces, almost all of which have two-hour time limits. Vila do Porto Boulevard and South Street have unrestricted (no time limit) parking.

The municipal parking supply for Downtown includes eight parking lots. The largest is the 150-space South Street Municipal Lot. Two of the parking lots are only available for public parking evenings and weekends. The Town Hall parking is available after 4:30 pm on weekdays and all day on weekends and holidays. The Business Improvement District (BID) arranged with Avidia Bank to make their 45-space parking lot on South Street available 6:00 pm to 2:00 am on Thursday, Fridays, and Saturdays.

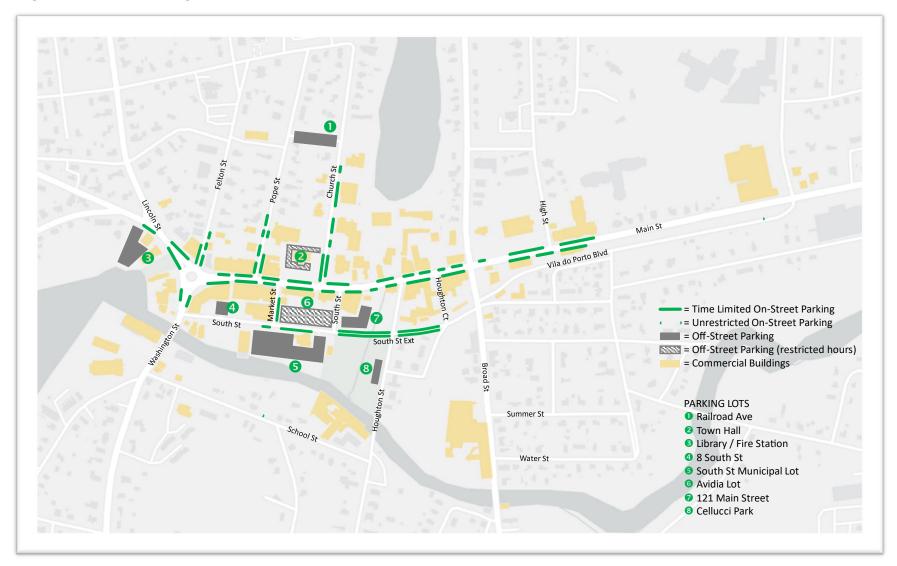
## **Parking Utilization**

Figure Es-3 and Figure ES-4 illustrate the utilization of the municipal parking. Parking utilization in the Core area of Downtown (west of Broad Street and north of the river) peaked during the evenings. On Thursday evening there were 132 available spaces scattered among the streets and lots. The majority of available parking (78 spaces) was in the Railroad Avenue Lot, the Town Hall parking, the Library / Fire Station Lot, and on South Street Extension. On Saturday evening the amount of available parking was 96 spaces, with over 70% of the available parking in those same three lots and on South Street Extension.

The availability of daytime parking for those who needed to park for more than two hours was extremely limited. There are 182 spaces designated for long-term parking among the South Street Municipal Lot, the Railroad Avenue Lot, and the Library / Fire Station Lot. Another 17 are available at Town Hall on Saturday. Midday on Tuesday there were 20 long-term parking spaces available, half of which were in the Railroad Avenue Lot. Midday on Saturday there were 38 such spaces available, with almost all either in the Railroad Avenue Lot or at Town Hall.

Parking duration data was collected for the on-street parking and for the South Street Municipal Lot. The on-street parking was used by 892 cars on Thursday and 1,075 on Saturday, with an average length of stay of 1.2 and 1.3 hours, respectively. The parking lot was used by 407 cars on Thursday and 507 on Saturday, with an average length of stay of 3.0 and 2.6 hours, respectively. Approximately two-thirds of those parking on-street did so for an hour or less. About 10% parked on-street for more than two hours.

Figure ES-2 Public Parking



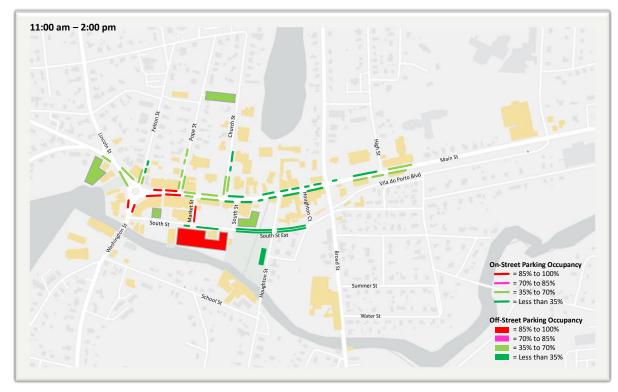
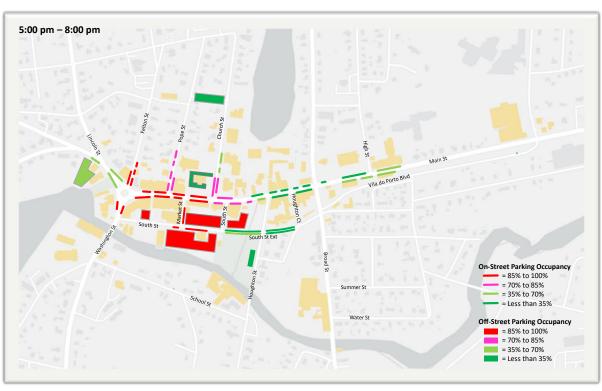


Figure ES-2 Peak Parking Occupancy: Thursday Midday and Evening



Source: Parking occupancy counts conducted by VHB on Thursday, May 11, 2023.

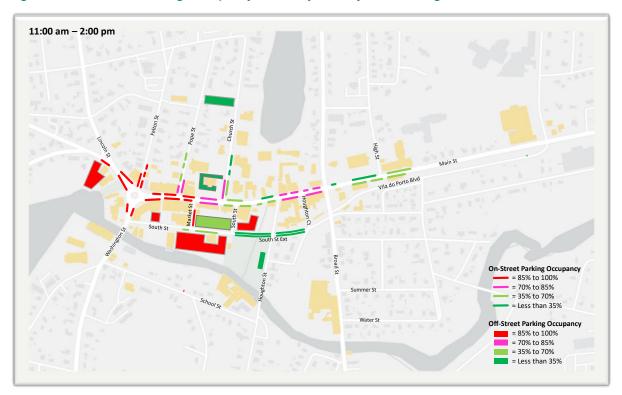
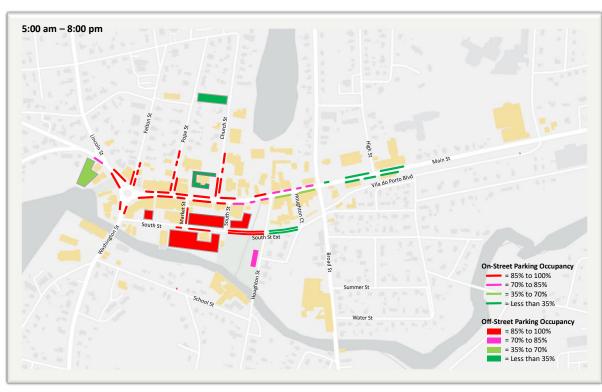


Figure ES-3 Peak Parking Occupancy: Saturday Midday and Evening



Source: Parking occupancy counts conducted by VHB on Saturday, May 13, 2023.

# **Parking Survey**

An on-line survey was used to solicit information and comments about parking Downtown. A total of 3,413 responses were received.

What is your primary connection to downtown Hudson?

I visit downtown	3,012	88%
I live downtown	184	5%
I'm an employee working downtown	162	5%
I own a business downtown	46	1%
I'm a landlord of a property downtown	9	<1%
	3,413	



All survey respondents were asked the open-ended question "What would make parking in the downtown area better for you and others? Feel free to be as specific as you wish." Almost all respondents provided comments and suggestions. Those comments and suggestions provided insight to understanding existing conditions and guided many of the recommendations of this study. Four topics were especially notable in the suggestions to improve the parking experience in Downtown.

- Increasing the amount of parking was a comment by more than 1,500 respondents, some 300 of whom suggested using the old McDonald's restaurant site on Washington Street.
- More than 200 respondents suggested changing parking time limits.
- Additional handicap parking locations were suggested by about 125 respondents.
- More than 100 respondents commented about parking signage.

## Recommendations

Based on the findings of the evaluation of existing conditions, recommendations for improving the parking experience for all users, and for strategies for better managing the Downtown parking assets, were developed and presented in three general categories — Parking Regulations, Parking Supply, and Parking Enforcement.

## **Parking Regulations**

- Change the standard 2-hour on-street time limits to 3 hours. Extend hours of enforcement from 6:00 pm to 8:00 pm. After this is done, consider increasing the cost of parking tickets.
- Allow unrestricted (no time limit) parking on South Street Extension
- Develop a policy for designating quick-stop parking spaces.
- Prioritize installing additional EV charging locations with other Downtown amenities. Consider locations at the Library / Fire Station Lot, the Railroad Avenue Lot, and on Vila do Porto Boulevard.
- Federal regulations regarding accessibility in public rights of way, including on-street parking, were finalized in September. Use the new regulations to guide planning for more on-street handicap parking.
- Update the handicap parking signage and marking in the municipal parking lots. Add handicap parking spaces where required.

## **Parking Supply**

### Making Better use of Existing Parking Supply

- Make better use of the Library / Fire Station Lot by reducing the number of reserved employee spaces, moving the 15-minute space to Washington Street, and adding signage to make public parking more prominent.
- Make better use of the Town Hall after-hours parking by adding supplemental signage, with affirmative messaging about when public parking is allowed.
- Have the Business Improvement District work with Avidia Bank to make the parking at the Pope Street Avidia Bank Financial Center available for public parking after hours.
- Allow after-hours public parking at the Senior Center
- Change the loading zone regulations for Houghton Street, between Main Street and South Street Extension, to allow for public parking.

### **Construction of New Parking Facilities**

- The parcel at 32 Washington Street (former McDonald's site) could be a good site for surface parking. Continue to engage the owners and encourage them to carry out the site investigations needed to identify conditions that may impact redevelopment options and costs.
- The skatepark site would be a good location for surface parking or a parking garage with housing on the upper levels. Advance initial planning for developing the site.

#### **Enforcement**

Tracking of license plates by hand to determine parking violations should be replaced with a ticketing system that uses a handheld license plate recognition device.

# Introduction

# **Project Understanding**

A comprehensive parking study in Downtown Hudson was last completed in 2014. Since then, Downtown Hudson has been experiencing a significant economic and cultural renaissance and has become a premier destination within the Boston region. An updated parking study was needed to ensure Downtown has a well-managed parking system that supports the changing needs of residents, visitors, and businesses.

The primary objectives of this study are to provide an accurate view of the current usage of the municipal parking assets serving Downtown, identify opportunities for improving the parking experience for all users, and recommend strategies for better managing the parking assets.

# Methodology

The findings and recommendations of this study are based on parking data collected in the field by VHB and information gathered through public meetings and an online survey.

The parking data collection started with an inventory of the parking supply, categorizing the location and regulations for the on-street and off-street parking in Downtown. The next step was to conduct parking occupancy counts and collect parking duration (length of stay) data. Thursday May 11th and Saturday May 13<sup>th</sup> were chosen as representative of typical but busy parking days. Parking occupancy counts were made of all off-street and on-street public parking from 8:00 am to 8:00 pm on both days. Parking duration data was collected both days for the on-street parking and for the South Street Municipal Lot.

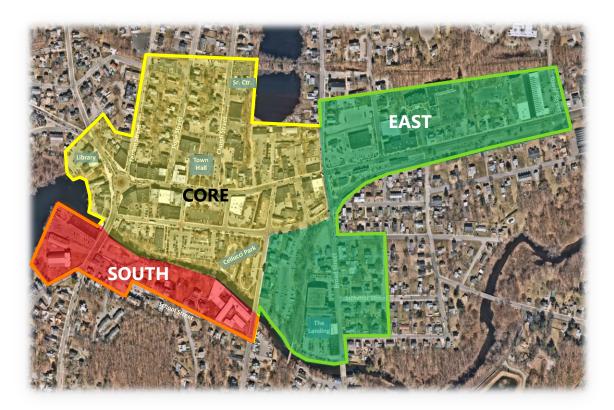
Input from the users of the parking was of critical help in evaluating the parking data and developing recommendations managing the parking system. Comments were received at public meetings at the start of the study in May and from an on-line survey available throughout the summer.

# **Study Area**

The boundaries of the study area are depicted in Figure 1. The study area covers the Downtown Business zoning district and some adjacent residential streets. The adjacent residential streets were included to assess how much commercial parking activity was overflowing into the residential areas. It was found to be nominal.

The study area is divided into three subareas – Core, East, and South. Based on the analysis of parking activity data, it is apparent that the three subareas have unique parking characteristics, and the presentation of findings and recommendations takes this into account.

Figure 1 **Study Area** 



# **Existing Conditions**

This chapter presents the public parking supply and current parking utilization in the Downtown study area. The parking utilization data includes parking occupancy counts of all the public parking and parking duration data for most of the on-street parking and for the South Street Municipal Lot.

# **Parking Supply**

There are approximately 648 public parking spaces in the study area, consisting of 357 off-street spaces and 291 on-street spaces. The locations are illustrated in Figure ES-2, shown previously.

The 291-space on-street parking inventory includes 230 time-limited parking spaces, almost all of which have two-hour time limits (see Table 1). The two-hour parking is in effect from 9:00 am to 6:00 pm Monday through Saturday. The on-street parking inventory excludes areas that are primarily used for residential parking.

The municipal parking supply for Downtown includes eight parking lots totaling 357 spaces (see Table 2). Two of the parking lots are only available for public parking evenings and weekends. The Town Hall parking is available after 4:30 pm on weekdays and all day on weekends and holidays. The Business Improvement District (BID) has arranged with Avidia Bank to make their 45-space parking lot on South Street available 6:00 pm to 2:00 am on Thursday, Fridays, and Saturdays.

Table 3 lists the parking by type and by subarea. Nearly half (47%) the parking is time-limited for two hours or less. All the off-street parking and most of the on-street parking is located in the Core area. The Core area has 563 spaces (87% of the parking supply). The East area has 65 (10%) and the South area has 20 (3%).

Table 1 On-Street Parking Supply

		No. of Parking Spaces						
			No Time					
Area	15 Minute	2 Hour	Limit	HP	Total			
Core	11	189		6	206			
East		30	34	1	65			
South			20		20			
Total	11	219	54	7	291			

Notes: HP = Handicap Parking

Time-limited parking is effective 9:00 am to 6:00 pm weekdays and Saturdays.

Table 2 Off-Street Parking Supply

	No. of Parking Spaces						
Parking Lot	15/30 Minute	2 Hour	No Time Limit	НР	Employee	Total	
South Street Municipal Lot	7	5	133	5		150	
8 South Street		14		1		15	
121 Main Street		23		2		25	
Cellucci Park		12		2		14	
Railroad Ave			34	1		35	
Library / Fire Station	1	20	15		18	54	
Avidia Lot			44	1		45	
Town Hall	2			2	15	19	
Total	10	6o	238	14	33	357	

Notes: HP = Handicap Parking

121 Main Street includes 2 EV charging spaces.

Parking at Town Hall is available on weekends and after 4:30 pm on weekdays.

Parking at the Avidia Lot is available 6:00 pm to 2:00 am on Thursday, Fridays, and Saturdays.

Table 3 Parking Supply by Type

	No. of Parking Spaces							
Area	Time Limited (2 hours or less)	<b>Unrestricted</b> (no time limit)	After hours Only	Other	Total			
Core	272	179	59	53	563			
East	30	34		1	65			
South		20			20			
Total	302	233	59	54	648			
,	47%	36%	9%	8%				

Notes: "After hours only" spaces include those at Town Hall and the Avidia Lot on South Street.

"Other" spaces include handicap parking, electric vehicle, and employee spaces.

# Parking Occupancy

Tables 4 and 5 present the peak parking occupancy of the public spaces during the Thursday and Saturday field counts. The parking data is summarized in four time periods — morning, midday, afternoon, and evening. See also Figure ES-2 and Figure ES-3 in the Executive Summary for a graphic illustrating of the parking occupancy for the midday and evening periods, respectively.1

Some key findings are as follows.

- The East area has 64 on-street parking spaces. Occupancy never exceeded 13 cars.
- The South area has 20 on-street parking spaces. The parking was heavily used both days and reached capacity Saturday evening.
- The parking in the Core area peaked at approximately 80% of capacity, Saturday afternoon and evening. Despite the overall parking within the Core area never reaching capacity, several parking lots and streets were parked at or near capacity.
  - The South Street Municipal Lot was at or near capacity both days. On Saturday, the lot was at capacity from midday through the evening. On Thursday, the lot approached capacity midday and evening.
  - The parking lots at 8 South Street and 121 Main Street (behind Medusa Brewery) reached capacity both days.
  - The Avidia Lot was nearly full both evenings.
  - The Cellucci Park Lot was little used on Thursday but was near capacity Saturday afternoon. It was briefly at capacity Saturday morning due to activity at the food bank across the street.
  - The westerly block of Main Street, between Washington Street and Pope Street, as well as Market Street, were at capacity most of both days.
  - On Thursday, South Street, Felton Street, and the block of Main Street between Pope Street and Church Street were essentially full in the evening, with only a single empty parking space on each.
  - On-street parking activity was greater on Saturday than Thursday. This resulted in parking on Felton Street, Pope Street, Church Street exceeding 90% of capacity. One block of on-street parking along South Street Extension reached capacity Saturday evening.

<sup>&</sup>lt;sup>1</sup> The tables and figures show the peak occupancy during each time period for the parking spaces with two-hour or unrestricted time limits. Complete hourly occupancy results for the entire municipal parking supply are provided in the Appendix.

Parking Occupancy: Thursday, May 11, 2023 Table 4

		Мо	rning	Mid	day	Afte	rnoon	Eve	ning
Location	Capacity	8am	– 11 am	11 am	– 2 pm	2 pm	– 5 pm	5 pm	– 8 pm
OFF-STREET PARKING									
South Street Municipal Lot	138	95	69%	132	96%	122	88%	134	97%
8 South Street	14	6	43%	9	64%	10	71%	14	100%
121 Main Street	21	6	29%	12	57%	19	90%	23	110%
Cellucci Park	12	1	8%	3	25%	3	25%	3	25%
Railroad Ave	34	30	88%	23	68%	14	41%	4	12%
Library / Fire Station	35	15	43%	18	51%	14	40%	23	66%
Avidia Lot	44							42	95%
Town Hall	17							2	12%
Total	315	153	60%	197	78%	182	72%	245	78%
ON-STREET PARKING									
Core Area									
Main Street (Washington to Pope)	19	18	95%	18	95%	19	100%	19	100%
Main Street (Pope to Church)	21	9	43%	13	62%	14	67%	20	95%
Main Street (Church to Houghton)	20	2	10%	4	20%	8	40%	12	60%
Main Street (Houghton to Broad)	21	4	19%	7	33%	8	38%	10	48%
Washington St	18	10	56%	11	61%	12	67%	12	67%
Church Street	22	5	23%	6	27%	13	59%	13	59%
Pope Street	15	6	40%	6	40%	8	53%	11	73%
Felton Street	12	4	33%	4	33%	9	75%	11	92%
Market Street	4	3	75%	4	100%	4	100%	4	100%
South Street	9	0	0%	2	22%	5	56%	8	89%
South St Ext (South St to Houghton)	15	0	ο%	0	ο%	3	20%	6	40%
South St Ext (Houghton to Broad)	13	1	8%	1	8%	1	8%	1	8%
Total: Core Area	189	62	33%	76	40%	104	55%	127	67%
East Area									
Main Street	30	9	30%	12	40%	10	33%	11	37%
Vila do Porto Boulevard	34	1	3%	1	3%	0	0%		3%
Total: East Area	64	10	16%	13	20%	10	16%	12	19%
South Area									
School Street	20	11	55%	12	60%	9	45%	14	70%

Note: Parking counts excludes 15 minute, 30 minute, HP, EV, and employee spaces. Avidia Lot and Town Hall parking are available for public parking only in the evening. The daytime off-street parking supply is 254 spaces.

Table 5 Parking Occupancy: Saturday, May 13, 2023

		Мо	rning	Mid	day	Afte	rnoon	Eve	ning
Location	Capacity	8am	– 11 am	11 am	– 2 pm	2 pm	– 5 pm	5 pm	– 8 pm
OFF-STREET PARKING									
South Street Municipal Lot	138	91	66%	137	99%	137	99%	138	100%
8 South Street	14	11	79%	14	100%	13	93%	13	93%
121 Main Street	21	8	38%	21	100%	21	100%	21	100%
Cellucci Park	12	12	100%	4	33%	11	92%	9	75%
Railroad Ave	34	7	21%	11	32%	8	24%	3	9%
Library / Fire Station	35	16	46%	30	86%	20	57%	22	63%
Avidia Lot	44	14	32%	18	41%	36	82%	38	86%
Town Hall	17	2	12%	4	24%	4	24%	5	29%
Total	315	161	51%	239	76%	250	79%	249	79%
ON-STREET PARKING									
Core Area									
Main Street (Washington to Pope)	19	14	74%	19	100%	19	100%	19	100%
Main Street (Pope to Church)	21	15	71%	17	81%	20	95%	21	100%
Main Street (Church to Houghton)	20	2	10%	6	30%	12	60%	14	70%
Main Street (Houghton to Broad)	21	10	48%	17	81%	14	67%	14	67%
Washington St	18	15	83%	16	89%	17	94%	15	83%
Church Street	22	5	23%	11	50%	21	95%	22	100%
Pope Street	15	3	20%	10	67%	14	93%	13	87%
Felton Street	12	11	92%	12	100%	12	100%	11	92%
Market Street	4	4	100%	4	100%	4	100%	4	100%
South Street	9	2	22%	4	44%	9	100%	9	100%
South St Ext (South St to Houghton)	15	0	ο%	2	13%	7	47%	15	100%
South St Ext (Houghton to Broad)	13	1	8%	3	23%	4	31%	2	15%
Total: Core Area	189	82	43%	121	64%	153	81%	159	84%
East Area									
Main Street	30	13	43%	12	40%	8	27%	6	20%
Vila do Porto Boulevard	34	0	0%	0	0%	0	0%	3	9%
Total: East Area	64	13	20%	12	19%	8	13%	9	14%
South Area									
School Street	20	15	75%	18	90%	14	70%	20	100%
	in to UD EV								

Notes: Parking counts excludes 15 minute, 30 minute, HP, EV, and employee spaces.

The access gate was raised, and public parking occurred at the Avidia Lot during the day, although the lot is posted for public parking only during the evening.

# **Parking Availability**

Parking availability is another way to view parking occupancy, and one that more directly relates to a driver's perception of the parking system. The following summarizes the availability of parking, and general adequacy of the parking supply, in Downtown.

### **East Area**

The parking occupancy counts show there are more than 50 parking spaces available during the week and on Saturday. It appears that sufficient parking is available in the East area of Downtown at all times for both short-term and long-term parkers.

Table 6 Parking Availability: East Area

		No. of Spaces Available						
		Morning	Midday	Afternoon	Evening			
	Capacity	8am – 11 am	11 am – 2 pm	2 pm – 5 pm	5 pm – 8 pm			
THURSDAY								
Main Steet	30	21	18	20	19			
Vila do Porto Boulevard	34	33	33	34	33			
Total	64	54	51	54	52			
SATURDAY								
Main Steet	30	17	18	22	24			
Vila do Porto Boulevard	34	34	34	34	31			
Total	64	51	52	56	55			

Source: Parking occupancy data collected by VHB on Thursday, May 11, 2023 and Saturday, May 13, 2023.

### South Area

The South area of Downtown is, from a parking standpoint, a unique section of Downtown as it is relatively isolated from almost all the rest of the Downtown parking system. The South area has only a few businesses and the largest, the hardware store, is self-sufficient in parking. Others have some on-site parking but rely at times on the parking along School Street. That School Street parking, which is shared with some residential homes, was fully utilized at times on Saturday.

Table 7 Parking Availability: South Area

		No. of Spaces Available						
		Morning	Midday	Afternoon	Evening			
	Capacity	8am – 11 am	11 am – 2 pm	2 pm – 5 pm	5 pm – 8 pm			
THURSDAY								
South Street	20	9	8	11	6			
SATURDAY								
South Street	20	5	2	6	0			

Source: Parking occupancy data collected by VHB on Thursday, May 11, 2023 and Saturday, May 13, 2023.

### **Core Area**

Table 8 and Table 9 (on the next pages) show the available parking spaces recorded during the May counts in the Core area of Downtown. On Thursday evening there were 132 available spaces scattered among the streets and lots. The majority of available parking (78 spaces) was in the Railroad Avenue Lot, the Town Hall parking, the Library / Fire Station Lot, and on South Street Extension. On Saturday evening the amount of available parking was 96 spaces, with over 70% of the available parking in those same three lots and on South Street Extension.

Table 10 shows the availability of places to park for those staying longer than 2 hours. There are 182 such spaces among the South Street Municipal Lot, the Railroad Avenue Lot, and the Library / Fire Station Lot. Another 17 are available at Town Hall on weekends.

Midday on Tuesday there were 20 long-term parking spaces available, half of which were in the Railroad Avenue Lot. Midday on Saturday there were 38 such spaces available, with almost all either in the Railroad Avenue Lot or at Town Hall.

Table 10 Availability of Spaces Where Parking Duration Longer Than 2 Hours is Allowed

		No. of Spaces Available					
		Morning	Midday	Afternoon	Evening		
	Capacity	8am – 11 am	11 am – 2 pm	2 pm – 5 pm	5 pm – 8 pm		
THURSDAY							
South Street Municipal Lot	133	40	6	16	n/a		
Railroad Ave	34	4	11	20	n/a		
Library / Fire Station	15	3	3	7	n/a		
Total	182	47	20	43			
SATURDAY							
South Street Municipal Lot	133	47	1	1	n/a		
Railroad Ave	34	27	23	26	n/a		
Library / Fire Station	15	6	1	7	n/a		
Town Hall	17	15	13	13	n/a		
Total	199	95	38	47			

Notes: Evening counts are Not Applicable (n/a) since the time span on the two-hour limits ends at 6:00 pm. Excludes HP spaces.

Source: Parking occupancy data collected by VHB on Thursday, May 11, 2023 and Saturday, May 13, 2023.

Table 8 Core Area: Parking Availability on Thursday

		No. of Spaces Available				
		Morning	Midday	Afternoon	Evening	
Location	Capacity	8am – 11 am	11 am – 2 pm	2 pm – 5 pm	5 pm – 8 pm	
OFF-STREET PARKING						
South Street Municipal Lot	138	43	6	16	4	
8 South Street	14	8	5	4	0	
121 Main Street	21	15	9	2	2	
Cellucci Park	12	11	9	9	9	
Railroad Ave	34	4	11	20	30	
Library / Fire Station	35	20	17	21	12	
Avidia Lot	44				2	
Town Hall	17				15	
Total: Off-Street Parking	315	101	57	72	70	
ON-STREET PARKING						
Main Street (Washington to Pope)	19	1	1	0	0	
Main Street (Pope to Church)	21	12	8	7	1	
Main Street (Church to Houghton)	20	18	16	12	8	
Main Street (Houghton to Broad)	21	17	14	13	11	
Washington Street	18	8	7	6	6	
Church Street	22	17	16	9	9	
Pope Street	15	9	9	7	4	
Felton Street	12	8	8	3	1	
Market Street	4	1	0	0	0	
South Street	9	9	7	4	1	
South St Ext (South St to Houghton)	15	15	15	12	9	
South St Ext (Houghton to Broad)	13	12	12	12	12	
Total: On-Street Parking	189	127	113	85	62	
Total: All Parking	504	228	170	157	132	

Note: Parking counts exclude 15 minute, 30 minute, HP, EV, and employee spaces.

Public parking at the Avidia Lot and the Town Hall is available Thursday only during the evening.

Source: Parking occupancy data collected by VHB on Thursday, May 11, 2023.

Table 9 Core Area: Parking Availability on Saturday

		No. of Spaces Available					
		Morning	Midday	Afternoon	Evening		
Location	Capacity	8am – 11 am	11 am – 2 pm	2 pm – 5 pm	5 pm – 8 pm		
OFF-STREET PARKING							
South Street Municipal Lot	138	47	1	1	0		
8 South Street	14	3	0	1	1		
121 Main Street	21	13	0	0	0		
Cellucci Park	12	0	8	1	3		
Railroad Ave	34	27	23	26	31		
Library / Fire Station	35	19	5	15	13		
Avidia Lot	44	30	26	8	6		
Town Hall	17	15	13	13	12		
Total: Off-Street Parking	315	154	76	65	66		
ON-STREET PARKING							
Main Street (Washington to Pope)	19	5	0	0	0		
Main Street (Pope to Church)	21	6	4	1	0		
Main Street (Church to Houghton)	20	18	14	8	6		
Main Street (Houghton to Broad)	21	11	4	7	7		
Washington Street	18	3	2	1	3		
Church Street	22	17	11	1	0		
Pope Street	15	12	5	1	2		
Felton Street	12	1	0	0	1		
Market Street	4	0	0	0	0		
South Street	9	7	5	0	0		
South St Ext (South St to Houghton)	15	15	13	8	0		
South St Ext (Houghton to Broad)	13	12	10	9	11		
Total: On-Street Parking	189	107	68	36	30		
Total: All Parking	504	261	144	101	96		

Note: Parking counts excludes 15 minute, 30 minute, HP, EV, and employee spaces.

The access gate was raised, and public parking occurred at the Avidia Lot during the day, although the lot is posted for public parking only during the evening.

Source: Parking occupancy data collected by VHB on Saturday, May 13, 2023.

# **Parking Duration of Stay**

Parking duration (length of stay) data was collected during the field counts conducted in May. Data was collected for the on-street parking in the Core area and for the South Street Municipal Lot.

License plate data was collected every half hour between 6:30 am and 8:00 pm to identify the arrival and departure times for each parked vehicle. Tables 11 and 12 summarize the results for the Core area. The full results are provided in the Appendix.

The following summarizes key findings for the on-street parking and for the parking in the South Street Municipal Lot.

## **On-Street Parking**

- The 164 spaces covered by the study were used by 892 cars on Thursday and 1,075 cars on Saturday. This equates to a turnover of 5.4 cars per space on Thursday and 6.6 cars per space on Saturday.
- Turnover varied by location and ranged from 2.7 to 9.1 cars per space. The lowest turnover was on South Street Extension and the highest occurred on Main Street between Washington Street and Pope Street.
- The length of stay averaged 1.2 hours on Thursday and 1.3 hours on Saturday.
- The majority of cars parked for an hour or less (66% on Thursday and 62% on Saturday). >
- Approximately 10% of on-street parkers (94-140 per day) did so for more than two hours. This includes approximately 7% (58-81 cars per day) that parked between 2 and 3 hours.

## **South Street Municipal Lot**

- The 138 spaces covered by the study were used by 407 cars on Thursday and 507 cars on Saturday. This equates to a turnover of 2.9 cars per space on Thursday and 3.7 cars per space on Saturday.
- The length of stay averaged 3.0 hours on Thursday and 2.6 hours on Saturday.
- Roughly one-third of cars parked for an hour or less (29% on Thursday and 32% on Saturday).
- Approximately 32% of cars parked for more than four hours on Thursday while about 21% did so on Saturday.
- There was generally good compliance with the five parking spaces posted with a 2-hour time limit. A few cars did park longer but almost all were cars that parked an hour or two before the time limit restriction expired at 6:00 pm and remained until the parking survey ended at 8:00 pm.

Table 11 **Parking Duration: Thursday** 

		No. of Cars by Time Parked							
	No. of	0-1	1-2	2-3	3-4	>4	Total	Cars/	Avg Stay
Location	Spaces	Hrs	Hrs	Hrs	Hrs	Hrs	Cars	Space	(hours)
ON-STREET PARKING									
Main Street (Washington to Pope)	19	114	47	9	1	2	173	9.1	1.2
Main Street (Pope to Church)	21	80	37	8	4	4	133	6.3	1.3
Main Street (Church to Houghton)	20	54	9	5	4	3	75	3.8	1.3
Main Street (Houghton to Broad)	21	71	18	6	1	0	96	4.6	1.0
Washington Street	6	39	15	1	0	2	52	8.7	1.2
Church Street	22	71	23	9	1	0	104	4.7	1.2
Pope Street	15	54	17	7	0	2	80	5.3	1.2
Felton Street	12	42	11	6	4	5	68	5.7	1.6
Market Street	4	16	8	2	1	1	28	7.0	1.4
South Street	9	23	18	2	0	0	43	4.8	1.3
South St Extension	15	22	14	3	1	0	40	2.7	1.3
Total	164	586	217	58	17	19	892	5.4	1.2
		66%	24%	7%	2%	2%			
SOUTH STREET MUNICIPAL LOT									
2-hour time limit	5	20	12	1	1	0	34	6.8	1.3
No time limit	133	99	65	46	34	129	373	2.8	3.6
Total	138	11 <b>9</b>	<b>77</b>	47	35	129	3/3 <b>407</b>	2.9	3.0
	-50	29%	19%	12%	9%	32%	40/	2.3	3.0

Note: Duration data includes all on-street parking in Core area except South Street Extension east of Houghton Street and parking on Washington Street west of the rotary.

On-street parking excludes 15-minute and HP spaces.

South Street Municipal Lot parking excludes 30-minute and HP spaces.

Source: Data collected by VHB on Thursday, May 11, 2023.

Table 12 **Parking Duration: Saturday** 

		No. of Cars by Time Parked							
	No. of	0-1	1-2	2-3	3-4	>4	Total	Cars/	Avg Stay
Location	Spaces	Hrs	Hrs	Hrs	Hrs	Hrs	Cars	Space	(hours)
ON-STREET PARKING									
Main Street (Washington to Pope)	19	94	63	8	2	2	169	8.9	1.3
Main Street (Pope to Church)	21	120	48	9	6	4	187	8.9	1.2
Main Street (Church to Houghton)	20	64	17	5	6	2	94	4.7	1.2
Main Street (Houghton to Broad)	21	118	31	7	2	0	158	7.5	1.0
Washington Street	6	42	18	8	1	1	45	7.5	1.4
Church Street	22	49	27	16	6	3	101	4.6	1.7
Pope Street	15	77	23	3	3	3	109	7.3	1.2
Felton Street	12	40	16	7	5	6	74	6.2	1.9
Market Street	4	13	8	4	0	2	27	6.8	1.7
South Street	9	23	24	3	2	2	54	6.0	1.5
South St Extension	15	25	20	11	О	1	57	3.8	1.5
Total	164	665	295	81	33	26	1075	6.6	1.3
		62%	27%	8%	3%	2%			
SOUTH STREET MUNICIPAL LOT									
2-hour time limit	5	27	9	4	0	1	41	8.2	1.3
No time limit	133	134	134	52	42	104	466	3.5	3.1
Total	138	161	143	56	42	105	507	3.7	2.6
		32%	28%	11%	8%	21%			

Note: Duration data includes all on-street parking in Core area except South Street Extension east of Houghton Street and parking on Washington Street west of the rotary.

On-street parking excludes 15-minute and HP spaces.

South Street Municipal Lot parking excludes 30-minute and HP spaces.

Source: Data collected by VHB on Saturday, May 13, 2023

# **Parking Survey**

An on-line survey was used to solicit information and comments about parking Downtown. The survey was available from late May to early September. A total of 3,413 responses were received. The survey provided separate sets of questions for each of the five answer choices for the initial question — What is your primary connection to downtown Hudson? As shown below, more than 3,000 responses came from those who identified as visitors to Downtown.

#### What is your primary connection to downtown Hudson?

I visit downtown	3,012	88%
I live downtown	184	5%
I'm an employee working downtown	162	5%
I own a business downtown	46	1%
I'm a landlord of a property downtown	9	<1%
	3,413	



The complete results of the survey are provided in a separate memorandum. Figure 2 on the following page shows some results from the responses by Downtown visitors.

## **Survey Comments**

All survey respondents were asked the open-ended question "What would make parking in the downtown area better for you and others? Feel free to be as specific as you wish." Almost all respondents provided comments and suggestions. Those comments and suggestions provided insight to understanding existing conditions and guided many of the recommendations of this study. Four topics were especially notable in the suggestions to improve the parking experience in Downtown.

- Increasing the amount of parking was a comment by more than 1,500 respondents, some 300 of whom suggested using the old McDonald's restaurant site on Washington Street.
- More than 200 respondents suggested changing parking time limits.
- Additional handicap parking locations were suggested by about 125 respondents.
- More than 100 respondents commented about parking signage.

Figure 2 Survey Results from Visitors to Downtown

### Do you live in Hudson?

Yes	1,951	65%
No	834	28%
Not now, but used to	227	8%
	3,012	



### How often do you visit downtown Hudson?

Several times a week	1,478	50%
Several times a month	1,125	38%
Several times a year	308	10%
Other	73	2%
	2,984	



### What was the reason for your most recent visit?

Shopping	692	16%
Eat + Drink	2,313	53%
Hair care, Beauty + Wellness	541	12%
Errands/Appointments	674	15%
Other	163	4%
	4,383	



Note: Multiple responses allowed.

### How long did you stay downtown on your most recent visit?

Less than 30 minutes	272	9%
30 minutes to 1 hour	503	17%
1 to 2 hours	1,462	49%
2 to 4 hours	739	25%
More than 4 hours	31	<1%
	3,007	



### Where did you park on your most recent visit?

On street	1,704	58%
In a public parking lot	870	30%
In a business' parking lot	239	8%
I didn't drive, I walked or biked	89	3%
Other	39	1%
	2,941	



4

# Recommendations

Based on the findings of the evaluation of existing conditions, this chapter presents recommendations for improving the parking experience for all users, and for strategies for better managing the Downtown parking assets. The recommendations are presented in three general categories — Parking Regulations, Parking Supply, and Parking Enforcement.

# **Parking Regulations**

Recommendations regarding parking regulations cover changes to time-limited parking, electric vehicle parking, and handicap parking.

## **Change 2-Hour Time Limits to 3 Hours**

All on-street parking in the Core study area has a two-hour time limit from 9:00 am to 6:00 pm Mondays through Saturdays. It is recommended that this two-hour time limit be changed to three hours and the time span be changed from 9:00 am to 8:00 pm.

Frustration with the two-hour time limits was mentioned by over 150 respondents to the survey as well as by participants in the public meetings. Many indicated that they risk receiving a ticket for staying more than two hours yet do not feel they have any other reasonable option.

A lack of longer-term parking options is borne out by the parking data collected in May. The data indicate that there are times when the longer-term parking options are not enough to support the demand for longer-term parking. Analysis of the parking duration data collected in May indicates that those parking on street longer than 2 hours required as many as 50 to 60 parking spaces yet at times there were as few as 30 spaces available in the designated longer-term parking areas among the off-street parking lots.

The recommendation to change the hours of enforcement to end at 8:00 pm instead of 6:00 pm is typical of areas with high amounts of evening activity. The parking duration data collected in May showed patterns of cars first parked at 3:00 pm or 4:00 pm and remaining parked when the data collection ended at 8:00 pm. This is a common pattern for employee parking and extending the time span of the parking time limits would help direct those parkers to other locations.

Approximately 10% of those currently using the on-street parking do so for more than 2 hours. Changing the two-hour time limits to three hours would increase compliance from about 90% to 97%. There will still be, as seen by the parking duration data, some who apparently have decided that parking on street for four, six, or even 8 hours is worth the risk of receiving a \$10 parking ticket. It is recommended that the Town consider raising parking ticket fines to address this issue.

### **Unrestricted Parking on South Street Extension**

The parking along the South Street Extension is the least used on-street parking in the Core area of Downtown. The block between South Street and Houghton Street has 15 spaces, but typical daytime occupancy is less than half that. Only on weekend evenings does the parking near capacity. The block between Houghton Street and Houghton Court has 13 spaces and only a few are ever used.

It is recommended that the current two-hour time limits on South Street Extension be removed. This would create some convenient long-term parking in the easterly part of the Core area and make better use of an underutilized parking resource.

## **Quick-stop Parking**

Quick stop parking is very short-term parking, typically with time limits of 15 to 30 minutes. There are currently 15-minute spaces at the Post Office and on Pope Street at Avidia Bank. There are also 30-minute spaces in the South Street Municipal Parking Lot.

It is recommended that the town establish a policy for designating quick-stop parking at other Downtown locations. The parking data collected in May shows that 36% of all on-street parking was for 30 minutes or less. Additional quick-stop parking locations would increase the convenience for those making short trips to retail shops, picking up orders at restaurants, or making deliveries.

The goal would be to increase the availability of safe and convenient parking for all Downtown businesses and quick-stop parking should be located where it can best be managed.

- The spaces should be readily identifiable and highly visible to the approaching driver, such as the first space on a block, or after a driveway.
- Quick-stop parking should be dispersed, generally no closer than about 200 feet apart.
- Requests for a quick-stop parking location should be made by multiple businesses, property owners, or Downtown residents.
- Requests for quick-stop parking should be evaluated with regards to the area rather than a specific parking space. Visibility, safe vehicle access, and the types of parkers who may benefit should be considered in determining the precise location of the quick-stop parking space.
- Locations of quick-stop parking should not be considered permanent. For example, the best solution to a request for a quick-park space relatively near an existing quick-stop may be to adjust the location of the existing one.

## **Electric Vehicle Charging**

Two electric vehicle (EV) parking spaces, with Level 2 charging, are provided in the 121 Main Street municipal lot. Level 2 charging provides roughly 20 miles of range per hour of charging. Public information from the ChargePoint network indicates the two spaces are typically used by 2 to 5 cars each day. Friday evenings and Saturday afternoons and evenings are the busiest times.

The usage of the existing EV spaces should be monitored. There do not today appear to be significant issues at present with cars overstaying time limits and denying others access to the chargers, but if usage increases this could happen. If such problems do occur, it is recommended that the rates be adjusted. At present the fee is simply \$0.20 per kWh (roughly \$1.30 per hour). Many municipalities also have a station rate surcharge to dissuade overstaying the time limit or remaining parked after being fully charged. For example, Marlborough surcharges 4 cents per minute for cars once they are fully charged. Maynard surcharges \$1.25 per hour for cars parking over the two-hour limit.

A number of survey respondents and meeting attendees advocated for more EV parking Downtown. EV fast chargers are available nearby at Hudson Commons so Level 2 charging availability in Downtown functions more as a Downtown amenity rather than a necessity. As such, any additional EV charging stations should be prioritized with other Downtown amenity improvements.

New EV charging stations should be located in convenient, but less used parking areas. Three locations are recommended for consideration.

- 1. The Library / Fire Station Lot. This location is convenient for many locations in the west end of Downtown.
- 2. Railroad Street Lot. This location is convenient to the Senior Center and businesses and residences on Church and Pope streets.
- 3. Vila do Porto Boulevard. An EV charger at the westerly end of Vila do Porto Boulevard would be convenient to many of the businesses and residences in the east end of Downtown.

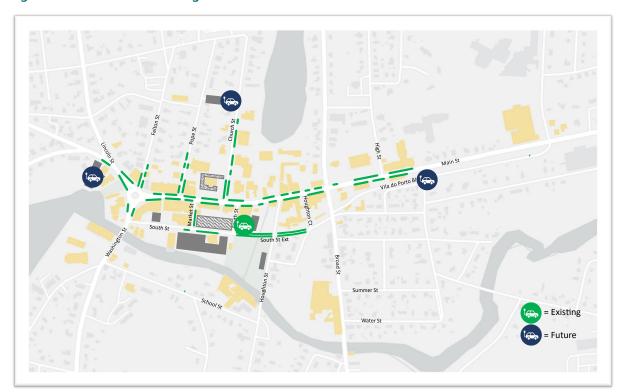


Figure 3 Potential EV Parking Locations

## **Handicap Parking**



A desire for handicap parking in more on-street locations was cited by more than 100 of the survey respondents. Coincidentally, Federal regulations on the location, design, and amount of accessible on-street parking was finalized in September. It is recommended that the new regulations be used to guide planning for more on-street handicap parking.

A review of the handicap parking currently provided in the Town's municipal lots noted some shortfalls regarding the number of handicap parking spaces, particularly wider "van accessible" ones, as well as a need to refresh the signage and markings of those spaces. It is recommended that the required number of off-street handicap parking spaces be provided, and that signage and markings be updated.

#### **Off-Street Handicap Parking**

The number of accessible parking spaces in public parking lots is regulated by the American with Disabilities Act and the Massachusetts Architectural Access Board. Table 13 shows the number of handicap parking spaces required and provided for each of the public parking lots. All of the public parking lots except the Library / Fire Station Lot have designated handicap parking spaces. At least one of every six handicap spaces must be "van accessible" with a wider adjacent aisle. The 121 Main Street and Railroad Avenue lots do not have designated van accessible parking spaces.

Table 13 **Handicap Parking: Off-Street Lots** 

Lot	Capacity	Required No. of Accessible Spaces	No. of Accessible Spaces Provided	Includes Van Accessible Space?
South Street Municipal Lot	150	5	5	Yes
8 South Street	14	1	1	Yes
121 Main Street	25	1	1	No
Cellucci Park	15	1	2	Yes
Railroad Ave	35	2	1	No
Library / Fire Station	56	3	0	-
Town Hall	19	1	1	Yes

Source: VHB inventory, May 2023.

While inventorying the municipal parking it was noted that the signage and markings of some of the handicap accessible parking spaces do not meet Federal and state requirements. For example, van accessible parking spaces are required to have a supplemental "van accessible" sign and not all such spaces do. It is recommended that as part of the annual lot maintenance, all signage and markings at handicap parking spaces be reviewed and updated as necessary.

### **On-Street Handicap Parking**

Figure 4 depicts the location of on-street handicap parking spaces on-street. There are seven, with most located near the rotary.

Accessible on-street parking is addressed by the Public Right-of-Way Accessibility Guidelines (PROWAG) finalized this August by the U.S. Access Board. It should be noted that PROWAG covers much more than accessible parking. Per the Federal Highway Administration, the Public Right of Way Accessibility Guidelines "ensure that sidewalks, pedestrian street crossings, pedestrian signals, and other facility for pedestrian circulation and use constructed or altered in the public right-of-way by state and local governments are readily accessible to and usable by pedestrians with disabilities".

The basics of PROWAG with regards to on-street parking include the following.

- A minimum of one accessible parking space is required for every 25 marked or metered parking spaces along a block perimeter. This applies to non-residential parking only.
- On-street parking spaces shall be a minimum of 24 feet long and 13 feet wide, although there are exceptions. They can be the same dimension as adjacent parallel parking spaces if (1) when only the roadway is altered, and not the sidewalk or (2) if the design would result in less than 9 feet remaining between the curb line and the right-of-way boundary. In both cases, accessible parking spaces must be provided nearest to a crosswalk.

The recent final PROWAG rulemaking applies when roadways and sidewalks are altered or newly constructed. And since PROWAG applies to much more than just on-street parking the planning for additional on-street handicap parking should be coordinated with planning and design of other Downtown roadway and sidewalk projects.

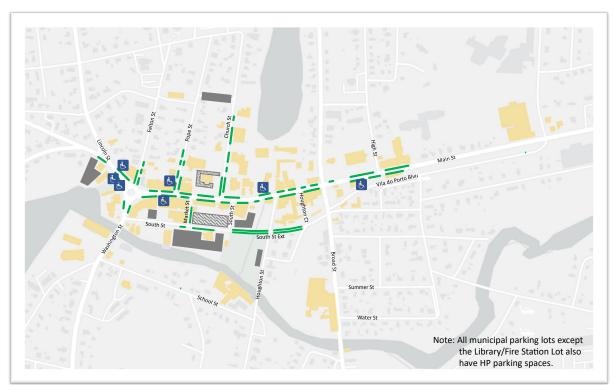


Figure 4 On-Street Handicap Parking Locations

# **Parking Supply**

"More parking" was cited by most survey respondents as the obvious means of improving the parking experience Downtown. Providing more parking can be accomplished by constructing new parking or by making better use of existing parking resources. Both options were explored as part of this study.

## Making Better Use of Existing Parking Supply

The following are recommendations for making better use of the existing parking supply, both municipal and privately owned, as a public parking resource. Recommendations are provided for five locations.

- 1. Library / Fire Station Lot
- 2. Town Hall Parking
- 3. Avidia Bank Financial Center Lot
- 4. Senior Center Parking
- 5. Houghton Street

### Library / Fire Station Lot

The Library / Fire Station Lot is underutilized. As shown in Table 14, there were 15 to 29 unused parking spaces during the two days of parking counts in May. The location of the parking lot, at the west end of Downtown and hidden from sight behind some municipal buildings, certainly contributes to the lack of use. Another factor is the allocation of parking — the 54-space lot includes reserved parking for two categories of employee parking and has three categories of public parking. Segregating parking for different users often makes for inefficient use of the parking supply.

Table 14 Parking Availability: Library / Fire Station Lot

		No. of Spaces Available				
		Morning	Midday	Afternoon	Evening	
	Capacity	8am – 11 am	11 am – 2 pm	2 pm – 5 pm	5 pm – 8 pm	
THURSDAY						
Public: 15-minute spaces	1	1	1	1	0	
Public: 2-hour spaces	20	17	14	14	7	
Public: Unrestricted spaces	15	3	3	7	5	
Reserved employee spaces	18	7	6	7	7	
Total	54	28	24	29	19	
SATURDAY						
Public: 15-minute spaces	1	1	1	1	0	
Public: 2-hour spaces	20	13	4	8	6	
Public: Unrestricted spaces	15	6	1	7	7	
Reserved employee spaces	18	5	9	9	12	
	54	25	15	25	25	

Source: VHB counts on Thursday, May 11, 2023 and Saturday, May 13, 2023.

Recommendations to make better use of the Library / Fire Station Lot focus on reducing the types of parking regulated within the lot and changing the signage to make public parking more prominent.

- Reduce the number of reserved employee spaces in the lot. No more than 12 of the 18 reserved spaces were used during the weekday and even fewer were used during the busy times of Saturday midday through evening. It is recommended that the employee parking along the east side of the lot be changed to public parking. The employee parking in the northwest corner of the lot would remain. Further, it is recommended that the reserved employee parking be shared between Library and Fire Station employees rather than there be separate locations for each department.
- Move the 15-minute parking space to Washington Street. This space appears to be rarely used. Moving it outside of the parking lot would help simplify the parking allocation within the lot.
- Add signage to make public parking more prominent. The current signage, and that reserved employee parking spaces are the first ones a driver sees when entering the lot, likely contributes to a visitor's impression of the lot being a restricted employee area tucked behind municipal buildings. Consolidating all reserved parking in the northwest corner will help make the parking lot feel more inviting, as will adding "affirmative" public parking signage. For example, the signage on the unrestricted (no time limit) public parking spaces messages when parking is not allowed, rather than that public parking is allowed. Those spaces should be signed for public parking, perhaps with a 12-hour time limit. Any signage about winter parking rules should apply to the entire parking lot, not just some of the public parking spaces.

Figure 5 **Library / Fire Station Lot** 



### **Town Hall Parking**

There are 19 parking spaces at the Town Hall reserved during the day for employees and visitors. The spaces are available for public use after 4:30 pm on weekdays, and on holidays and weekends.

The field count data showed very few, and sometimes no, cars using the parking in the evening or on Saturday. The parking is included on Town and Business Improvement District (BID) online parking maps, but it is not well known that Town Hall parking is available evenings and weekends. One likely reason is simply that the parking is not readily visible to those searching for parking. Another seems to be that there is no signage that directly says it is available for public parking. The Town Hall parking doesn't "look like" public parking.

It is recommended that supplemental signage, with affirmative messaging about when public parking is allowed, be added to make it clear that it can be used as public parking. Additionally, the existing employee parking signs are old, often faded, and should be replaced. As part of this effort, the posted restrictions for each employee parking space should be reviewed and updated if necessary.

Increased use of the Town Hall parking, through better signage and increased marketing by the Town and BID, would effectively add about a dozen parking spaces supporting high-activity destinations within the Core area of the Downtown.







#### **Avidia Bank Financial Center Lot**

The Avidia Bank Financial Center on Pope Street has a 56-space parking lot accessible from both Pope Street and Church Street. Currently, 10 of the spaces are leased by the Town for Town Hall employees.

It is recommended that the BID work with Avidia Bank to make the parking lot available for public parking after hours, at least on Fridays and Saturdays. The financial center is open until 4:00 pm on Fridays and noon on Saturdays.

Downtown benefits greatly from the Avidia Bank allowing similar use of their South Street lot and doing so at the Pope Street office would add a large parking area very near the high-activity Main Street area. The additional parking would increase the supply in the Core area of Downtown by more than 10 percent.





#### **Senior Center Parking**

It is recommended that public parking be allowed after hours at the Senior Center parking lot, similar to what is done at Town Hall. At present, demand for the Senior Center parking will likely be limited to larger events, but formally designating the parking for public use will expand the good practice of maximizing use of the town's parking resources.

### **Houghton Street**

The west side of Houghton Street, between Main Street and South Street Extension, is designated as a loading zone in the Town's *Traffic Rules and Regulations*. It is recommended that regulations be changed to allow time-limited public parking. This would add 6 to 8 spaces to the supply of public parking,

depending on whether a single loading zone space was designated or if loading activities shared the public parking spaces.

Changing the loading zone designation of this block of Houghton Street would add only a modest amount of parking supply, but at nominal cost.

## **Construction of New Parking Facilities**

Building a parking garage, particularly on the former McDonald's restaurant site at 32 Washington Street, was a frequent comment by survey respondents. As part of this study, options for providing parking at that site were evaluated. In addition, options for constructing additional parking at the skatepark site were evaluated.

## **Parking Options at 32 Washington Street**

The site has been vacant since 2017 and it is well located to serve many Downtown employees and visitors. Accordingly, the site was evaluated for both surface parking and a parking garage.

The two key conclusions from that evaluation are (1) the site has potential for use as surface parking, but extensive site exploration would be required to determine if it is functionally and financially viable and (2) that the site is too small to accommodate a feasible parking garage.

Based on the findings, it is recommended that the Town continue to engage the owners of the property and encourage them to carry out the site investigations needed to identify conditions that may impact redevelopment options and costs.



Figure 8 32 Washington Street

Source: Nearmap imagery, October 2023

Surface Parking at 32 Washington Street

**Figure 9** illustrates a layout for approximately 85 surface parking spaces using the entire site footprint. Having that much public parking would help support existing and future parking demand, but a thorough due diligence effort would need to be made before pursuing that option. Two of the most important issues that a site investigation would need to determine are whether any site environmental remediation is required and the condition of the river wall supporting the northerly edge of the site.

### Parking Garage at 32 Washington Street

All parking garages are expensive to build, with a cost of \$30,000 or more per space common in the suburban Boston area. Even that cost assumes a site big enough to achieve cost-efficient design. A minimum footprint of 120' by 180' is desirable, although a garage with a footprint of 120' by 130' may be feasible where the cost of land is extraordinarily high.

The 32 Washington Street parcel footprint is small and awkwardly shaped. It has frontage of about 120' but narrows quickly to about 95' from river edge to the southerly boundary. This is simply too small a width to accommodate the circulation and ramping required for a parking garage. Moreover, even the 95' width may not be attainable since it is likely no large structure could be constructed to the river's edge.



Figure 9 Surface Parking Concept for 32 Washington Street

### Parking Options at the Skatepark

The Skatepark site includes the adjacent privately-owned 35 South Street parcel, currently used by a granite and stone business. The site would be a good location for employee parking today and would provide many options for supporting future changes and growth of the Downtown parking system. Accordingly, the site was evaluated for its potential as surface parking or a parking garage.

Figure 10 Skatepark Site



Source: Nearmap imagery, October 2023

**Figure 11** shows a concept where the Skatepark site is used to expand the 150-space South Street Municipal Parking Lot. As shown, an additional 65 parking spaces could be created. This is just one example of how surface parking could be provided. The parking could also be separate from the South Street Municipal Lot, or a path added along Tannery Brook.

Another option for adding parking to the site would be to construct a parking garage. The site is wide enough and long enough to accommodate one with approximately 60 cars per level. Construction costs would be high, about \$2 million per level, and operating costs for a parking garage are more than for surface parking. More importantly, a stand-alone parking garage is not the best use for such a prominent location. It would be better if housing were constructed on the upper levels of any parking garage. This would allow for some sharing of costs and provide opportunities for more people to live in Downtown.

There are many benefits to constructing parking at the site. The additional parking supply would support existing and new projects Downtown or could be used to provide replacement parking should an existing municipal parking lot be developed as a building site. It is recommended that the Town advance some initial planning for developing the site. Developing the site for parking and perhaps housing would be a complex effort that would take years to realize, but it is important that the initial due diligence and site planning be done so that the Town can act promptly when opportunities arise.

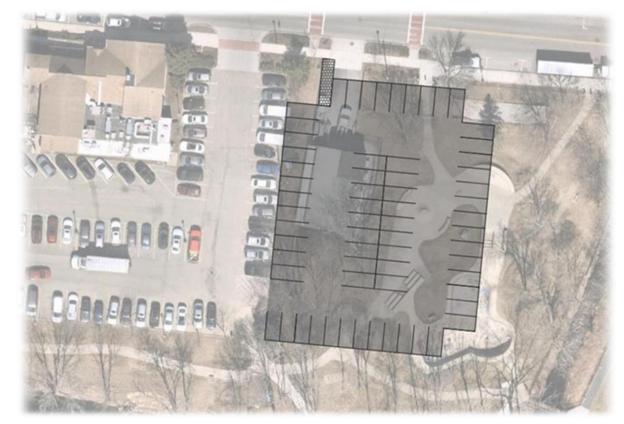


Figure 11 Example of Surface Parking at the Skatepark Site

# **Enforcement**

At present, all parking enforcement is done by hand by a part-time parking enforcement officer (PEO). The PEO walks through Downtown writing down license plate numbers and checking back later to determine if cars have overstayed posted time limits. This system is currently working very well but there are parking enforcement technologies and systems that can make the enforcement effort easier and provide better monitoring of overall parking activity.



# **Using License Plate Recognition (LPR)**

The Downtown parking enforcement effort could be improved by providing the PEO with a ticketing system that uses license plate recognition. Handheld devices have a camera that quickly records the time and location of vehicles, calculates whether the vehicle is in violation, and issues a ticket if appropriate. Not only do the LPR devices make easier day-to-day parking enforcement, but they collect information about parking utilization that can be used for monitoring the parking system and for assessing potential adjustments to policies and regulations.

It is recommended that Hudson obtain a digital citation management system for parking monitoring and enforcement. There are a several manufacturers of such systems and it is recommended that the Town contact other communities in

Massachusetts to discuss what systems they use and how they use them. It is also important to understand how responsive their vendor has been for system maintenance and upgrades.



## **Parking Payment Systems**

Parking pricing is often an important tool in the management of a downtown parking system. It can be used to manage parking demand in high-use areas and encourage more use of underutilized parking locations.

Pay-by-cell and multi-space pay stations are commonly used in parking systems with paid parking. They provide multiple payment options (by cell, coin, and card) and are convenient for parkers. They also can provide the municipality with comprehensive and real-time parking utilization data that can be extremely useful in monitoring and adapting the parking system.

Parking payment systems can have many benefits, but the Downtown parking system is currently operating effectively, and a parking pricing management tool is not recommended at this time.



# **Appendix**

**Parking Occupancy and Duration Data** 

## PARKING OCCUPANCY Off-Street Parking Thursday, May 11, 2023

		No. of Spaces	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM		Peak upancy
South Street Municipal Lot	30 min 2 hour Unrestricted HP	7 5 133 5 150	0 0 18 0	3 1 55 0	3 2 79 0	3 2 93 0	5 5 109 0 <b>119</b>	6 4 125 0 <b>135</b>	5 5 127 1	5 4 128 1 <b>138</b>	2 4 117 2 <b>125</b>	3 4 116 0 <b>123</b>	4 5 108 1 118	6 5 129 3 <b>143</b>	7 5 116 3 <b>131</b>	6 5 111 0 <b>122</b>	7 5 129 3	100% 100% 97% 60%
8 South Street	2 hour HP	14 1 15	1 0 <b>1</b>	3 0 <b>3</b>	2 0 <b>2</b>	6 0 <b>6</b>	5 0 <b>5</b>	7 0 <b>7</b>	9 1 <b>10</b>	7 0 <b>7</b>	10 0 <b>10</b>	10 0 <b>10</b>	10 0 <b>10</b>	14 0 <b>14</b>	9 0 <b>9</b>	9 0 <b>9</b>	14 1 15	100% 100%
121 Main Street (Medusa)	2 hour HP EV	21 2 2 2 25	3 0 0	4 0 0 4	4 1 0 <b>5</b>	6 1 0	6 0 0	10 0 1 11	12 0 1 <b>13</b>	12 0 0	13 0 0 13	14 0 0 14	19 0 0 <b>19</b>	23 0 0 23	21 0 0 21	15 0 0 <b>15</b>	23 1 1 25	110% 50% 50%
Cellucci Park Lot	2 hour HP	12 2 14	0 0 <b>0</b>	0 0 <b>0</b>	1 0 <b>1</b>	1 1 <b>2</b>	1 0 <b>1</b>	3 1 <b>4</b>	3 1 <b>4</b>	3 0 <b>3</b>	3 1 <b>4</b>	3 0 <b>3</b>	2 0 <b>2</b>	2 2 <b>4</b>	3 0 <b>3</b>	1 2 <b>3</b>	3 2 5	25% 100%
Railroad Ave	Unrestricted HP	34 1 35	12 0 <b>12</b>	12 0 <b>12</b>	17 1 <b>18</b>	30 1 <b>31</b>	23 0 <b>23</b>	18 0 <b>18</b>	19 0 <b>19</b>	17 0 <b>17</b>	14 0 <b>14</b>	9 0 <b>9</b>	4 0 <b>4</b>	1 0 <b>1</b>	1 0 <b>1</b>	0 0	30 1 31	88% 100%
Library / Fire Station	15 min 2 hour Unrestricted Employee	1 20 15 18	0 0 8 2 <b>10</b>	0 0 7 2 <b>9</b>	0 2 7 11 <b>20</b>	0 3 12 11 26	0 6 12 10 <b>28</b>	0 5 10 10	0 3 9 12 <b>24</b>	0 5 9 12 <b>26</b>	0 5 7 11 <b>23</b>	0 3 8 11 <b>22</b>	0 6 6 11 <b>23</b>	0 10 10 4	1 13 7 7 <b>28</b>	1 5 6 6	1 13 12 12 12	100% 65% 80% 67%
Avidia Lot (South St)	Unrestricted HP	44 1 45	0	0	0	0	0	0	0	0	0	0	0	42 0 <b>42</b>	39 0 <b>39</b>	16 0 <b>16</b>	42 0 42	95% _0%
Town Hall	15 min Employee HC	2 15 2 19	0	0	0	0	0	0	0	0	0	0	1 1 0	1 1 0	1 1 0	1 1 0	1 1 0	50% 7% 0% 11%

Street	Block	Side	е Туре	No. of Spaces	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM		Peak upancy
Church	Town Hall	W	2 hour	9	0	1	2	3	3	3	3	6	6	8	8	8	8	7	8	89%
Church	Town Hall	W	15 min	2	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	50%
Church	Opposite Town Hall	E	2 hour	6	0	1	1	1	1	1	1	0	1	2	2	2	2	1	2	33%
Church	North of Town Hall	E	2 hour	7	0	1	1	1	2	2	1	0	1	3	3	2	2	1	3	43%
Church	Post Office	Ε	15 min	7	0	0	2	0	1	1	3	4	2	3	2	0	0	0	4	57%
				31	0	3	6	5	7	7	8	10	10	16	15	13	13	10	18	_
Pope	Avidia	Ε	15 min	2	0	0	0	0	2	2	1	1	2	2	1	1	1	1	2	100%
Pope	West Side	W	HP	1	0	0	0	0	1	0	1	1	0	0	1	1	0	0	1	100%
Pope	Both Sides		2 hour	15	1	6	6	6	6	6	6	4	6	8	10	11	11	7	11	73%
				18	1	6	6	6	9	8	8	6	8	10	12	13	12	8		
Felton	Both Sides		2 hour	12	4	4	4	4	4	3	3	7	8	9	9	11	11	11	11	92%
South Street	Washington to South St Ext	S	2 hour	9	0	0	0	0	2	2	1	1	4	5	5	8	8	6	8	89%
South Street Ext	South St to Houghton Street	N	2 hour	6	0	0	0	0	0	0	0	0	0	2	2	1	2	2	2	33%
South Street Ext	South St to Houghton Street	S	2 hour	9	0	0	0	0	0	0	0	0	1	1	3	4	4	4	4	44%
South Street Ext	Houghton St to Houghton Ct	N	2 hour	7	0	0	0	1	0	0	0	0	0	0	0	0	1	0	1	14%
South Street Ext	Houghton St to Houghton Ct	S	2 hour	6	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1	17%
				28	0	0	0	1	0	0	1	1	1	3	5	5	7	6	8	_
Market Street	Main St to South Street	Е	2 hour	4	0	1	1	3	4	4	4	4	4	4	4	4	4	3	4	100%
Washington St	South of Main Street	W	2 hour	3	2	3	2	3	2	2	3	3	2	2	2	3	2	2	3	100%
Washington St	South of Main Street	Ε	2 hour	3	2	3	2	2	2	3	3	3	3	3	3	3	3	3	3	100%
				6	4	6	4	5	4	5	6	6	5	5	5	6	5	5	6	_
Main Street	Lincoln St to Washington St	N	HP	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	100%
Main Street	Lincoln St to Washington St	S	HP	2	0	0	0	0	0	0	1	1	0	0	0	1	0	0	1	50%
Main Street	Lincoln St to Washington St	Ν	2 hour	4	0	1	3	1	2	4	4	1	3	3	2	4	4	2	4	100%
Main Street	Lincoln St to Washington St	S	2 hour	8	0	0	0	1	1	1	0	0	3	0	0	0	0	2	3	38%
Main Street	Washington St to Pope St	N	2 hour	7	0	1	6	6	4	3	6	7	7	7	7	7	6	6	7	100%
Main Street	Washington St to Market St	S	2 hour	12	5	8	8	12	12	11	7	12	12	11	12	12	12	11	12	100%
Main Street	Washington St to Market St	S	HP	1	0	0	0	0	0	0	1	1	0	0	1	0	0	0	1	100%
Main Street	Pope St to Church St	N	2 hour	10	2	2	4	6	6	7	7	7	6	6	8	10	10	8	10	100%
Main Street	Market St to South St	S	2 hour	11	0	3	3	3	6	6	6	5	5	7	9	10	10	10	10	91%

### PARKING OCCUPANCY On-Street Parking Thursday, May 11, 2023

Street	Block	Sid	е Туре	No. of Spaces	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM		Peak upancy
Main Street	Church to Houghton St	N	2 hour	8	0	0	1	1	2	2	1	1	0	3	4	5	5	3	5	63%
Main Street	Church to Houghton St	N	HP	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0%
Main Street	Church to Houghton St	S	2 hour	12	0	1	1	1	2	2	1	1	1	5	5	7	7	4	7	58%
Main Street	Houghton St to Broad St	Ν	2 hour	10	3	1	0	3	5	5	2	2	2	5	5	7	7	5	7	70%
Main Street	Houghton St to Broad St	S	2 hour	11	1	0	0	1	1	2	2	1	1	3	3	3	3	3	3	27%
				98	11	17	26	35	41	43	39	39	40	50	56	66	64	54	71	_
Main Street	Broad Street to High Street	N	2 hour	10	0	0	0	1	2	2	2	1	1	0	2	3	2	2	3	30%
Main Street	Broad Street to High Street	S	2 hour	4	0	0	2	2	0	4	3	1	3	2	2	0	0	0	4	100%
Main Street	Broad Street to High Street	S	HP	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0%
Main Street	High Street to Sawyer Lane	Ν	2 hour	11	2	4	3	4	2	1	2	2	2	3	3	4	2	2	4	36%
Main Street	High Street to Sawyer Lane	S	2 hour	5	0	0	2	2	0	4	3	1	3	2	2	0	0	0	4	80%
				31	2	4	7	9	4	11	10	5	9	7	9	7	4	4	15	_
Vila do Porto Bl	vd	N	None	34	0	0	0	1	0	0	1	0	0	0	1	0	0	0	1	3%
School Street		N	None	20	4	9	9	11	10	12	12	9	8	8	12	14	13	9	14	70%

No. of Cars by Time Parked

Street	Block	Side Type	No. of Spaces	0.5 hr	1 hr	1.5 hrs	2 hrs	2.5 hrs	3 hrs	3.5 hrs	4 hrs	4.5 hrs	5 hrs	5.5 hrs	6 hrs	6.5 hrs	7 hrs	7.5 hrs	8 hrs	8.5 hrs	9 hrs	9.5 hrs	10 hrs	10.5 hrs	11 hrs	11.5 hrs	12 hrs	12.5 hrs	13 hrs	13.5 hrs				Avg Stay (hours)
Church Street Church Street Church Street Church Street	Town Hall Town Hall Opposite Town Hall North of Town Hall	W 2 hour W 15 min E 2 hour E 2 hour	9 2 6 7	23 5 3 8	18 1 10 9	8 1 3 0	10 1 1 1	3 0 4 2	0 0 0	0 0 1 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	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	62 8 22 20	6.9 4.0 3.7 2.9	1.1 1.4 1.0
Pope Street Pope Street	Avidia Both Sides	E 15 min 2 hour	2 15	16 34	1 20	1 7	0 10	0 5	0 2	0 0	0 0	0 2	0 0	0	0	0	0 0	0 0	0	0	0	0	0	0	0	0	0 0	0	0	0	0 0	18 80	9.0 5.3	1.2
Felton Street	Both Sides	2 hour	12	24	18	4	7	4	2	4	0	1	0	2	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	68	5.7	1.6
South Street Ext	Washington to South St Ext  South St to Houghton Street	S 2 hour	9	12 5	11 7	9	9	1 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	43 19	4.8 3.2	1.3
South Street Ext	South St to Houghton Street	S 2 hour	9	7	3	2	7	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21	2.3	1.4
Market Street Washington St	Main St to South Street  South of Main Street	E 2 hour	4 6	7 15	9	4 6	4 6	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	28 52	7.0 8.7	1.4
Main Street Main Street	Washington St to Pope St Washington St to Market St	N 2 hour S 2 hour	7 12	24 35	24 31	9 20	5 13	1 3	1 4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	64 109	9.1 9.1	1.0 1.3
Main Street Main Street Main Street Main Street Main Street Main Street	Pope St to Church St Market St to South St Church to Houghton St Church to Houghton St Houghton St to Broad St Houghton St to Broad St	N 2 hour S 2 hour N 2 hour S 2 hour N 2 hour S 2 hour	10 11 8 12 10 11	20 20 14 21 32 20	21 19 7 12 12 7	9 12 2 2 9 3	7 9 3 2 2 4	5 1 0 3 2 2	1 1 2 0 1	1 0 2 0 0	0 2 0 2 1 0	1 1 2 0 0	0 0 0 0 0	1 0 0 0 0	0 0 0 0 0	0 0 0 1 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 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	66 67 30 45 59 37	6.6 6.1 3.8 3.8 5.9 3.4	1.3 1.4 1.3 1.3 1.0
	Subtotal		168	<b>345</b> 38%	<b>262</b> 29%			<b>40</b> 4%	<b>18</b> 2%	<b>11</b> 1%	6 1%	<b>11</b> 1%	<b>0</b> 0%	<b>5</b> 1%	<b>0</b> 0%	<b>1</b> 0%	<b>0</b> 0%	<b>1</b> 0%	<b>0</b> 0%	<b>1</b> 0%	<b>0</b> 0%	918	5.5	1.2										
South Street N	funicipal Lot	30 min 2 hour Other	7 5 133 145	60 8 47 <b>115</b> 24%	4 12 52 <b>68</b> 14%	1 8 20 <b>29</b> 6%	1 4 45 <b>50</b> 11%	1 0 25 <b>26</b> 5%	1 1 21 <b>23</b> 5%	1 1 13 <b>15</b> 3%	0 0 21 <b>21</b> 4%	0 0 18 <b>18</b> 4%	0 0 19 <b>19</b> 4%	0 0 11 <b>11</b> 2%	0 0 10 <b>10</b> 2%	0 0 7 <b>7</b> 1%	0 0 12 <b>12</b> 3%	0 0 12 <b>12</b> 3%	0 0 10 <b>10</b> 2%	0 0 9 <b>9</b> 2%	0 0 8 <b>8</b> 2%	0 0 2 <b>2</b> 0%	0 0 3 <b>3</b> 1%	0 0 3 <b>3</b> 1%	0 0 1 <b>1</b> 0%	0 0 2 <b>2</b> 0%	0 0 1 <b>1</b> 0%	0 0 0 <b>0</b> 0%	0 0 1 <b>1</b> 0%	0 0 0 <b>0</b> 0%	0 0 0 <b>0</b> 0%	69 34 373 476	9.9 6.8 2.8 3.3	0.7 1.3 3.6 3.0
	TOTAL		313	<b>460</b> 33%	<b>330</b> 24%	<b>142</b> 10%	<b>154</b> 11%	<b>66</b> 5%	<b>41</b> 3%	<b>26</b> 2%	<b>27</b> 2%	<b>29</b> 2%	<b>19</b> 1%	<b>16</b> 1%	<b>10</b> 1%	<b>8</b> 1%	<b>12</b> 1%	<b>13</b> 1%	<b>10</b> 1%	<b>10</b> 1%	<b>8</b> 1%	<b>2</b> 0%	<b>3</b> 0%	<b>3</b> 0%	<b>1</b> 0%	<b>2</b> 0%	<b>1</b> 0%	<b>0</b> 0%	<b>1</b> 0%	<b>0</b> 0%	<b>0</b> 0%	1394	4.5	1.8

## PARKING OCCUPANCY Public Parking Lots Saturday, May 13, 2023

		No. of Spaces	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM		eak upancy
South Street Municipal Lot	30 min	7	0	4	5	6	6	6	7	7	4	3	4	6	7	7	7	100%
·	2 hour	5	2	2	2	5	5	5	5	5	5	3	5	5	5	5	5	100%
	Unrestricted	133	26	51	70	86	110	129	132	133	129	122	132	133	131	132	133	100%
	HP	5	0	0	0	0	0	1	1	0	0	0	0	2	3	2	3	60%
		150	28	57	77	97	121	141	145	145	138	128	141	146	146	146	148	_
8 South Street	2 hour	14	0	0	3	11	14	12	10	7	5	9	13	12	12	10	14	100%
	HP	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	100%
		15	0	0	3	11	14	12	11	7	5	9	13	12	12	10	15	
121 Main Street (Medusa)	2 hour	21	1	2	4	8	11	17	21	12	13	14	21	19	21	15	21	100%
	HP	2	0	0	1	0	0	0	0	1	0	1	0	2	0	0	2	100%
	EV	2	1	1	0	1	1	0	0	0	0	0	1	2	2	1	2	100%
		25	2	3	5	9	12	17	21	13	13	15	22	23	23	16	25	_
Cellucci Park Lot	2 hour	12	4	9	12	7	2	2	4	6	9	11	9	6	5	2	12	100%
	HP	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0%
		14	4	9	12	7	2	2	4	6	9	11	9	6	5	2	12	_
Railroad Ave	Unrestricted	34	6	6	6	7	11	10	11	11	8	5	3	2	2	3	11	32%
	HP	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0%
		35	6	6	6	7	11	10	11	11	8	5	3	2	2	3	11	_
Library / Fire Station	15 min	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	100%
	2 hour	20	3	3	4	7	11	15	16	13	12	9	12	14	9	9	16	80%
	Unrestricted	15	4	4	7	9	14	10	12	9	6	7	8	7	5	6	14	93%
	Employee	18	2	3	7	13	9	8	7	8	9	8	6	5	3	3	13	72%
		54	9	10	18	29	34	33	35	30	27	24	26	26	18	18	44	
Avidia Lot (South St)	Unrestricted	44	10	10	11	14	15	18	5	32	34	26	36	37	38	30	38	86%
	HP	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0%
		45	10	10	11	14	15	18	5	32	34	26	36	37	38	30	38	_
Town Hall	15 min	2	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	50%
	Employee	15	1	1	1	2	4	2	2	2	1	1	3	4	3	2	4	27%
	HC	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0%
		19	1	1	1	2	4	2	2	2	2	2	4	5	4	3	5	26%

Street	Block	Side	e Type	No. of Spaces	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM		Peak upancy
Church	Town Hall	W	2 hour	9	0	1	2	4	4	4	4	9	9	9	9	9	9	9	9	100%
Church	Town Hall	W	15 min	2	0	0	0	0	0	0	0	2	2	2	2	2	2	2	2	100%
Church	Opposite Town Hall	E	2 hour	6	0	1	1	1	1	1	5	6	6	6	6	6	5	5	6	100%
Church	North of Town Hall	E	2 hour	7	0	0	0	0	0	0	2	6	6	6	7	7	4	2	7	100%
Church	Post Office	Ε	15 min	7	0	1	2	4	1	3	1	1	0	0	1	0	1	0	4	57%
				31	0	3	5	9	6	8	12	24	23	23	25	24	21	18	28	_
Pope	Avidia	Ε	15 min	2	0	1	1	1	1	1	1	2	2	2	2	2	0	0	2	100%
Pope	West Side	W	HC	1	0	0	0	0	0	1	1	1	1	0	1	0	0	0	1	100%
Pope	Both Sides		2 hour	15	0	3	3	3	6	6	10	14	14	14	12	11	13	13	14	93%
				18	0	4	4	4	7	8	12	17	17	16	15	13	13	13		
Felton	Both Sides		2 hour	12	6	10	11	11	12	12	11	12	12	10	11	11	11	10	12	100%
South Street	Washington to South St Ext	S	2 hour	9	0	0	0	2	2	3	4	5	8	9	9	9	9	9	9	100%
South Street Ext	South St to Houghton Street	N	2 hour	6	0	0	0	0	0	0	0	2	3	3	1	6	6	6	6	100%
South Street Ext	South St to Houghton Street	S	2 hour	9	0	0	0	0	0	1	2	4	4	3	3	7	9	9	9	100%
South Street Ext	Houghton St to Houghton Ct	Ν	2 hour	7	0	0	0	0	1	1	0	2	0	0	1	1	1	0	2	29%
South Street Ext	Houghton St to Houghton Ct	S	2 hour	6	0	0	1	0	2	2	1	2	1	1	1	0	0	0	2	33%
				28	0	0	1	0	3	4	3	10	8	7	6	14	16	15	19	
Market Street	Main St to South Street	Ε	2 hour	4	0	4	4	4	4	4	4	4	4	4	4	4	4	4	4	100%
Washington St	South of Main Street	W	2 hour	3	0	3	3	3	3	3	3	3	3	3	3	3	3	3	3	100%
Washington St	South of Main Street	Ε	2 hour	3	0	2	3	3	3	3	3	3	3	3	3	3	3	3	3	100%
				6	0	5	6	6	6	6	6	6	6	6	6	6	6	6	6	<del>-</del>
Main Street	Lincoln St to Washington St	N	НР	1	0	0	1	0	0	0	0	0	1	1	0	0	0	0	1	100%
Main Street	Lincoln St to Washington St	S	HP	2	0	1	2	1	0	1	0	0	1	0	0	1	1	0	2	100%
Main Street	Lincoln St to Washington St	N	2 hour	4	2	4	3	3	4	3	3	4	4	4	3	3	2	1	4	100%
Main Street	Lincoln St to Washington St	S	2 hour	8	2	2	4	5	6	4	4	7	5	5	6	5	4	4	7	88%
Main Street	Washington St to Pope St	N	2 hour	7	2	4	5	6	6	6	7	7	7	7	7	7	7	6	7	100%
Main Street	Washington St to Market St	S	2 hour	12	0	5	7	8	9	11	12	12	12	12	12	12	12	11	12	100%
Main Street	Washington St to Market St	S	HP	1	0	1	-	7	1	1	1	1	1	1	1	1	1	1	1	100%
Main Street	Pope St to Church St Market St to South St	N S	2 hour 2 hour	10 11	0 1	4 4	5 4	7 8	8 8	8 8	9 8	10 9	10 9	10 10	10 11	10 11	10 11	10 11	10	100% 100%
Main Street	ואומו גפנ אנ נט אטענוו אנ	3	2 nour	11	1	4	4	ŏ	ŏ	ŏ	ŏ	9	9	10	11	11	TT	11	11	100%

### PARKING OCCUPANCY On-Street Parking Saturday, May 13, 2023

Street	Block	Sid	е Туре	No. of Spaces	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM		Peak upancy
Main Street	Church to Houghton St	N	2 hour	8	0	1	1	1	2	3	3	5	7	7	5	5	5	4	7	88%
Main Street	Church to Houghton St	N	HP	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0%
Main Street	Church to Houghton St	S	2 hour	12	0	1	1	1	1	3	3	3	5	5	5	6	9	9	9	75%
Main Street	Houghton St to Broad St	N	2 hour	10	0	4	6	6	8	8	8	7	7	7	7	7	9	9	9	90%
Main Street	Houghton St to Broad St	S	2 hour	11	1	4	4	4	3	9	9	7	7	4	4	4	3	5	9	82%
				98	8	35	43	50	56	65	67	72	76	73	71	72	74	71	89	<del>-</del>
Main Street	Broad Street to High Street	N	2 hour	10	0	0	0	0	1	0	0	0	0	0	0	0	1	0	1	10%
Main Street	Broad Street to High Street	S	2 hour	4	0	0	1	1	2	2	3	3	0	0	0	2	1	0	3	75%
Main Street	Broad Street to High Street	S	HP	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0%
Main Street	High Street to Sawyer Lane	N	2 hour	11	5	3	10	6	6	4	3	3	3	1	3	1	2	2	10	91%
Main Street	High Street to Sawyer Lane	S	2 hour	5	0	0	0	2	1	1	2	0	2	2	0	0	0	0	2	40%
				31	5	3	11	9	10	7	8	6	5	3	3	3	4	2	16	_
Vila do Porto Bl	vd	N	None	34	0	0	0	0	0	0	0	0	0	0	0	0	3	1	3	9%
School Street		N	None	20	5	11	14	15	14	16	18	14	13	9	16	20	20	13	20	100%

### PARKING DURATION

Saturday, May 13, 2023

#### No. of Cars by Time Parked

Street	Block	Side Type	No. of Spaces	0.5 hr	1 hr	1.5 hrs	2 hrs	2.5 hrs	3 hrs	3.5 hrs	4 hrs	4.5 hrs	5 hrs	5.5 hrs	6 hrs	6.5 hrs	7 hrs	7.5 hrs	8 hrs	8.5 hrs	9 hrs	9.5 hrs	10 hrs	10.5 hrs		11.5 hrs	12 hrs	12.5 hrs		13.5 hrs				Avg Stay (hours)
Church Street	Town Hall	W 2 hour	9	18	13	6	11	4	2	2	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	58	6.4	1.5
Church Street	Town Hall	W 15 min	2	2	0	2	1	1	0	0	0	0	ō	0	0	0	0	1	0	Ö	0	0	0	0	0	0	0	0	0	0	0	7	3.5	2.0
Church Street	Opposite Town Hall	E 2 hour	6	3	10	2	4	1	5	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	28	4.7	1.8
Church Street	North of Town Hall	E 2 hour	7	3	2	2	2	3	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	2.1	2.0
Pope Street	Avidia	E 15 min	2	8	1	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13	6.5	
Pope Street	Both Sides	2 hour	15	45	32	13	10	1	2	2	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	109	7.3	1.2
Felton Street	Both Sides	2 hour	12	20	20	7	9	4	3	3	2	0	1	2	0	1	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	74	6.2	1.9
South Street	Washington to South St Ext	S 2 hour	9	11	12	18	6	3	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	54	6.0	1.5
South Street Ext	South St to Houghton Street	N 2 hour	6	1	5	3	3	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18	3.0	1.7
South Street Ext	South St to Houghton Street	S 2 hour	9	9	10	10	4	3	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	39	4.3	1.4
Market Street	Main St to South Street	E 2 hour	4	5	8	3	5	2	2	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27	6.8	1.7
Washington St	South of Main Street	2 hour	6	15	9	8	4	6	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	45	7.5	1.4
Main Street	Washington St to Pope St	N 2 hour	7	27	18	10	9	2	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	68	9.7	1.1
Main Street	Washington St to Market St	S 2 hour	12	23	26	31	13	4	2	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	101	8.4	1.3
Main Street	Pope St to Church St	N 2 hour	10	43	25	10	13	1	2	2	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	98	9.8	1.1
Main Street	Market St to South St	S 2 hour	11	33	19	19	6	3	3	3	1	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	89	8.1	1.3
Main Street	Church to Houghton St	N 2 hour	8	16	5	5	1	1	2	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	34	4.3	1.4
Main Street	Church to Houghton St	S 2 hour	12	32	11	7	4	1	1	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	60	5.0	1.1
Main Street	Houghton St to Broad St	N 2 hour	10	38	26	8	9	3	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	87	8.7	1.1
Main Street	Houghton St to Broad St	S 2 hour	11	45	9	8	6	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	71	6.5	0.9