



MALDEN CENTER PARKING MANAGEMENT PLAN



Malden
Redevelopment
Authority



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ACKNOWLEDGEMENTS

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Table of Contents

Acknowledgements.....	2
Table of Contents	3
Executive Summary.....	5
Introduction.....	7
Study Area.....	9
Existing Parking Analysis.....	11
Parking Capacity and Regulations	11
Parking Occupancy.....	14
On-Street Parking Duration	18
Additional Off-Street Parking Lot Observations	22
Mountain Avenue Garage	22
Main Street Lot.....	24
Main Street & Ferry Street Lot	25
Florence Street Lot.....	25
Main Street & Charles Street Lot	25
Pearl Street Lot.....	26
Stop & Shop Lot.....	28
Zoning Analysis	29
Residential Parking Requirements	30
Commercial Parking Requirements	31
Public and Stakeholder Participation	32
Observed Parking Issues.....	34

Widespread Disregard for Parking Regulations.....	34
Enforcement Issues.....	35
Pricing Issues.....	37
Loading Issues	37
Handicap Parking Placards	38
Snow Clearance Issues	38
Parking Recommendations	40
Physical Improvements.....	40
Regulations and Pricing.....	51
Zoning.....	62

Appendices Included Separately

Appendix A: Ongoing Redevelopment Projects in Malden Center.....	2
Appendix B: On-Street Parking Capacity and Regulations by Block	4
Appendix C: On-Street Effective Capacity Illustration	7
Appendix D: On-Street Occupancy by Time of Day.....	9
Appendix E: Average Occupancy by Location.....	12
Appendix F: Hourly Occupancy by Location.....	15
Appendix G: Detailed Duration Data	23
Appendix H: Reverse Angle Parking Brochure	25
Appendix I: Survey Results.....	28
Appendix J: Survey Results from Free Response Questions.....	47

Executive Summary

The Metropolitan Area Planning Council (MAPC), a regional planning agency serving the 101 cities and towns of Metro Boston, collaborated with the Malden Redevelopment Authority and the City of Malden to complete a parking study for Malden Center, which is currently experiencing significant residential and commercial development activity. The parking study documents existing parking regulations and capacity; gathers input on parking issues from businesses and other stakeholders; and collects and analyzes data on parking occupancy and duration. The purpose of the study is to develop recommendations for improving parking availability and efficiency through updated parking policies and/or physical improvements.

Study area observations were completed on a weekday and a Saturday during the spring of 2015. Overall, the parking analysis showed that there is very high parking demand in Downtown Malden on weekdays and Saturday evenings. Public parking supply is constrained by a high number of permit-only on-street spaces, and a very high number of leased spaces within the two Malden Center garages. As a result, **the effective daytime parking capacity for the general public is much lower than the total capacity, with only 32% of all Malden Center parking spaces available to the general public.**

MAPC's field observations revealed:

- Overall parking (on-street and garages) experienced weekday peak demand at 11:00am, with 84% of all parking spaces utilized, but parking levels were consistently high between 9:00am-3:00pm.
- On-Street weekday peak demand occurred at 1:00pm with an occupancy of 98%, well above the target occupancy level of 85%¹
- Multiple vehicles parked in 1 hour parking spaces for long durations (sometimes all day), limiting the potential for parking turnover

Based on our analysis of the existing parking situation in Malden Center, MAPC makes numerous recommendations in this report for physical improvements and policy changes that are intended to help achieve the following goals:

- Increase availability for short-term parking in the study area, while maintaining adequate parking for employees of Malden Center businesses and others who need long-term parking.
- Maximize parking capacity through physical improvements and pricing strategies that enable more efficient use of existing on-street and off-street parking areas.
- Reduce demand for parking by improving conditions for walking, biking and transit use, and by changing pricing policies that encourage driving.
- Coordinate policies for on-street, public off-street, and private off-street parking so that the parking system as a whole can adequately accommodate current and future development in Malden Center.

Key recommendations include:

1. Restripe on-street parking spaces throughout the study area to clarify parking regulations and maximize the use of curb space.
2. Implement a consistent 2 Hour limit for on-street spaces in Malden Center.

¹ *The High Cost of Free Parking*, by Professor Donald Shoup.

3. Purchase smart parking meters and price on-street parking within the study area. Coordinate prices with hourly parking prices in garages and off-street lots.
4. Adjust monthly permit pricing for garages and surface lots to create more availability for short-term parking in the Jackson and CBD garages.
5. Make aesthetic improvements to the garages and install additional wayfinding signage to encourage use by short-term parkers.
6. Work with private garage and lot owners to open any excess parking to the public.
7. Make pedestrian and bicycle infrastructure improvements to reduce demand for parking.
8. Require new developments to implement Transportation Demand Management strategies to reduce parking demand.
9. Make comprehensive parking information readily available and easy to access for residents, visitors, and employees.
10. Reinvest parking revenue in garage maintenance and public realm improvements in Malden Center.

These measures are proposed as a package of recommendations; piecemeal implementation may compromise their effectiveness. In addition, many of these recommendations will require ongoing management by the City of Malden and the Malden Redevelopment Authority. In particular, this report suggests hourly and monthly parking prices, but recommends that these prices be adjusted up or down depending on whether occupancy is above or below 85%. Therefore MAPC strongly recommends that the City appoint a parking manager to oversee implementation and ongoing management.

Finally, parking is a hot-button issue in Malden and many significant changes to the status quo are proposed in this report. Robust public education is crucial to explain the coming changes and why they are necessary. Most important is to relate all of the parking reforms back to the goal of increasing on-street parking availability for customers in Malden Center. In the long term, reinvesting parking revenue into streetscape improvements in Malden Center will help maintain support for pricing on-street parking.

Introduction

Malden Center is a dense mixed-use downtown experiencing resurgence with new residential and commercial growth occurring through the redevelopment of existing buildings and parking lots. Malden Center is home to a number of major employers, including Malden City Hall, the Malden Police Department, the Massachusetts Department of Elementary and Secondary Education, and numerous small businesses and restaurants. Pleasant Street and Main Street are the primary retail areas, but Exchange Street is seeing a number of redevelopment projects that will boost its residential, retail and restaurant presence. The area is conveniently served by the MBTA's Orange Line, numerous bus routes, and two garages owned by the Malden Redevelopment Authority. Proximity of Malden Center to the Orange Line station has increased market demand for new residential and mixed-use buildings in the Center, as well as the reinvestment and re-use of older historic buildings. Malden Center is surrounded by residential neighborhoods which help to define and constrain the boundaries of the denser core, thereby limiting expansion and the ability to construct more parking facilities. The increase in new development activity mixed with the constrained parking environment was a concern of City staff, elected leaders, business owners, and residents. MAPC was asked by the Malden Redevelopment Authority (MRA) to assist in assessing the current parking situation in Malden Center, and developing recommendations for managing parking assets into the future.

The purpose of this parking study is to determine how existing downtown parking spaces are currently being utilized, and for what period of time. This effort will help determine if the existing parking supply is adequate, whether regulations and/or the location of parking should be adjusted, and make recommendations for managing the parking supply in the context of significant ongoing and future redevelopment. A table of ongoing development projects is provided as a reference in **Appendix A**.

Several **parking management best practices** that helped guide MAPC's analysis and recommendations for Malden Center:

- Parking regulations should be visible, clear and consistent
- Parking policies and regulations should encourage people to park once and visit multiple destinations in Malden Center in one trip
- Short-term parking should be prioritized close to businesses, with long-term parking in garages or at the periphery of Malden Center
- Parking policies should aim for 85% parking occupancy² for on-street parking, meaning parking is generally close to being fully utilized but there are always a few spaces available. Occupancy greater than 85% may be appropriate for off-street parking, depending on the size and configuration of the lot or garage.

MAPC collected and analyzed existing parking capacity, occupancy, and duration data in the Malden Center study area. The scope for this parking study included identification and analysis of the following:

1. Existing parking capacity and regulations within the study area
2. Hourly occupancy and duration on both a weekday and a Saturday

² Target parking occupancy level identified in *The High Cost of Free Parking*, by Donald Shoup. An 85% parking occupancy is generally considered the sign of a "healthy" parking district - one with strong demand but enough available supply to avoid the negative consequences of drivers circling around looking for parking.

3. Average duration, and patterns of short- and long-term parking
4. Times and locations of peak parking demand
5. Occupancy observations of additional public off-street lots around the periphery of the study area
6. Analysis of garage utilization (data provided by LAZ parking)

Throughout this process, MAPC held meetings with the Malden Redevelopment Authority and the City of Malden, and surveyed businesses and members of the public to determine existing issues and potential solutions.

Study Area

The sub-district of Malden Center which acts as the focus area for the parking study area is bound by Florence Street to the north, Main Street to the east, Centre Street to the south, and Commercial Street to the west. From end to end, the study area is 0.3 miles long, or approximately a six minute walk. The study area includes the following parking locations (as shown in **Figure 1**):

On-street public parking (owned and maintained by the City of Malden):

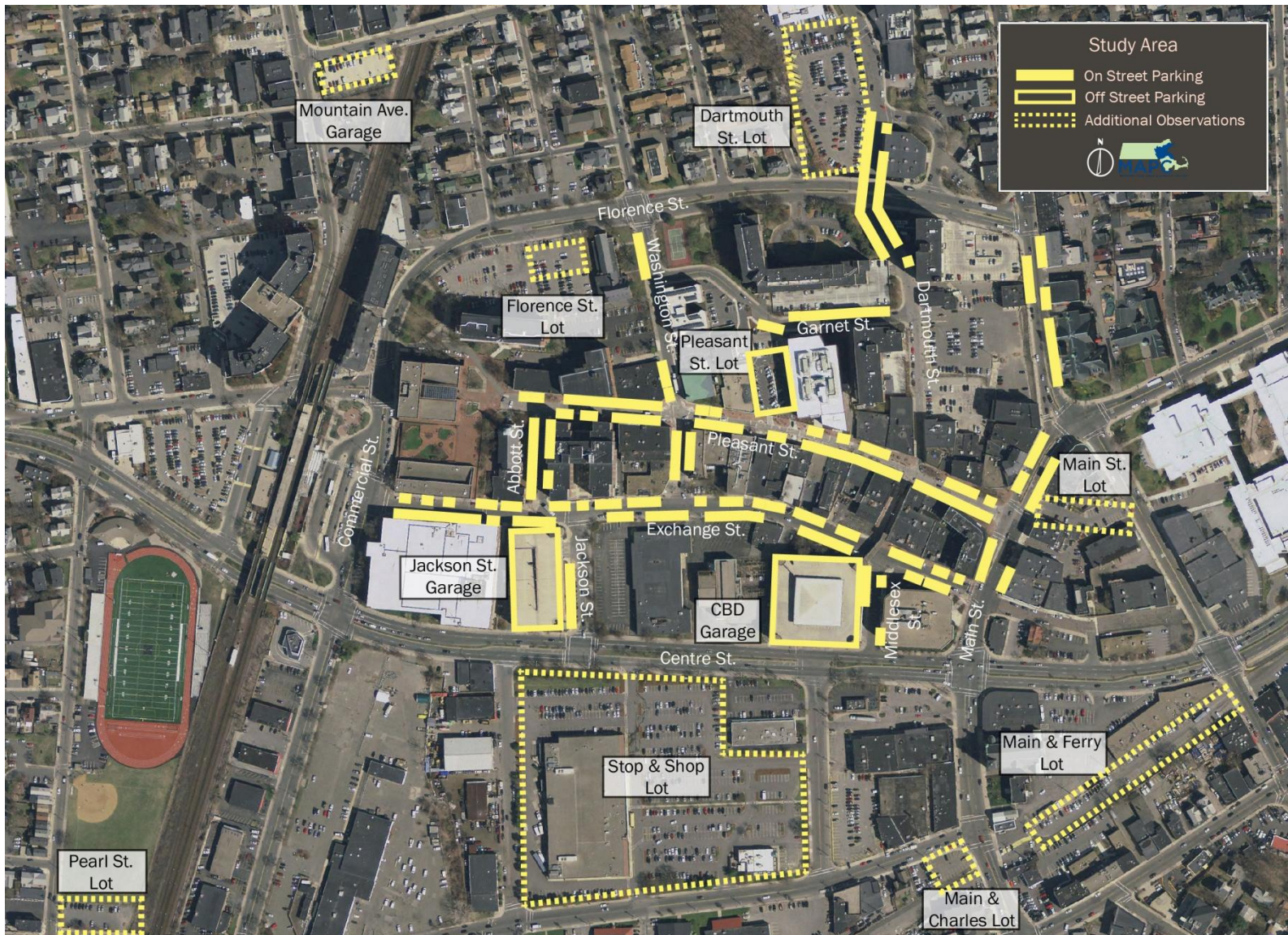
- Pleasant Street between City Hall and Main Street
- Exchange Street between Commercial Street and Main Street
- Main Street between Florence Street and Exchange Street
- Dartmouth Street between YMCA and Centre Street³
- Washington Street between Florence Street and Exchange Street
- Garnet Street between Washington Street and Dartmouth Street
- Abbott Street between Pleasant Street and Exchange Street
- Jackson Street between Exchange Street and Centre Street

Off-street public surface parking lots and garages (owned and maintained by the Malden Redevelopment Authority, and operated by LAZ parking):

- Pleasant Street Parking Lot
- CBD Garage
- Jackson Street Garage

³ Portions of the roadway were closed for construction during data collection

Figure 1 Malden Center Study Area



Existing Parking Analysis

In order to determine the existing parking conditions within Malden Center, MAPC conducted a parking study on Tuesday, April 14, 2015 from 7:00am - 9:00pm and Saturday, May 2, 2015 from 9:00am–10:00pm. Prior to the data collection effort, the number, type, and location of parking spaces within the study area were documented.

Parking Capacity and Regulations

The study area includes a total of 1,658 parking spaces, including garage parking, on-street parking, and the surface parking lot located off of Pleasant Street. The majority of parking spaces (79%) are located within the CBD and Jackson Street garages, with the remaining spaces located on-street and in the surface parking lot. **Table 1** provides a detailed breakdown of parking location and capacity within the study area.

Table 1. Study Area Public Parking Capacity¹

Location of Parking	Capacity	Percent
CBD & Jackson Garages	1,302	79%
On-Street	318	19%
Pleasant Street Lot	38	2%
Total	1,658	100%
¹ Other areas observed for this parking study but located outside of the core study area are not included in this total.		

There are 1,340 off-street public parking spaces within the study area, 1,302 of these within garages. The garage spaces are split evenly between the CBD and Jackson Street garages, with 651 spaces within each garage. The cost of parking is \$2 per hour, with a max daily rate of \$18. Many local businesses validate parking for their customers, which provides up to 2 hours of free parking for customers. Evening specials are available for \$4 if you enter between 5:00-7:00pm and exit before 6:00am. Monthly passes are also available for \$100. On weekends, the Jackson Street garage is closed and the CBD garage is open to the public at no cost. In addition to the garage spaces, there are 38 spaces available in the off-street parking lot on Pleasant Street. These spaces are primarily 2 Hour spaces, with a few handicap spaces available. This parking is available at no cost.

The 318 on-street spaces have a wide variety of posted regulations, including 1 hour, 90 minute, 15 minute, senior center, police permit, emergency vehicle, loading, handicap, taxi, and unrestricted/unsigned parking spaces. The majority of spaces in the study area have a 1 Hour limit, but the time restrictions vary slightly. For example, most spaces on both Pleasant Street and Exchange Street have 1 Hour restrictions, but they are in effect until 6:00pm on Pleasant Street but only 5:00pm on Exchange Street. The lack of consistency in parking regulations can result in driver confusion and make enforcement more difficult, which may encourage some drivers to ignore the regulations completely. All on-street parking is free.

A summary of the on-street parking regulations is illustrated in **Figure 2** and shown in **Table 2**. A detailed breakdown of parking capacity and regulations by block is included in **Appendix B**.

This aerial map of downtown St. Paul, Minnesota, illustrates a walking tour route. The streets shown include Commercial St., Main St., Exchange St., Jackson St., Abbott St., Washington St., Florence St., Garnet St., Pleasant St., Centre St., Middlesex St., and Dartmouth St. Numbered segments (1-16) are placed along the streets, indicating specific locations or points of interest. The map is oriented with North at the top.

Table 2. On-Street Parking Regulations

Type of Parking Regulations	Capacity	Percent
1 Hour ¹	203	64%
Police & Emergency Vehicles/Police Permit	36	11%
90 Minutes	25	8%
Senior Center/Sr. Center Permit	23	7%
15 Minute	15	5%
Unrestricted/Unsigned	8	3%
Handicap	4	1%
15 Minute/Loading	3	1%
Taxi	1	0%
Total	318	100%
¹ Includes all 1 Hour Parking spaces within the study area (with various restriction times: 7am-5pm, 7am-6pm, and 11am-5pm)		

As shown in **Table 2**, the existing regulations reserve a large number of on-street spaces for permitted users (emergency and police vehicles, police officer personal vehicles, visitors to the senior center, handicap drivers, loading vehicles, and taxis), leaving only 76% of the on-street parking spaces available for use by the general public. This is also true in the garages, where approximately 80% of all spaces are leased or reserved by local businesses. Therefore, **the effective daytime parking capacity for the general public is much lower than the total capacity, with only 32% of all Malden Center parking spaces available to the general public.** Table 3 details the effective capacity of all study area parking areas, also illustrated in **Appendix C**.

Table 3. Study Area Effective Public Parking Capacity

Location of Parking	Total Capacity	Effective Capacity	Effective Capacity Percent
CBD & Jackson Garages	1,302	250	19%
On-Street	318	243	76%
Pleasant Street Lot	38	36	95%
Total Effective Capacity	1,658	529	32%

Parking Occupancy

During the parking observation hours, MAPC detailed the parking occupancy and duration by time of day in order to gain an in-depth understanding of how parking is utilized in Malden Center. This parking data helps to identify peak demand times, average parking durations, and areas with the highest parking demand.

During the weekday observation, peak parking occupancy in Malden Center occurred at 1:00pm for on-street parking (98% occupancy), between 9:00am-2:00pm in the Pleasant Street lot (97-100% occupancy), and at 11:00am in the garage (82% occupancy). The peak period for Malden Center as a whole was 11:00am with 84% of all parking spaces utilized. However, parking occupancies in Malden Center were consistently high between 9:00am and 3:00pm, after which time on-street occupancy remained high but garage parking occupancy decreased considerably.

For residents and customers looking to find short-term parking (on-street or in the Pleasant Street lot) within Malden Center, finding a parking space is difficult between the hours of 10:00am-5:00pm, when parking occupancy within those areas is above 85% occupancy. There is limited parking available within the two garages throughout the day, but many short-term users do not utilize these spaces due to the cost and increased distance from the downtown core.

A summary of the weekday on-street occupancy is shown below in **Figure 3** and **Appendix D**.

During the Saturday observation, peak parking occupancy in Malden Center was busiest in the evening. In a downtown with active restaurant and entertainment uses, customers often park for longer periods of time which limits turnover and parking availability. It should be noted that the majority of the on-street parking regulations are not in effect after 5:00pm or 6:00pm (depending on the location); therefore vehicles parked after that time generally remain for the evening. The on-street parking peak occurred at 8:00pm; however the Pleasant Street lot was at or near capacity from 10:00am through the end of the observations at 10:00pm. Detailed garage data is not available for the weekend because the CBD garage gates are open and parking is free (the Jackson Street garage is closed on weekends). However, the CBD garage is staffed by LAZ Customer Service Personnel and it was noted that the garage was never more than 25% full during the day or evening.

A summary of the Saturday on-street occupancy is shown below in **Figure 4** and **Appendix D**.

Figure 5 and **Figure 6** on the following pages illustrate on-street parking utilization across Malden Center during the peak hour on both the weekday and weekend observations. Dark red indicates areas of on-street parking that were at or above 100% occupancy during the busiest hour of the observation day. As shown in the figures, all on-street parking on Pleasant Street, Exchange Street, and Main Street were fully occupied during the peak occupancy period. Parking spaces that were available were limited to permit parking areas, such as police vehicle and senior center parking, and also along the fringe of the study area along Dartmouth Street and the north edge of Main Street. Average parking occupancy is illustrated in **Appendix E**; hourly parking occupancy is illustrated in **Appendix F**.

Figure 3 Malden Center Parking Occupancy vs. Capacity - Weekday

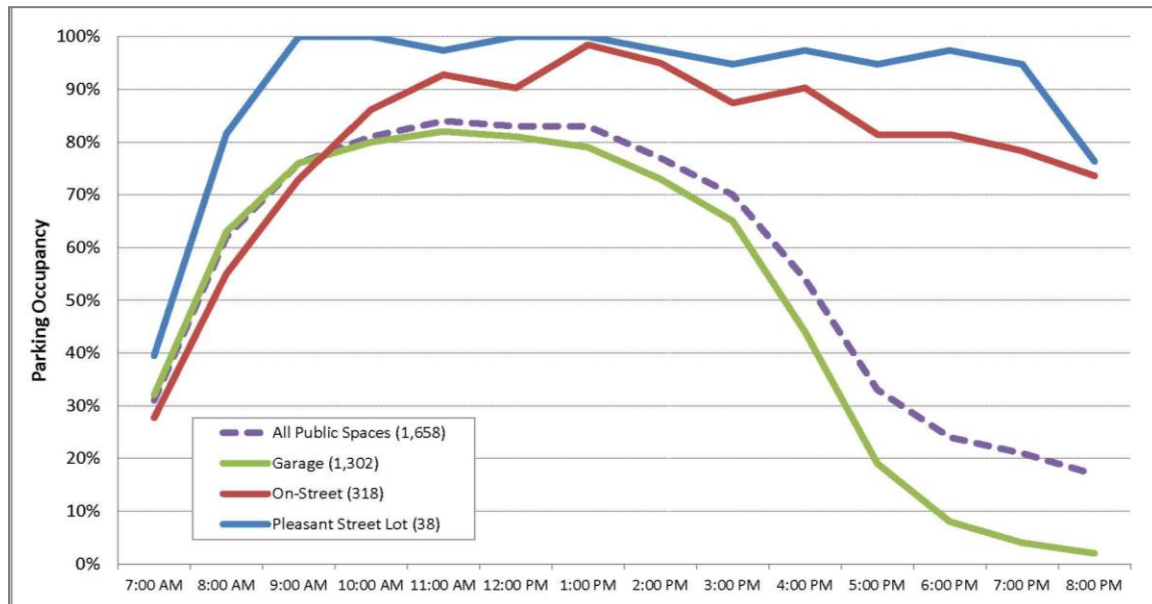


Figure 4 Malden Center Parking Occupancy vs. Capacity - Saturday

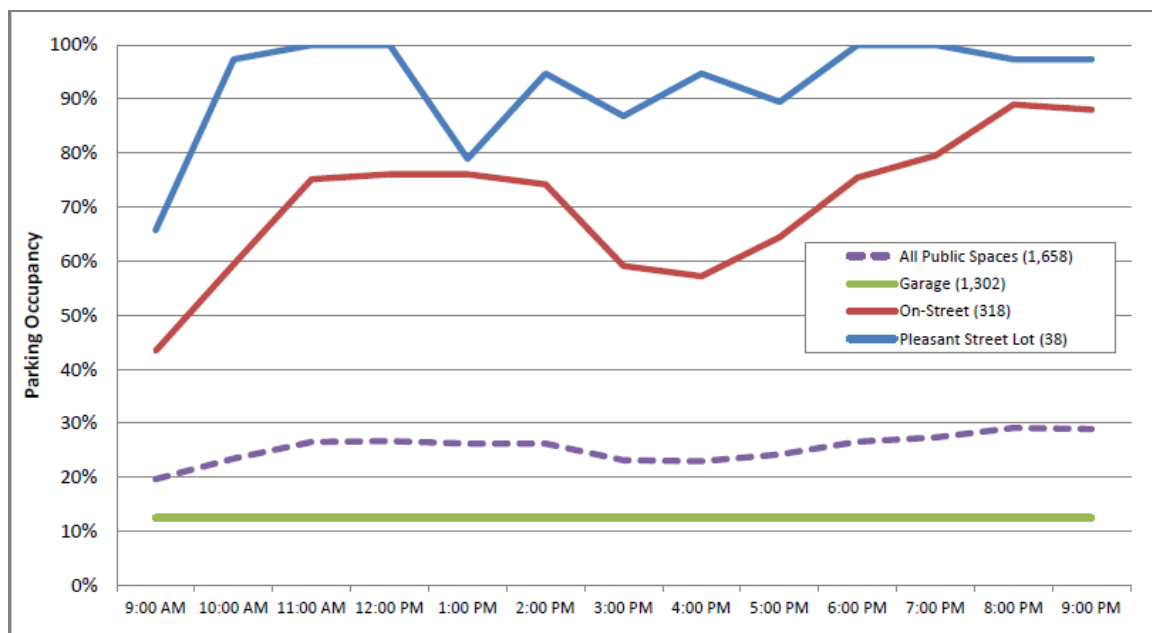


Figure 5 Weekday Peak On-Street Occupancy by Location

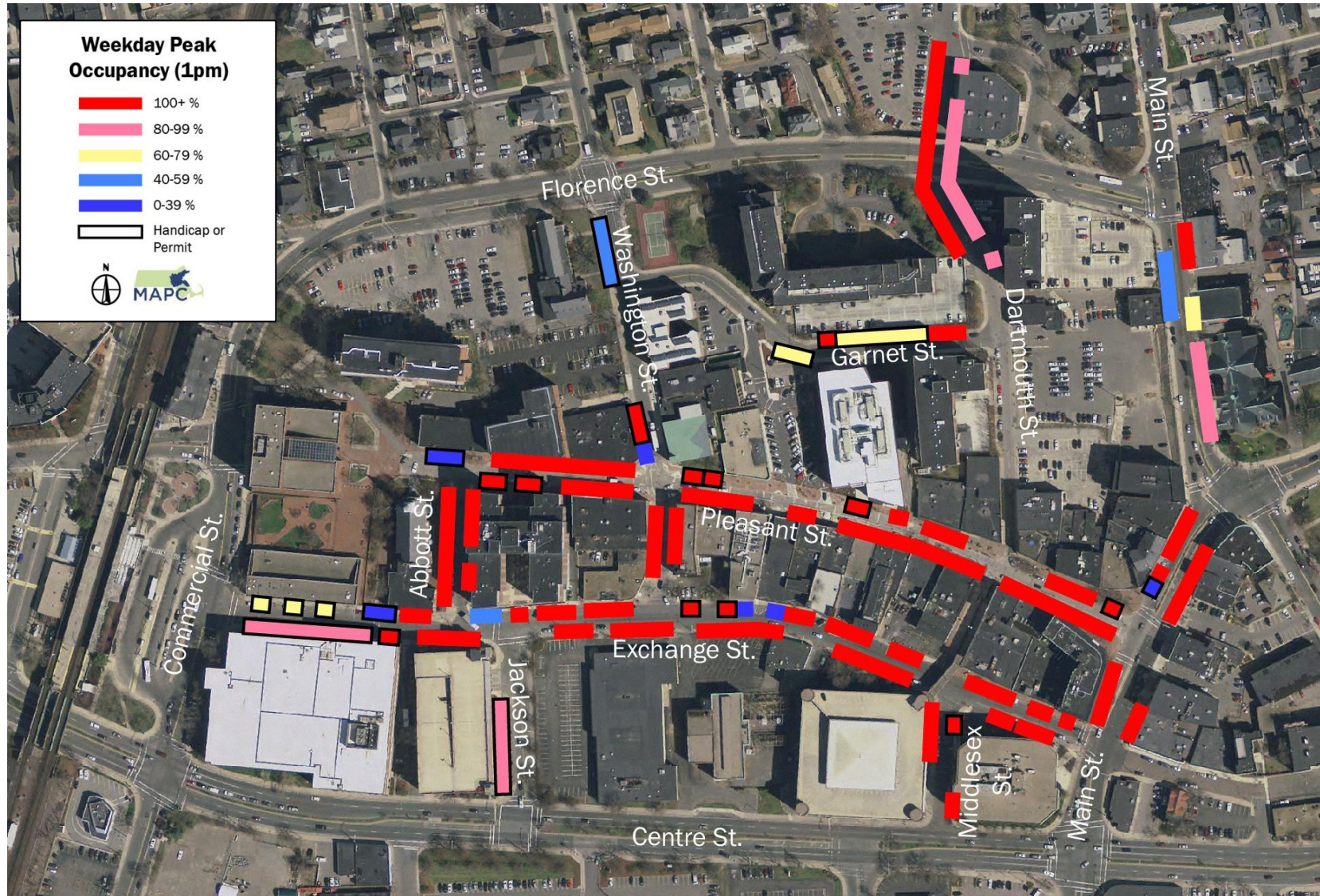
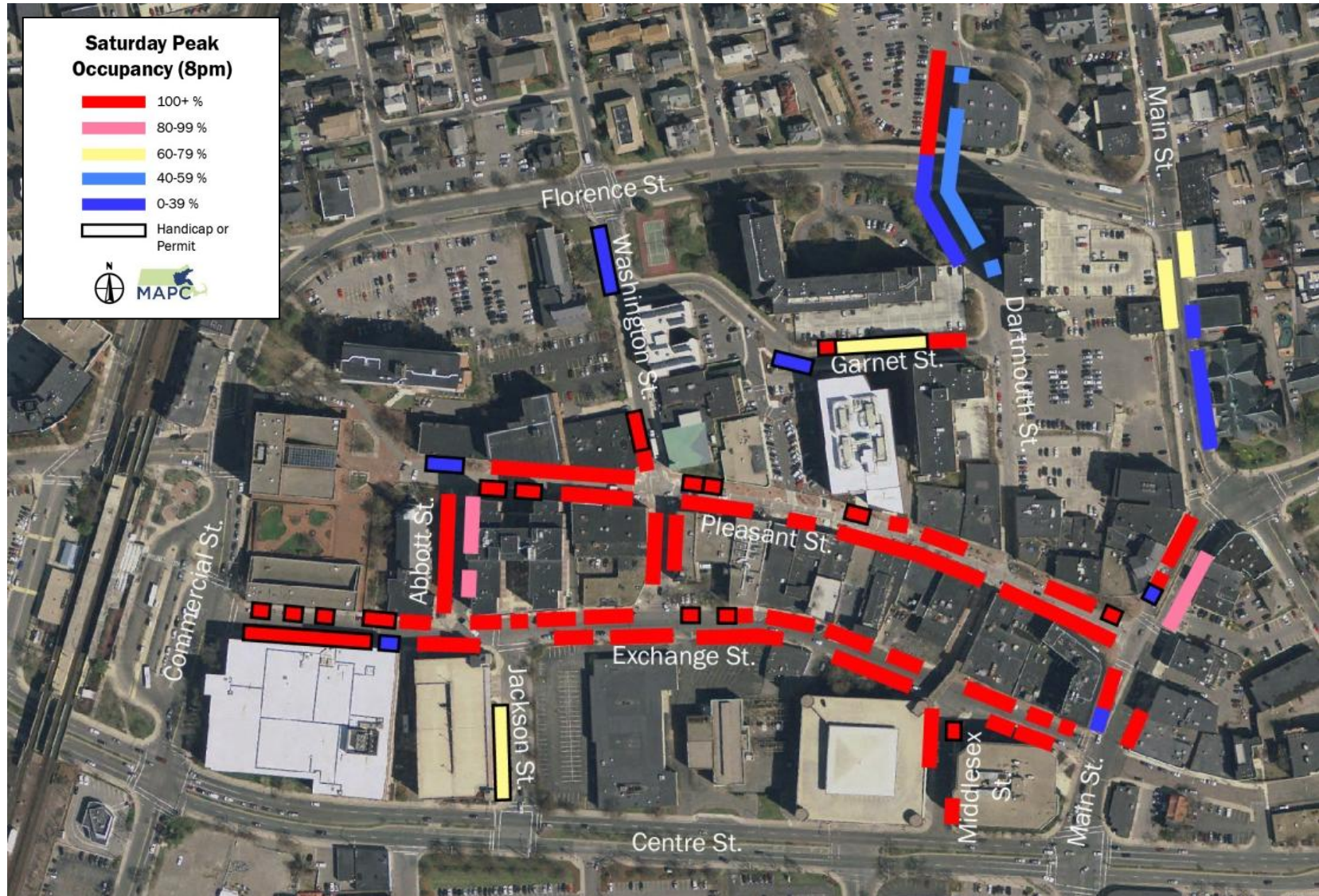


Figure 6 Saturday Peak On-Street Occupancy by Location



On-Street Parking Duration

Parking turnover is critical to the success of a business district because patrons of businesses want to find a parking space within a short walk of their destination. If vehicles are parking in on-street spaces and exceeding the time indicated by the parking regulations, parking spaces may not be available for other patrons. Therefore, parking duration is an important component of a parking study to identify how long vehicles remain on-street and how often the parking spaces turnover to new visitors and customers.

During MAPC's observations, the overall average parking duration for on-street spaces was 1.8 hours (108 minutes) during the weekday and 1.7 hours (102 minutes) on Saturday. Considering the majority of the spaces are restricted to 1 Hour parking, the average duration in Malden Center is greater than it should be. As mentioned previously, there are a number of on-street spaces that are not available to the general public. These permitted spaces all had higher average duration times than spaces available to the general public. This was especially true for the police permit spaces which had an average duration of over 7 hours. Long-term parking is generally not the best use for on-street spaces, which are the most convenient and in-demand for customers of local businesses and other short-term visitors. Average duration data organized by parking regulation is shown in **Table 44**.

Table 4. Average Parking Duration by Type of Parking

Type of Parking	Capacity	Weekday (hours)	Saturday (hours)
2 Hour	36	2.0	1.6
1 Hour ¹	203	1.6	1.6
Police & Emergency Vehicles	23	2.8	6.4
Police Permit	13	7.3	3.2
90 Minutes	25	3.1	1.8
Senior Center	8	2.7	1.5
Sr. Center Permit	15	2.2	2.5
15 Minute	15	0.8	0.8
Unrestricted/Unsigned	8	1.7	1.2
Handicap	4	2.1	1.7
15 Minute/Loading	3	0.5	0.5
Taxi	1	0.5	--
<i>Totals/Averages</i>			
On-Street	318	1.8	1.7
Pleasant St. Lot	38	2.0	1.6
On-Street and Pleasant St. Lot	356	1.8	1.7
Effective On-Street and Pleasant Street Lot²	279	1.7	1.6

¹Includes all 1 Hour parking space restrictions, including 7am-5pm, 7am-6pm, and 11am-5pm

²Includes: 1 Hour, 90 Minute, 15 Minute, and 2 Hour parking

Parking analysis performed on Tuesday April 14 and Saturday May 2, 2015.

Over half of the vehicles in Malden Center were parked for less than 1 Hour during both the weekday and Saturday observations. Approximately **one-quarter of all vehicles park for more than 2 hours**, which is significant given that the majority of Malden Center parking spaces have a 1 Hour parking restriction. The lack of turnover creates a build-up of parking demand and results in frustrated drivers circling Malden Center in search of a parking space.

Overall duration by type of parking is shown in **Table 5**, with additional detail provided in **Appendix G**. As shown in the table, a significant amount of vehicles park longer than the posted duration, with 35% of vehicles in 1 Hour spaces, 29% of vehicles in 2 hour spaces, and 37% of vehicles in 90 Minute spaces exceeding the allotted time during the weekday observation period. There were nearly identical results during the weekday and Saturday observations, with more than 40% of all observed vehicles having a parking duration that exceeds one hour.

Average duration by location is shown in **Figure 7** and **Figure 8**. As shown in the figures, long-term parking occurs near the Police Station and the YMCA on weekdays, and near the Police Station, on Main Street, and near restaurants on Exchange Street on Saturdays.

Table 5. Percent of Vehicles Parked by Duration and Type of Parking

Type of Parking	Capacity	Weekday				Saturday			
		<1 hour	1-2 hours	2-4 hours	4+ hours	<1 hour	1-2 hours	2-4 hours	4+ hours
1 Hour	203	65%	15%	10%	10%	57%	21%	13%	9%
2 Hour	36	41%	30%	16%	13%	47%	28%	17%	8%
90 Minutes	25	35%	28%	9%	28%	38%	37%	14%	11%
15 Minute	15	85%	8%	5%	2%	84%	12%	3%	1%
Senior Center ¹	23	38%	18%	29%	14%	39%	22%	29%	10%
<i>Totals/Averages</i>									
On-Street and Pleasant St. Lot	356	59%	17%	12%	12%	56%	21%	13%	10%
Effective On-Street and Pleasant St. Lot²	279	62%	17%	10%	11%	57%	22%	13%	8%

Parking analysis performed on Tuesday April 14 and Saturday May 2, 2015.

¹Includes: Senior Center and Senior Center Permit

²Includes: 1 Hour, 2 Hour, 90 Minute, and 15 Minute parking

Red denotes parking durations that exceed the posted regulations

Figure 7 Weekday Average Duration by Location

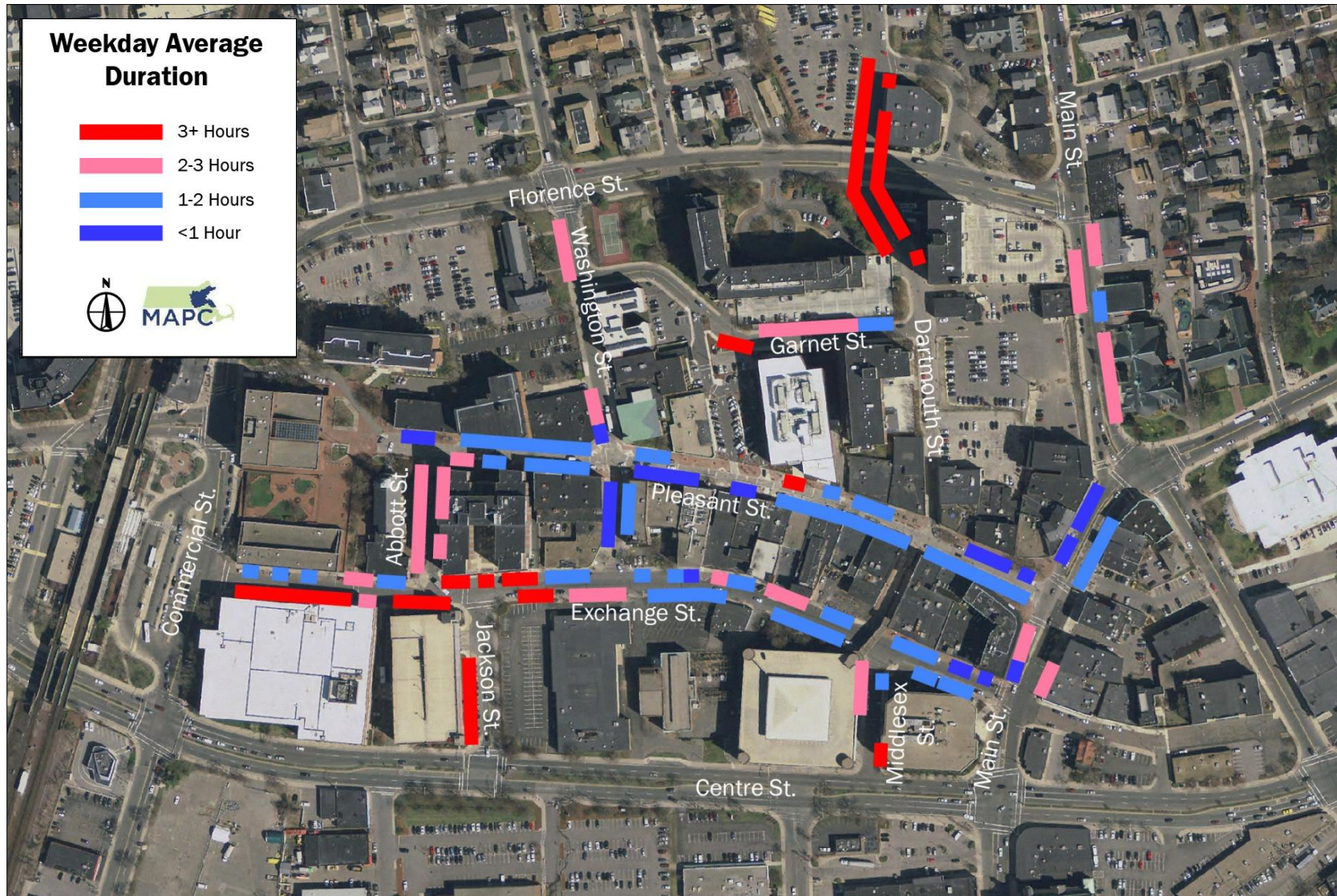
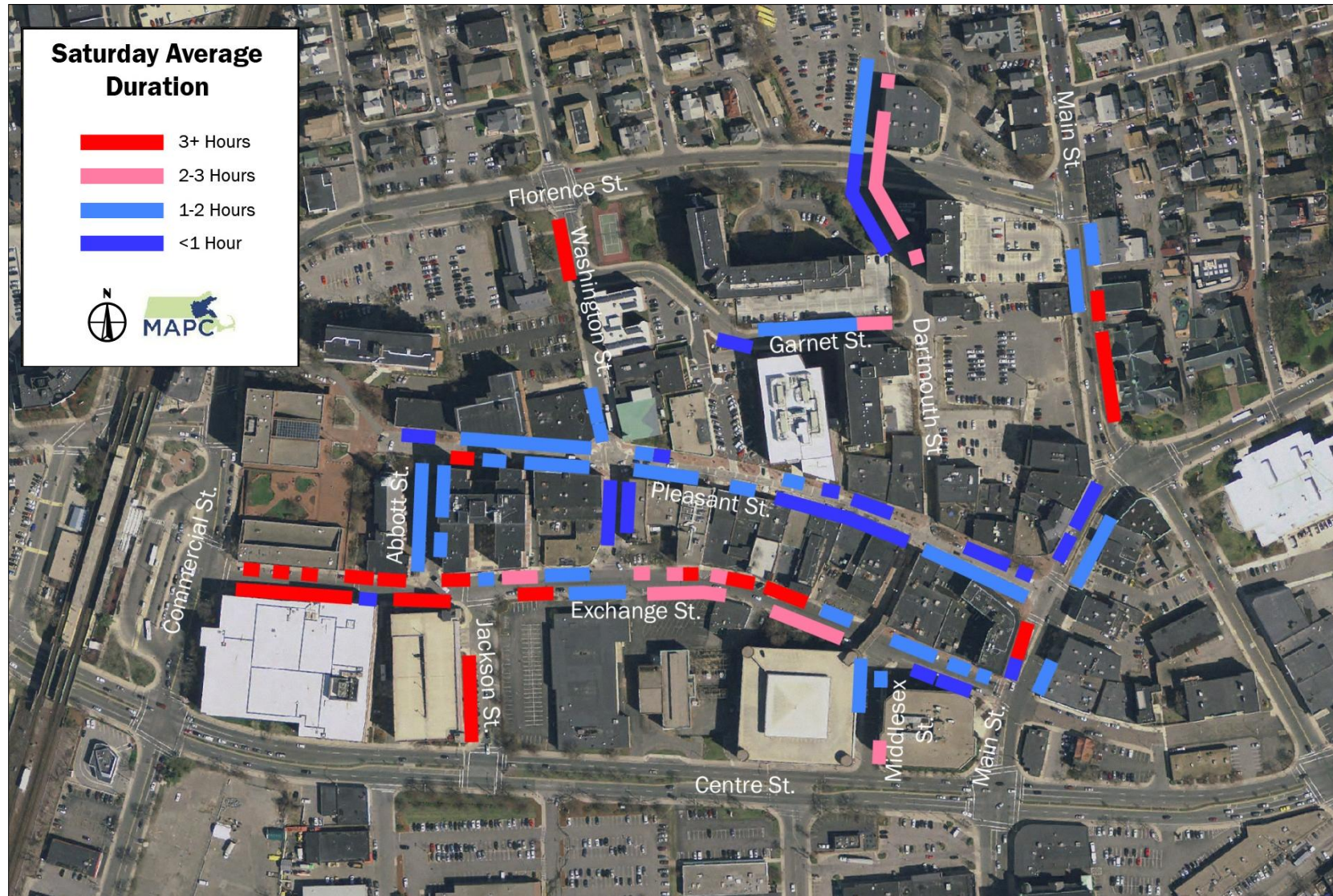


Figure 8 Saturday Average Duration by Location



Additional Off-Street Parking Lot Observations

In addition to hourly occupancy and duration observations within the study area, MAPC conducted occupancy checks every two hours at a number of additional parking areas surrounding the study area. All but one of these additional parking areas are publicly owned by the City of Malden or the Malden Redevelopment Authority; some are for permit parking only and others are open to the general public. These lots include:

Owned and maintained by the Malden Redevelopment Authority, and operated by LAZ parking:

- Mountain Avenue Garage
- Dartmouth Street Lot
- Florence Street Lot⁴
- Main Street Lot
- Main Street & Ferry Street Lot

Owned and maintained by the City of Malden:

- Main Street & Charles Street Lot
- Pearl Street Lot

Privately owned and maintained:

- Stop & Shop parking lot, owned and operated by Stop & Shop

These lots were observed in order to understand their usage, and determine if there is any excess capacity available. While many of them are a little too far from the core of Malden Center to be an attractive parking option for customers and other short-term parkers, they may provide an opportunity to shift more of the monthly pass holders out of the Jackson and CBD garages, in order to free up additional space within the study area for short-term parking.

Mountain Avenue Garage

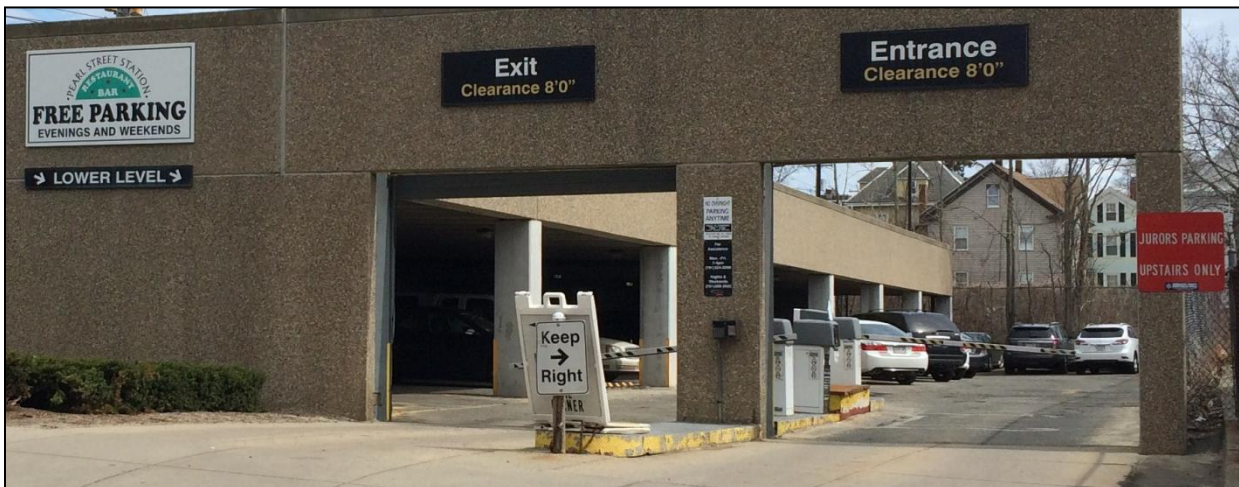
The garage on the corner of Mountain Ave and Summer Street is owned by the City of Malden and operated by LAZ Parking. There are 39 spaces on the upper level, which are reserved for monthly pass holders and jury members serving in the Malden District Court across the street (as shown in **Figure 9**). Monthly passes cost \$100, however 12 passes are sold to the nearby Pearl Street Station Restaurant for \$45 each for use by their staff. Overnight monthly passes are sold to nearby residents for \$50, and the daily rate for jurors is \$7. The lower level of the garage has 44 spaces open to the public for \$3/hour with a daily maximum of \$20. The lower level is free on evenings and weekends, and is used as overflow parking for patrons of the Pearl Street Station Restaurant (as shown in **Figure 10**). The garage had a peak weekday occupancy of 69% and a Saturday peak occupancy of 47%.

⁴ Under Construction during observations

Figure 9 Mountain Ave entrance to Mountain Ave Garage Upper Level



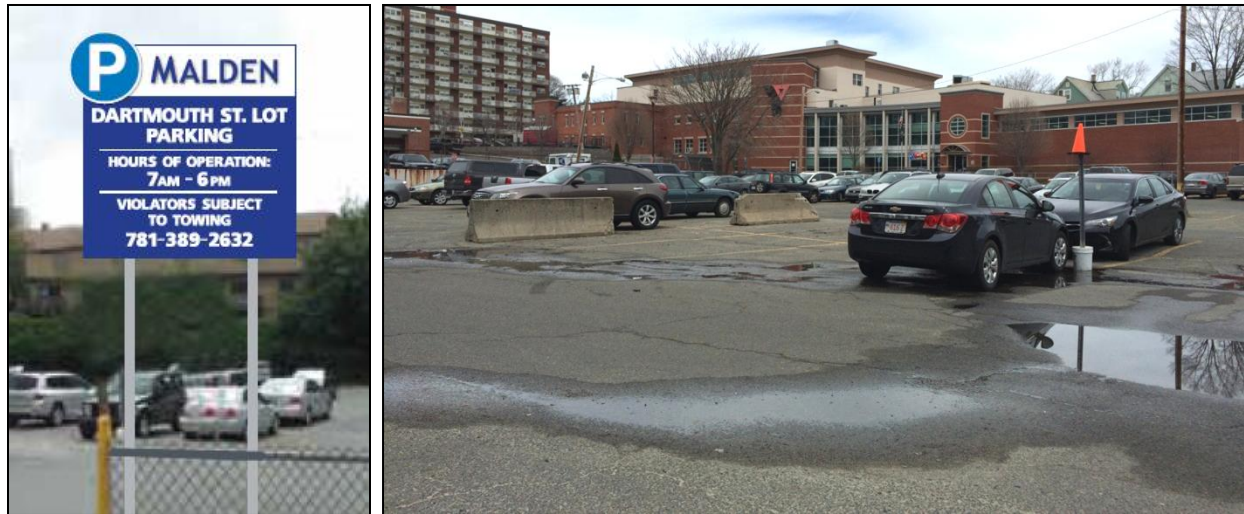
Figure 10 Summer Street entrance to Mountain Ave Garage Lower Level



Dartmouth Street Lot

The surface parking lot on Dartmouth Street, shown in **Figure 11**, is located across from the Malden YMCA and is owned by the City of Malden and managed by LAZ Parking. The YMCA purchases 75 spaces at \$40 per month for YMCA visitors to use, while the remaining 79 spaces are open to monthly pass holders at \$75/month. A number of part-time workers at the adjacent post office purchase passes for the lot for \$38, but they are generally out by 10:30am. The parking lot had a weekday peak occupancy of 67% and a Saturday peak occupancy of 93%.

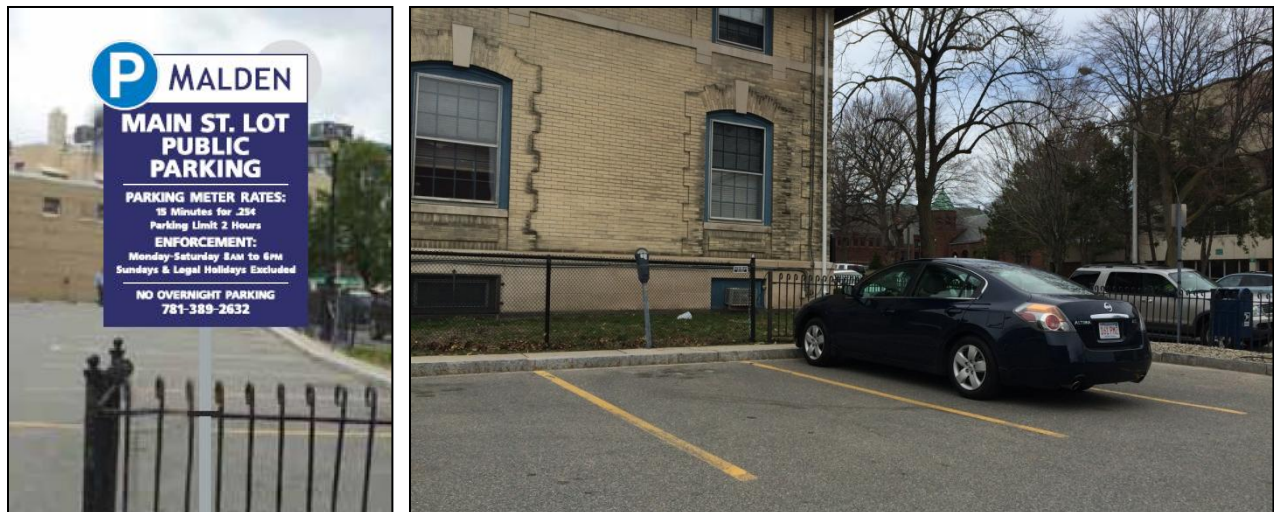
Figure 11 Dartmouth Street Parking Lot



Main Street Lot

The small surface lot that runs between Main Street and Ferry Street, shown in **Figure 12**, is owned by the Malden Redevelopment Authority and operated by LAZ Parking. There is a one-way entrance from Main Street, near the intersection with Pleasant Street, and a two-way entrance/exit on Ferry Street. The 46 spaces are currently metered with a price of \$1/hour. Despite its convenient location, MAPC found this lot to have an average occupancy of 19% during the weekday observation and only 10% during the Saturday observation. This is likely due to the fact that the lot is metered, while on-street parking is currently free. In addition, the one-way circulation and the narrow aisle between the two rows of spaces make it difficult to maneuver within the lot. The parking lot had a weekday peak occupancy of 71% and a Saturday peak occupancy of 48%.

Figure 12 Main Street Parking Lot



Main Street & Ferry Street Lot

A few blocks south from the Main Street Lot there is another surface lot that runs between Ferry Street and Main Street, behind the Dockside Restaurant. This lot is owned by the City of Malden and operated by LAZ Parking, and includes 10 metered spaces and 64 permit-only spaces. Metered parking is \$1/hour and monthly permits are \$75/month. Metered parking tends to be busiest during lunch and dinner hours, which suggests that patrons of the Dockside and other nearby restaurants may be using those spaces. LAZ data indicate that there are 35 monthly pass holders, but at peak weekday utilization MAPC observed 25 vehicles in the permit only spaces, leaving 40 spaces available. The Saturday observation saw higher utilization in the permit spaces, which are open to the public on weekends as shown in **Figure 13**. This higher demand on weekends could be related to the Northern Strand Trail, which runs alongside this lot. During parking lot observations the lot was no more than half full on the weekday, with a peak occupancy of 47%. Saturday occupancies varied but were generally half full, with a peak occupancy of 77%.

Figure 13 Main & Ferry Street Lot



Florence Street Lot

The Florence Street lot was under construction during the observation period and therefore detailed occupancy data is unavailable. The MRA-managed lot is re-opening in October 2015 with 83 spaces. The owners of the nearby residential building will have access to up to 46 spaces if their tenants need additional parking, and an adjacent senior living complex also has the ability to use up to 42 spaces, although they are not expected to use more than 10-15 at most. Effective capacity for the public will therefore most likely be in the range of 50 to 83 spaces. There will be a fare gate and permit and hourly parking will be allowed.

Main Street & Charles Street Lot

At the corner of Main Street and Charles Street is a small, 19-space surface lot that is owned and managed by the City of Malden. This lot, shown in **Figure 14**, has no signage indicating that it is free

public parking, yet it did see limited usage, with a peak occupancy of 53% during the weekday and 95% during the Saturday observation.

Figure 14 Main and Charles Lot



Pearl Street Lot

Surrounded by playing fields, event halls, and small restaurants, the Pearl Street lot (shown in **Figure 15**) provides parking to a variety of users throughout the day. The City of Malden-owned lot was recently re-paved and re-striped in 2015. The 62 spaces are designated as 2 Hour parking between 7am-12pm, Monday through Friday, although there is no time limit for vehicles with a Malden resident parking sticker. During parking lot observations the lot was rarely more than half full, with peak occupancies of 42% during the weekday and 63% during the Saturday observations.

Figure 15 Pearl Street Lot



Illustrations showing the occupancy within all of these publicly-owned lots are below in **Figure 16** and **Figure 17**.

Figure 16 Weekday Parking Lot Occupancy

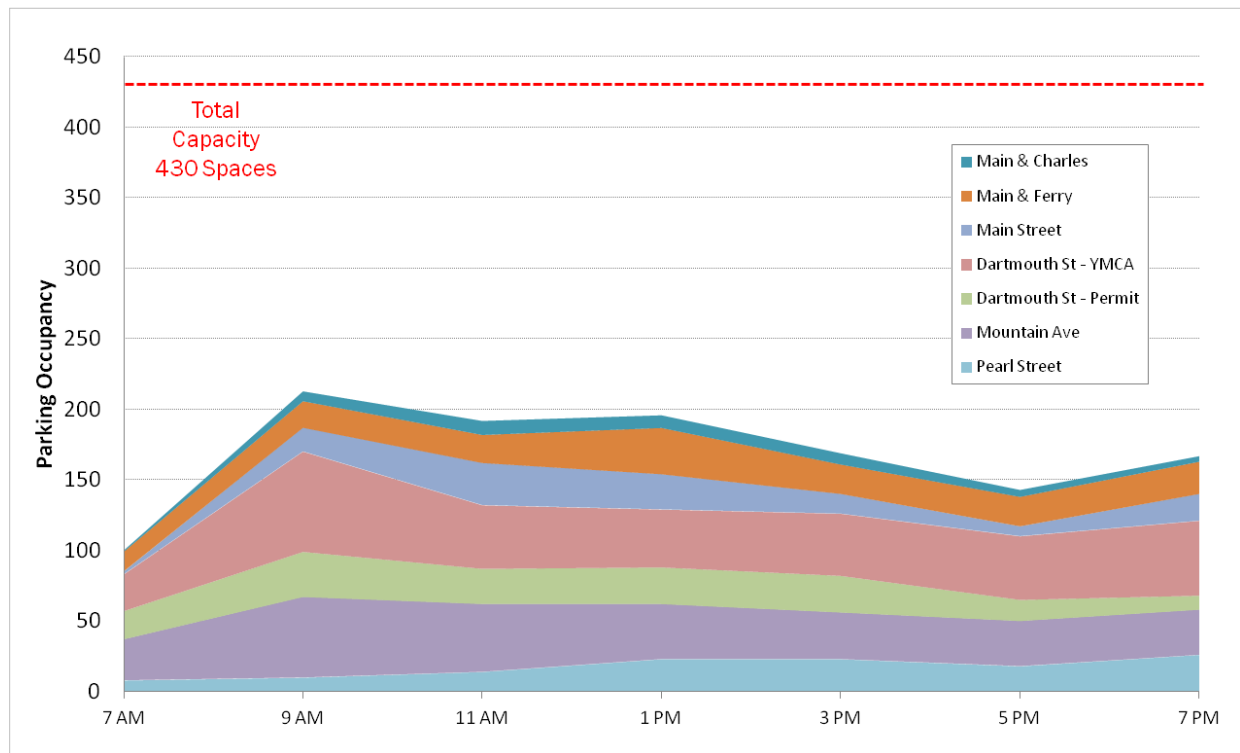
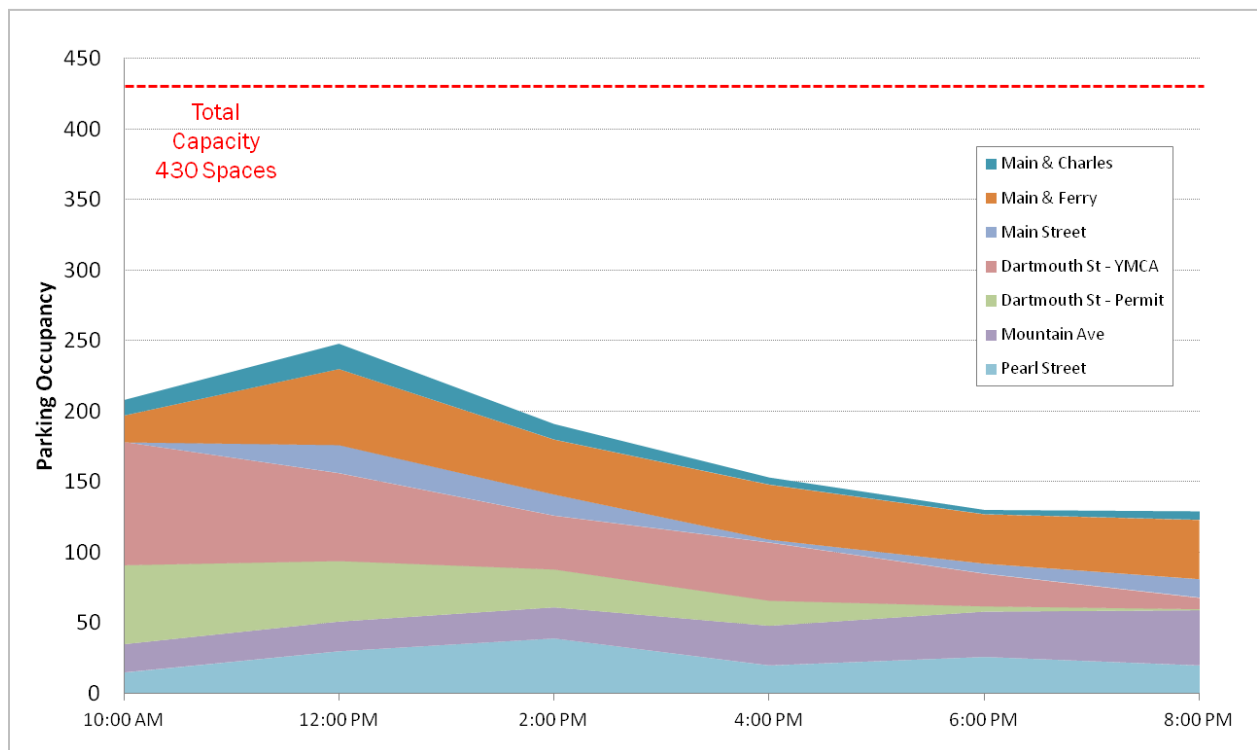


Figure 17 Saturday Parking Lot Occupancy



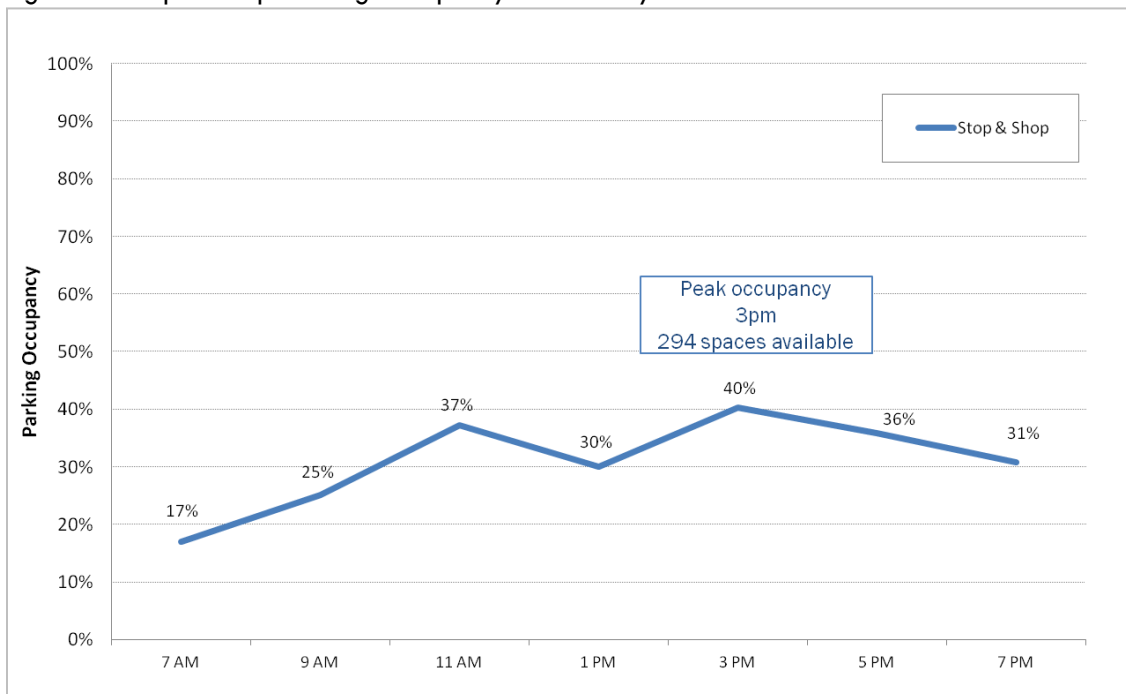
Stop & Shop Lot

Directly adjacent to the study area is a Stop & Shop supermarket with a large surface parking lot. Although this is a privately-owned lot, its size and proximity to the study area (shown in **Figure 18**) make it an important element in the Malden Center parking ecosystem. With a total of 493 spaces, this lot has more than enough capacity to serve the supermarket. At the peak observed utilization, there were nearly 300 empty parking spaces, as shown in **Figure 19**.

Figure 18 Stop & Shop Parking Lot



Figure 19 Stop & Shop Parking Occupancy - Weekday



Zoning Analysis

The City of Malden has the ability to exercise control over private off-street parking through the City's zoning code. MAPC's goal in analyzing the parking elements of Malden's zoning is to help the City better understand how their current parking regulations may impact the public parking supply in Malden Center as new development occurs. It is critical that parking requirements reflect the amount of parking that is *actually* needed in a downtown based on current utilization of the public and private parking assets. Requiring too much parking in a downtown can make development unnecessarily expensive or lead developers to tear down existing buildings in order to build surface parking, damaging the dense, mixed-use, walkable character of Malden Center. On the other hand, requiring too little parking can overburden a limited supply of public parking in **the absence of other strategies to reduce parking demand and actively manage the balance of supply and demand.**

Table 6 shows the existing parking requirements for Malden's Central Business District, which are lower than parking requirements for the rest of the city.

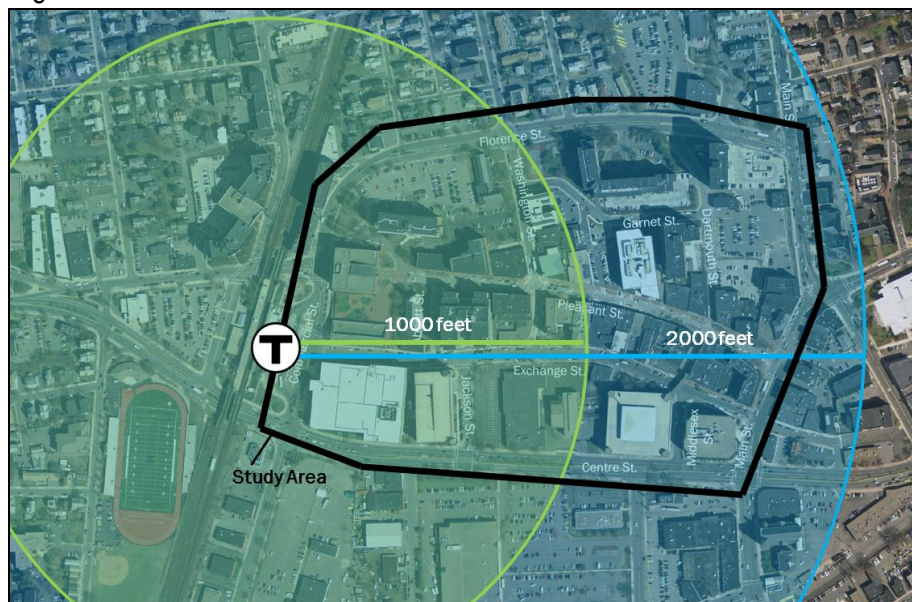
Table 6 Parking Requirements for Malden Central Business District

Development Type	Car parking	Bicycle parking	Additional Stipulations
Residential	1.5 per unit	1 rack (2 bikes) per 20 units	1 car-sharing space per 50 units; Further parking reductions allowed by special permit if public parking available within 400'
Residential within 2000' of MBTA	1.25 per unit		
Residential within 1000' of MBTA	.75 per unit		
Non-residential	0	1 rack (2 bikes) per 10,000 ft ²	-

Source: City of Malden Zoning Code Section 500.2.8

Figure 20 illustrates the distance from the Malden Center MBTA station. One thousand feet is approximately 0.2 miles, or less than a 4 minute walk; 2000 feet is about a 7.5 minute walk.

Figure 20 Malden Center distance from MBTA



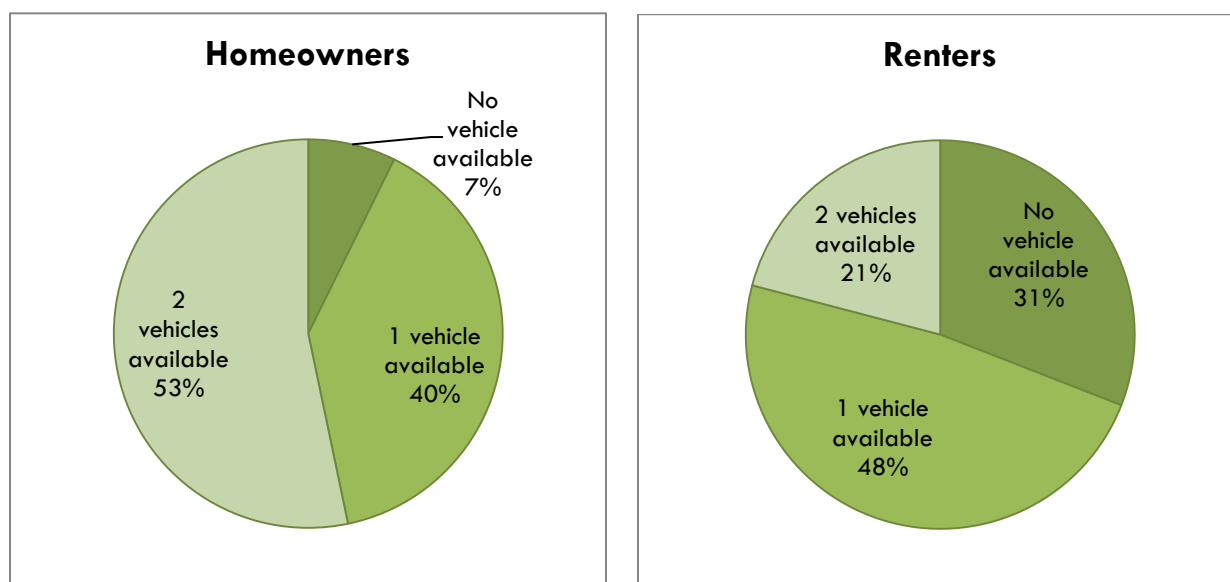
Residential Parking Requirements

National standards for minimum parking requirements, such as those recommended by the Institute for Transportation Engineers (ITE), are often based on isolated single-use sites with no transportation options other than private automobile. Many communities around the country and around Massachusetts are moving away from these one-size-fits-all recommendations, which often result in a costly oversupply of parking. MAPC recommends using a context-sensitive approach, which takes into account the existing density and mix of uses, the available transportation options, and the existing parking supply.

Malden is a mixed-income community with a dense, walkable core, rapid transit access to Downtown Boston, served by numerous MBTA bus routes, and a major regional bicycle trail located just blocks from Malden Center. All of these factors contribute to a relatively low vehicle ownership rate of 1.27 cars per household, with an average household size of 2.5 people. **Sixty-five percent of households in Malden own one car or less.**⁵

Vehicle ownership rates are even lower among renters than homeowners, as shown in **Figure 21**. Nearly 80% of renter households in Malden have one car or less.

Figure 21 Vehicle Ownership among Malden Homeowners vs. Renters. Source: ACS 2009-2013.



The Malden zoning code requires one parking space per bedroom for all standard residential uses⁶. Since the average household has 2.5 people and 1.27 cars, one parking space per bedroom may be higher than necessary. However, parking requirements are lower for residential buildings in the Central Business District, as shown in **Table 6** on the previous page. Based on our analysis of vehicle ownership data, and based on the proximity of Malden's Central Business District to the MBTA Orange Line, MAPC considers the lower residential parking requirements of .75 – 1.5 spaces per unit in the Central Business District to be reasonable.

⁵Source: American Community Survey, 2009-2013.

⁶ City of Malden Zoning Ordinance Section 500.1.

Commercial Parking Requirements

In lower-density areas with few transportation options, it is reasonable to require that each business or commercial building provide dedicated off-street parking. However, in a dense, walkable, transit-accessible downtown like Malden Center, requiring separate off-street parking for each business would likely result in more land being utilized for parking than for actual buildings. Malden Center is already dense, with very little vacant land, and the attractive and walkable nature of the downtown is supported by continuous building facades which are not broken up by surface parking lots. Parking is limited to on-street spaces, garages, and one public surface lot on Pleasant Street. Requiring each new development to provide off-street parking could lead to historic buildings being torn down rather than redeveloped, which would have a significant impact on the character of Malden Center.

Non-residential uses in Malden Center are not currently required to provide off-street parking. This is an appropriate regulation for several reasons. First and foremost, people are able to access Malden Center in a variety of ways that do not require a vehicle, including walking, biking, and taking the MBTA. Thousands of residents live in Malden Center or within easy walking distance, and many more live within a short bike ride. Nearly 13,000 people board the MBTA Orange Line at Malden Center on a typical weekday,⁷ and Malden Center is also served by numerous MBTA bus routes.

Second, for a mixed-use business district like Malden Center, centralized parking is much more efficient than dedicated parking for individual businesses. Many people will visit more than one business on each trip to Malden Center, and they should be encouraged to park once and walk between different destinations. In addition, different businesses are busy at different times. With centralized public parking, the same number of people can be served by a smaller number of parking spaces, because spaces used by day care center employees during the day can be used by restaurant employees at night.

For all of these reasons, Malden's current zoning requiring no dedicated off-street parking for non-residential properties in Malden Center is appropriate and should remain in place. Parking management strategies such as those detailed in the following sections of this report will help the City more successfully manage parking supply and demand, instead of reinstating a parking requirement for commercial uses.

⁷ Source: MBTA Ridership and Service Statistics, Fourteenth Edition, 2014.
<http://www.mbta.com/uploadedfiles/documents/2014%20BLUEBOOK%2014th%20Edition.pdf>

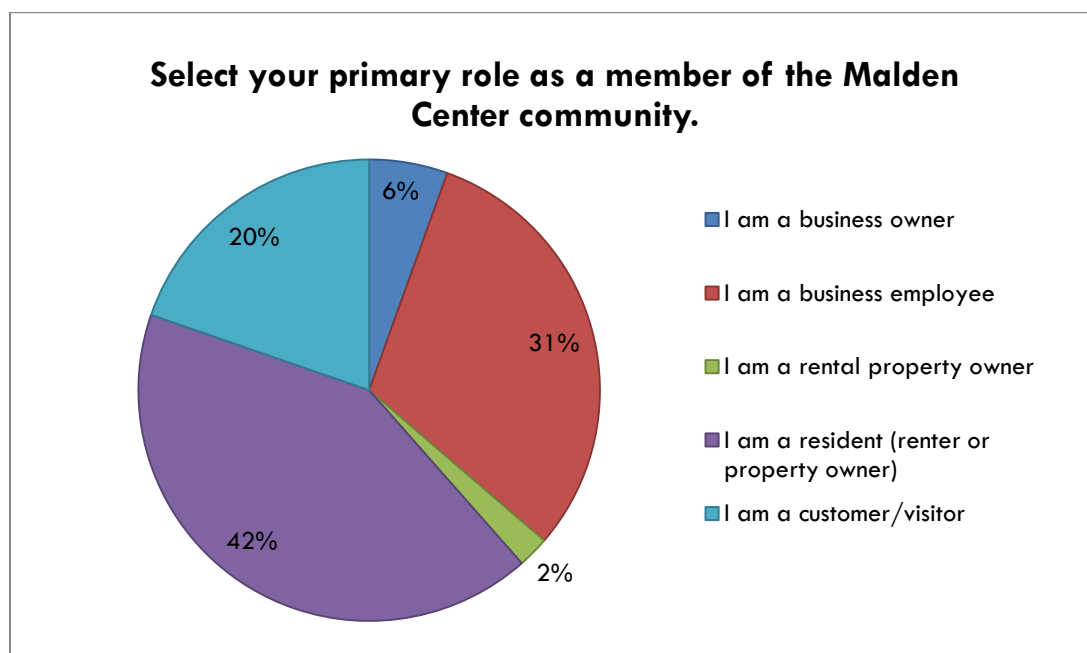
Public and Stakeholder Participation

Over the course of several meetings with the MRA staff, City staff, local business owners, as well as a public online survey that received 325 responses, MAPC gathered extensive and valuable feedback on parking issues in Malden Center, as well as ideas for possible solutions.

MAPC held a preliminary meeting with local business owners in April 2015, focusing on existing parking issues, including the location and availability for both employee and customer parking throughout the day. MAPC also made a presentation to MRA/City staff in May and the City Council, Planning Board, and the public in June that focused on the results of the parking data collection, observations, and the resulting draft recommendations. Input from these meetings was incorporated into the final recommendations.

An online survey developed by MAPC as part of this study was posted on the City of Malden website and publicized directly to local businesses and employees. The survey received 325 responses, representing all of the major stakeholder groups in Malden Center, as shown in **Figure 22**. Survey questions and summary results are provided in **Appendix I**; answers to free-response questions are provided in full in **Appendix J**.

Figure 22 Participants in Malden Center Parking Survey



Key findings of the survey include:

- The vast majority of respondents access Malden Center by car. Employers estimate that 100% of their employees drive to work; employees themselves answered that 94% drive, 21% take public transit, 6% walk, and 3% bike (respondents were allowed to select more than one mode of transportation). Malden residents also primarily drive to Malden Center (85%), but 31% walk, 9% take transit, and 5% bike.

- Respondents' perceptions of when parking demand is highest—weekdays 11:00am – 6:00pm and weekends after 6:00pm—are broadly consistent with MAPC's field observations.
- As Malden Center sees increasing development activity, there is growing competition for limited parking between residents, workers, customers, and MBTA commuters.

The main theme that emerged from the survey responses is that parking in Malden Center is currently a difficult experience for most people. Specific issues include:

- It is often very difficult to find an on-street parking space.
- The one hour limits for on-street spaces are too short, so customers and restaurant patrons are constantly worried about getting a ticket.
- At the same time, enforcement of one hour limits is not effective: many people park for much longer than one hour, taking up a significant number of on-street spaces.
- Hourly parking in the garage is expensive, and the garages are viewed as unpleasant, yet despite those issues the garages are often full.
- Some employees of local businesses that do not provide monthly parking passes have a hard time affording the garages, and often park in on-street spaces (despite the 1 hour time limit).
- Survey participants overwhelmingly felt that winter is the most difficult time of year to park in Malden Center, due to inadequate snow removal from on-street parking spaces, and poorly cleared sidewalks that make it difficult to get from the garages to destinations.

There was widespread agreement from survey respondents that the one-hour limits are poorly enforced and frequently flouted, yet respondents also felt that the one-hour limits were a source of stress because they don't provide enough time for people to complete their activities in Malden Center. Seventy-three percent of respondents would prefer a 2 hour time limit. A number of respondents suggested that metering on-street spaces would help increase turnover, but that pricing should be paired with slightly longer time limits, such as 2 or 3 hours.

Survey respondents were split almost 50/50 on whether on-street parking should be priced as a way to help manage demand, but opposition to charging for parking in Malden Center declined to 30% if revenue is reinvested in downtown improvements. A number of people suggested that the first 15 minutes should remain free. Many people were supportive of pricing under certain conditions, such as longer time limits, being able to pay by credit card or using a mobile phone. Of those who support pricing, a majority prefer that prices change based on the level of demand.

There was a small but significant group of survey respondents who think Malden Center is developing too fast, and free, convenient public parking should be a top priority. A few people felt that building more parking is the solution, even if it comes at a price of tearing down buildings or reversing the recent pedestrian improvements on Pleasant Street. However, other respondents suggested a range of constructive ideas for improving the situation, including improving safety and comfort for biking and walking; overhauling pricing so that the garages are cheaper than on-street; and improving the condition of the garages so people are more willing to park there.

The valuable feedback gathered from stakeholders, elected officials and the public helped MAPC design this parking study, and informed the analysis and recommendations included in this report.

Observed Parking Issues

Beyond measuring occupancy and duration, MAPC's field observations included documenting parking behavior more generally, including issues where regulations may be unclear or illegal parking may be commonplace. Many of these observations corroborate concerns raised by survey respondents.

Widespread Disregard for Parking Regulations

Overall, MAPC observed a widespread laissez faire attitude toward parking regulations, including parking in areas where no parking is allowed, and parking far longer than the one hour limit in effect for most of the study area. This widespread disregard for the rules is encouraged by unclear signage and pavement markings, while irregular enforcement fails to provide an adequate disincentive for breaking the rules.

Examples of confusing or inconsistent signage and pavement markings in Malden Center include:

- Areas that look like a parking spot but don't have any signage or pavement markings
- Areas that have pavement markings indicating no parking is allowed, but there is enough space to park and it's unclear to the average person why you shouldn't park there (example in **Figure 23**)
- A variety of different time limits within the study area (15 minutes, 1 hour, 90 minutes, 2 hours)
- Regulations within the study area in effect for inconsistent periods of time (8am-4pm, 7am-5pm, 7am-6pm, 11am-5pm, 7am-7pm)

Figure 23 Example of Parking Regulations that are Frequently Ignored



Once some people are parking illegally based on unclear regulations, there can be a snowball effect, and a broader culture of disregard for the rules can emerge. Furthermore, inconsistency in regulations makes enforcement very difficult.

Enforcement Issues

Parking enforcement must strike a delicate balance. If enforcement is very strict, it can create an unwelcoming environment if business patrons are frequently getting tickets for minor infractions. On the other hand, lax enforcement can create a culture of flouting the rules, and disregard of time limits in particular can contribute to a lack of parking availability for customers.

Unfortunately, MAPC's observations included the worst of both scenarios: parking enforcement officers were observed giving lots of tickets in certain areas, while other vehicles were parked for long durations in on-street spaces without getting ticketed. Many of these vehicles parked for long durations appeared to display signs or emblems to indicate to parking enforcement that the vehicle should not be ticketed. A number of restaurant menus appeared in vehicles parked on-street, with notes saying that the vehicle belonged to a local worker or business owner and should not be ticketed, as shown in **Figure 24**.

Figure 24 Restaurant Owner/Employee Signals to Parking Enforcement



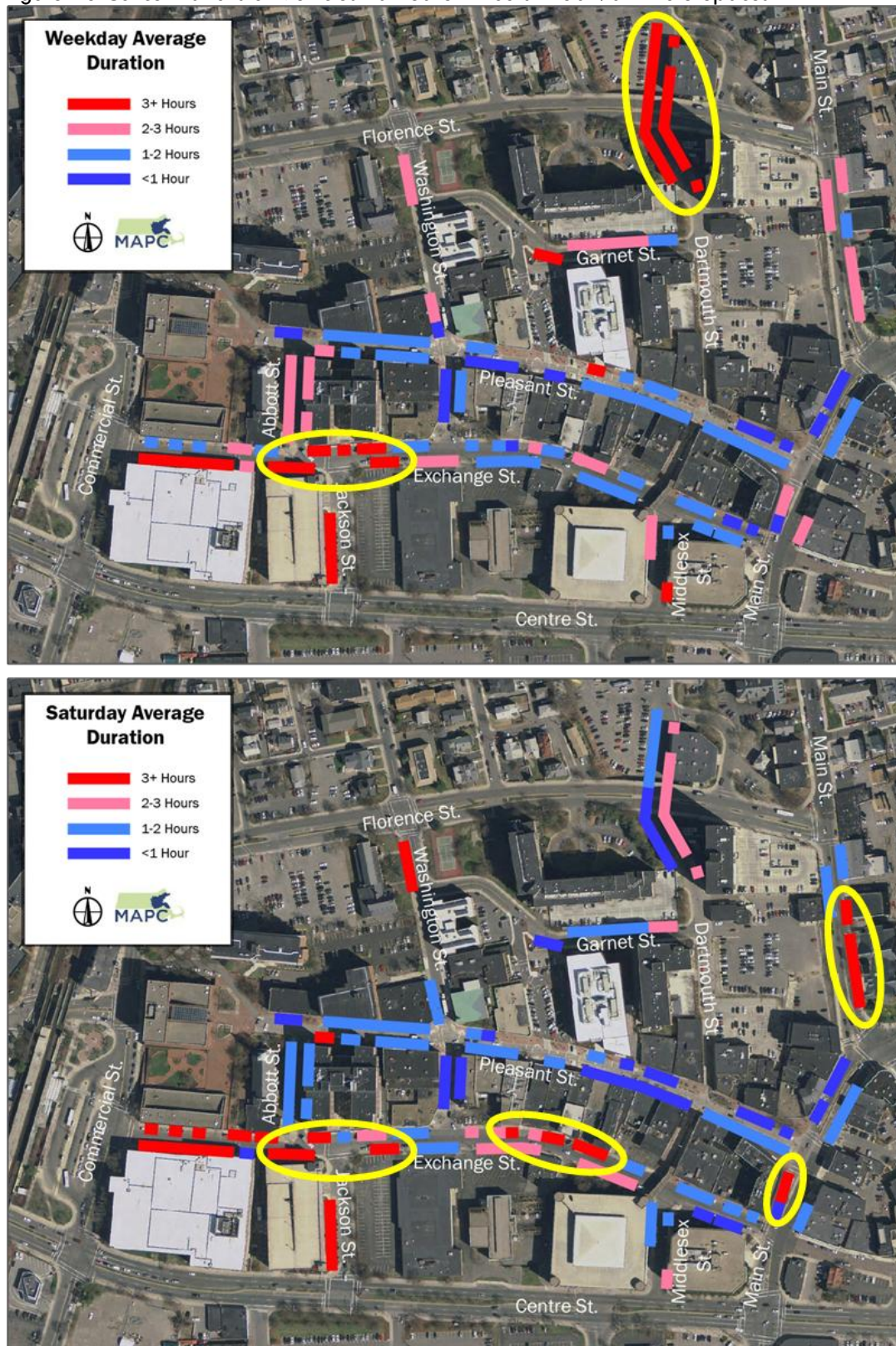
In addition, a number of personal vehicles belonging to police officers were observed to have badges or parking ticket books in the front dashboard, or official police shirts or vests located on the driver's seat, as shown in **Figure 25**. These vehicles were observed in on-street spaces for extended periods of time (up to 13 hours).

Figure 25 Police Officer Signals to Parking Enforcement



Numerous survey participants also mentioned construction workers as a group that parks for long durations in on-street spaces. **Figure 26** shows the areas where MAPC observed a concentration of long-term parking in short-term spaces.

Figure 26 Concentrations of Vehicles Parked 3+ Hours in 60-90 Minute Spaces



As the City evaluates strategies for improving parking in Malden Center, it will be important to ensure that parking regulations are enforced consistently across the entire study area. As MAPC's field observations and the survey responses show, relying on enforcement of time limits to create turnover in on-street spaces is very difficult. Parking meters can help increase turnover and compliance with time limits in several ways. First, when asked to pay per hour, people are more cognizant of how long they are parking, and if they are parking for a long duration they are more likely to seek out a different location to park. Second, it is much easier for an enforcement officer to walk down the street and look for expired meters, than to enforce time limits by chalking tires or writing down license plates.

Pricing Issues

When pricing parking, the most effective strategy is to charge the highest price for the spaces with the highest demand, but charge a lower price for spaces where there is more availability. The current pricing scheme in Malden Center essentially does the reverse. On-street parking is always the most popular; currently it is free, and it is very difficult to find a space. The Main Street lot charges \$1/hour, while the more popular Pleasant Street lot is free. The most expensive parking is in the garages, where some survey respondents noted that they do not feel safe or comfortable parking. The result of this system is that people have an extremely strong preference for parking on street, so on-street spaces are usually full, and new people arriving will circle the block looking for an on-street space rather than parking in one of the lots or garages where parking is priced. Many people give up and simply double park or park illegally if they are making a short stop. **Figure 27** shows examples of illegal and double parking in Malden Center.

Figure 27 Illegal and Double Parking in Malden Center



The most effective way to combat double parking is to ensure availability of on-street spaces. If there is a legal space available, people will use it, but if there are none, some people will park illegally or double park rather than go to a garage or a more distant surface lot.

Loading Issues

Malden Center has limited dedicated loading zones, and therefore trucks making deliveries often park wherever they can find space. MAPC observed numerous large trucks unloading at all times of day, often by double parking, parking in the bicycle lane, or parking in areas that are not legal parking spaces. **Figure 28** shows just a few of the many examples that MAPC observed.

Figure 28 UPS Trucks Parking Illegally in Malden Center



However, MAPC also observed delivery trucks parking in legal or at least less disruptive ways when there was space available, as shown in **Figure 29**.

Figure 29 More Appropriate Delivery Parking in Malden Center



Scheduling deliveries outside of the peak parking hours of 10am-4pm can help ensure that delivery trucks are not blocking travel lanes or fire hydrants. In addition, increasing on-street parking availability overall will help increase the odds that drivers can find a legal space to park for those deliveries that must occur during the middle of the day.

Handicap Parking Placards

MAPC's observations and comments from stakeholders indicate that there is a high rate of handicap parking placard use in Malden Center. Massachusetts law states that people with a handicap placard may park in any legal parking space without paying a meter, and without obeying time limits. They must, however, obey regulations such as "no parking" and "resident only." Some handicap permits are permanent, while others are temporary. Temporary permits state the date on which they expire, and the user is required to make that information visible to parking enforcement. The City of Malden has little ability to reduce the usage of handicap placards for on-street parking, except to strictly enforce the expiration of temporary permits.

Snow Clearance Issues

The winter of 2015 was an exceptionally snowy one, however many survey respondents noted that snow creates parking issues every year, not just in 2015. Inadequate snow clearance exacerbates an already tight supply of on-street parking when snow piles block spaces, as shown in **Figure 30**.

Figure 30 Snow-filled Parking Spaces



In addition, snowy weather can increase the demand for on-street parking. Poorly cleared and icy sidewalks, as shown in **Figure 31**, may lead some people to drive to Malden Center when they normally walk or bike. Also, survey participants noted that it is much harder to park in garages or off-street lots in the winter because the walk from the garage to their destination is so difficult.

Figure 31 Dangerous Sidewalks and Poor Bicycle Rack Access



Snow emergencies also constrict off-street parking. During snow emergencies declared by the City of Malden, parking is prohibited on many neighborhood streets and residents are instructed to park overnight in the CBD garage. During a typical snow emergency, these cars must be moved by 7am. However, in 2015 there were snow emergencies that lasted multiple days; in one case there were hundreds of vehicles parked in the CBD for several days. In that type of situation the garage will open for monthly pass holders only, and will not be available for hourly parking. However, garages will open to the public in the afternoon once no additional permit holders are expected to arrive.

Parking Recommendations

Despite a large supply of public parking in Malden Center, parking demand is very high on weekdays between 10:00am and 5:00pm, and on-street parking is very full on Saturday evenings, causing frustration for many who visit the area during those times. Based on our observations and input from stakeholders, MAPC has developed a suite of recommendations that, if taken together, will help to accomplish the following goals:

- Increase availability for short-term parking in the study area, while maintaining adequate parking for employees of Malden Center businesses and others who need long-term parking.
- Maximize parking capacity through physical improvements and pricing strategies that enable more efficient use of existing on-street and off-street parking areas.
- Reduce demand for parking by improving conditions for walking, biking and transit use, and by changing pricing policies that encourage driving.
- Coordinate policies for on-street, public off-street, and private off-street parking so that the parking system as a whole can adequately accommodate current and future development in Malden Center.

The recommendations are divided into sections: Physical Improvements, which can clarify where parking is allowed and maximize the number of spaces in on- and off-street parking areas; Parking Management and Pricing, which aims to increase short-term availability in on-street spaces, while guiding long-term parkers to off-street parking; and Zoning and Transportation Demand Management, which are aimed at shaping the long-term trends in supply and demand.

Physical Improvements

MAPC observed widespread informal parking behavior in Malden Center, with many people squeezing in at the ends of rows or parked in spaces that were not formal parking spaces. In this section we make recommendations to clarify where parking is and is not allowed, and to maximize the number of spaces that can be accommodated for a given length of curb. In addition, we make recommendations to encourage short-term visitors to park in the Jackson and CBD garages by making the garages easier to find and more welcoming.

This section also includes recommendations for physical improvements that can increase pedestrian and bicyclist safety and encourage more people to visit Malden Center without a car. Increasing the number of people who get to Malden Center by walking and biking is an important strategy for reducing parking demand, and has benefits far beyond parking, including improving public health and decreasing greenhouse gas emissions. Pedestrians and cyclists have also been found in numerous studies⁸ to spend more at local businesses than people who arrive by car, and walkable neighborhoods are increasingly seen as an amenity for residents and employees.

⁸ For example: *Examining Consumer Behavior and Travel Choices*, Transportation Research for Vibrant Communities, 2012. http://ppms.otrec.us/media/project_files/OTREC-RR-12-15%20Final.pdf.

Recommendation: Restripe parking on Exchange Street to convert all pull-in angled parking to back-in reverse angled parking

Angled parking is a good strategy to maximize the number of parking spaces on a given length of curb. However, traditional pull-in angled parking creates dangerous conditions as drivers must back out into an active traffic lane, with little ability to see oncoming vehicles and bicyclists. In addition, the ease of pulling into an angled space can make conditions more dangerous for cyclists, who may be cut off by vehicles making a quick turn into a parking space.

In contrast, reverse angled parking is oriented so that drivers pull ahead of the open parking space and then back into it so the rear end of the vehicle is at the curb. When exiting the parking space, the driver's side of the car is closest to the travel lane, giving the driver much improved visibility to pull out into traffic. **Figure 32** demonstrates how drivers' ability to see oncoming traffic and bicyclists while exiting a parking space is vastly improved with the implementation of reverse angled parking. Striping a bicycle lane adjacent to reverse angled parking is also a safety improvement over parallel parking, where bicyclists are at risk of being struck by opening car doors. **Figure 33** shows a recent example of reverse angled parking in Somerville.

Figure 32 Reverse Angled Parking Improves Visibility. Source: City of Somerville

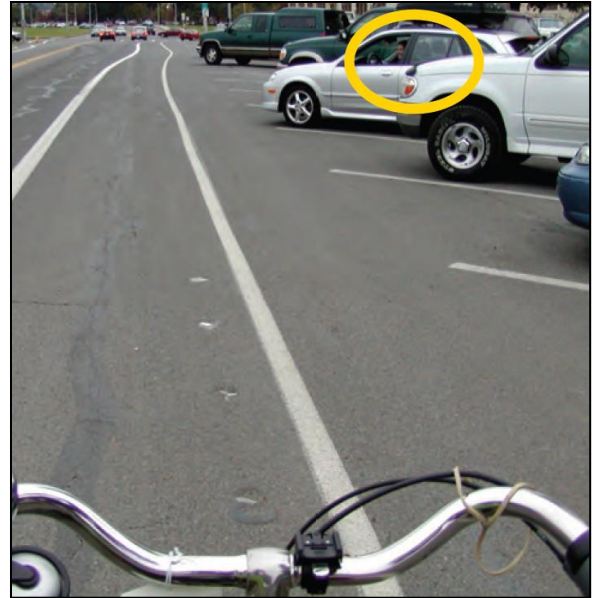


Figure 33 Reverse Angled Parking with Bicycle Lane in Somerville. Image credit: Boston Herald.



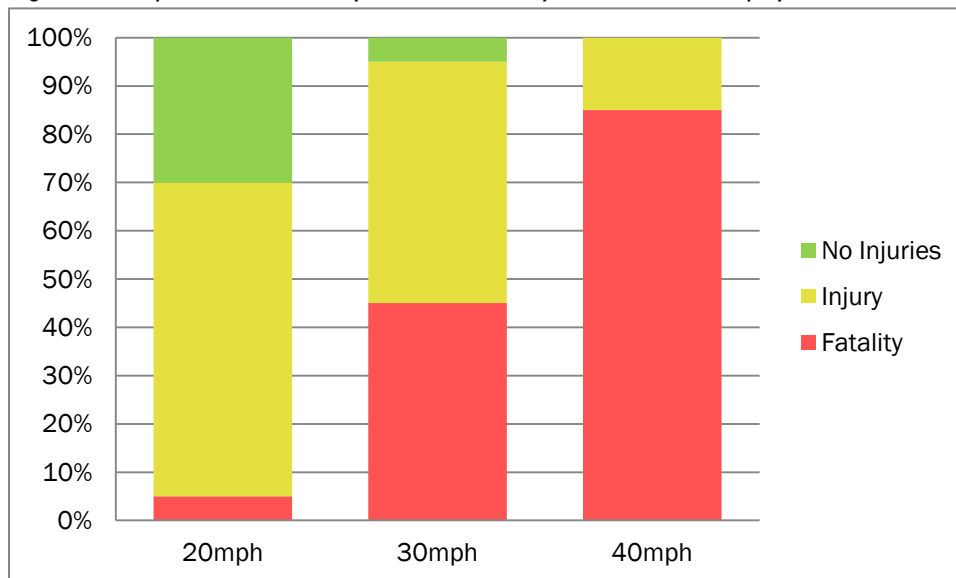
Implementing reverse angled parking does require some public education. However, once a few cars have parked correctly, it becomes clear to others how to use the new spaces. The City of Somerville posted signs explaining the new parking configuration, and had city staff on site to help during the first few days. They also produced an excellent brochure (included in **Appendix H**) explaining how reverse angled parking works and why it is an improvement.

Recommendation: Reconfigure Exchange Street to add additional parking and a bicycle lane

At approximately 45 feet wide for most of its length, Exchange Street has a very wide right of way for a one-way street. This encourages speeding, double parking, and other potentially dangerous maneuvers.

Numerous survey respondents indicated that the need to cross busy streets was one reason that they did not like to park in the garages or other areas outside the core of Malden Center. Speed of traffic is the most important factor in the severity of crashes: even the difference between 20mph and 30mph is enormous, as shown in **Figure 34**. Narrowing travel lanes is a proven way to reduce average vehicle speeds without negatively impacting traffic throughput.

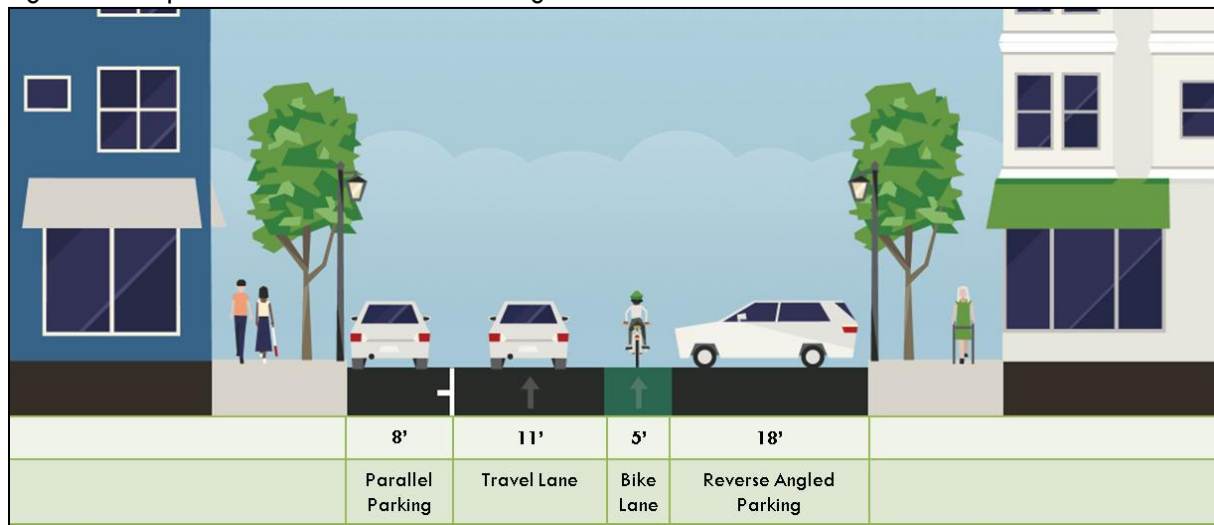
Figure 34 Impact of Vehicle Speed on Severity of Pedestrian Injury in Vehicle-Pedestrian Collisions



Source: National Highway Traffic Safety Administration
<http://www.nhtsa.gov/people/injury/research/pub/HS809012.html>

MAPC's calculations indicate that the entire length of Exchange Street has sufficient width to add a bicycle lane, and reverse angled parking on one side of the street with spaces at a 45 degree angle to the curb. Converting parallel parking to reverse angled parking on Exchange Street would have two important benefits. In addition to lowering speeds and improving safety by narrowing Exchange Street, additional parking spaces could be accommodated. **Figure 35** illustrates how this configuration could be accommodated on a section that of Exchange Street that is 42' wide between the existing curbs.

Figure 35 Proposed Cross Section for Exchange Street



The cross section shown above uses conservative widths for the parallel parking, vehicle travel, and reverse angled parking lanes⁹. Reverse angled parking is recommended for the south side of the street, so that the bicycle lane is adjacent to the reverse angled parking as opposed to the parallel parking. Bicycle lanes adjacent to parallel parking can put cyclists at risk of colliding with opening car doors. The recommended configuration would slow traffic, add safe accommodations for cyclists, and cut down on double-parking. In addition, MAPC estimates that the proposed configuration would result in a net gain of 8 parking spaces.

Recommendation: Restripe parking spaces on Pleasant Street to ensure all usable curb length is marked for parking.

Along Pleasant Street, there are several locations at the ends of parking rows there is excess space along the curb. In some cases these areas are painted with hatched lines in order to indicate that parking is not allowed, but in others it is unmarked. Technically these are not legal parking spaces, but drivers were observed parking there and some areas are long enough to accommodate a vehicle (as shown in **Figure 36**). Drivers routinely parking illegally in these areas contribute to an overall laissez faire attitude about following the parking rules in Malden Center. Furthermore, it is an indication that there may be room for more legal parking spaces than are currently striped.

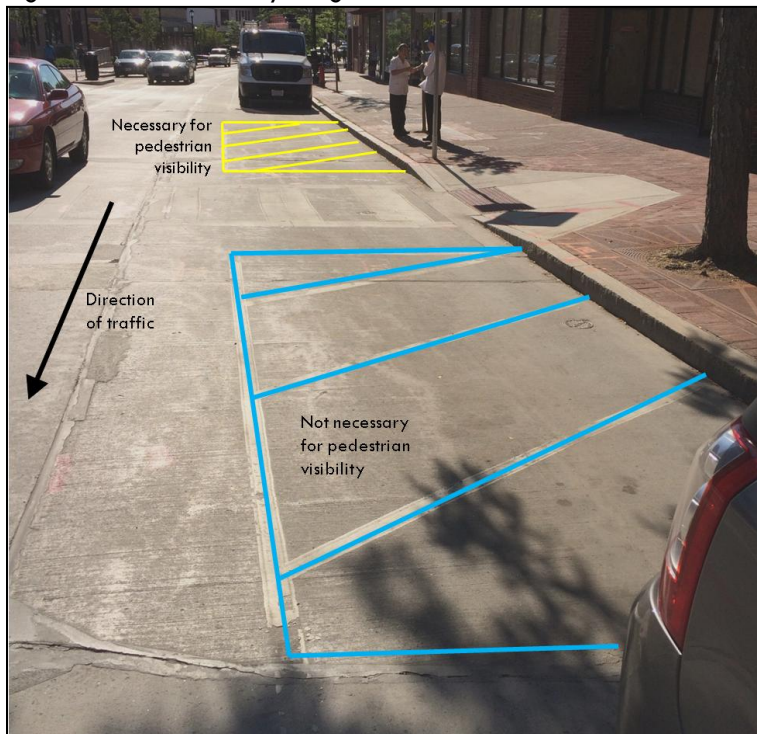
⁹ Available design guidelines recommend a range of 13.5' to 22' (depending on the angle of the parking space) for the cross-sectional width of reverse angled parking. For the purposes of this proposed reconfiguration of Exchange Street, MAPC followed the 18' dimensions recommended by a Smart Parking Toolkit developed by the Massachusetts Executive Office of Energy and Environmental Affairs, available at http://www.mass.gov/envir/smart_growth_toolkit/bylaws/SP-Bylaw.pdf.

Figure 36 Inefficient Striping on Pleasant Street



Similarly, there are a number of locations where a “no parking” area is hatched before or after a driveway or crosswalk. This clear distance is important to allow for the turning radius into driveways, and to improve visibility for pedestrians in a crosswalk. However, in some cases this clear distance is larger than it needs to be. In particular, on a one-way street the parking on the far side of a crosswalk does not need to preserve clear distance for visibility, only a smaller distance to prevent cars exiting a parking space from backing up into the crosswalk. **Figure 37** shows an example on Pleasant Street.

Figure 37 Unnecessarily Large Clear Distance from Crosswalk



In addition to areas where parking is explicitly not allowed, there are other areas where it is unclear if parking is allowed. In **Figure 38**, there is a sign indicating reserved parking in the First Church of Malden driveway on Pleasant Street, but there is space along the curb for 1-2 cars to park without blocking the driveway, yet there is no signage or striping to indicate whether or not parking is allowed.

Figure 38 Unclear Parking Regulations on Pleasant Street



MAPC recommends that parking spaces on Pleasant Street be restriped to consolidate any excess clear distance and clarify where parking is allowed. Parking spaces on Pleasant Street are currently striped as 22 feet long, which is longer than necessary. Additional parking spaces could be added if the length was adjusted to 20 feet, and unnecessary hatched areas on the ends of rows were converted to parking. **Table 7** shows possible areas for additional parking spaces based on MAPC's measurements:

Table 7. On-Street Parking Dimensions on Pleasant Street

From	To	Total Curb Length	Usable Curb Length	Current # of Parking Spaces	Proposed # of Parking Spaces
<i>North side of Pleasant Street, from Main Street toward City Hall</i>					
Main	Dartmouth	144'	134'	6	6
Dartmouth	Pleasant St Lot	193'	163'	6	7
Pleasant St Lot	Washington	83'	63'	2	3
Washington	City Hall	250'	240'	10	12
<i>South side of Pleasant Street, from Main Street toward City Hall</i>					
Main	Dartmouth	220'	200'	9	10
Dartmouth	Washington	532'	472'	20	22
Washington	Abbott	249'	122'	9	11
Abbott	City Hall	39'	34'	0	1
Potential new parking spaces:					10

Calculations assume the following dimensions:

Parking space: 20'

Clear distance on each side of a fire hydrant: 10'

Clear distance on each side of a driveway: 5'

Clear distance before a crosswalk on a one-way street: 20'

Clear distance after a crosswalk on a one-way street: 10'

Recommendation: Stripe Senior Center parking spaces on Garnet Street to increase efficient use.

Adjacent to the Pleasant Street lot entrance off Garnet Street, there is an area signed for senior center parking only. The lack of striping makes it unclear as to whether vehicles are supposed to park parallel or angled, causing confusion and inefficient use of space. As shown in **Figure 39**, Garnet Street is one way at this location, which allows enough width in the right of way to stripe reverse angled parking spaces.

Figure 39 Senior Center Parking on Garnet Street



MAPC never observed more than two cars parked in this location, yet it is likely that 5 could be accommodated if spaces were clearly marked, as illustrated in **Figure 40** below.

Figure 40 Proposed Configuration for Senior Center parking on Garnet Street



If five spaces could be clearly marked at this location, the effective number of Senior Center parking spaces would increase, and a corresponding number of the parallel parking spaces further down on Garnet Street could be converted from Senior Center only to general public use.

Recommendation: Stripe each parking space on Dartmouth Street and Main Street to maximize the efficient use of curbside parking.

On-street parking on Dartmouth Street north of Garnet Street and Main Street north of Salem Street has no visible striping demarcating parking spaces. This can lead to inefficient parking with large distances between each vehicle. Striping individual parking spaces on these two streets will increase efficiency, and is necessary in the event that single space parking meters are installed.

Recommendation: Make aesthetic improvements to Jackson and CBD garages.

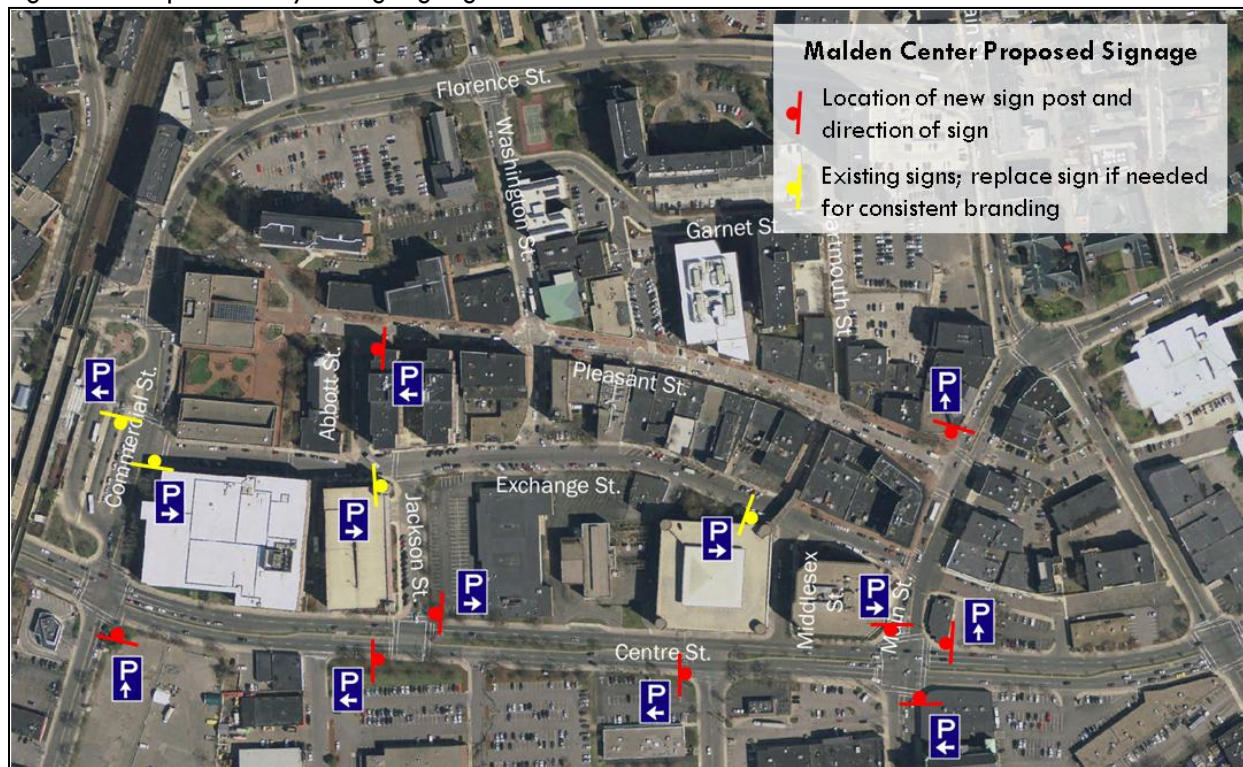
A number of survey respondents commented that they avoid parking in the two garages in Malden Center because the garages feel dirty and/or unsafe. In particular, several people mentioned that the garages felt unsafe when they were alone at night, or did not like to park there when they were with their children. Updated lighting, painting and other aesthetic elements can go a long way toward creating a safe and welcoming atmosphere, and encouraging more use of the garages after 4:00pm and on weekends. This is a key strategy to relieve the high demand for on-street parking. The Malden Redevelopment Authority has already purchased LED light bulbs for all of the fixtures in the CBD and Jackson Garages, and they will be installed in the upcoming months, however additional improvements are needed.

In addition, MAPC recommends installing automatic fare gates on the garages. This requires an up-front capital expenditure, but can be more cost effective over the long term, especially if there is enough future parking demand to require opening both garages on the weekends.

Recommendation: Add consistent wayfinding signage to promote use of the garages.

Good wayfinding signage is important to make it as easy as possible for drivers to find parking, and minimize traffic impacts related to drivers circling around looking for an on-street space. Wayfinding signage refers to signs that direct drivers entering the business district toward public off-street parking. All parking-related signage in Malden Center should use the same design style to make it easier for drivers to immediately spot the signs, and to give Malden Center a consistent branding. The same branding should be used for parking assets owned by both the City of Malden and the Malden Redevelopment Authority. New signage installed at several surface lots in 2015 is a good example of distinctive branding, and all parking-related signage in Malden Center should be updated to match that style. Proposed locations for new/updated wayfinding signage are shown in **Figure 41**.

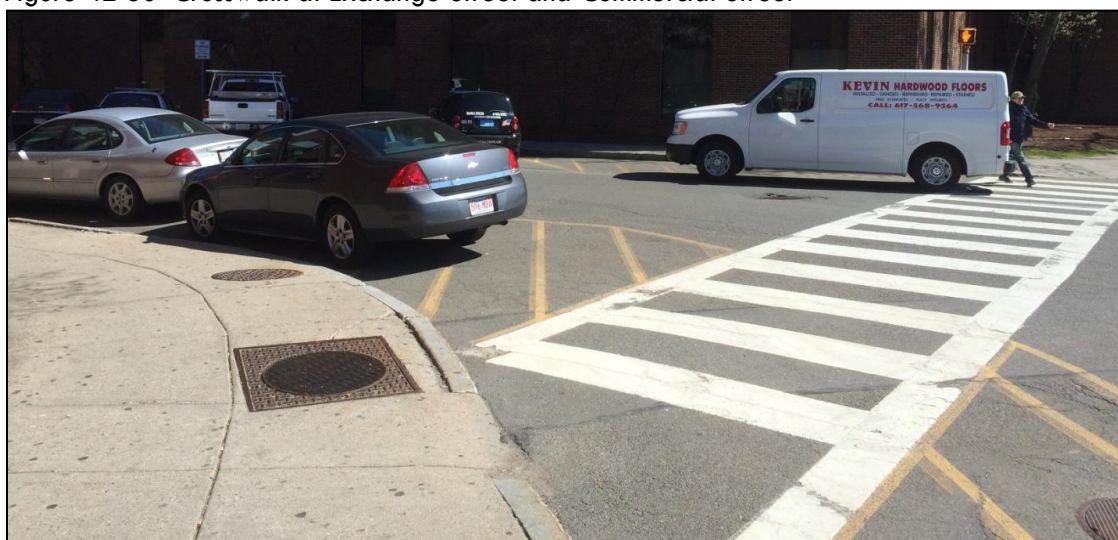
Figure 41 Proposed Wayfinding Signage for Malden Center



Recommendation: Install curb extensions at the intersection of Exchange St and Commercial St.

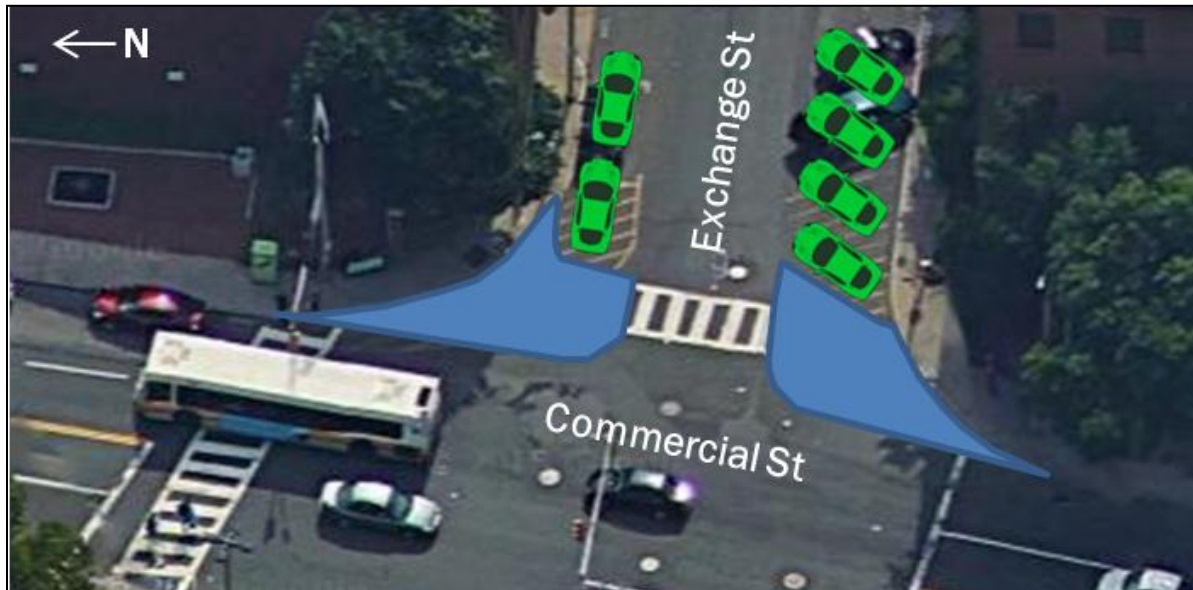
The intersection of Commercial Street and Exchange Street is extremely wide, with a crosswalk 60 feet in length, as shown in **Figure 42**. The wide intersection encourages vehicles to turn onto Exchange Street at high speeds, which is dangerous for pedestrians. Several usable parking spaces have also been hatched out at this location to prevent turning vehicles from hitting parked cars.

Figure 42 60' Crosswalk at Exchange Street and Commercial Street



MAPC recommends that the City install curb extensions on both sides of Exchange Street at this intersection. This would slow down turning vehicles and dramatically shorten the distance that pedestrians must cross, thereby improving safety. In addition, several parking spaces could be reclaimed. **Figure 43** illustrates this concept, with reverse angle parking shown on the south side of Exchange Street.

Figure 43 Proposed Curb Extensions at Exchange Street and Commercial Street



An updated pedestrian crossing signal with countdown timers is also a much-needed safety improvement in this location. Aesthetic upgrades such as trees and other landscaping, and street furniture such as benches and streetlights should also be considered, similar to the way that Pleasant Street was recently reconstructed. **Figure 44** shows the gateway to Malden Center at Pleasant Street and Main Street, which should serve as a model for the intersection of Commercial Street and Exchange Street.

Figure 44 Curb Extensions at Pleasant Street Gateway to Malden Center. Source: Google Street View. Note: Image was taken before crosswalk and bicycle lane pavement markings were installed.



The intersection of Exchange Street and Commercial Street is the most urgent priority since it is the gateway to Malden Center, and the nearby MBTA station generates a high volume of pedestrian traffic. Yet other intersections along Exchange Street could also benefit from curb extensions, and the City should continue to seek funding to reconstruct the entire street. In the interim, the City should also look for opportunities to have these types of public realm improvements funded by the private sector as adjacent parcels are redeveloped.

Recommendation: Enforce snow clearance policy and prioritize clearance of streets and public sidewalks in Malden Center.

The City of Malden currently has an ordinance requiring property owners to clear snow from the sidewalks in front of their property. This ordinance should be strictly enforced in Malden Center and other areas with lots of foot traffic.

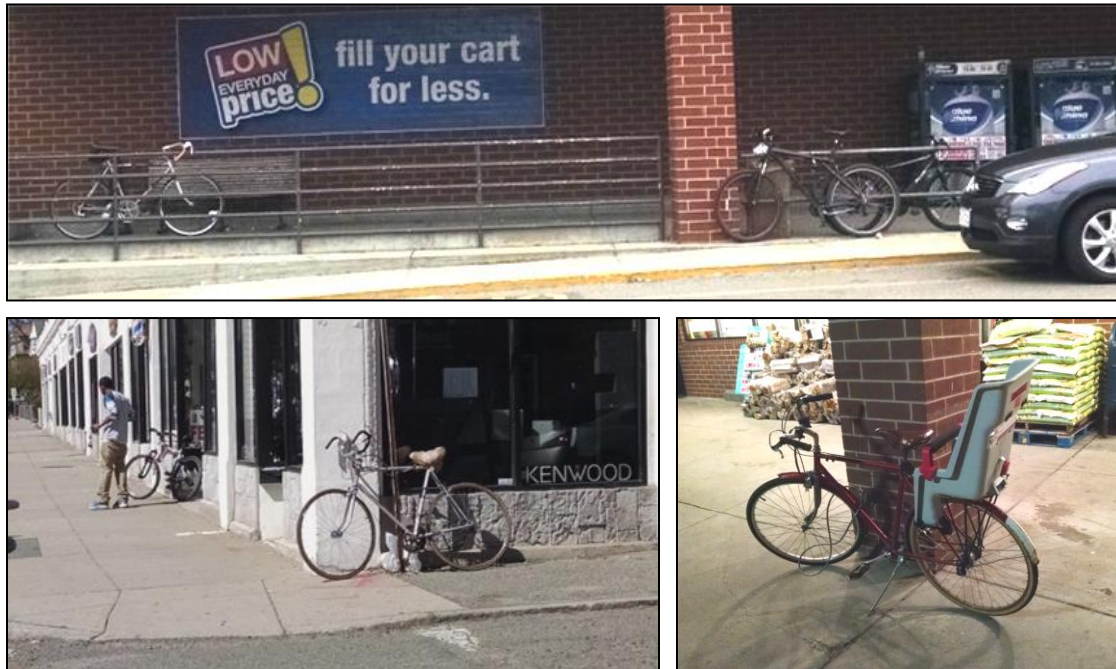
In addition, the City should prioritize its own snow clearance efforts to ensure that busy streets and sidewalks in Malden Center are cleared as soon as possible, and that access is available for pedestrians to cross streets, access their vehicles, and local transit services. Snow clearance on neighborhood streets should also be prioritized so that residents don't have to park for extended periods of time in the CBD garage.

Recommendation: Install bicycle racks on Exchange Street and Main Street.

MAPC observed numerous people visiting Malden Center by bicycle. Encouraging more people to come by bicycle can reduce the demand for vehicle parking, while also having positive effects on public health, greenhouse gas emissions, and traffic. The nearby Northern Strand Trail is an important bicycling destination, and improving bicycle connections from the trail to Malden Center can attract new customers for local businesses.

Providing bicycle parking is an important tool to encourage more bicycle trips. While there are bicycle racks on Pleasant Street, there are none on Exchange Street and Main Street. Other important destinations such as the Stop & Shop also lack bicycle racks. Cyclists, like drivers, prefer to park as close as possible to their destination, so without any racks bicycles get locked to whatever is available. This contributes to an untidy streetscape and can sometimes block pedestrian access along sidewalks. In addition to providing orderly parking for those already biking, additional bicycle racks can also serve as an invitation and encouragement for more people to visit Malden Center by bicycle. **Figure 45** shows bicycles locked in various improvised ways at the Stop & Shop and on Main Street.

Figure 45 Improvised Bicycle Parking



MAPC recommends that the City install additional bicycle racks on public property, and work with private property owners such as Stop & Shop to install bicycle racks on their property. MAPC has conducted a regional collective procurement for bicycle racks that Malden can use to purchase racks directly from pre-selected vendors, at discounts of up to 40%. More information on this program is available at <http://www.mapc.org/resources/regional-bike-parking>.

Regulations and Pricing

In many cities and towns, there are both areas with a high demand for parking, and areas further from the center (or in garages) with lower demand and excess capacity. In those cases, pricing on-street parking (while keeping off-street parking inexpensive or free) can be a relatively simple solution to smooth out parking demand across more of the available capacity. However, in Malden Center, due to a number of large employers and long-term parking demand from Orange Line commuters, during the weekdays the two garages are almost entirely full of long-term parkers. Therefore, additional effort will be needed to free up space in the garages for short-term parking by shifting some monthly pass holders to other locations.

Reducing the overall parking demand is also an important strategy for improving parking availability for those who continue to drive. Reducing demand for parking can include ensuring that individuals, rather than their employers, pay the full cost of parking; making it easier for people to walk and bike to Malden Center; and continuing to grow the housing stock in and around Malden Center, which provides a ready base of customers just steps away from local businesses.

The recommendations in this section are aimed at approaching the parking availability issue from all of these angles. In order to be successful, many of these steps must be implemented as a comprehensive package.

Recommendation: Extend time limits for most on-street parking to 2 hours

Many survey respondents noted that the current one hour limit for on-street parking is not enough time for many typical visits to Malden Center, such as a meal in a restaurant, hair appointments, or classes at the senior center, dance studio, or martial arts studio. Time limits can be an important strategy to increase turnover of on-street parking, but if time limits are too short they can make life more difficult for the very customers the restrictions are intended to serve. MAPC therefore recommends that time limits be extended to 2 hours. However, extending the time limits to 2 hours must be combined with other efforts to increase turnover, the most important of which is pricing on-street parking, which is discussed in the following recommendation. Without pricing, extending time limits to 2 hours will only make it easier for long-term parkers to monopolize the on-street spaces.

The existing regulations in Malden Center are in effect at different times of day: some spaces are 7am – 5pm, others are 7am – 6pm, and still others are 11am – 5pm, which is confusing to visitors and makes enforcement needlessly difficult. MAPC recommends that on-street parking regulations start at 7am. Restrictions should continue into the evening hours until 6pm at a minimum, but we would recommend that time periods as late as 9pm be considered. Evening hours can be busy in Malden Center due to the large number of restaurants and other nightlife destinations, so having restrictions go later in the evening would ensure that on-street parking is available for restaurant patrons, rather than being occupied for the entire evening by restaurant employees or other long-term parkers.

There are only two exceptions MAPC recommends to the 2 hour limit. First, MAPC recommends that several spaces near each day care center in Malden Center be posted as 15 minute parking from 7-9am and 4-6pm Mon-Fri, and regular 2 hour parking the rest of the day. This will help to ensure that parents are able to drop off and pick up their children safely and easily without double parking.

Second, for the parking spaces on Washington Street and Garnet Street currently marked as Senior Center Permit spaces, MAPC recommends that they be regulated consistently with the rest of the on-street parking outside of Senior Center hours. Senior Center Permit spaces should have a consistent time limit of 8:00am – 4:00pm, Monday through Friday. An example of a sign with these regulations is demonstrated in **Figure 46**.

A map of proposed parking regulations is provided in **Figure 47**. A table comparing parking capacity categorized by existing and proposed regulations is provided in **Table 8**. The proposed capacity assumes implementation of the physical recommendations from the previous section, and shows a net gain of 34 spaces. This table also demonstrates the greater simplicity of the proposed regulations: there are only 5 types of parking regulations, as opposed to 10 existing types of regulations.

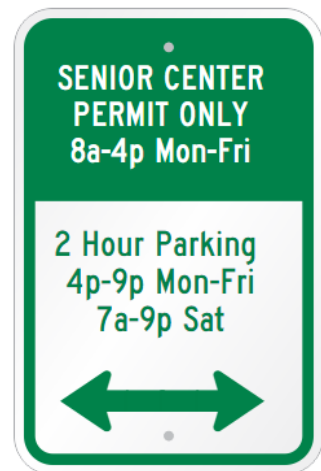


Figure 46 Proposed Sign for Senior Center Parking

Figure 47 Proposed Regulations for On-street Parking in Malden Center

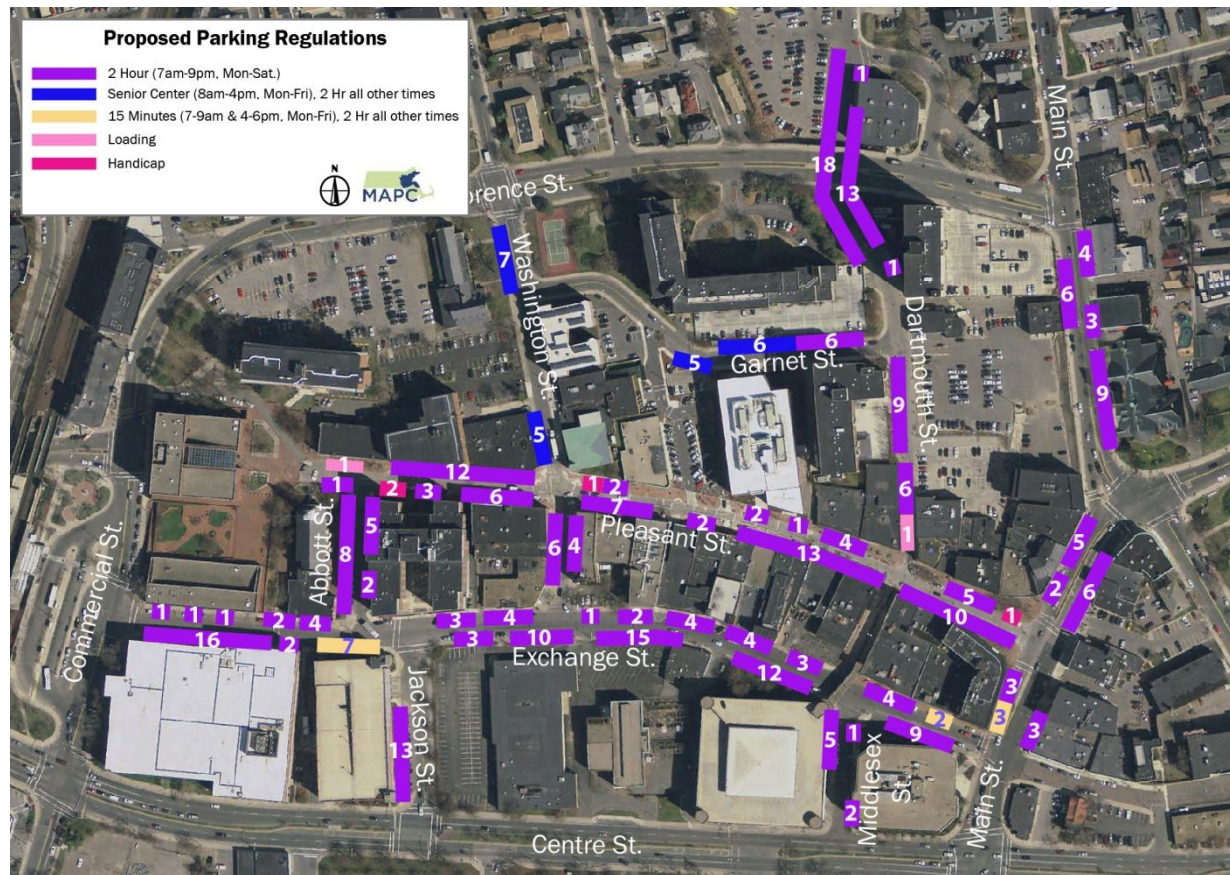


Table 8 Existing and Proposed Parking Capacity

Type of Parking Regulations	Existing Capacity	Proposed Capacity
2 Hour	0	311
90 Minutes	25	0
1 Hour	203	0
15 Minute	15	0
15 Min 7-9am, 4-6pm, otherwise 2 Hour	0	12
15 Minute/Loading	3	0
Loading	1	2
Police & Emergency Vehicles/Police Permit	36	0
Senior Center/Sr. Center Permit	23	23
Unrestricted/Unsigned	8	0
Handicap	4	4
Taxi	1	0
Total	318	352
Additional spaces as proposed:		34

Note: Proposed capacity assumes all physical recommendations have been implemented.

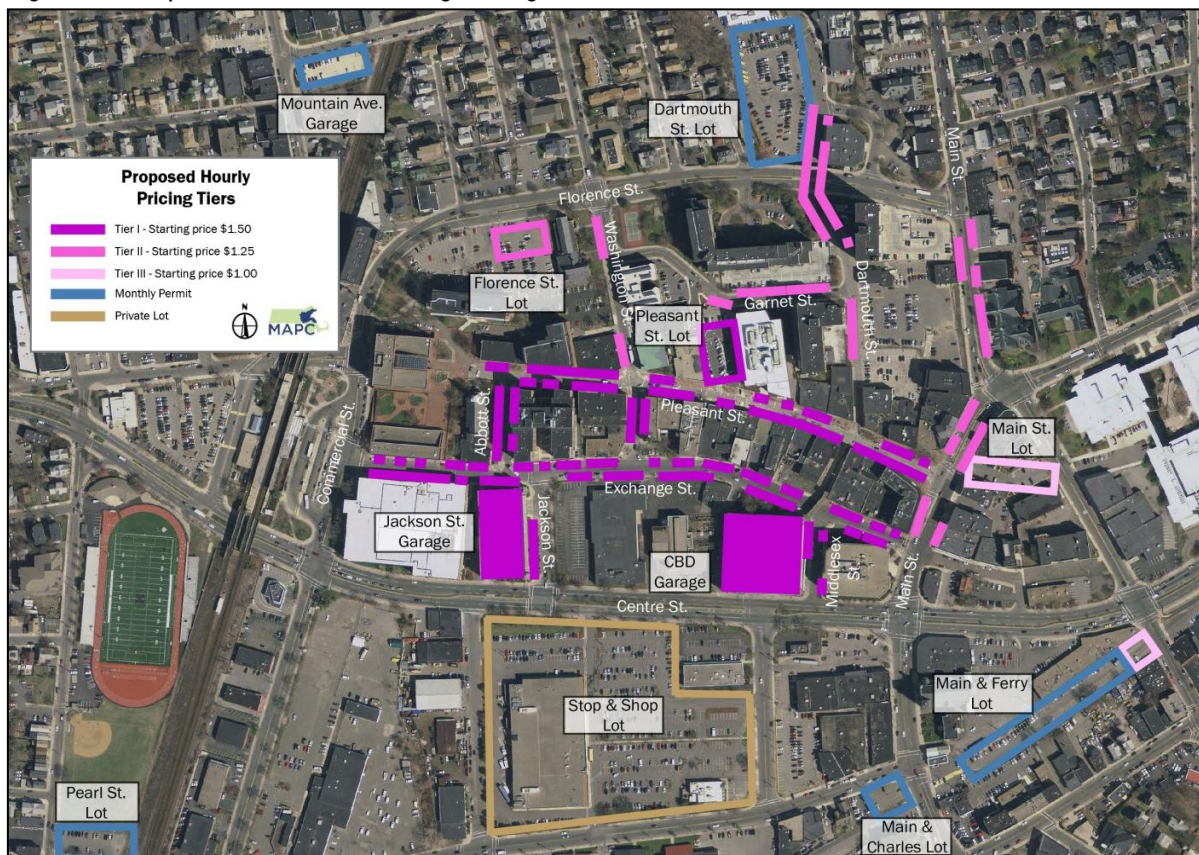
Recommendation: Install electronic parking meters and price all on-street parking in the study area.

Ideally, people would be able to visit Malden Center and experience free and easy-to-find parking. However, in an area like Malden Center where parking demand is high and supply is finite, this scenario is impossible. Typically customers and others making short trips to a business district prioritize convenience, but are less deterred by paying for parking—as long as they can easily find a space. Employees and commuters, who are staying all day long, prioritize cost, and are willing to walk a little to their destination if they can save money. These two types of parking demand—short-term/location-sensitive, and long-term/cost-sensitive—can be balanced by pricing the most convenient spaces at a higher rate than spaces in a garage or a surface parking lot that’s located a little further from the core of the business district.

MAPC recommends that the City install parking meters for all on-street parking within the study area, and price the parking in three tiers according to demand, as listed below and shown in **Figure 48**:

- a. Tier I: \$1.50/hr (25 cents = 10 min): Pleasant St, Pleasant St lot, Exchange St, Abbott St, Jackson St, Middlesex St, S Washington St, CBD and Jackson garages
- b. Tier II: \$1.25/hr (25 cents = 12 min): Main St, Dartmouth St, Garnet St, Washington St north of Pleasant, Florence St lot¹⁰
- c. Tier III: \$1.00/hr (25 cents = 15 min): Main Street lot and Main & Ferry Street lot

Figure 48 Proposed On-street Parking Pricing



¹⁰ In August 2015 new public, off-street spaces became available in a lot off Dartmouth Street. While this lot was not available during our observations, MAPC recommends that the public spaces be metered and priced as Tier II.

The above prices are suggested as a starting point, not necessarily the “right price.” **The goal of pricing parking is to create more availability;** specifically, there should generally be about one open space per block, which corresponds to approximately 85% occupancy. **If there are no open spaces, the price is too low; if there are lots of open spaces, the price is too high.**

MAPC recommends that the City annually evaluate parking occupancy and adjust prices to balance demand. The price should be increased on blocks with occupancy above 85%, and the price should be decreased on blocks with occupancy below 75%. MAPC recommends that the City purchase solar-powered “smart” parking meters, which generate real-time data on parking occupancy, and would enable the City to automatically evaluate average occupancy and adjust prices remotely.

“Smart” meters are electronic parking meters that allow people to pay using coins or credit cards. They can be hardwired or solar powered, and they have several advantages over traditional coin-only meters:

- More convenient for customers—no need to carry quarters
- Real-time data on parking utilization is collected automatically
- Prices or other regulations can be reprogrammed remotely
- Meters can automatically charge different prices at different times of the day
- Staff is immediately alerted of any broken meters

The two main types of smart parking meters are single space meters, which are located adjacent to each parking space, and multispace meters, where one kiosk serves an entire block or an entire surface lot. In addition, pay by phone services enable drivers to pay for parking at a metered space by calling a number from their mobile phone, or using a smartphone application. Pay by phone systems can be implemented in conjunction with any type of on-street meter technology.

The cost difference between single space and multispace meters depends on the number of spaces per block that can be served by one multispace meter. The equipment costs for each type are similar if the typical block has around 10 spaces on each side. For blocks with more than 10 spaces, multispace meters are more cost-effective, while single space meters are more cost-effective for smaller blocks. Requiring people to cross a street to use a multispace meter (either the opposite side of the street they’re parked on, or on the same side but beyond an intersection with a side street) is not recommended; many people may have a hard time figuring out where the meter is, and may feel it is too far to walk.

Since Malden Center has numerous blocks with fewer than 10 spaces per side, MAPC recommends single space smart meters for on-street parking spaces. However, the Pleasant Street lot and other off-street public parking areas can be well served by one or two multispace parking meters.

In addition, the City of Malden may choose to contract with a pay by phone company. A pay by phone option further increases convenience for users, who can extend the time on their meter remotely via text message. Real time information on payments by phone can be downloaded to the physical meters for the purposes of enforcement.

MAPC recently conducted a statewide collective procurement for single space meters, multispace meters, and pay by phone systems. The City of Malden is eligible to purchase equipment and services from MAPC’s selected vendors without doing a separate municipal procurement, and in most cases at a significant discount from standard pricing. More information is available at www.mapc.org/parkingmeters.

Recommendation: Adjust pricing in the Jackson and CBD garages to encourage use from customers and other shorter-term parkers.

Most people prefer to park in on-street spaces, rather than in a garage, but on-street spaces are much more limited. In order to encourage people to park in the garages, the price should be consistent with or lower than the price for on-street parking. In particular, parking in the garages should be strongly encouraged on evenings and weekends, when the garages have plenty of available capacity. MAPC recommends several changes to the price structure for short-term parking in the Jackson and CBD garages, as shown in **Table 9**.

Table 9 Current and Proposed Pricing for Jackson and CBD Garages

	Current	Proposed
Hourly Rate	\$2	\$1.50
Evening Special	\$4 flat rate if enter between 5pm and 7pm; \$2/hr if enter after 7pm	Max \$3 if enter after 5pm
Maximum daily rate	\$18	No maximum
Weekends	Free	Free
With Validation	Free	Free
Monthly Pass	\$50-\$105	\$150

MAPC recommends that the hourly price in the garages be lowered to be consistent with Tier I of on-street parking prices. In the event that on-street prices change, the garage price should remain equal to or less than the on-street price. MAPC also recommends an expanded discount during the evening in the garages, which have hundreds of available spaces at that time. Finally, MAPC recommends that garage parking remain free on the weekends. Currently the garages are at approximately 12.5% occupancy on weekends, meaning that there are approximately 1100 available spaces.

There are several large restaurant and entertainment businesses currently under construction in Malden Center that will generate increased demand for evening and weekend parking. These businesses should be encouraged to direct their customers to park in the garages. If in the future the garages become full on evenings and weekends, prices can be increased. Until that time MAPC recommends that discounts remain in place in order to encourage evening and weekend patrons to use the garages and relieve demand for on-street parking.

In addition, MAPC recommends that the first floor of the garages be reserved for hourly parking, in order to ensure that convenient parking is available for short-term users. Monthly pass holders are parking all day long, and are not as sensitive to the minor inconvenience of driving up to an upper floor, as opposed to short-term users, who strongly prioritize convenience.

Recommendation: Shift some monthly pass holders out of the garages by offering lower prices for surface lots surrounding Malden Center.

Malden Center has a large number of people parking all day long in the Jackson and CBD garages. In addition to the employees of local businesses, there are several major employers located right in Malden Center, plus an MBTA station that draws a large number of commuters looking for parking. The two main public garages in Malden Center, Jackson and CBD, are oversubscribed with monthly passes, leaving little room during weekday peak hours for Malden Center visitors to park when on-street spaces are full.

When the Malden Police Department relocates to its new building, more than 100 monthly pass spaces will open up in the Jackson garage. However, a series of additional steps will be needed to make room for the general public in the Jackson and CBD garages:

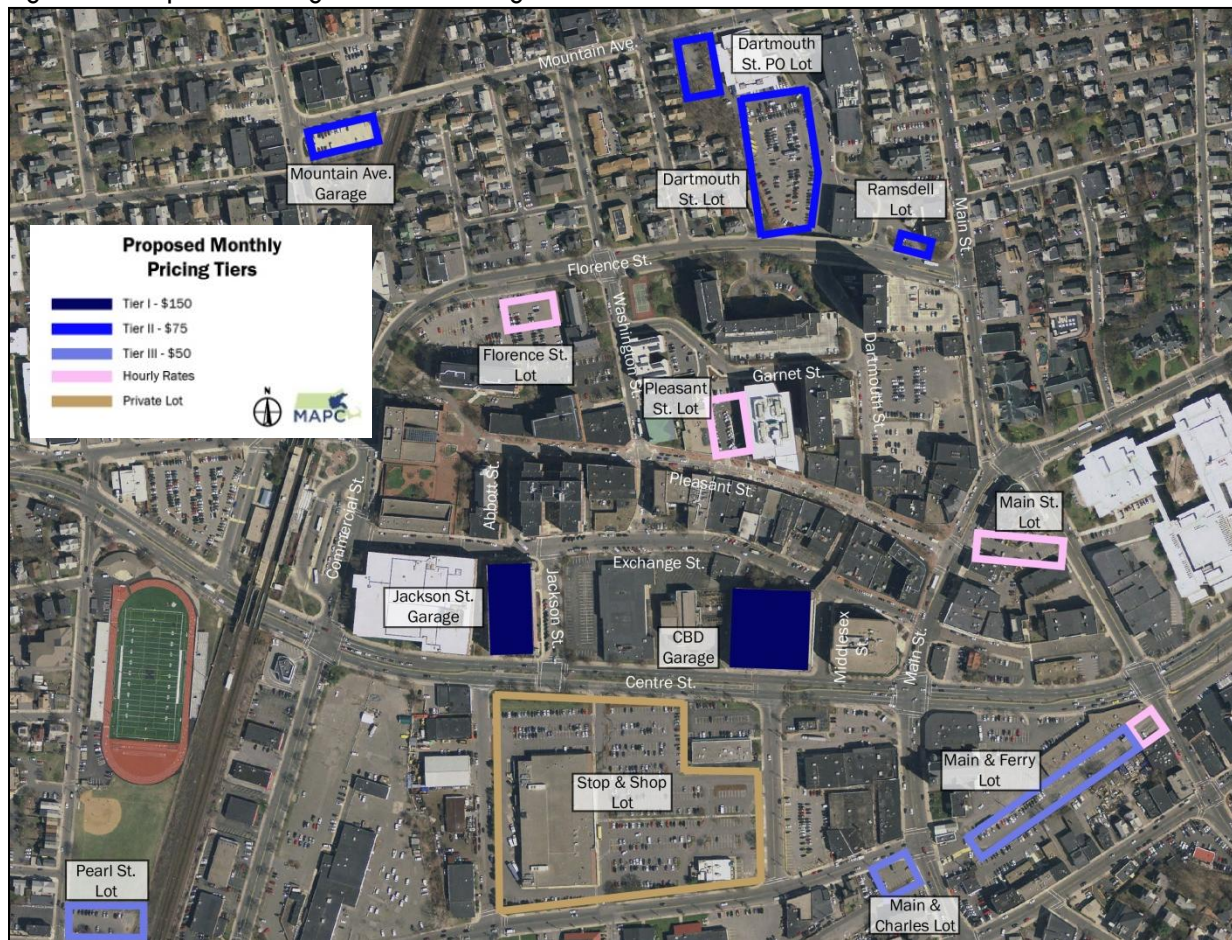
- **Increase the price of monthly passes in the Jackson and CBD garages to \$150/month.**
Assuming an average month has around 20 work days, a month's worth of parking at the current maximum daily rate would be \$360. A month of parking at the MBTA lot is approximately \$120, however the lot fills up very early in the morning, while a monthly pass in one of the garages guarantees a space.
- **Offer reduced monthly pass prices for surface lots further from the core of Malden Center.**
Several surface lots surrounding Malden Center have lower utilization than the garages. MAPC recommends reducing monthly pass prices for these surface lots at the same time as monthly pass prices increase in the garages, in order to shift some monthly pass holders from the garages to the surface lots. Current and proposed monthly pass prices are shown in **Table 10**, and a map of the lots is provided in **Figure 49**.
- **Phase out discounted monthly pass prices.** Many of the large employers in Malden Center have extremely generous parking contracts with the City or the MRA, guaranteeing them large numbers of spaces at discounted rates for many years. MAPC strongly recommends that the City discontinue this practice, and bring the monthly pass prices up to par with the price paid by individuals as soon as existing contracts can be renegotiated. The advertised monthly rate is \$105 for Jackson and \$100 for CBD, yet hundreds of passes are sold to local businesses at \$50-55 per month. This should include City of Malden employees, who currently have 98 monthly spaces reserved at no cost in the Jackson garage.

Table 10 Current and Proposed Pricing for Monthly Permits

Parking Facility	Current	Proposed
CBD Garage	\$100	\$150
Jackson Garage	\$105	\$150
Dartmouth Street Lot	\$75	\$75
Ramsdell Road Lot	\$75	\$75
Mountain Ave/Post Office Lot	\$75	\$75
Mountain Ave Garage	\$100	\$75
Main St and Ferry St	\$75	\$50
Main St and Charles St	n/a	\$50
Pearl St Lot	n/a	\$50

As noted in the table, MAPC recommends introducing a \$50 monthly permit for the Pearl Street lot. This lot has excess capacity during business hours, and could be an attractive option for owners and employees of nearby businesses, and for MBTA commuters. While providing parking for MBTA commuters should not be the goal of Malden's parking policy, shifting commuters out of the Jackson and CBD garages is helpful to create additional short-term parking availability in the business district. However, the uses surrounding this lot, including playing fields and an Elks hall, generate significant parking demand on a variable schedule, so it is possible that MAPC's observations did not capture peak demand. MAPC therefore recommends that the City make a limited number of monthly permits available at first and increase the number if no issues arise.

Figure 49 Proposed Pricing Tiers for Parking Lots



All of the prices listed above are suggested as a starting point, not necessarily the “right price”. MAPC recommends that the number of monthly passes sold for each lot and garage be evaluated annually with the goal of fully subscribing the surface lots surrounding Malden Center. If there are empty spaces in the surface lots, prices there should be lowered and/or prices for the garages should be increased. The City should strive to move long-term monthly parking to the periphery of the business district to free up both on-street and off-street parking in the core of Malden Center for use by short-term parkers. Consistent tracking and monitoring of monthly pass holders, daily parkers, and short-term parkers will provide the data to create the right price and the right balance of parking in Malden Center.

Based on MAPC’s observations and our analysis of current monthly pass contracts using information provided by LAZ Parking (which includes surface lots that were not included in MAPC’s observations), spaces are available as follows for monthly pass holders to relocate from the garages:

- At least 13 additional permits are available for the Main & Ferry Street lot, which runs along the old rail right of way behind the Dockside restaurant
- 19 spaces in the Main Street and Charles Street lot are currently for hourly use, but should be converted to monthly permit spaces
- 16 permits are available in the Mountain Ave lot next to the Post Office
- 6 permits are available in the Ramsdell Road lot

- The Mountain Ave garage is fully booked with permits for the top floor, but the bottom level is open to the public. MAPC observed that it was never more than half full, meaning that approximately 20 additional monthly passes could be made available.
- The Dartmouth Street lot is partly reserved for the YMCA, and partly for permit-only parking. The permit-only area, with approximately 75 spaces, had a maximum of 32 cars during MAPC's weekday observation (though 65 permits have been sold). Approximately 30 additional monthly permits could be sold, since this lot is large enough to slightly oversell.
- The Pearl Street lot has 62 spaces and had a maximum of 23 cars during MAPC's weekday observation. Approximately 30 monthly passes could be made available for this lot.

While many of the larger employers have contracts guaranteeing spaces in a certain location, there are a number of smaller companies that purchase monthly passes in the garages and could be incentivized to switch to a surface lot, for example:

- Wayside Youth and Family Services: 20 passes in CBD
- Jarcol LLC: 8 passes in CBD
- Kour Dental Group: 7 passes in CBD

Finally, the discounted price for monthly passes in surface lots should be advertized to the individuals who purchase monthly passes on their own. Some of them may well take the opportunity to save money by parking a little further away from their destination.

Recommendation: Reinvest parking revenue into improvements to Malden Center.

Introducing pricing for on-street parking for the first time can be contentious. However, clearly showing to business owners and people paying to park where the money is going can be an effective strategy to gain support for pricing. When asked whether they would support charging for on-street parking if revenues were reinvested in Malden Center improvements, only 30% of survey respondents did not support pricing.

MAPC recommends that the City set up a dedicated account to receive parking meter revenue, and use this revenue to fund parking operations and public realm improvements in Malden Center. All of the Physical Recommendations in the previous section would be eligible for these funds, as well as additional streetscape improvements like new trees, benches and lighting.

Similarly, MAPC recommends that the Malden Redevelopment Authority use revenue from its lots and garages to maintain and improve those parking assets. Garages can be very expensive to maintain, and neglecting maintenance can discourage people from using them, or in the worst case, can eventually lead to structural problems that impact parking capacity. Properly maintaining all off-street parking assets will ensure that parking is being used as efficiently as possible in Malden Center.

Recommendation: Do not sell garage passes to the Wynn Casino or any other bulk purchaser that will not benefit Malden Center.

The Jackson and CBD garages are an important resource to support the Malden Center business district and people who work in Malden Center. Those needs must be prioritized in the allocation of space in the garages. Secondary are the needs of people who commute on the MBTA: they may not benefit Malden Center as directly, but they are an important constituency nonetheless. However, a proposal by the Wynn Casino in Everett to purchase garage spaces in Malden for its employees would bring little to no benefit to Malden Center, while monopolizing spaces in the garages that are already struggling to meet the needs of existing customers. A bulk sale to Wynn Casino would have the least detrimental impact on parking availability in Malden Center if permits were valid for evenings and weekends only, at times when garage occupancy is below 50%. However, with the robust and growing nightlife in Malden Center, evening and/or weekend pass sales to Wynn Casino are not recommended. Under no circumstances should requests to purchase passes for weekday use be approved.

Recommendation: Allow lower-wage employees of small businesses in Malden Center to park for free in the Stop & Shop parking lot.

A theme that emerged from the survey was that the price of parking in a garage is hard to afford for hourly-wage workers. These employees are essential to keeping Malden Center a vibrant business district, and while some of them may be able to walk, bike or ride the T to work, others need to drive, and therefore need to park. The Stop & Shop supermarket has a very large parking lot that is conveniently located just across Centre Street from the business district, and MAPC's observations found **300 empty spaces during peak demand**. MAPC's understanding is that the owners have indicated that they do not mind if people park in their lot, because they may be more likely to stop in for groceries.

MAPC recommends that the City work with Stop & Shop to formalize an agreement to make a certain number of spaces available to the public, or, if the owners of Stop & Shop wish to more closely monitor the use of their lot, a permit could be created that would only be available to certain people, such as hourly wage workers of nearby businesses, and students of Malden High School and the New England Hair Academy. These permits could be valid only in the areas of the lot furthest from the grocery store entrance, and should be offered for a very reduced price, such as \$20 per month.

A number of municipalities in Greater Boston have agreements with property owners to make private parking lots available to the public. In some cases the municipality pays the private property owner for use of the lot, and in other cases the municipality takes on certain maintenance responsibilities such as plowing or periodic repaving and restriping. The City of Malden should be open to any of these options when negotiating with Stop & Shop.

Recommendation: Create and widely distribute an easily-understandable guide to all the parking options in Malden Center.

Differential pricing is intended to encourage people who are more price-sensitive to park in areas that experience lower parking demand, in order to free up space in areas with higher demand. However, in order for this to work people need to know that there are different prices in different locations. Information on parking in Malden Center is currently difficult to find through a simple Google search, and there is no information on hourly and monthly parking on the City of Malden website.

MAPC strongly recommends that the parking information page on the Malden Redevelopment Authority website be substantially updated, that information on hourly and monthly parking in Malden Center be added to the City of Malden website, and that City distribute parking information through local businesses and gathering places. Specifically:

- Create a new parking map for just the immediate area of Malden Center. Keep text to a minimum and show the price per hour/month directly on top of the location.
- Update the Malden parking website <http://maldenredevelopment.com/content/parking> to have a parking map right at the top with prices shown, as well as detailed information for employees and commuters on monthly pass options. Work with a programmer to optimize the site for Google searches—it currently does not show up in the first page of Google search results for “Malden parking.”
- Link to the parking page from the www.cityofmalden.org homepage. Include a link in the drop-down menus for Visitors, Business, and Residents on the City of Malden website. Also link to it from residential parking permit page: <http://www.cityofmalden.org/content/resident-parking-permit-application-and-information>
- Create paper brochures with parking map and monthly pass information and distribute them at City Hall, the Senior Center, and any businesses that wish to distribute them.
- Supply employers with an electronic and/or paper brochure to distribute to their employees and patrons.
- Promote, via websites and brochures, the fact that the garages are free on weekends and with validation, and discounted on weekday evenings.

These efforts are essential to the success of new pricing and regulations for parking in Malden Center. Public acceptance of these changes will depend heavily on the success of efforts to disseminate information about what the changes are and why they are being implemented.

Recommendation: When police station moves, convert the police permit-only on-street spaces to metered 2 hour spaces.

Currently 24% of the on-street parking in Malden Center is not available for the general public to use mid-day during the week. Thirty-six of these spaces are restricted for use by police (both official vehicles and personal vehicles). The police station is currently in the process of relocating outside Malden Center; when this move is complete, all of the spaces on Exchange Street and Jackson Street that are currently reserved for police vehicles and permit holders should be opened for general public use.

Recommendation: Prohibit scheduled deliveries during peak hours

Some deliveries, such as UPS, occur at all times of day. However, many others are scheduled. MAPC recommends that the City of Malden prohibit scheduled deliveries during peak hours on weekdays, and ticket delivery drivers parking illegally during those hours. Furthermore, when a driver is ticketed, a notice should be sent to the business receiving the delivery, reminding them to schedule deliveries outside of peak hours. For deliveries that must occur during the day, delivery drivers should be directed to use one of the two designated loading zones in Malden Center, or to use driveways where available.

In MAPC’s meeting with business owners at the beginning of this study, it was brought up that deliveries are currently not allowed after 10:00am on Pleasant Street, but that this regulation is not enforced. Increased enforcement, outreach to businesses, and more availability of on-street spaces should all help address the problem.

Zoning

MAPC does not recommend any changes to the parking requirements currently in place for Malden Center. However, we do recommend regulatory actions to reduce demand for parking, and to introduce tools to maintain flexibility in the event of future changes in parking demand.

Recommendation: Allow residential developments with excess parking to make their garages available for monthly permit parking.

When Dartmouth Towers and Dartmouth Gardens were built, parking requirements were higher in Malden Center than they are today. However, the City entered into an agreement with those developments stating that any unused parking capacity would be opened up to non-residents who choose to purchase a monthly pass. Today these two residential buildings provide nearly 300 monthly parking spaces to people who work in Malden Center.

There are other older residential buildings in Malden Center that were built when parking requirements were higher, and while MAPC did not include private residential garages in our observations, City officials have indicated that several buildings do have excess parking. MAPC recommends that the City invite these building owners to apply for a Special Permit Amendment allowing them to make excess residential parking available to members of the public who purchase a monthly pass. The Special Permit Amendment should reduce the number of parking spaces that the building is required to provide for residents to equal the number required under the current zoning. If the building owner wishes to reserve even less parking for residents, they may support their proposal with data showing the parking utilization rate of existing residents and the number of spaces currently unused. These agreements can be modeled on existing agreements with Dartmouth Towers and Dartmouth Gardens.

Recommendation: Enact a flexible residential parking ordinance to respond to future shifts in parking demand.

Residential parking requirements attempt to predict how many cars people will own, in order to ensure that adequate off-street parking is provided. However, as new housing is built in Malden Center, and new employers and retail businesses open in the area, residents are likely to take an increasing number of trips by walking, biking, and riding the MBTA. In addition, more than a dozen Zipcar shared vehicles are currently located in the immediate vicinity of Malden Center. All of these forces may combine to reduce demand for private vehicle ownership, and a lower residential parking requirement may be appropriate in the future, just as past shifts in vehicle ownership led to the current reduced parking requirements in Malden Center.

In order to allow the available parking capacity to be most efficiently used to meet demand in the future, MAPC recommends that the City of Malden adopt a flexible residential parking ordinance, so that parking can respond to future changes in demand. Such an ordinance would state that in the event that residential parking requirements are lowered, existing residential and mixed-use buildings may apply for a permit amendment to reduce their residential parking ratio to equal the new requirement, and open any excess parking to the public. This process should be as simple and straightforward as possible.

Recommendation: Encourage residential developments to charge residents separately for parking.

The price of providing a parking space is often included in the rental or purchase price of an apartment. However, not all residents have the same number of vehicles, and some residents have

no vehicles at all. If the price of parking is unbundled from the price of the apartment, fewer parking spaces may be needed because the spaces that are provided are used more efficiently. Unbundling parking allows people who own fewer cars to save money, because when parking is automatically included in the rent or purchase price of an apartment, people who don't own a car are paying for parking they don't need. Unbundling the price of parking from the price of housing can therefore incentivize people to own fewer cars, or attract people who already have fewer cars. MAPC recommends that the City of Malden use the permit approval process to encourage residential developers to unbundle the price of parking from the rental or purchase price of the housing unit.

Recommendation: Incorporate a Transportation Demand Management ordinance in the zoning.

In an area like Malden Center with high parking demand and a physically constrained environment, efforts to reduce parking demand from long-term parkers are crucial to improving parking availability for short-term visitors. Employer-based Transportation Demand Management (TDM) programs can help reduce the number of employees who drive to work alone. MAPC recommends that the City of Malden enact a TDM ordinance requiring new or redeveloped commercial buildings of greater than 10,000 ft² or employers with more than 50 employees within the Central Business District to adopt 1) a mode share goal (for example, no more than 50% of employees will drive to work alone), and 2) a TDM plan to help them achieve the mode share goal. Communities such as Cambridge, Needham, Lexington, Woburn and Hadley have TDM requirements that make permit approval conditional upon adoption of a TDM plan.

Recommended Transportation Demand Management strategies include the following:

- **Market-rate parking:** Employees pay for their own parking passes. If the employer buys them in bulk, the cost can be passed on to employees. Making employees aware of the true cost of driving to work will nudge some of them to choose other modes.
- **Parking “Cash Out”:** Employer offers a cash stipend in the same amount as a monthly parking pass to employees who do not drive to work. This is similar to the previous strategy, but provides an incentive to people who walk, bike and take transit, as opposed to a disincentive to those who drive.
- **Subsidized MBTA passes:** Employer pays full or partial cost of a monthly MBTA pass. Any amount paid by employee can be deducted pre-tax.
- **Carpool/vanpool:** Employer provides tools and information to facilitate ride sharing, and/or discounted parking for people who carpool.
- **Bicycle parking:** Providing secure, indoor bicycle parking at the workplace can help encourage people to commute by bicycle.
- **Showers:** Providing a place for bicycle commuters to change clothes and freshen up can remove a common barrier that keeps people from biking to work.
- **Marketing:** It is crucial for companies to actively educate employees about commuting options and promote any programs or financial incentives for commuting by foot, bike or transit.
- **Monitoring:** Employers should regularly (e.g. every 1-2 years) survey employees on their commute habits to gauge progress toward the mode share goal. This data should be reported to the City of Malden and the Massachusetts Department of Environmental Protection.

The City of Malden can also require large employers to participate in MassRIDES, a free program provided by the Massachusetts Department of Transportation that assists employers with implementing TDM programs. More information on MassRIDES is available at www.commute.com.

