

# **Downtown Medfield Parking Study**

Final Report and Recommendations

May 2018





## **Study Background**

The Town of Medfield is located in Norfolk County, and lies nearly 20 miles southwest of Downtown Boston. Bordered to the west by the Charles River, Medfield is one of Massachusetts' smaller communities with only 12,000 residents. The downtown features a rich variety of assets including varied land uses, accessible natural features, architectural variety, historic buildings, retail and restaurants, as well as open spaces. Formed as a crossroads market town, the center of Medfield is accessible along Massachusetts Route 109 and Route 27. The town lies several miles from any interstate or expressway, situated along one of the arteries towards Boston. Currently, there is no commuter rail service within the town, though, the neighboring towns of Walpole and Norfolk, about 10-15 minutes away, are served by the MBTA Commuter Rail's Forge Park line.

Downtown Medfield features a traditional New England mixed-use environment, with local walking destinations, retail, and housing. Over the last several years, the Town has seen an increase in new projects and developments in the downtown including a local private school, a new market, and a Starbucks coffee shop. This increase in commercial destinations, as well as the Town's new green space in the downtown, created a need for a strategic review of the parking system in downtown Medfield.

Medfield residents came together in February 2016 in a community forum, and identified four primary challenges in the downtown area:

- Traffic congestion is extreme
- Unsafe road conditions for pedestrians and vehicles alike

- Lack of downtown parking
- Pedestrians are not safe



## **Study Understanding**

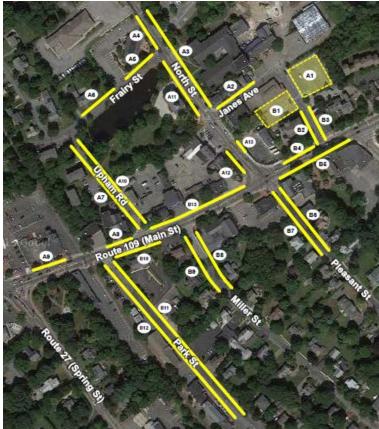
As local growth and development efforts advance within Medfield, the Town has recognized the need for a comprehensive evaluation of parking and mobility in the downtown area. To aid further development and maintain an attractive and vibrant downtown center, parking policies and practices must align with the broader goals for the community while addressing the realistic needs of locals and visitors.

An effective parking management plan helps to strategically maximize existing parking assets without compromising the character of downtown Medfield, which supports the area's long-term success. The development of a parking plan for downtown Medfield helps set a baseline against which to measure and support future investments, land developments, and economic activity.

This parking study follows up on a 2014 downtown Medfield parking study. The 2014 study measured parking demand on a weekday and a weekend, and found that 65% of public parking spaces were occupied at both 10 am and 1 pm. The highest areas of parking occupancy were found along Main Street, North Street, and Janes Avenue. While the 2014 study demonstrated moderate demand for parking in the downtown area, the study only looked at publically owned parking facilities.

This parking study follows up on the 2014 study, and includes a measure of private parking demand, as well as a look at ancillary parking issues, and finally provides a series of recommendations designed to promote more cohesive and efficient parking management in downtown Medfield.





2014 Study Area

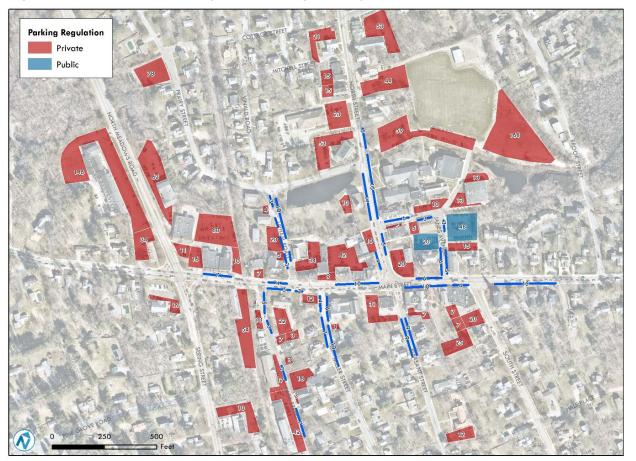


This section documents the current conditions of downtown Medfield parking facilities based on extensive data collection efforts conducted in the fall of 2017. This includes identifying the existing parking assets, how they are used today, and the Town's current parking management strategies.

#### **STUDY AREA**

The study area selected for the parking management study encompasses the commercial and mixed-use town center and covers a majority of the public and private parking spaces in downtown. As shown in Figure 1, the study area is centered along Main Street and includes several blocks north and south of Main Street for from north Meadows Road to South Road.

Within the boundaries of the study area, there many off-street parking lots, including two municipal lots. The majority of lots contain private off-street accessory parking for customers and employees of downtown businesses. Some onstreet parking is painted along Main Street and North Street. Informal on-street parking exists on most of the remaining residential streets within the study area.



#### Figure 1: Downtown Medfield Study Area & Parking Inventory

Note: Detailed inventory map in the Appendix.

#### PARKING INVENTORY

Based on field work conducted in September 2017, there are approximately 1,700 public and private parking spaces in the downtown Medfield study area. The parking inventory includes all on- and off-street spaces. As noted in Figure 2, less than 15% of the total supply is available to the public, meaning that they are not restricted to particular users. A majority of private spaces are restricted to designated users, such as customer-only or employee-only parking.

The full parking inventory is depicted in the parking regulations map in Figure 1. Other key findings from the inventory are shown below.

#### **KEY FINDINGS**

- There are approximately 1,700 existing parking spaces in the study area, an eighth of which are on-street;
- Few spaces of the publicly-available parking have time limits;
- Only 5% of all off-street parking is publicly accessible, equal to fewer than 70 spaces; these spaces are not regulated;
- The vast majority (95%) of the off-street parking supply is private and restricted to specific user groups;
- There are two municipal parking lots within the study area. In addition to these 70 spaces, there are a further 200 on-street spaces.

Figure 2: Parking Inventory in Downtown Medfield					

Parking Location	# of Spaces	% of Total Parking	% Publicly Available	% Restricted Access
On-Street	206	12%	100%	0%
One Hr.	21	1%	-	-
Off-Street	1,488	88%	5%	95%
Total	1,694	100%	18%	82%



MEDFIELD PARKING STUDY

#### PARKING UTILIZATION

Parking utilization counts provide a time series of typical parking demand for a typical day in an area. Trained individuals counted parked cars in each on-street segment and lot at pre-determined time intervals in the study area. Land usage, regulation, pricing, and convenience drastically impact how individual parking assets are utilized. By compiling parking utilization for all assets at once, one can begin to clearly identify patterns of high or low usage, the impact of regulations, or how much of the total parking supply is available throughout the day.

In order to ensure that parking management systems are operating efficiently, a certain level of vacancy is preferred both on-and off-street. It is ideal to have at least one empty onstreet space per block face in a downtown, ensuring easy customer access to businesses. This typically equates to about 1 out of 8 spaces free, or a target of 15-percent vacant per block face. Similarly a goal of at least 10-percent vacancy is considered ideal in off-street lots. If any facility has less availability, it is effectively at its functional capacity and drivers perceive parking problems.

The project team conducted parking utilization counts on a typical weekday and weekend. Weekday counts were conducted on a typical, autumn Wednesday in October from 8 am until 8pm to understand parking demand throughout the day associated with downtown's peak activities. A typical Saturday and Sunday was counted in October, also from 8am to 2pm in order to better understand the weekend parking demands occurring in the area.

#### Spatial Analysis of Parking Utilization

Understanding how downtown parking is managed requires being able to describe how parking facilities and on-street parking interact with each other during the peak times of day. A chart of hourly utilization rates for one specific location is valuable, but seeing how that location behaves among others located nearby can reveal patterns and trends not evident in numbers alone. The lot which is completely full may be right around the corner from another lot that has plenty of availability at the same time.

Using the utilization data, the consultant team developed a series of maps based on the parking inventory map. Color represents the percentage of spaces utilized at each location based on notable breaks used to evaluate the adequacy of a parking facility:

- "Cool" light blue / blue refers to 0-30% and 30-60% utilization, points at which on-street blocks and off-street facilities are viewed as underutilized.
- Yellow refers to blocks and facilities with 61% to 80% utilization and represent regularly-used resources, but that still have opportunity for additional demand.
- **Orange** refers to utilization between 81% and 90%, and are considered to be at the ideal level of parking demand.
- Red represents demand 91% or higher and is considered at functional capacity or beyond capacity. While fully maximizing efficiency, these blocks or facilities are full or near full, giving the impression of lack of parking.

#### PARKING UTILIZATION

**Medfield Downtown Parking Inventory** 

On the right are the key findings for weekday and weekend utilization, followed by the spatial analysis maps below which show the peak utilization for downtown Medfield on a typical weekday and weekend, during the lunchtime peak hours of 11am-2pm. These hours are chosen to capture peak hour customer, retail, and residential activity within downtown Medfield. A full suite of utilization maps are attached in the Appendix.

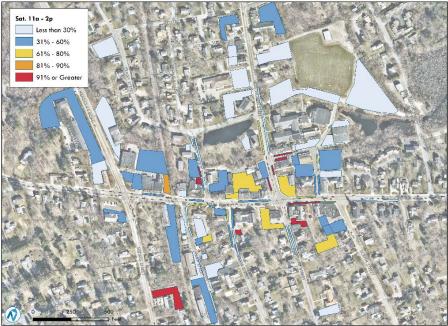
Figure 3: Medfield Parking Peak Utilization – Wednesday 11am-2pm

# 

#### **KEY FINDINGS**

- Overall, there is parking availability during the lunchtime peak period on weekdays and weekends, with only a few public and private lots nearly full, especially north of Main St and east of North St;
- Wednesday has higher utilization than Saturday or Sunday;
- On-street parking demand is concentrated along Janes Ave, and Upham Rd, where shops and major destinations to customers and visitors locate;
- The two municipal lots are 55% to 100% full on Wednesday.

Figure 4: Medfield Parking Peak Utilization – Saturday 11am-2pm



#### Medfield Downtown Parking Inventory

#### PARKING UTILIZATION

The utilization charts show a detailed picture of how full parking gets on-street and off-street. The blue bars indicate how many cars are parked each hour; the beige areas indicate the number of available parking spaces. Based on the detailed data collection effort, the utilization data can be analyzed in multiple ways, including regulations, location, and type of parking. This helps to reveal that parking demand is not uniform throughout the study area.

Overall, downtown Medfield parking supply is under 45% utilized, indicating an excess of available parking during the lunchtime peak period. On-street and off-street parking is roughly equally used on weekdays. However, nearly 20% of total demand is concentrated in the seven lots to the north east of Main and North Streets, which includes the only two publicly accessible lots, with over 90% utilization (Figure 10).

Figure 6: Utilization For All Saturday Parking in Downtown Medfield

#### **Utilization chart**

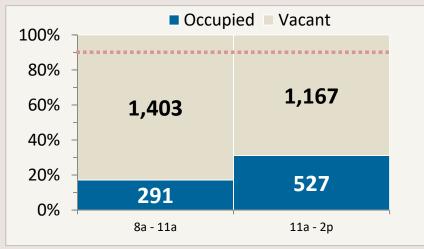
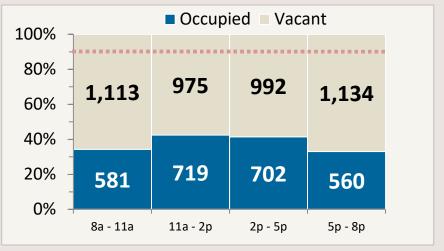


Figure 5: Utilization For All Wednesday Parking in Downtown Medfield

#### **Utilization chart**



#### Figure 7: Utilization For All Sunday Parking in Downtown Medfield

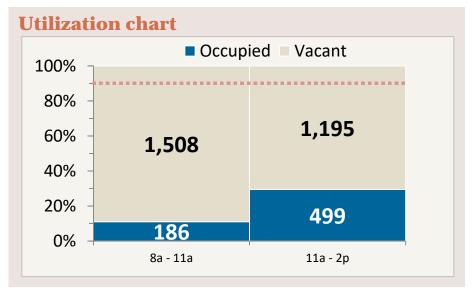


Figure 8: On-Street Parking Utilization for Wednesday

#### **Utilization chart**

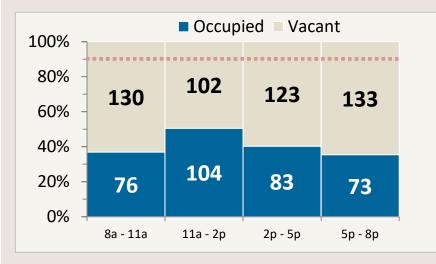


Figure 10: Weekday Utilization Profile of Core Area Off-Street Parking

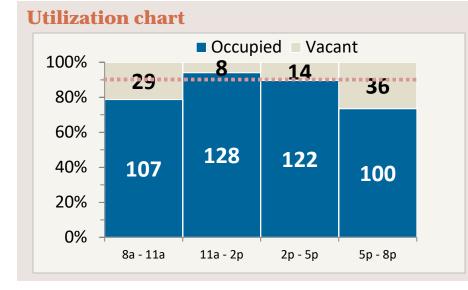
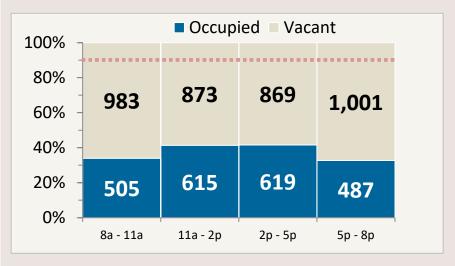
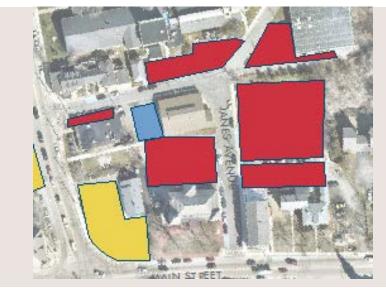


Figure 9: Off-Street Parking Utilization for Wednesday

#### **Utilization chart**



#### Figure 11: Core Area Off-Street Parking Spaces





# Land Use and Zoning

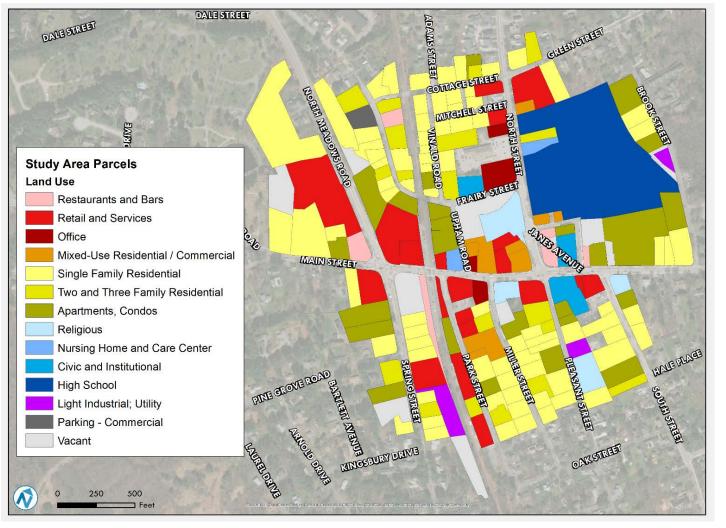


#### **EXISTING LAND USE**

Parking does not exist independently. It is intricately intertwined with the overall mix of land uses and activities it serves. Unlike other neighborhoods, downtown Medfield does not currently represent typical suburban development. The mix of land uses and

small-scale retail has the bones of a walkable environment, although its current form is still suburban in nature. As downtown Medfield continues to evolve and attract a variety of land uses, the balance and relationship between land use and parking is critical. Careful consideration of what the land is dedicated to (built environment, roadways, open space, parking) has a significant impact on the vitality of the downtown.

This following land use and parking analysis helps to illustrate the existing ratio of land use, and associated parking supply, to expected demand in downtown Medfield. The combined results of these analyses are then compared to the actual observed parking demand. The model determines how much parking would be needed assuming that parking is often shared between land uses and people (customers, employees, visitors) visiting multiple destinations. Figure 12: Medfield Study Area Land Use



Note: Detailed land use map in the Appendix.

#### PARKING REQUIREMENTS

A review of the most up-to-date Zoning Ordinance (April 2013) indicates that Medfield's parking requirements are frequently higher than industry standard peak parking demand rates promulgated by the Institute of Transportation Engineers (ITE). ITE produces a periodic report titled *Parking Generation*, which is the prevailing national standard in determining parking demand for a development. ITE standards are based on parking demand studies submitted to ITE by a variety of parties, including public agencies, developers and consulting firms.

Although widely considered an industry standard, the peak parking demand rates found in the ITE guide are primarily derived from studies conducted in auto-dependent suburban settings. When applied as minimum requirements in a more dense setting —such as downtown Medfield - these tend to reproduce a similar autodependent parking ratio that is incongruous with downtown Medfield's mixed-use development.

Many of Medfield's parking requirements exceed most current ITE rates (*Parking Generation, 4th Edition, 2010*) for the described land use (Figure 13); though some are inline with or even below the ITE rates. These parking requirements in the code are particularly important, as they guide the required parking - and therefore land area needed to develop an existing or new property in the town. Other land uses have different measurements for parking requirements. Additionally, Medfield's use of multiple inputs to derive parking for one use greatly increases the amount of parking.

#### Figure 13: Sample of General Parking Requirements under Medfield Zoning Ordinance

Use	Amount of Use	Medfield Parking Rate	ITE Rates	Above/Below
Dwelling	1 Unit	2 spaces	1.83 spaces	Above
Accessory dwelling unit in an R District	1 Bedroom	1 space	1.23 spaces	Below
Dwelling in a B District	1 unit	1.5 spaces	1.23 spaces	Above
	1 unit	1.5 spaces	1.2 spaces	Above
Lodging House, Motel or Hotel	20 SF meeting space	1 space	-	Above
	2 Employees	1 space	-	Above
Retail	120 SF	1 space	0.56 spaces	Above
Retail	2 Employees	1 space	-	Above
Medical offices and clinics	1 doctor	5 spaces	3.2 spaces per KSF	-
Other professional offices	1 employee	2 spaces	2.84 spaces per KSF	Above
	Minimum	3 per office	-	Above
Wholesale Establishment	500 SF	1 space	2.3 spaces	Below
Manufacturing or industrial establishment	1000 sf	1 space	1.02 spaces	Below
	4 seats	1 space	0.8 spaces	Above
Auditorium, theater, church, or other place of assemblage		OF	२	
other place of assemblage	8 ft. bench	1 space	-	Above
Public housing for elderly	1 unit	1/4 spaces	0.59 spaces	Below
School (junior or elementary)	1 classroom	2 spaces	0.17 per student	-
	1 classroom	4 spaces	0.09 per student	Above
School (high)	Assembly area	As above	-	Above
Community facility	300 SF	1 space	0.96 spaces	Above
Community facility	Assembly area	As above	-	Above
	3 seats	1 space	1.47 spaces	Below
Restaurants, night clubs or eating	2 Employees	1 space	-	Above
places	2 feet of linear takeout service counter	4 spaces	-	Above
Bowling alley	1 lane	7 spaces	3.13 spaces	Above
	1 chair	2 spaces	-	-
Barber shop, beauty parlor	2 Employees	1 space	-	-
Self service dry cleaners and self service laundries	2 machines	1 space	1.4 per KSF	-
Gasoline and service stations	1 service bay	3 spaces	0.75 spaces	Above
Hospitals, extended care facilities or homes	1 Bed	2 spaces	3.47 spaces	Below
	1 FTE or equivalent	1 space	1.38 spaces	Below
Day-care facility for children	300 SF classroom	1 space	0.95 spaces	Above
	1 Bedroom	1 space	1.2 spaces	Below
Bed-and-breakfast	Owner Occupant	2 spaces	1.83 spaces	Above

#### ITE EXPECTED DEMAND

Within the study area, there is approximately 376,000 square feet of commercial, office and retail space, and 52 residential units (single-family houses not included), as well as a gas station and 200 hundred middle and high school students. Below, individual land uses are grouped as accurately as possible into categories created by ITE's *Parking Generation, 4*<sup>th</sup> *Edition* in order to calculate the expected amount of parking needed to support the level of development and activity within the study area.

#### **KEY FINDINGS**

- Based on national parking standard calculations the recommended number of unshared parking spaces in Medfield (based on existing land use) is 2,162 spaces
- At 1,694 total spaces, the study area's existing parking supply is approximately 684 spaces under what ITE would recommend without any sharing.
- The modeled demand peak is at 7pm with 821 spaces, less than half of the total number of spaces in downtown Medfield.
- Observed demand (based on utilization survey) indicates that the midday peak demand is approximately 720 spaces, with 975 spaces available during the 11a-2p peak period

Figure 14: Medfield Study Area Existing Land Use

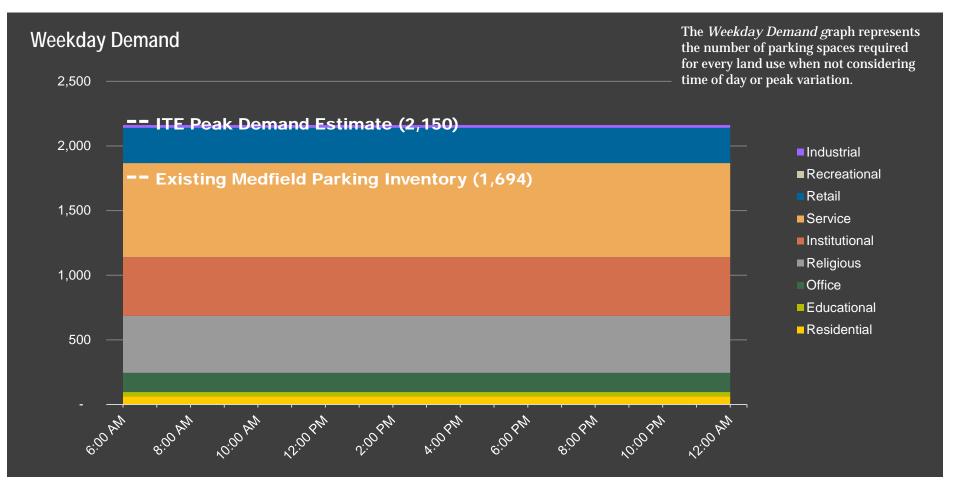
Land Use	SF / Units
General Light Industrial	30,568
Auto Parts and Sales	3,402
Supermarket (Suburban)	14,231
Convenience Market - 24 hours (Urban)	2,156
Pharmacy/Drugstore (w/Drive Thru)	15,195
Gas Station w/Convenience Market	16 fueling stations
Liquor Store	16,852
Furniture/Carpet Store	1,872
Generic Retail	49,602
Sit-Down Restaurant (no bar)	13,253
Sit-Down Restaurant (Bar)	19,517
High Turnover Restaurant (Suburban)	16,300
Fast-Food - Suburban (w/out Drive Through)	2,654
Coffee/Donut Shop (w/out Drive Through)	4,039
Coffee/Donut Shop with Drive Through	4,195
Dry Cleaners	4,260
Bank	23,225
Hospital (Suburban)	17,172
Clinic	1,000
US Post Office	11,832
Day Care Center	4,294
Church	51,001
Funeral Home	17,666
Office (Suburban)	48,884
Medical/Dental Office	3,000
Middle School/Junior High	100 students
High School (Suburban)	100 students
Low to Mid Rise Apartment (Suburban)	52 units

MEDFIELD PARKING STUDY

#### MODELED ITE PARKING ANALYSIS

Based on national suburban standards, ITE shows an expected demand of more than 2,150 spaces to meet the study area's existing land uses. This assumes that every land use would have their own dedicated parking supply which would not be shared between other uses. The existing inventory within the downtown study area is almost 1,700, approximately 460 spaces below what ITE would recommend.

Figure 16: ITE Modeled Demand



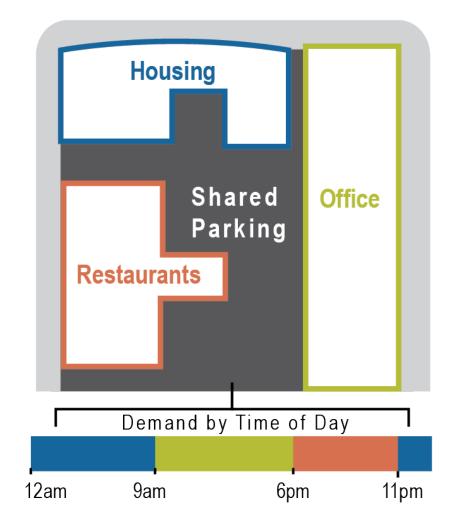
#### SHARED PARKING DEMAND

National experience indicates that projections using standard ITE parking rates tend to overestimate demand for downtown areas like Medfield. Mixed-use areas offer the opportunity to use one parking space for multiple land uses. This reduces the total number of spaces which would be required by the same land-uses in stand-alone developments.

To demonstrate the efficiency of a park-once environment, Nelson\Nygaard used an adapted shared parking model using inputs from the Urban Land Institute's (ULI) *Shared Parking Manual (2nd Edition, 2005)* and *ITE's Parking Generation* (4th Edition, 2010).

Demand for parking varies by use throughout the day: Office space creates parking demand during business hours; Parking for residential housing is often most full overnight as residents take their cars during the day; and Restaurant uses peak at lunch and dinner. The shared parking model aggregates parking demand by time of day across all land uses to derive an overall parking expectation within the study area.

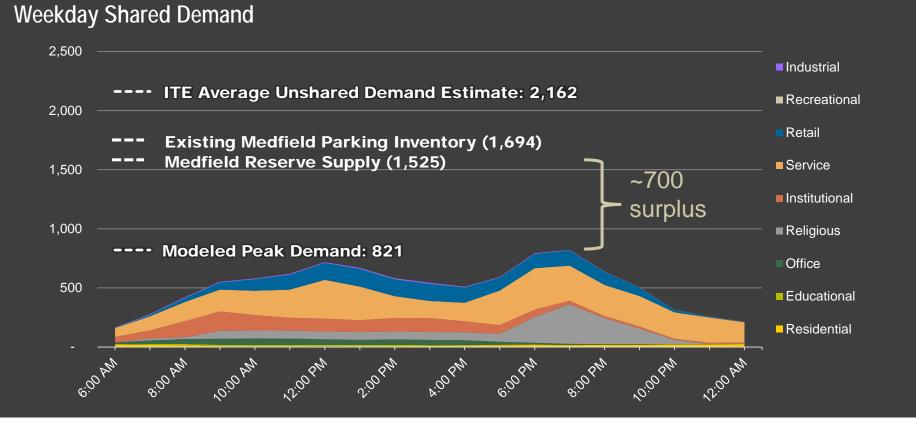
Besides demand by time of day, the model is calibrated for downtown Medfield with a reduction for internal capture. Mixed-use downtowns allow for parking efficiencies through "internal capture" or "captive market" trips. Such trips are made by patrons who, having already parked once, walk between uses without accessing their vehicle. The model includes a conservative percent reduction to account for the mix of Medfield's development patterns.



#### MODELED SHARED PARKING ANALYSIS

The same land use totals for downtown Medfield were added to the modified ULI Shared Parking Model to show the number of parking spaces needed in Medfield's mixed-use environment after factoring in time of day demands by land use. The estimates show that the peak demand at 7:00 pm is only 821 spaces. There is adequate supply to meet demand, with a surplus of 700 spaces\* during the peak demand period. This assumes full use of downtown's land uses, which today only peak at 719 spaces, suggesting an even higher surplus is already available.

Figure 17 Modeled "Shared" Demand



\*Note: This available parking "surplus" includes an assumption for a 10% operational reserve.





The public outreach process is an integral piece of the parking analysis, as it can help unlock another level of understanding of how parking is used or not used and the reasons why. In addition to parking data collection, the study team conducted a series of stakeholder meetings with the Economic Development Committee, facilitated a public meeting in March 2018, and launched an online parking user survey between February and April in 2018—all done in order to understand and represent the community perspective of parking in downtown Medfield.

#### STAKEHOLDER MEETINGS

A series of targeted stakeholder meetings were conducted as a part of the public outreach process to gather input from those most familiar with parking issues and challenges in Medfield. The study team met with the Economic Development Committee and Town planning staff to discuss the initial findings of the study. The primary goal of this small-group meeting was a free flowing exchange about parking and an understanding of specific parking experiences and perspectives in Downtown Medfield. Several common themes emerged, which are summarized at right.

#### **Interviewed stakeholders**

- Economic Development Committee
- Bob Callaghan
- Pat Casey
- Ralph Costello
- Paul Hinckley
- Joe Scier (associate)
- Ann Thompson
- Alex Jowdy
- Town planner: Sarah Raposa
- Medfield Chief of Police: Robert Meaney

#### Stakeholder interview summary

- Conflict exists between employee and customer parking
- Existing parking spaces should be formalized and regulated by striping and enforcement, e.g. on-street
- Shared parking among private owners exists and should be encouraged by the Town
- The Downtown Parking District already allows for flexibility in downtown parking requirements
- Directional and parking signage is generally needed.
- A more walkable downtown is desired. Crossing Main Street can be quite challenging with speeding throughtraffic, poor visibility at turning corners, long cycle times, and improperly-placed crosswalks.
- Some on-street parking hinders traffic as people pull in and out
- Many off-street lots are too far away from the downtown to be used
- Turnover is a problem, with people parking all day

#### **OPEN HOUSE**

On March 6<sup>th</sup> 2018, local residents, business owners, employees and others were invited to the Medfield Public Safety Building to participate in a hands-on parking public meeting designed to gather input on parking in Medfield. The public meeting included a brief presentation of the study background and initial findings through field observation of parking occupancy, as well as initial issues and opportunities identified. A majority of the meeting time was used to gather feedback from the public through a number of interactive activities and an open comments period. More than twenty public participants showed up and voiced their comments and concerns directly to the study team.

Figure 18: Parking Study Public Meeting Flyer (March 2018)



#### **Open House key findings**

- Improving the pedestrian experience is key. Participants believed the sidewalks downtown are too dangerous for small kids, especially to go to the library or Medfield Children's Center with multiple children or strollers.
- Traffic congestion, distracted driving, and high-speed turns has created an unsafe and unpleasant walking environment along North Street and Main Street.
- Many pointed out hazardous locations in downtown Medfield for pedestrians crossing Main Street, especially at the intersection with North Street at the heart of activity.
- Generally, participants agreed that long-term employee parking should be found farther from the Town Hall and Janes Ave at the Montrose School lot, but pedestrian connections make it appear as an unpleasant and unsafe option.
- Many noted that high parking turnover in downtown in the public lot was important to increase business and allow residents to run errands.
- Parking is always in high demand at the lot behind Brothers Marketplace. Cars turning into and out of the entrances on South Street can be chaotic.
- Participants suggested that events on weekday evenings need more formalized agreements on where spillover parking can be found. Managing drop-offs for after-schools programs at the Library and First Baptist Church is also important.
- Parking and wayfinding signage could be made more informative and be placed in more locations.

#### **OPEN HOUSE**

#### **Comment Exercises**

In the comment activity, participants were asked to complete two statements related to their parking experiences and priorities in downtown Medfield. The first statement detailed participants' typical activities in downtown, whereas the second ask for participants' top priority for transportation improvements. The pedestrian environment and sidewalk conditions were most frequently cited. Examples of participant comments can be seen in Figure 19.

#### Figure 19: Participant Parking Experience Comment Forms

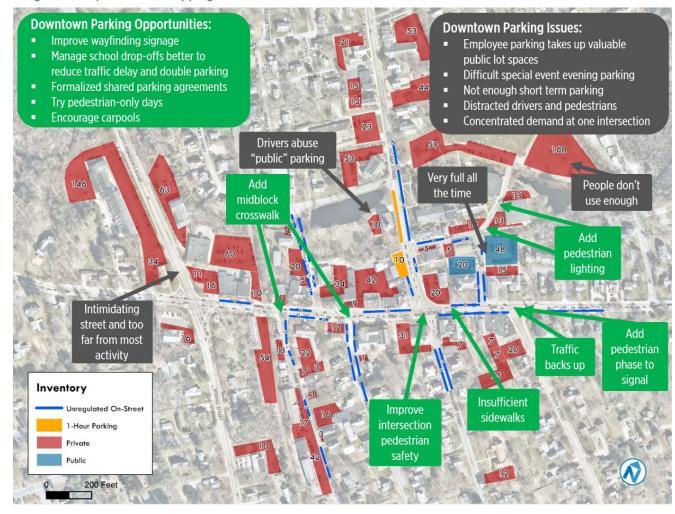
#### MEDFIELD DOWNTOWN PARKING STUDY MEDFIELD DOWNTOWN PARKING STUDY When I visit downtown... When I visit downtown... I LIVE IN DONNTOWN AM ABLE TO WALK TO ALL STORES I enjoy the bustle and variety - even the cars WOULD LIKE TO SEE BETTER CROSS-POLKS + SIGNAGE FOR REDESTRIANS. If I could do one thing to improve downtown transportation it If I could do one thing to improve downtown transportation it would be ... would be ... ENHANCE PEDESTICIAN ACCESS - CROSSWALK I'm size Redestrian How and Safety @ MILLER ALTOSS TO MAIN ST. Mongh Main + North intersection. SIGNAGE - MORE BETTER DEFINE CICOSUMURS. MEDFIELD DOWNTOWN PARKING STUDY MEDFIELD DOWNTOWN PARKING STUDY When I visit downtown... I after have a hard time findered space to fait near When I visit downtown... How hall - Exp. C nights w/ mys If I could do one thing to improve downtown transportation it If I could do one thing to improve downtown transportation it would be ... shoul spaces / > Morture parking would be ... find a way to make encloyee parking safe + well greatides U. Something needs to be done with trafficlights good ! coming from south St to Naw + walk lights. MEDFIELD DOWNTOWN PARKING STUDY MEDFIELD DOWNTOWN PARKING STUDY When I visit downtown... When I visit downtown... I go to Town Hall, Denkin Donots, Dorthers 1. Hypitaluy Nallefran WREK but when not Walking, can find parking within a reasonable distance from my deshnatien. I vouly park at June's Ave let or on No.14 Street 2. Also don't like CRossing the North St / Main St intersection If I could do one thing to improve downtown transportation it If I could do one thing to improve downtown transportation it would be ... would be ... Thy pidesman muy days-Close the Streets-encourage parlain farthin-mt/ct of main st. shelp paper sa its not so bod? Impose pedestrian flow - case her pedicitions to walk throughout down lows area

O IMpune signage but I'M NIT a fan of Mare smeksigus-

#### **OPEN HOUSE**

#### **Mapping Exercise**

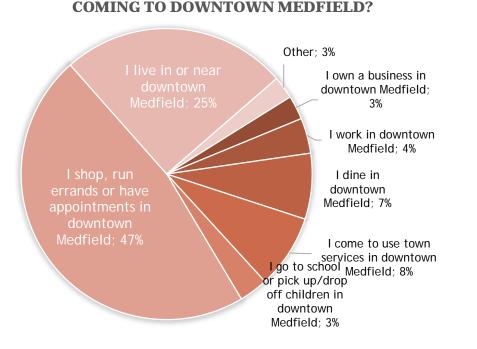
Participants expressed directly to the study team their comments on issues and opportunities regarding parking in Medfield. Location-specific comments were marked directly onto a large printed map of the study area, while non-location-specific comments were listed separately. All comments were compiled into the electronic version in Figure 20. Possible solutions were marked as opportunities, while comments without a clear or immediate solution were marked as issues. Figure 20: Open House Mapping Exercise Comments



#### **ONLINE SURVEY**

This section summarizes findings from the online parking user survey, which incorporated input from parkers regarding their parking preference, habits, experiences, and perceptions. Respondents reported about their most recent day in downtown Medfield along with more generalized perceptions. The online survey was launched on February 1<sup>st</sup>, 2018 and was widely distributed and publicized on the Town website and through local media. By April 1<sup>st</sup>, 2018 when the survey was closed, it had attracted over 560 responses.

#### Figure 21: Respondents by User Group



WHAT WAS YOUR PRIMARY PURPOSE FOR

#### **Online survey key findings**

- 47% of the total 563 survey respondents are shop and run errands downtown; 25% are downtown residents; 8% use downtown services, 7% dine downtown, and; 13% identified as other user groups
- Most survey respondents are frequent visitors to downtown Medfield– 42% visit downtown every day, 46% several times a week
- Most respondents park on Main Street (24%) or a private parking lot (23%), while another 15% park on North Street
- Most respondents are short-term parkers 40% park less than 30 minutes, 36% within 1 hour. Only 5% park for longer than 4 hours
- A majority of respondents (approximately 97%) can find a parking spot within 5 minutes on the day they filled in the survey or on an average day; and even on the worst day, still over half (55%) can find parking within 5 minutes
- Close to 40% of the respondents noted they at least once failed to find parking downtown and left
- More than 60% of respondents visit more than one establishment when visiting downtown. 70% of travel between establishments is on foot.
- On perceived pedestrian safety at the corner of Main and North Streets, participants reported an average of 6.5 on scale of 1 to 10. At Main and Route 27, the perception of safety is worse; respondents reported an average of 5.2
- A significant majority (93%) of survey respondents are not willing to pay to get a guaranteed parking space
- On the question of what would enhance the transportation and parking experience in downtown Medfield, most think "more publicly available off-street parking" would help visitors to downtown; and "better walking conditions" are desired

#### **ONLINE SURVEY**

Figure 21: Most Survey Respondents are Frequent Visitors

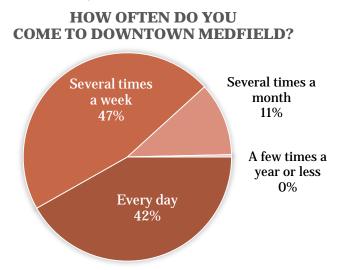


Figure 22: Most Survey Respondents are short-term parkers **HOW LONG DO YOU TYPICALLY PARK?** 

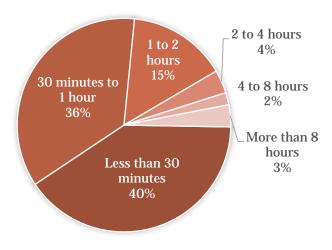
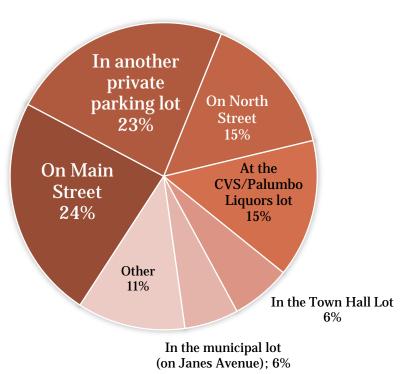


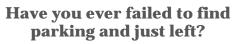
Figure 23: Most Respondents Park on Main Street or in a private lot

#### TODAY, OR THE MOST RECENT DAY YOU DROVE TO DOWNTOWN MEDFIELD, WHERE DID YOU PARK?



#### **ONLINE SURVEY**

Figure 22: Some who can't finding parking will leave



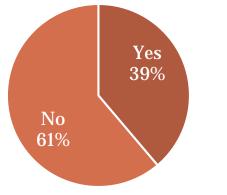


Figure 23: Most downtown Medfield visitors go multiple places.

#### During your last visit to downtown Medfield, did you travel to multiple establishments?

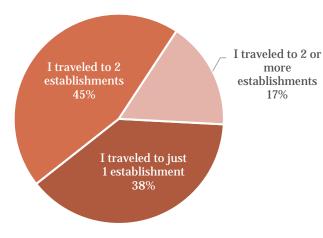
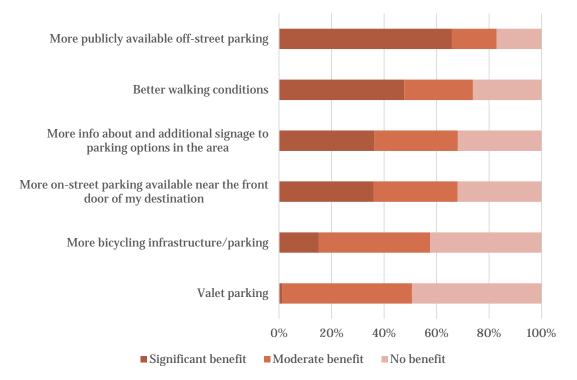


Figure 24: Preference of transportation and parking improvement

# In your opinion, what would enhance the transportation and parking experience in downtown Medfield?





## Recommendations



## Recommendations

The following pages provide a series of recommendations for how to improve parking in downtown Medfield. They focus on the following issues found in the downtown parking area:

- Mismatch of parking demand and available supply
- Informal on-street parking regulations may actually discourage on-street parking
- Wayfinding signage in the downtown area does not alert visitors on where to park
- Pedestrian connections do not provide easy access to more remote parking areas
- Existing zoning requires far more parking than needed

Medfield is blessed with a dense and walkable downtown core that connects mixed-use retail, offices, organizations, and restaurants to nearby residential streets and neighborhoods.

Downtown's built environment has the strong bones to support pedestrian and bicycle access, however, there are several barriers that currently deter this activity. This is often due to actual and/ or perceived barriers such as safety, visibility, and connectivity to and from parking lots and destinations. These barriers often affect user groups' perception of the downtown differently, and if left unaddressed, will not incentivize changes travel or parking behavior. The second set of recommendations integrate and enhance multimodal access throughout downtown. These investments will not only help reduce future parking demand but also provide safe and attractive access choices and a variety of alternatives for residents, visitors, and employees to get to their destinations.

#### **Recommendations**

#### **Explore Smarter Parking Management**

- Clarify existing supply by striping on-street spaces
- Encourage shared parking between businesses
- Coordinate with local churches and Montrose school during event parking management
- Simplify drop-offs during peak periods
- Incentivize long-term employee parking
- Reconfigure Montrose School Lot

#### **Enhance Downtown Multimodal Experience**

- Provide better parking information and signage
- Improve overall walking and bicycling environment

#### **Encourage Redevelopment in Downtown**

• Amend parking requirements for commercial and residential development under a certain amount of square footage; monitor spare parking capacity and re-evaluate periodically

#### Clarify existing supply by striping on-street spaces

Most of the spaces along North Street and Janes Ave are used throughout the day, but other on-street areas near the downtown are less utilized. Informal on-street parking regulations may actually discourage on-street parking by not making it obvious that it is available to the public. Few of the available spaces are striped in the downtown area, as streets south of Main Street appear exclusively residential, even as public parking is allowed during the day.

These blocks do not have any regulatory signage noting that parking is allowed, creating an environment of confusion, even for long-time residents and employees of downtown businesses. Having clear guidance for patrons who are unfamiliar with the area is an important component of the customer experience. Parking signage should clearly indicate where the public is welcome. Identifying suitable areas to formalize parking, whether on residential or main thoroughfare streets, will help to provide short and long term parking demand for existing and future users. A checklist of criteria can be created as a standard way of evaluating and prioritizing streets for their potential to accommodate parking. Criteria includes factors such as street width, sidewalks, adjacent land uses, existing regulations, and other physical elements such as hydrants, bus stops, etc.

In order ease the on-street congestion along Janes Avenue, additional steps may be taken including the addition timespecific loading zones, and emergency vehicle parking.

Potential locations to add on-street parking include along North Street, South Street, Upham Road, Miller Street, Frairy Street, Oak Street, and even Main Street.



On-Street Spaces on Upham Road are not well-defined, and there is no indication that visitors may park on the street due to a lack of regulatory signs.

	ONE-WAY STREETS	TWO-WAY STREETS
Parking 1 Side	12' TRAVEL LANE 7' PARKING LANE = 19' WIDTH	16' TRAVEL ROW 7' PARKING LANE = 23' WIDTH *
PARKING 2 SIDES	12' TRAVEL LANE 2 X 7' PARKING LANES = 26' WIDTH	16' TRAVEL ROW 2 X 7' PARKING LANES = 30' WIDTH *

#### **Encourage shared parking between businesses**

Mixed-use areas offer the opportunity to use one parking space for multiple land uses throughout the day without conflict. In general, effective shared parking can take advantage of three opportunities in districts like downtown Medfield:

- **Captive Markets** Residents and office workers that can walk or bike to nearby shops and services.
- **Off-setting Peaks** Off-setting parking demand patterns among nearby land uses.
- **Park-Once Management** Public policies and facilities that allow drivers to leave their cars in one place while they circulate amongst local destinations on foot.

Shared parking agreements provide an opportunity to make more efficient use of existing parking supply, by addressing the fact that most spaces are only used during certain times of day by particular groups. A shared parking district provides separate set of parking standards, and would also allow and encourage organizations and businesses to cooperate to provide sufficient parking at peak hours for the relevant group.

Opportunities for shared parking in Medfield include:

Montrose School Lot

• Unitarian Church, Bank of America, Middlesex Savings Bank These parking lots already tolerate some public parking, in addition to customer and employee parking, however a shared parking district will make this practice officially permitted and permanent. Businesses or organizations that traditionally restrict their facilities to on-site customers or employees should make arrangements with other businesses – either directly or through a third-party "broker" — that are both willing to share their facilities and offer excess capacity at suitable times.







## **Coordinate with local churches and Montrose school for routine and special event parking management.**

Medfield should improve the parking management system during routine events by working with stakeholders, like the Unitarian or First Baptist Churches, and businesses downtown, like Brothers Marketplace, to develop targeted Event Management Plans. These plans should have specific actions and strategies that can be implemented during events to make parking more efficient and convenient. These strategies may include:

- Online parking information in advance of the event, including websites for the Town, venues, the Medfield Employers and Merchants Organization, Inc., and the Neponset Valley Chamber of Commerce.
- Temporary on-street directional signs
- Secure additional parking facilities for use during event times
- Signage during the event that indicates when lots are full
- Remote parking and shuttles
- Valet parking
- Access for disabled/special permit parking



Special events, such as the Tree Lighting, summer concerts, and Discovery Medfield Day, also place unique demands on the parking system, attracting even infrequent visitors who are most likely to come downtown. Each event has a different dynamic, mix of users, and localized impact on parking and transportation.

Special event management programs allow towns to better leverage and manage parking supply/demand during large events. These agreements help to formalize the informal practices that already occur or are negotiated again for each event, providing peace of mind to organizers and attendees.

Using such a system, a town can prevent excessive parking on residential streets proximate to the event site and find partners to share reserve supply for patrons, especially during afterwork hours. For events that occur regularly, such as sports events, concerts, or festivals, a town can create parking districts that allow for certain regulatory designations on public streets, such as resident-only, vendors-only, or temporary public parking.



"THANK YOU TO OUR LAND PARTNERS. Montrose School for the use of their parking lots for our Kids' Alley rides and event parking, First Parish Unitarian Universalist for the use of their land, Brook Run Development for the use of their parking lot, and the Town of Medfield for the use of their land." - 2017 http://medfieldmemo.org/

#### Simplify drop-offs during peak periods

Parking can be challenging when almost all activities surround one intersection downtown. Pick-ups and drop-offs cause delays and traffic congestion on Main Street, North Street, and South Street. With limited publicly available parking close to Town Hall, the library, restaurants, churches, and Brothers Marketplace, there is an opportunity to simplify the short-term parking activities.

In order to accommodate short-term parking and drop-offs for school, after-school programs, and other events, the Town can create a public valet program in order to better accommodate public parking demand. By linking just a few on-street spaces used for drop-off and pick-up to under-utilized off-street facilities, public valet can expand curbside parking resources in high-demand areas, at high-demand times, and make greater use of all area parking resources. For customers, these services offer an easy alternative to finding parking by allowing drivers to drop-off their car at a convenient location. Essentially, it combines the convenience of on-street parking with the expansive capacity of off-street facilities.

A public valet can also help facilitate shared parking arrangements, by limiting access to the shared facility to an identifiable service operated by a party that can assume responsibility for all risk. This can open up access to private parking lots that might otherwise remain significantly underutilized or to lot owners that are resistant to providing more open access to their facilities.





#### Incentivize long-term employee parking

Stakeholders noted that employees of downtown businesses frequently park in the limited municipal spaces on Janes Ave, reducing the number of short-term spaces available for downtown visitors running errands or seeking to dine at local restaurants. Most parking survey respondents noted they were short-term parkers – 40% park less than 30 minutes, and 36% less than 1 hour – indicating that parking turnover in prime spaces should be encouraged.

There are large parking facilities near the downtown that are underutilized, that employees can be encouraged to use instead of more choice parking locations near downtown retail. While Brothers Marketplace has long encouraged its employees to park in a lot owned by the Montrose School off of Janes Avenue, more relationships such as this should be encouraged.

In coordination with encouraging long-term parking areas, would be the enforcement of 2-Hour parking behind Town Hall. The 2006 Medfield Downtown Vision and Action Plan includes the recommendation to "continue to encourage employees to park in more remote locations, saving prime parking spaces for customers/clients/shoppers."

The Town can facilitate these relationships, and encourage more walking by enhancing the walking conditions to places like the Montrose lot, the CVS lot, or other large and underused lots near downtown.



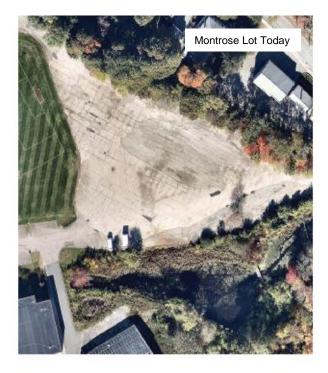


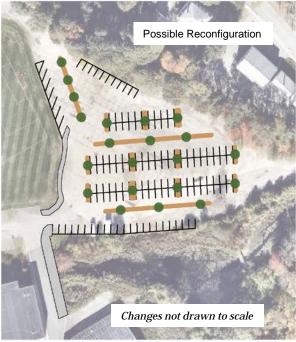
#### **Coordinate and Reconfigure Montrose School Lot**

Parking demand is greatest north of Main Street, and east of North Street. The off-street parking lots along Janes Avenue have the highest levels of demand in the study area. One potential solution is the unlock the supply potential of the large parking facility adjacent to the Montrose School athletic fields. The Montrose lot could support 150+ formal parking spaces, which would greatly increase the amount of available off-street parking in the heaviest demand areas of downtown, and would eliminate the need for drivers to cross a major roadway.

There are several steps necessary to make this a recommendation reality. The first, and most important, is to gain the consent of the school. The Town should take all necessary steps are assure the safety of students, and to minimize the school's liability. Secondly, the Town should improve access to the parking lot by building a formal sidewalk from Janes Avenue to the parking lot as well as a pedestrian bridge across the creek. Third, the Town should improve the parking lot to add lighting, signage, security cameras, emergency phones, landscaping, and formalized parking spaces. Finally, the Town should manage the lot throughout the year to include plowing and upkeep, and for the Town police to regularly patrol the lot.

Complemented by clear wayfinding and regulatory signing, this lot could become a long-term parking area for downtown employees and visitors during events. This lot could additionally function as a lot for valet parking, as well as employee parking





## **Enhance Downtown Multimodal Experience**

#### Provide better parking information and signage

Downtown Medfield visitors – particularly out-of-town visitors – are unaware of public parking options. There are only two small signs guiding drivers to the municipal spaces on Janes Ave. Visitors arriving along North Street have no signals to alert them to the location of off-street parking areas. Having clear guidance and signage for patrons who are unfamiliar with the area is also an important component of the customer experience.

A wayfinding program can help brand downtown Medfield and should encourage visitors, diners, and employees to "park once" or "park and walk." Signage should focus on directing cars to parking facilities, as well as encouraging people to visit multiple destinations on foot without moving their cars. In addition to parking facilities, signage should identify key sites of interest and their approximate walking distance (in minutes), such as the Meeting House Pond, Medfield Historical Society, town hall, and other points of interest.

Overall, signage should work to eliminate confusion and ensure that all users understand the rules and locations of parking. Parking signage should clearly indicate where the public is welcome and lay out any time-limits. Existing regulatory signage for the few time-limited spaces downtown is often faded and unclear. Signage should aim to accomplish four things:

- Define clear parking rules
- Identify free and long-term parking
- Identify major points of interests
- Guide pedestrians walking around downtown and back again to their car





The entrance to Janes Avenue has the only signs to alert drivers to public parking areas.

## **Enhance Downtown Multimodal Experience**

#### Improve overall walking and bicycling environment

Parking is not just about parking: it is about getting from the car to your destination or destinations, and then back to the car. The Town should explore improvements to the walking environment to encourage a more connected network and more pedestrians on the street, which in turns helps others feel safer. Customers, residents, and employees choosing to walk to downtown rely heavily on existing pedestrian infrastructure to provide safe and secure access to their destination. After parking their vehicles, motorist become pedestrians, and wayfinding and safe access become crucial components of their experience.

Encouraging walking, cycling, and transit can help to create a "park once" environment where people park their car and visit multiple destinations on foot, effectively reducing the number of parking spaces required to support activity downtown.

All crosswalks in downtown Medfield should conform to best practice; ideally 1-2' thick "continental" ladder bars that run parallel to traffic. These bars should be a minimum of 16' long, rather than the 8-10' length that they are today. Appropriate crosswalk signs should be included, and advanced yield "shark's teeth" should be installed 30' before each crosswalk where a stop sign is not installed.

A new crosswalk on Main Street could be added on the eastern side of Miller Street

- East of Woodman's, terminating the north side on-street parking with a curb extension
- Before the south side spaces at their protecting extension

Relatively small infrastructure investments such as secure bicycle racks encourage and welcome people to travel by bicycle, while improved crosswalks can extend the reach of transit as riders feel safe walking to and from stops.

The Town should invest in enhancing the presence, location, type, and supply of bicycle racks to promote biking as a means of travel to and from downtown. Short-term bicycle racks should be strategically placed in front-door locations, nearest to shops and businesses to allow visitors and customers using the multiuse path the option of stopping the Center to visit retail shops, cafes, or restaurants. Long-term, covered, and secure bicycle parking should be provided in easy to access locations, consistent with the Association of Pedestrian and Bicycle Professionals bicycle parking guidelines.



There is no crosswalk across Main Street at Miller Street or Upham Road.

#### **Enhance Downtown Multimodal Experience**

#### **Improve Main Street and North Street Intersection**

The wide curb radii at the intersection of Main and North Streets, especially the northeast corner, encourages high speed right turns through the heart of downtown. Squaring up the corners will reduce speeds as well as reduce the crossing distance for pedestrians.

The current location of pedestrian crosswalks are not designed to be as short as possible, angling diagonally across a farther distance in the middle of the road. Crosswalks are natural points of conflict between vehicles and pedestrians. Crosswalks should also be repainted with high-visibility continental markings, and pedestrian signals should be respond more ably to waiting pedestrians.

While crosswalks are used by pedestrians, they are designed to warn drivers. Advanced signage, yield triangles or "sharks' teeth," and broad, reflective crosswalk bars are all designed not simply to direct the pedestrian but to inform the driver of possible conflicts and to prepare to yield to someone walking. These can be added to Main Street east of South Street.





The intersection of Main and North Streets today (above) encourages high speed right turns. Additionally the pedestrian crossings are not designed to be as short as possible. Extending the curbs and painting continental markings (below) will encourage pedestrian safety at a key intersection downtown.



### **Encourage Redevelopment in Downtown**

#### **Amend zoning**

Existing zoning requires far more parking than needed. Individual uses in the current off-street parking regulations may have several different criteria they must meet in order to provide parking. There is already excessive amounts of parking in the downtown.

Though the Town already allows for lower parking amounts though the Downtown Parking District, it is at the discretion of the committee to determine the amount of parking. The Town can update zoning to allow parking to be shared by multiple users, and to waive requirements for commercial and residential development under a certain amount of square footage. This would formalize the process of how parking amounts are determined.

#### **RECOMMENDED ZONING CHANGES**

**In-Lieu Fees:** As a best practice, many communities have allowed developers to build less than the required or desired number of spaces by making a payment in-lieu of providing parking to a municipality. This one time or annual fee can be built into the zoning code to be used toward other transportation and streetscape improvements suggested in previous recommendations. These funds can help support the overall parking system (streetscape, bicycle, pedestrian, or other parking improvements), or be "banked" towards the future provision of parking by the Town. In order to implement in lieu fees as part of zoning, the Town should develop a rate schedule for an in-lieu fee option.

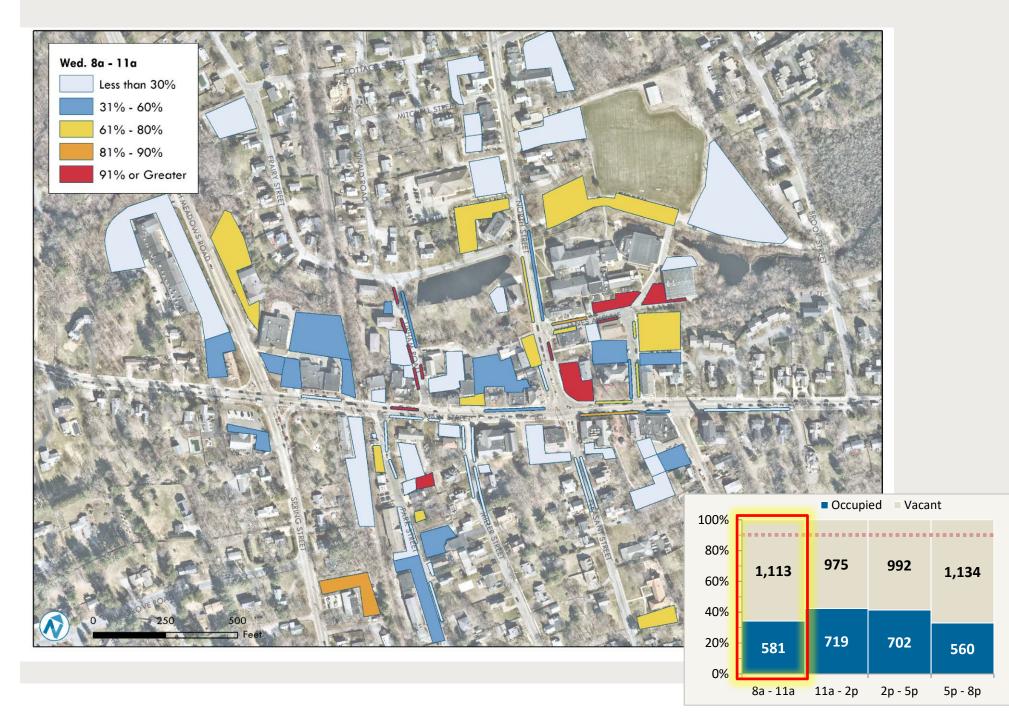


Shared parking allows customers and visitors from different uses to park in the same areas. Medfield's current zoning requires all uses to provide their own parking supply.

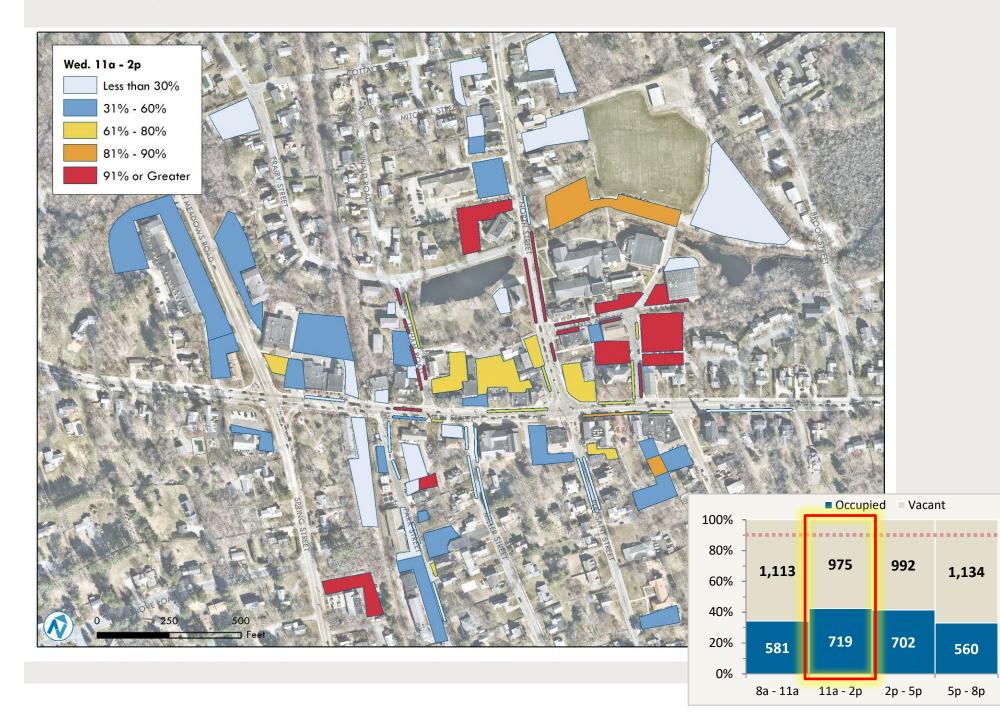


# **TECHNICAL APPENDIX**

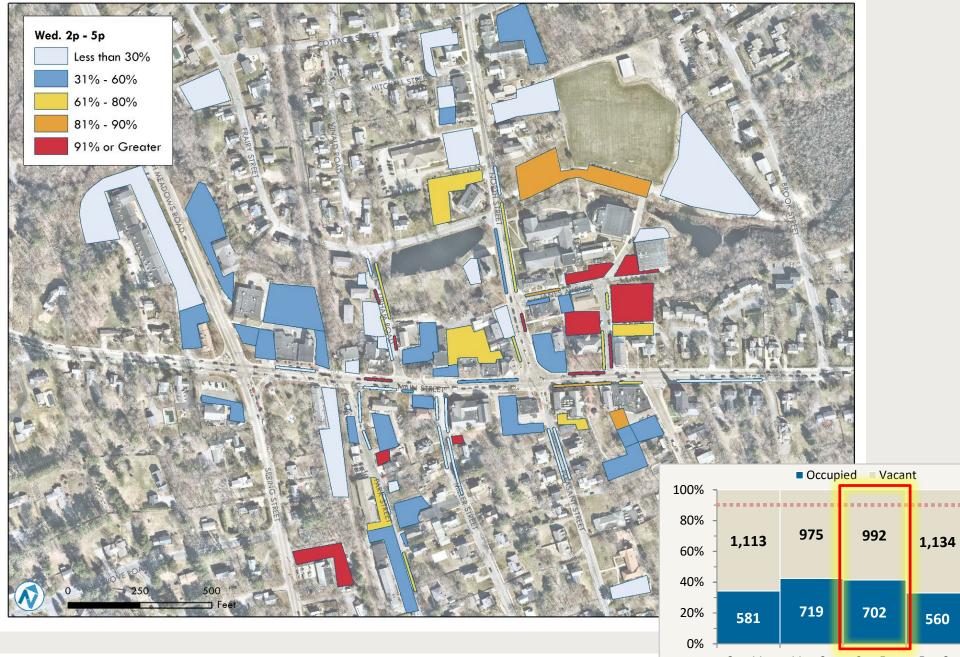
# Parking Utilization: Wednesday 8a - 11a



### Parking Utilization: Wednesday 11a - 2p



### Parking Utilization: Wednesday 2p - 5p

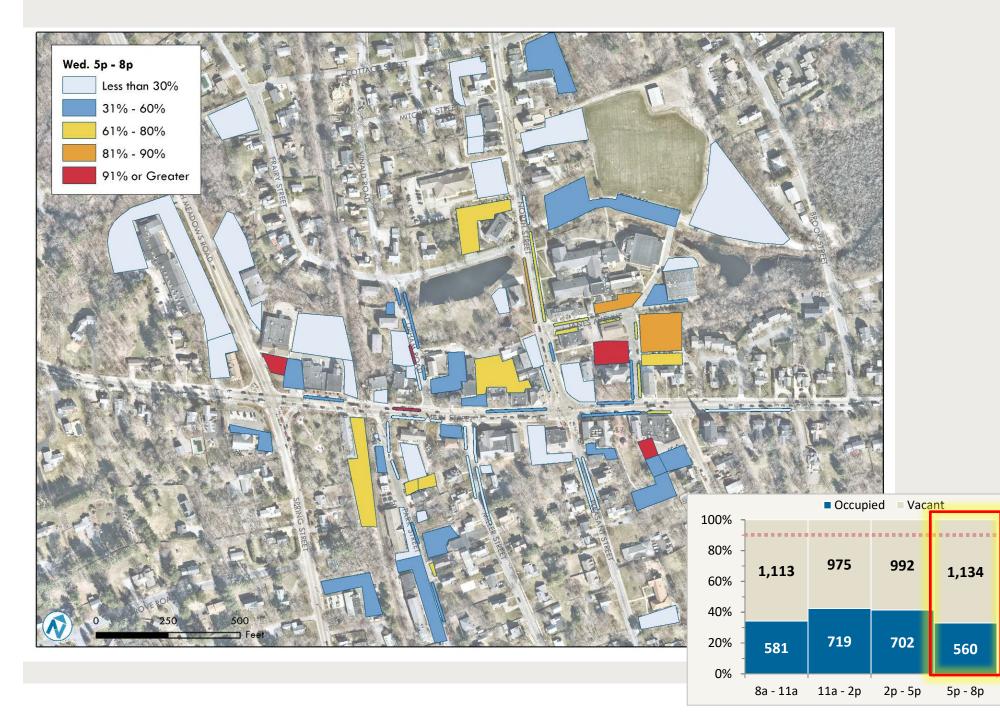


2p - 5p 8a - 11a 11a - 2p 5p - 8p

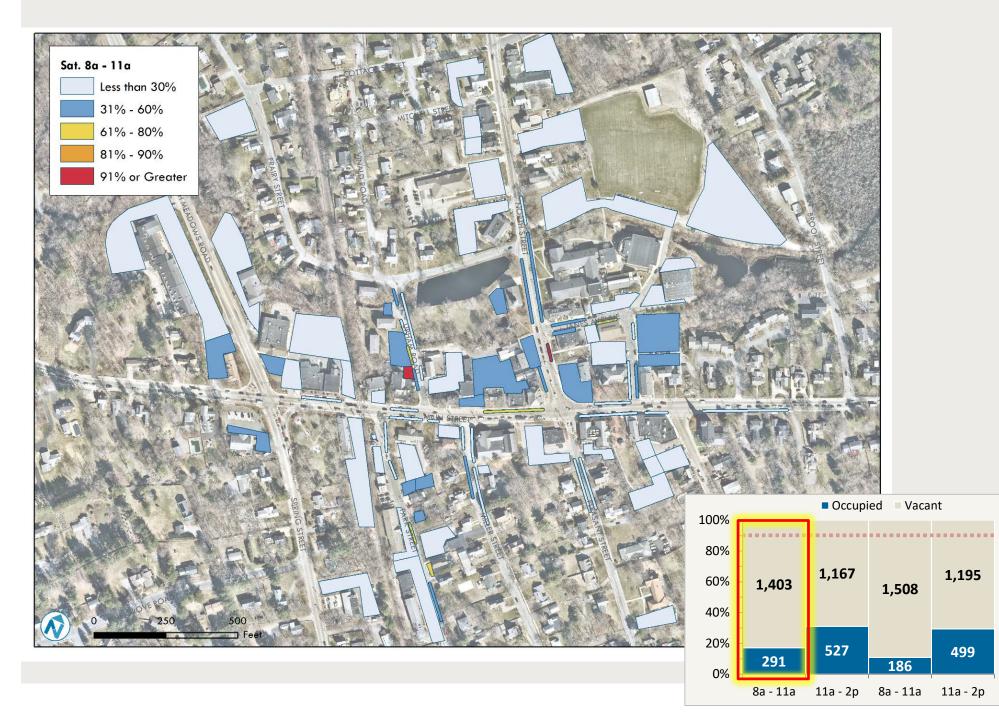
. . . . . . .

560

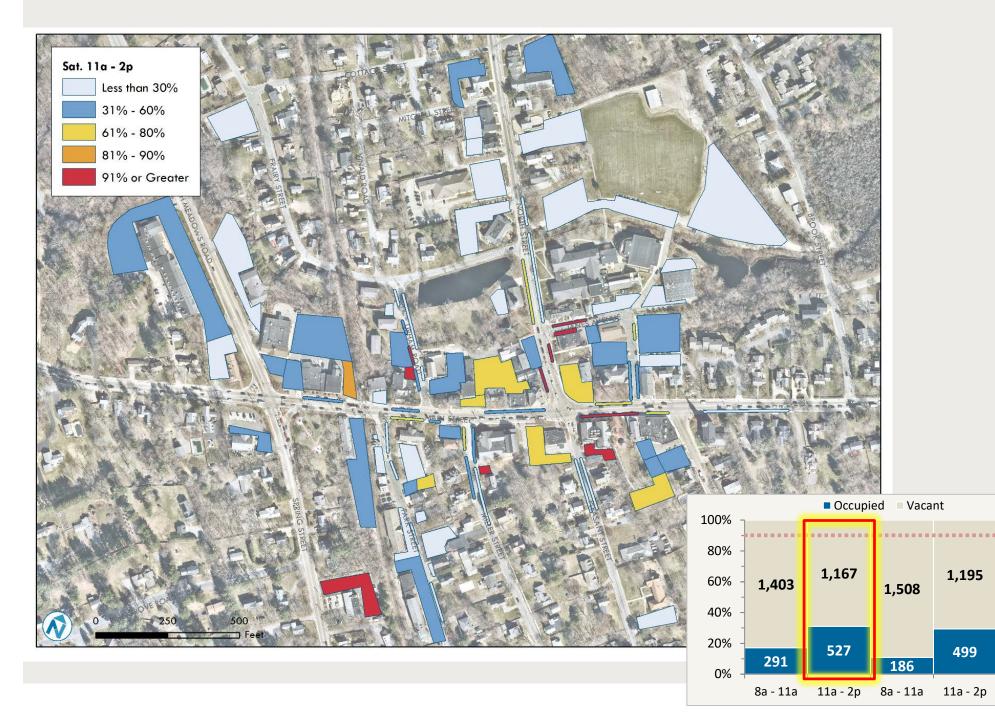
## Parking Utilization: Wednesday 5p - 8p



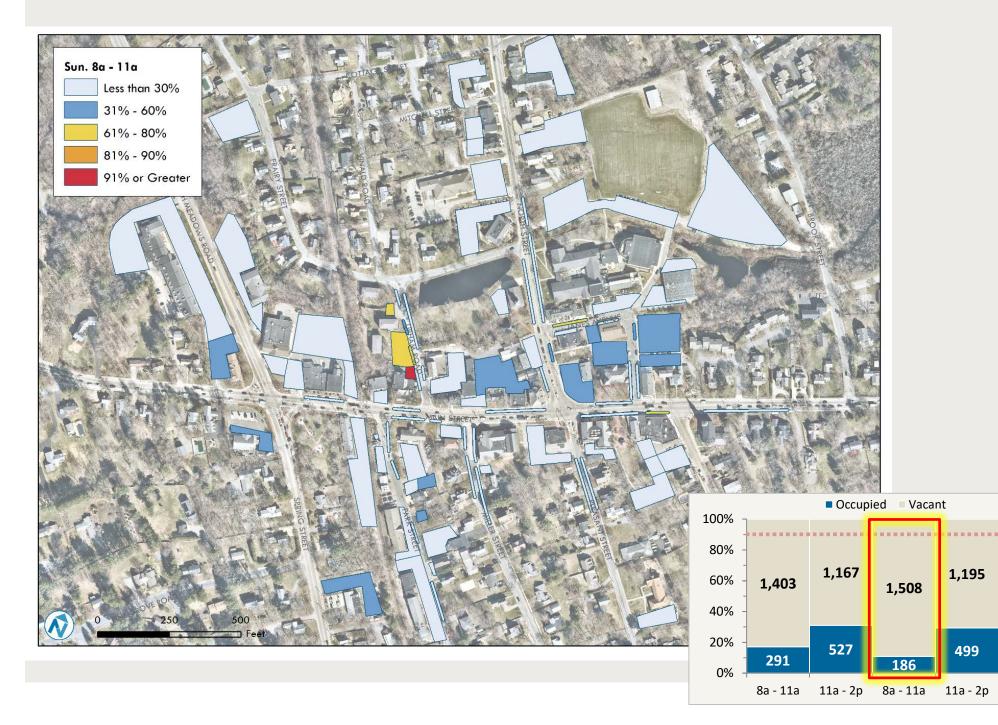
### Parking Utilization: Saturday 8a - 11a



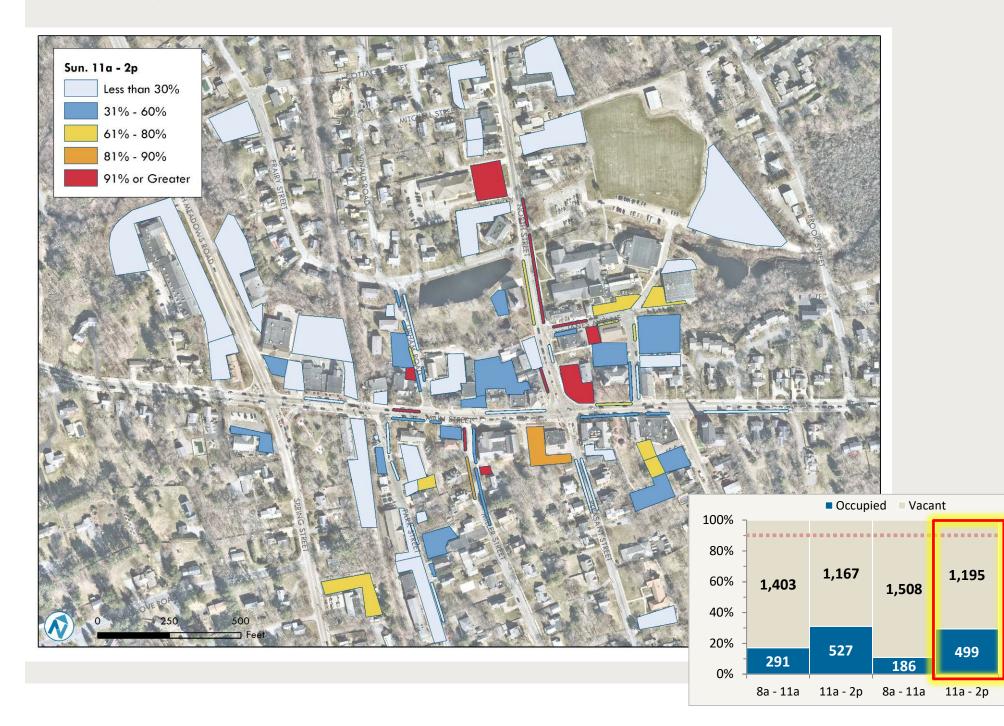
### Parking Utilization: Saturday 11a - 2p



### Parking Utilization: Sunday 8a - 11a



### Parking Utilization: Sunday 11a - 2p





NELSON\NYGAARD CONSULTING ASSOCIATES © 2018