



MEMORANDUM

To: Jean Delios, Julie Mercier, Andrew MacNichol
From: Matt Smith & Alyson Fletcher, Nelson\Nygaard
Date: January 22, 2019
Subject: Downtown Reading Parking Study – 2018 Assessment

INTRODUCTION

The Town of Reading has proactively studied its parking assets over the years in support of downtown economic development initiatives and goals. It first undertook a downtown parking study with Nelson\Nygaard in 2009 to analyze parking needs and perceptions to ensure that parking was not a barrier to attracting new businesses, institutions, and residential development.

In 2018, the Town engaged Nelson\Nygaard to reevaluate downtown parking and to update the recommendations to reflect the town's current parking needs in what is now a very different economic climate. This update provides the Town with a roadmap to better manage and connect its existing parking supply – especially during peak-demand – and to balance the needs of and to support downtown businesses, their customers and employees, as well as commuters and a growing residential base.

Process

Nelson\Nygaard analyzed 2018 parking conditions in the following manner. First, the project team verified and updated downtown's parking inventory (public and private) and collected new occupancy counts for all facilities within the study area. Data collection of parking utilization occurred during one Tuesday evening (4:00 P.M. to 8:00 P.M.) and one full Thursday (8:30 AM to 8:30 PM). This information was used to create up-to-date parking inventory and utilization maps.

Upon completion of the data gathering and analysis, the study team assessed parking initiatives completed since 2009, and summarized new parking issues facing Reading today. The team also reviewed and identified regulatory and management changes since 2009. All analysis was then used to inform the updated short, medium, and long-term parking strategies to manage parking in Downtown.

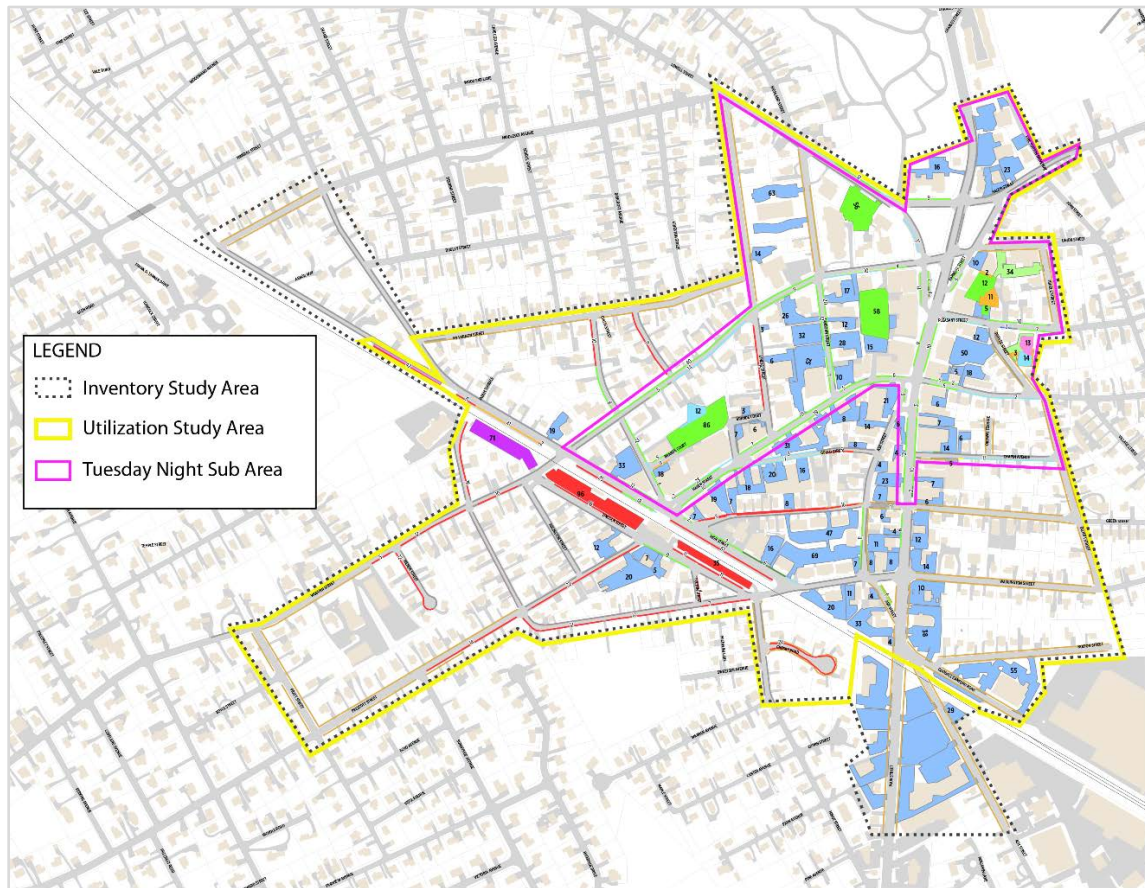
EXISTING CONDITIONS REVIEW

Inventory

The project team updated parking inventory maps to reflect 2018 parking conditions. To do so, the team reviewed the surveyed all publicly owned and/or operated on-street and off-street parking facilities and all privately owned off-street parking lots, excluding private driveways and

lots with fewer than five spaces. See Figure 1 below. The parking inventory database from the previous study was also updated to include details about posted regulations, permits, enforcement period, special use restrictions, compliance with parking ordinances, and price, when applicable.

Figure 1: 2018 Downtown Parking Study Area



Downtown Parking Inventory

The downtown study area has more than 3,450 total parking spaces. There are roughly 1,400 on-street spaces and more than 2,000 off-street spaces, the majority of which are located in private lots for business parking, residential parking, and customer parking. (See the Appendix for all inventory maps.)

Public Parking

There are approximately 1,450 publicly-owned parking spaces to support the downtown economy (42% of total inventory). These spaces, owned or operated by the town, provide parking to downtown customers, employees, and residents. Of these, 1,010 on-street and 200+ off-street spaces in municipally-owned lots are provided, the majority of which have a 2-hour time limit. Another 117 spaces serve Town Hall. Public parking is all located centrally in the core of downtown, primarily on Woburn St, Brande Ct, Haven St, and Main St.

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Downtown Parking Inventory

	Public Parking	Permit Parking	Private Parking	Total Parking
On-street	1,010	389	47	1,446
Off-street	321	131	1,556	2,008
TOTAL	1,331	520	1,603	3,454

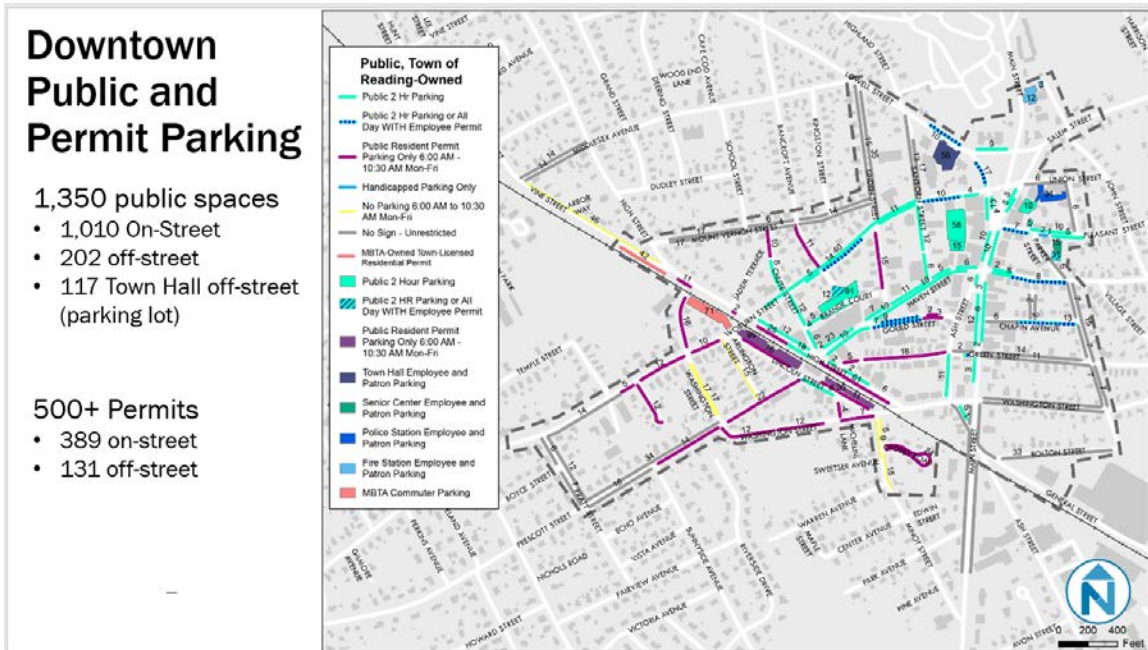
Permit Parking

There are more than 500 permit parking spaces in the study area. The majority (389) are located on-street, where resident permits are in effect from 6:00 A.M. to 10:30 A.M. Monday through Friday, to prevent commuters from outside of downtown from parking in the area. Many areas on the periphery are used for employee permits. The 131 off-street permit parking spaces include commuter rail parking, private employee parking, and leased parking.

Private Parking

There are roughly 1,600 privately-owned and operated parking spaces in the study area. Nearly all private parking is located in off-street lots dedicated for customer, employee, or resident-only lots. 47 on-street private spaces are leased or for MBTA customers.

Downtown Public and Permit Parking



Parking Utilization

Based on the utilization counts and analysis, Downtown Reading was shown to have plenty of available parking at all times throughout the day. As displayed in the following set of maps, parking utilization is typically highest in specific areas in downtown:

- 1) On- and off-street around the Train Depot and lower Haven Street

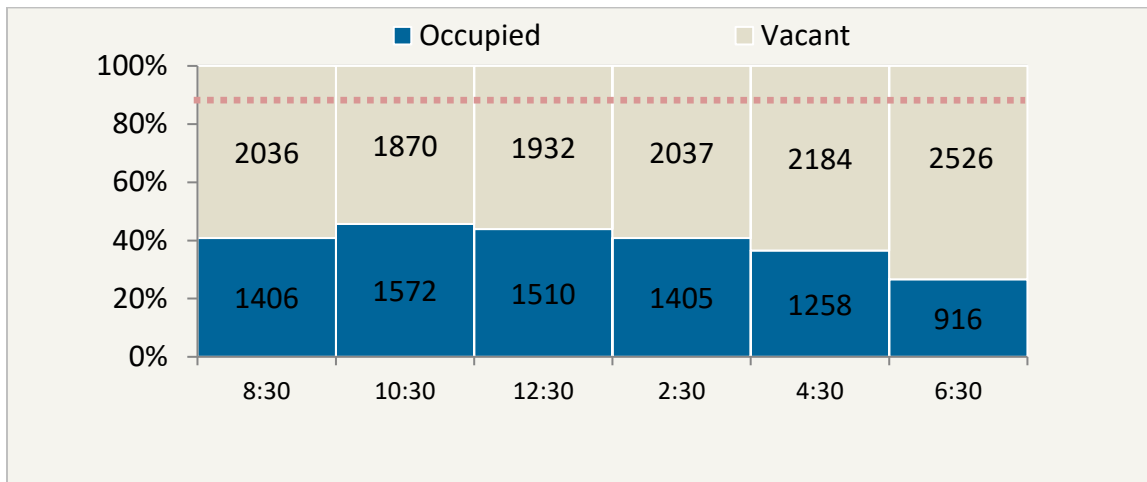
- 2) Lowell Street and the Public Lot south of Town Hall
- 3) On-street at the intersection of Main and Havel Streets

Other areas are consistently underused, with some minor exceptions, throughout the day.

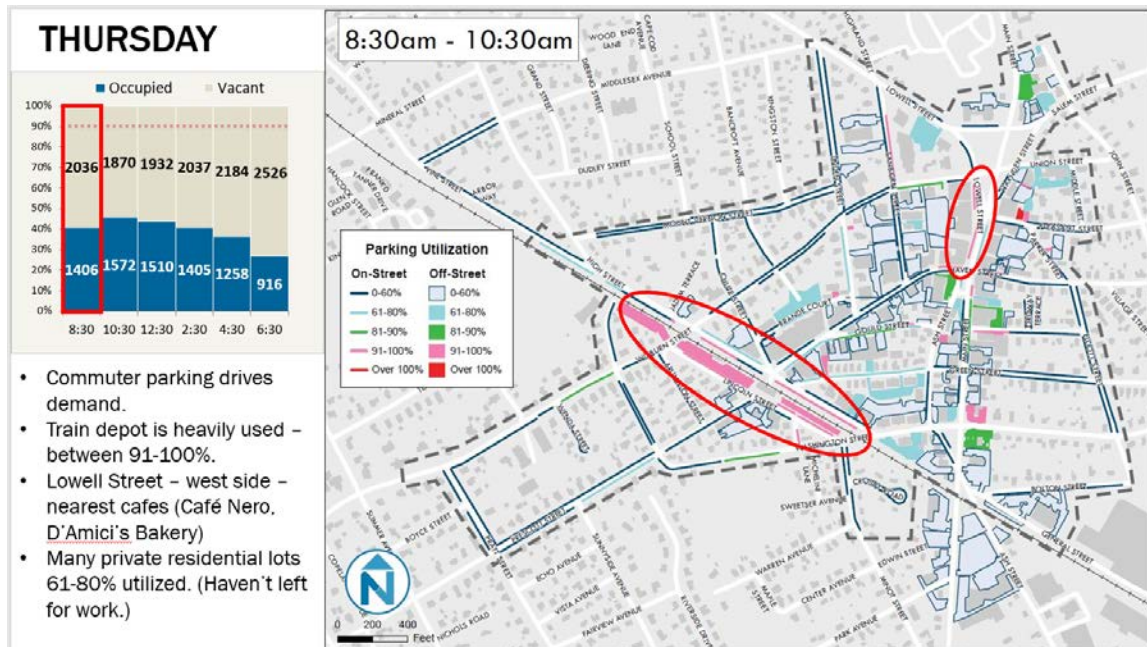
Peak Utilization

Peak weekday utilization in the study area reached 45% total occupancy. Over half of all parking in the downtown study area is not used at any given time; however, and important to note, some of this inventory is private, and not available for public use. After the 10:30am peak, demand shifts slightly in the mid-afternoon: Town Hall and Main Street get busier later in the day. Parking demand at the train depot persists until 6:30 P.M. Utilization drops as low as 25% by 6:30 P.M. The highest evening demand is along Main Street and in off-street lots.

Figure 2: 2018 Parking Utilization, Weekday 8:30am-6:30pm

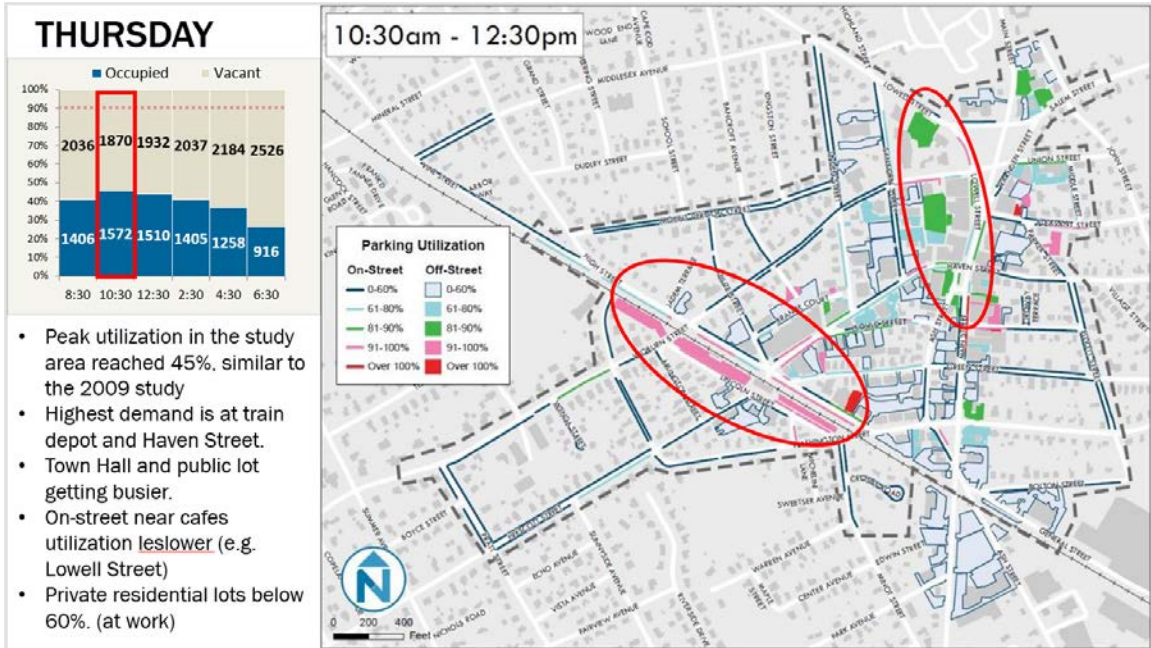


Thursday, Morning: 8:30am – 10:30am

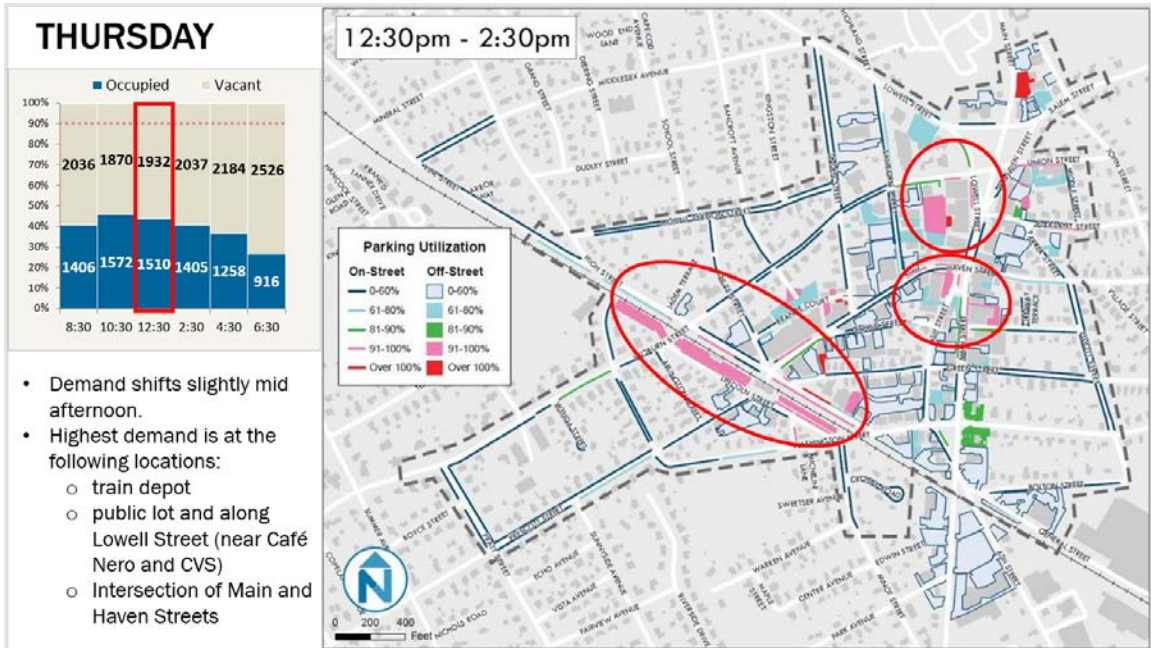


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Thursday, Late Morning: 10:30am – 12:30pm

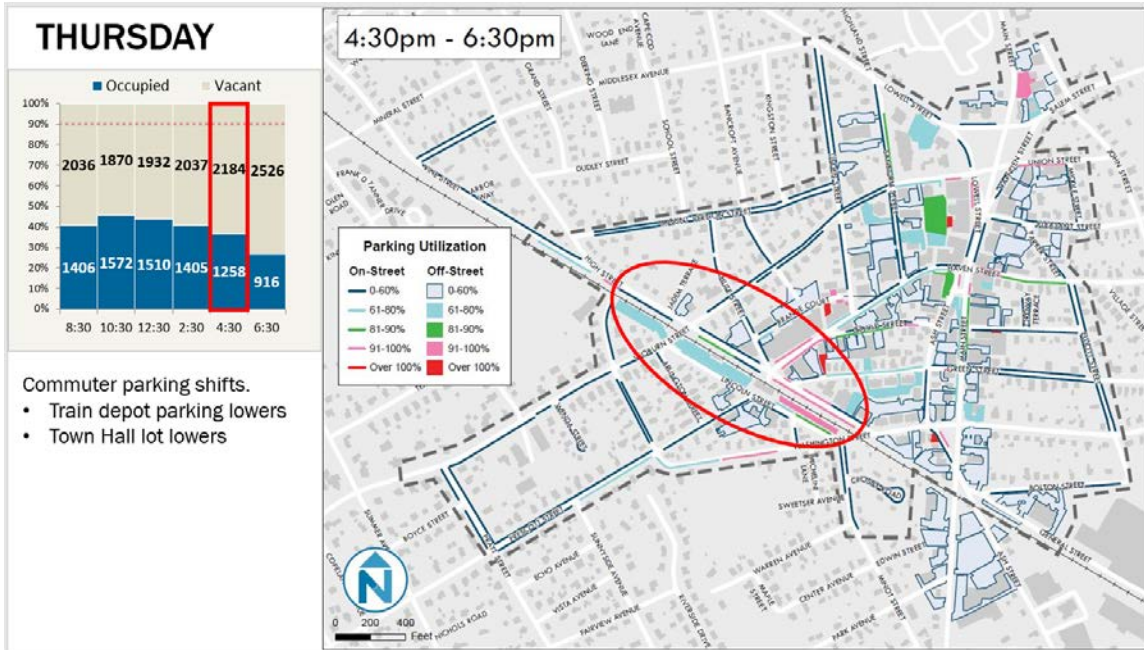


Thursday, Midday: 12:30pm - 2:30pm

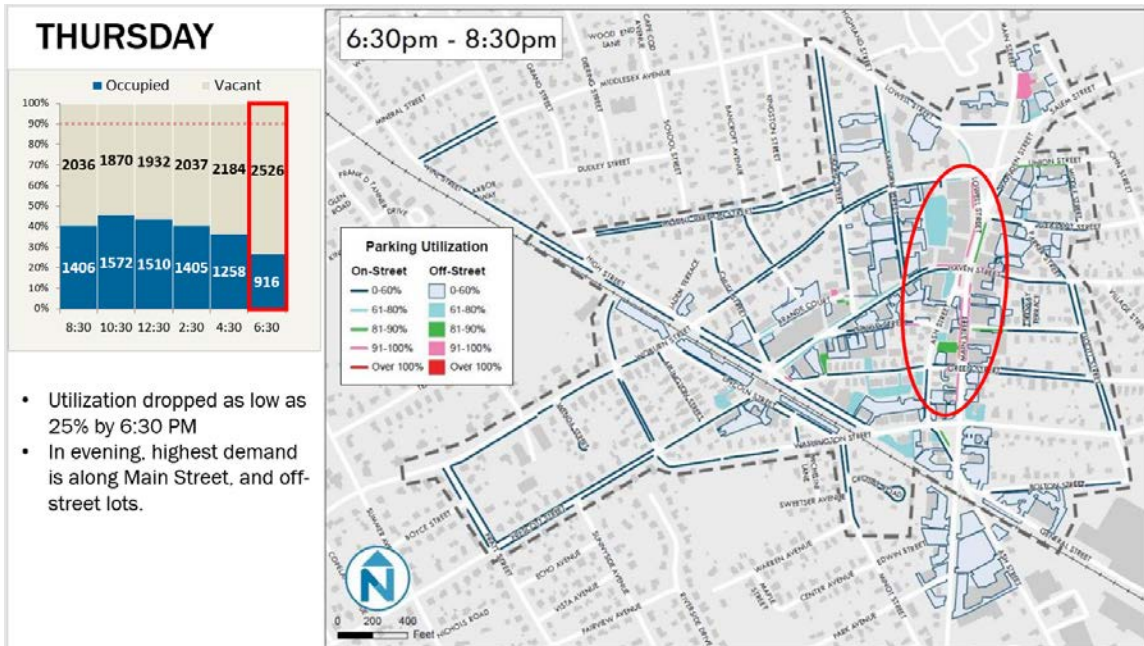


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Thursday Evening, 4:30pm – 6:30pm

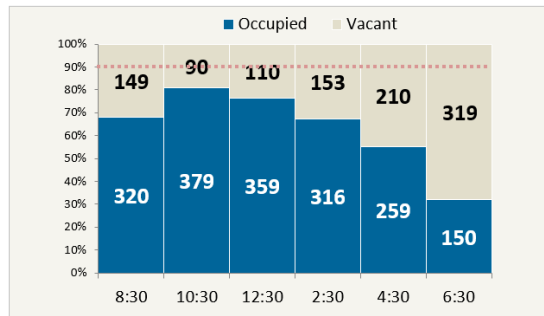


Thursday Evening, 6:30pm – 8:30pm

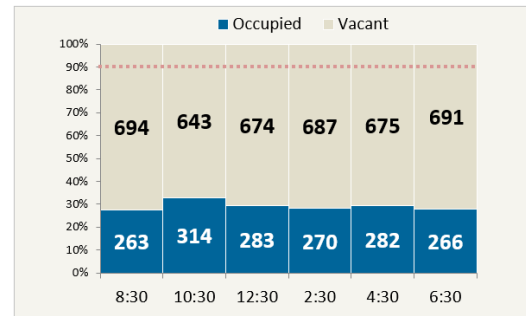


Public off-street spaces (lots) are well utilized, more so than public on-street spaces by percentage, owing in part to the disparity in total supply of spaces. There are fewer public off-street spaces, all of which are located in high demand areas, whereas on-street spaces are located throughout the study area. On-street spaces near lots are typically utilized at similar rates.

Public Off-Street



Public On-Street



At peak, roughly 380 off-street spaces are used (81%) as are nearly 315 on-street spaces (33%). Less than 40% of private parking is utilized at peak, with similar occupancy rates across customer, employee, and residential parking spaces.

2008 Findings

The above findings are consistent with the 2009 parking study – peak demand occurred at 11:00 A.M. with close to 50% of all parking spaces occupied within the study area. Similarly, the greatest demand was around the train depot, Haven Street, and on-street adjacent to the Town Hall.

Perception of Parking Scarcity

Despite the availability of parking in Downtown Reading, many visitors perceive there to be a parking shortage. While much of the most visible and convenient on-street parking, for example near the train station, cafes/restaurants and retail shops, is functionally full at times (above 90%), many off-street public lots are not at capacity, nor is much of the on-street inventory within a short walk. For example, while Lowell Street and Main Street between Haven and Woburn Streets are above 90% utilization at 6:30pm on a Thursday evening, utilization of the off-street municipal lot is below 80%, and on-street parking further north on Lowell St is even lower (<60%). All of this available parking is within a two-to-three-minute walk and convenient to the destinations.

Vehicle Circulation and Wayfinding

This perception of “no parking” availability is likely attributed to a combination of a complex and confusing parking environment, connectivity challenges, and lack of public understanding about the larger parking system. Simply put, many visitors may not know (or see) where available public parking is located.

Downtown Reading is characterized by numerous one-way streets where connections to parking lots are easy to miss, and/or connectivity to additional parking – the next lot – is circuitous and inconvenient. The parking system and roadway network is not intuitive to visitors (or even some residents), which can greatly influence the desire to return.

One solution to improve this condition is wayfinding. Wayfinding signage directing people to parking options is crucial to downtown commercial activity. Fortunately, the Town is now implementing new wayfinding signage including parking wayfinding which should make for a more intuitive downtown parking environment. For example, new orange and highly visible parking signage has been added to Atlantic Way to better call attention to the Brant Court off-

street lot. More signage, along with maps and other online and branding strategies would make it more intuitive and easier for visitors, as would potential reconfigurations of one-way streets.

Land Uses and Future Downtown Development

Land use and parking are intrinsically tied. Different land uses – residential, retail, office, industrial, and commuter parking lots – have different parking requirements, demand and needs. Further, parking needs differ not just by use, but by time of day, week, or month, depending on seasonal changes, including weather. For example, parking for full-service dining establishments typically peaks in the evening, whereas parking for personal or professional service establishments (e.g. medical offices, hair and nail salons) typically peak in the morning and afternoon. Residential typically peaks overnight and on weekends when people aren't at work, but is available during working hours. Understanding land use patterns, and changes over time, will allow Reading to identify potential parking hot zones now and in the future that should be addressed.

Existing Land Uses

Although there is sufficient available parking to accommodate peak demand for existing land uses in downtown, parking utilization will be affected by changes to land use patterns over time, including retail/commercial changes in existing structures, and from new residential and mixed-use development that is under construction, permitted or planned. It is important to track these changes – particularly given retail conditions in an increasingly e-commerce world – to assess potential parking needs and how to mitigate potential negative impacts.

New Development

Much of the new development is expected to be residential – over 200 units are in the pipeline – with some additional ground floor retail. This development has the potential to affect parking demand in the downtown, either directly or indirectly.

Parking impacts on the public inventory are not likely to result directly from the new residential development. New residential units require onsite parking to be provided. Further, given the proximity to the commuter rail, the potential for many of these new households to live a “car light” lifestyle is higher. (Car light households are those with two or more people who share one car, and/or who use car share and other mobility services in lieu of owning a car, or to supplement when a second car is needed). So while new development will bring more people to the downtown, they will primarily park at their building, then walk and support local businesses. However, and common within downtown environments, new commercial, retail, and restaurant space will require the use of public inventory. Reading's zoning does not require parking be provided for commercial projects in the downtown.

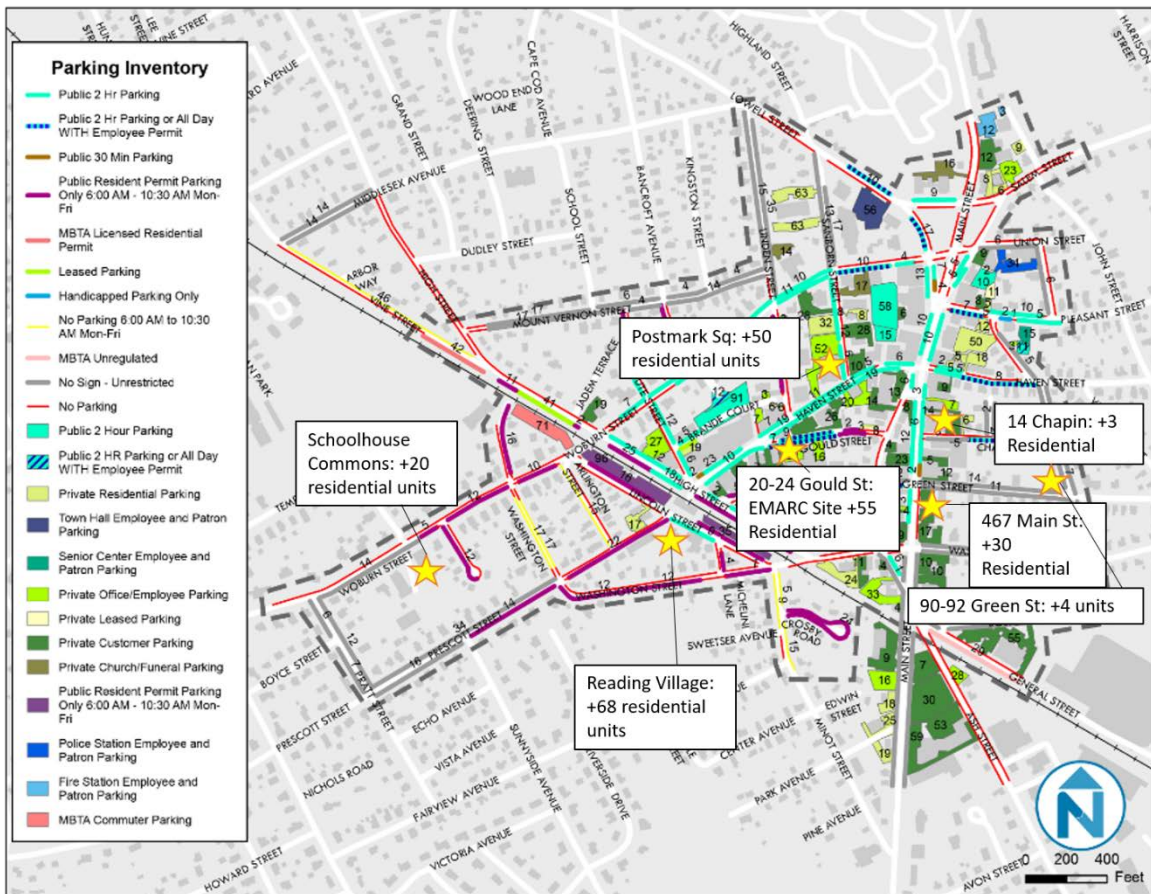
Based on the data collected during this study, there is likely enough parking to accommodate parking from new business activity within the new development. Available parking may not be available directly in front of the new establishments, but it should be available within a short walk (likely less than 2-3 minutes). However, several hundred new residents (and their buying power) in a concentrated, walkable area may attract additional retail and service investment in downtown, or result in a change of retail types catering to these residents. For example, specialty home goods stores, gift shops, cafes and restaurants often follow new residential growth, particularly in downtown settings. The residents are a captive audience. Should this occur, new

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establishments will not only attract the new and existing residential base, but will likely attract visitors given the new amenities and the enlivened downtown area. More business activity will bring more vehicles and the need to park. This represents the indirect parking demand of the new development and restaurants.

To ensure parking impacts of new development are mitigated, it is important for the town to monitor utilization before and after new construction (or when commercial use changes), particularly in areas nearest the new development, to assess changing utilization patterns, and potential regulatory interventions to manage demand. It is also imperative that Reading prioritize wayfinding, connectivity and circulation to better connect less visible, but nearby parking supply, to support a growing downtown. Finally, if and when utilization tops 85% across much of or contiguous areas of downtown, the Town would then determine if pricing should be used to better manage the parking supply. While some would perceive this to be a problem – less available parking – this would indicate a more successful downtown. This condition has not yet been met.

Figure 2 Future Development in Downtown Reading



PARKING MANAGEMENT RECOMMENDATIONS

2009 Recommendations Already Implemented

The Town of Reading has implemented several recommended strategies from the 2009 plan to improve parking management and availability, including:

- **The employee parking permit program was expanded.** More permits are available and are being sold.
- **Parking signage improvements are underway.** A comprehensive downtown wayfinding signage program has been designed, including parking wayfinding, and installation has begun.
- **Shared parking is allowed in zoning;** however, it has not yet been incentivized.
- **Parking minimums have been reduced in the Smart Growth District (40R) zoning district.**
- **Bicycle racks have been installed to provide active transportation parking.**
- **A bus shelter was installed to improve public transit experience.**

(See supporting documents in the appendix for the full list of 2009 recommendations.)

As highlighted above, the Town has made good progress, but more is needed to improve the parking experience. Additional strategies, some taken from the 2009 plan (but not yet implemented), along with new ones, are provided below.

2018 Recommendations

To improve the overall management of Reading's existing supply and to encourage more people to enjoy downtown, the following menu of recommended strategies was developed for implementation in the short-, middle- and long-term. Short-term actions are intended to be low-cost and easier to implement. Medium-term actions would include additional complexity and potential be of moderate cost. Long-term actions would require the most investment of time and resources. Recommendations are further divided into two categories, those specifically to enhance the physical parking supply and how it is used and managed (Parking Supply, Systems and Programs); and those that impact how you access, connect to and experience the parking system (Public Realm and Infrastructure). Both are equally important.

Short Term (1-2 years)

Parking Supply, Systems and Programs

1) Adjust time limits

Extending the period when time limits are in effect can promote turnover in areas of high demand later into the evening. This would benefit people visiting downtown's restaurants, so more people have an opportunity to park near them. Further, expanding time limits to 4 hours would also allow for a park once environment.

2) Further expand the Employee Parking Permit Program

Continue to increase the supply of permits available. Determine areas where permit spaces can and should be added (on- and off-street). Shared parking arrangements should be explored.

3) Explore use of enforcement technologies (e.g. LPR)

License plate recognition (LRP) technologies – on vehicles or handheld – would be used to enforce timing throughout downtown, especially heavily utilized areas. LPR can also be used for virtual permits – employee and resident – in place of hangtags or stickers.

4) Enhance parking information online, in stores, and through new technologies as implemented.

Public Realm & Infrastructure

1) Improve Parking Signage and Wayfinding

Expand wayfinding signage for parking with new program to further assist visitors. Improvements to add clarity and consistency to regulatory signage would also help.

2) Pilot designated pickup / drop-off zones for Uber/Lyft/Taxi in areas with high parking demand.

More and more people are using transportation network companies (TNC's) such as Uber and Lyft to get around. Designating areas of high parking utilization – e.g. near restaurants – could encourage use of these services through visibility, but also provide convenience, to reduce parking demand.

Medium Term

Parking Supply and Systems

1) Monitor parking utilization and adapt parking regulations as needed.

While the existing parking supply supports current land uses, changes in retail composition, new development and economic conditions will affect parking utilization. The Town should track utilization, particularly in areas where changes occur to see if additional regulations and strategies need to be implemented (e.g. pricing). Should a larger area reach 85% utilization, the potential to pilot demand-based, paid parking should be considered.

2) Expand On-Street Parking Supply (e.g. angled parking, striping enhancements)

Explore potential opportunities to add parking supply, especially in areas of highest demand. This could include striping efficiencies to include more spaces, additional angled parking (e.g. Haven Street), and more.

3) Establish measures to allow and incentivize and encourage shared parking opportunities.

The Town of Reading should work with private businesses to form agreements to share parking facilities for employee parking, or restaurants could use bank parking in the evening for customers or employees. Incentives for shared parking could include lower parking minimum requirements, and other strategies.

4) Develop valet parking permit program for interested businesses.

A valet program would allow individual or groups of businesses to operate/contract valet services using on- and off- street public and private lots (car storage).

Public Realm and Infrastructure

1) Improve connections to and from parking lots and downtown amenities (e.g. shops, services and restaurants).

The easier it is for visitors to find parking that is convenient to their destination, the more likely they are to return to town. Improving connectivity is essential to the parking system, particularly for communities competing with increasingly popular “lifestyle centers” that offer a downtown-ish atmosphere.

2) Expand low-cost bike facilities and parking in the downtown

Continue to expand bike rack supply per APBP standard guidelines, as well as study opportunity for bike lanes and other bike facilities to provide a convenient, active alternative to access downtown and reduce parking demand.

3) Install Bus Shelters.

Continue to expand bus shelters, benches and amenities at higher ridership stops to enhance the rider experience to increase public transit.

Long Term

Parking Supply and Systems

1) Implement demand-based pricing.

Once warranted, implement paid parking to ensure adequate parking supply is available for customers. Increase price of employee permits to be comparable to peers and

2) Install payment collection technologies (to implement #1 above).

Technologies to consider would be app-based parking, multi-space kiosks, and/or smart meters. These technologies not only collect parking fees, but provide data to track utilization.

3) Establish a Parking Benefits District (or Parking & Transportation Fund).

A Parking Benefit District (PBD) would allow for parking revenues collected within the district to maintain the parking system, and/or fund mobility improvements (including infrastructure projects) within the district.

4) Increase employee permit fee.

Should business activity, and employment, increase in the downtown, Reading should evaluate the need to adjust employee parking permits upward to better manage demand, and promote alternatives (e.g. carpooling, active commutes).

5) Focus enforcement efforts at peak periods.

Extend parking enforcement hours to times of higher demand (e.g. weekends and evenings) as needed.

Public Realm and Infrastructure

- 1) Continue to improve biking network/neighborhood connectivity to reduce parking demand.**
- 2) Improve auto circulation (e.g. road diets, traffic calming, evaluate one-way system).**

Implement road diets and traffic calming projects on streets like Haven and Main Street to create a more-friendly environment to enhance parking access. Evaluate the one-way street system as it relates to connectivity (including to parking) and the walking environment.