

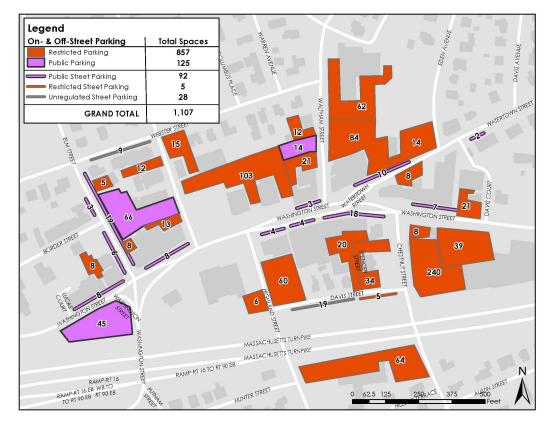
To:	Damien Chaviano	From:	Jason Schrieber, AICP
	Mark Development, LLC		Stantec, Inc.
File:	1314 Washington Parking Counts Update	Date:	September 13, 2018

#### Reference: 1314 Washington Street Parking Counts Update

In response to requests by City of Newton planning staff, Stantec has conducted additional parking occupancy counts in West Newton square and updated the parking inventory and study findings. This memo outlines the results of counts on both a weekday (Thursday) and a weekend (Saturday) which describe the use of parking within a short walk of 1314 Washington Street.

#### **Parking Inventory**

The inventory of all public and private, on and off-street parking spaces within a 700-foot radius of the front door of 1314 Washington Street was field checked, updated, and compiled and mapped below. This distance captures all parking within about a 3-4 minute walk at an average of 3-feet per second, which is an average for most elderly and small children. There are 1,107 spaces<sup>1</sup> within this radius, of which 245 (22%) are public parking available to customers, visitors and commuters. The remaining 862 spaces (78% of the total supply) are restricted to a variety of local users, such as employees, residents, the courthouse, and the police department. The lot at 1314 Washington Street also is considered restricted for the purposes of this analysis.



<sup>&</sup>lt;sup>1</sup> Only 1,040 spaces were counted during occupancy counts. Sixteen on-street spaces were temporarily closed for construction (9 on Elm and 7 on Washington), and auto service parking on Washington Street (60 spaces in two lots) was excluded. Only the counted spaces have been mapped and charted in the analyses below.



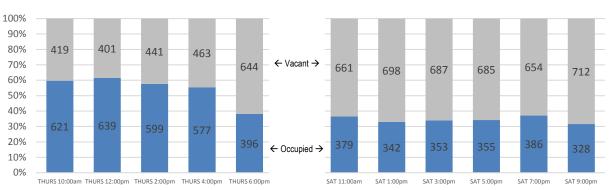
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Reference: 1314 Washington Street Updated Shared Parking Analysis

# **Parking Utilization**

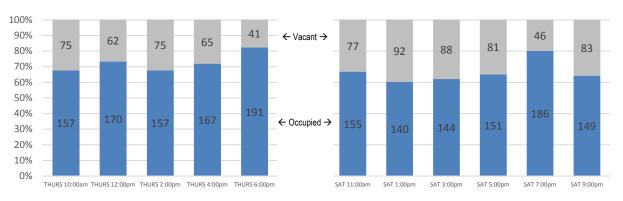
In order to determine the peak parking utilization in the square during an average weekday, parking occupancy counts were conducted on June 21, 2018, a Thursday (generally considered to be the busiest weekday for both office and retail/restaurant uses) when the weather was clear and public schools were still in session. Additional counts were conducted on August 11, 2018, a Saturday when the weather was clear to understand weekend parking demand.

A data collector counted every available space in the inventory once every two hours between 10am and 8pm on Thursday and between 11am and 10pm on Saturday. This methodology enables a full profile of parking use on every available parking space, helping to identify the point of peak demand and available parking at that time. As can be seen in the bar charts below, peak utilization of all West Newton spaces on a weekday is just above 60% between 12pm and 2pm, with 639 spaces occupied and 401 vacant (this is also the peak period of anticipated demand for the proposed redevelopment of 1314 Washington Street.) On a weekend, peak utilization is just under 40% between 7pm and 9pm with 386 cars parked and 654 spaces empty (this would be the peak time for the restaurant use at 1314 Washington, although the overall site demand at this time is low, with few office or bank employees expected on a Saturday.)



# Total Parking Utilization, Weekday vs. Weekend

While hundreds of spaces may be vacant during peak periods in West Newton, most of these spaces are currently reserved for specific uses, such as local businesses, churches, child care services, and the police department and courthouse. The public is generally restricted from these spaces and—with the exception of those who are customers of these restricted uses—have to park in the 232 public spaces, most of which are time-limited metered parking (meters operate 8am to 6pm). During weekdays, peak utilization of public parking is just above 80% between 6pm and 8pm, with 191 spaces occupied and 41 vacant. On a weekend, the profile is similar at 80% full between 7pm and 9pm, with 186 spaces occupied and 46 vacant. It is worthwhile noting that over 600 restricted spaces are vacant during these evening peaks.



#### Public Parking Utilization, Weekday vs. Weekend



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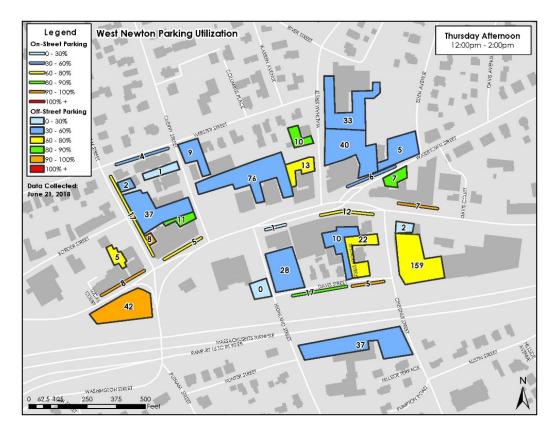
Reference: 1314 Washington Street Updated Shared Parking Analysis

# Parking Utilization by Geography

In order to understand where peak parking demand is located within the square, the parking occupancy results were mapped onto the inventory map for the square. The map below shows the result during the weekday peak between 12pm and 2pm (see Attachment A for all time periods). Colors represent percent utilization. Parking assets at or above 90% utilized are colored orange or red, since facilities above this threshold are typically considered to be functionally full due to the difficulty of finding an empty space. Green is considered optimal utilization (80-90%), with yellow and blues less utilized. The map series indicates some valuable key findings:

# On a Weekday:

- The 1314 Washington Street lot is under 60% utilized all-day with the exception of 4-6pm when utilization increases to 80-90%. After 6pm it is under 30% utilized.
- On-street parking is moderately utilized overall, not collectively reaching ideal 80-90% occupancy rates at any point, but certain segments do reach and occasionally exceed this threshold at certain times: Elm Street meters are mostly 80-90% utilized, except after 6pm when the meters shut off, and occupancy reaches/exceeds capacity; and Davis Street unregulated spaces exceed 90% utilization in the morning, then slowly decline all day, eventually dropping below 60% after 6pm.
- All off-street parking is less-moderately utilized overall, not collectively exceeding 60% utilization at any point. Most restricted lots occasionally increase into the 60-80% utilization range but decline to 30-60% by 6pm. For public spaces, the MBTA lot is at capacity all day until 6pm, and the Elm St. metered lot rises above 80% beginning at 2pm and approaches capacity after 6pm when the meters shut off.



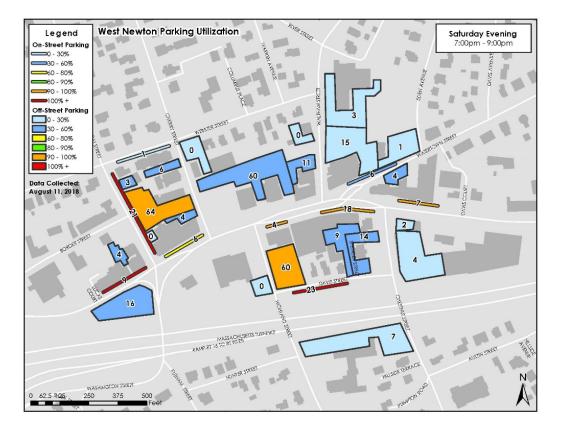


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Reference: 1314 Washington Street Updated Shared Parking Analysis

# On a Weekend:

The next map shows the peak Saturday demand (7pm-9pm), with other time periods shown in Appendix A. These maps reinforce the disparate use of restricted versus public spaces in West Newton on a weekend. Public on-street spaces and the Elm Street lot show utilization mostly above 60% or 80% all day long, while restricted lots stay below 60% or 30% all day. At 7pm, the Elm Street municipal lot, the 1314 Washington Street lot, and most on-street spaces are almost entirely full, while hundreds of restricted off-street spaces are nearly empty.



STANTEC CONSULTING SERVICES INC.

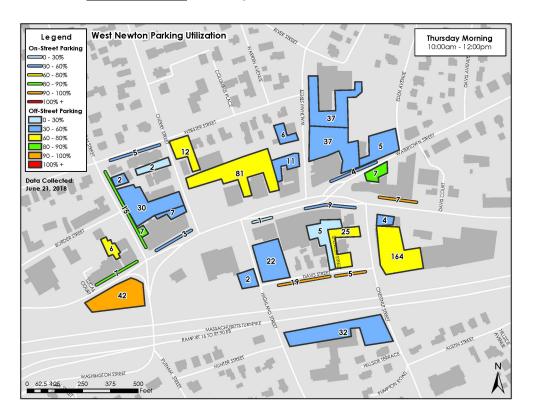
Jason Schrieber, AICP Senior Principal

Phone: 617-654-6093 jason.schrieber@stantec.com



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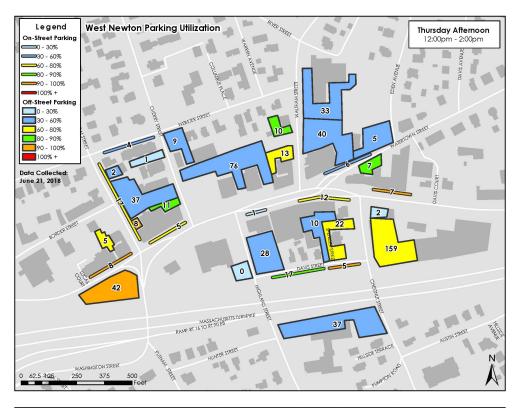
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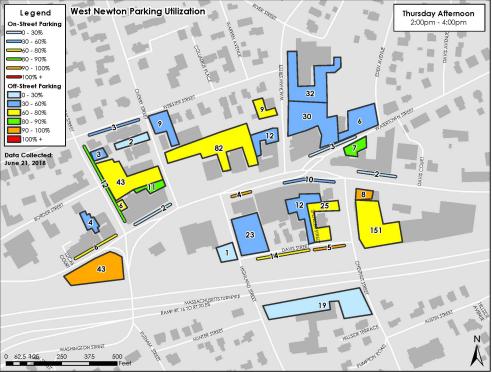


# Attachment A: Parking utilization time-series maps



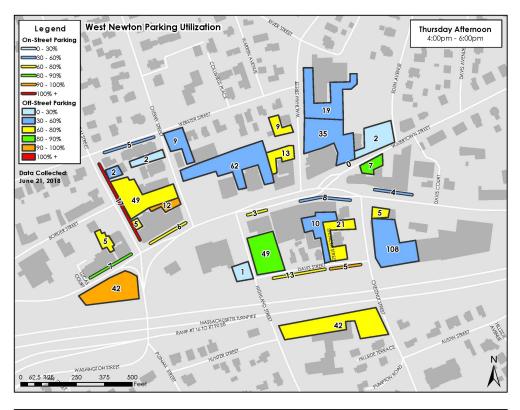
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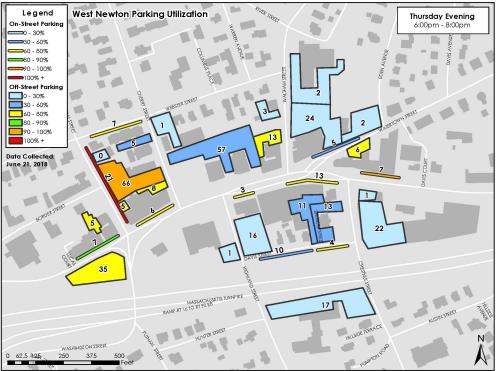






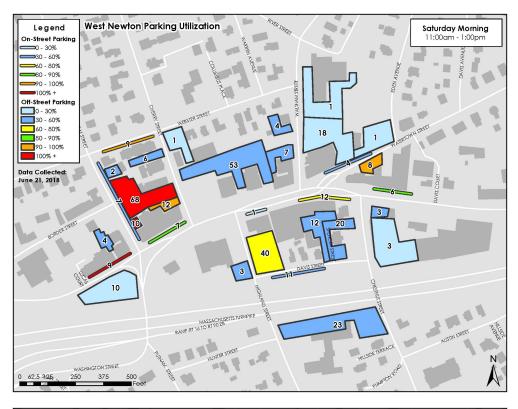
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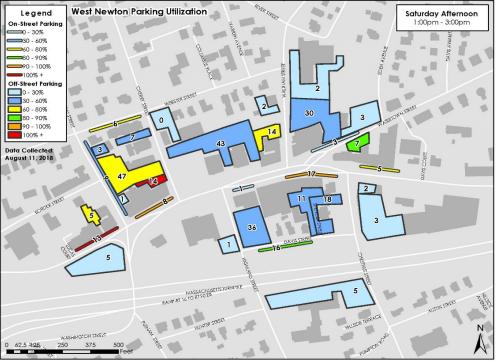






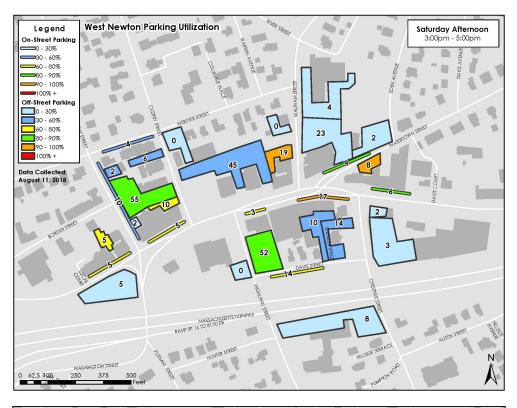
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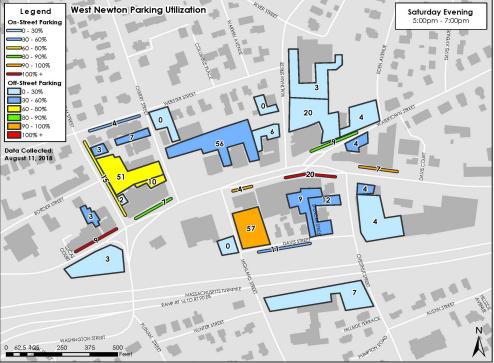






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