

Waterbury Downtown Parking Study

Downtown Parking Study
Waterbury, Vermont



Prepared for:
Village of Waterbury

Prepared by:
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November 15, 2016

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Executive Summary

A parking study was conducted for the Village of Waterbury examining the downtown area centered on the Stowe Street/Main Street intersection. Data collected by the Village's volunteer Parking Committee were compiled and evaluated to quantify existing parking conditions. Conclusions were reached regarding the adequacy of the existing parking supply and recommendations were made to manage this supply going forward. Key findings and recommendations are listed below.

Existing Conditions

- The downtown parking study area includes 345 parking spaces all located within approximately 400 feet of the Stowe Street/Main Street intersection. Of these spaces approximately 184 are located on public streets or in municipal off-street lots. Nearly half of the parking supply studied, (161 spaces or 47 percent of the total), is privately owned and maintained.
- Parking demands typically peak at midday on weekdays and on weekend evenings.
- Parking demands for the combined 345 public and private spaces peak at 76 percent of capacity. Demand in the municipal spaces is higher.
- Peak parking demands in the public spaces range from 77 percent in the evening to 86 percent midday. Multiple public parking areas located most proximate to the Stowe Street/Main Street intersection operate at more than 90 percent of capacity at peak times.
- The few public parking spaces consistently available during peak times are generally located along Main Street at the northern and southern limits of the study area. Beyond the limits of the study area public parking along Main Street is generally underutilized even at peak times.
- The privately owned Northfield Savings Bank and TD Bank lots are heavily utilized during evening hours when the banks are closed. After 5 PM these two lots effectively function as public parking lots providing 58 spaces. In comparison, on-street parking along Stowe Street, Elm Street, Main Street between Stowe and Elm Streets, and the Elm Street municipal lot provide a combined total of only 52 spaces.

Parking Adequacy

- High-turnover, public parking facilities are generally designed to operate at 85 to 90 percent of capacity at peak times.
- In urban areas certain studies suggest that walking distances of 400 feet or less from parking to a destination represents a very high level of service. As noted above, the

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spaces surveyed for this study are all located approximately 400 feet from the Stowe Street/Main Street intersection.

- Level of service thresholds are not defined for village settings. Expectations with respect to walking distance may be different in a village setting such as Waterbury.
- The combined public and private parking supply in the study area is more than adequate based on the above criteria. The 345 spaces, all located within approximately 400 feet of the Stowe Street/Main Street intersection, operate at less than 85 percent of capacity.
- The public parking supply in the study area is just adequate based on the above criteria as the public spaces within 400 feet of the Stowe Street/Main Street intersection operate at 86 percent of capacity at peak times.

Principal Finding

Maintenance of the existing high parking level of service in the Village is contingent upon the continued public use of privately owned parking spaces. A loss of public access to privately owned spaces at TD Bank and at the Northfield Savings Bank would displace up to 42 evening parkers to more remote areas resulting in longer walking distances and a lower level of parking service. Without public access to the bank lots the public parking supply in the study area would operate at 95 percent of capacity at midday and at 101 percent of capacity in the evening.

Recommendations

A prioritized list of recommendations is presented to address issues identified in the conduct of this parking study.

High Priority

- Negotiate agreements with property owners, particularly TD Bank and Northfield Savings Bank, to indefinitely preserve public access to private lots during evening hours. Maintaining public access to these spaces is critical to maintaining the current high level of parking service.

Medium Priority

The following recommendations seek to enhance the existing parking experience and effectively manage the existing parking supply.

- Expand public outreach with on-line communications and better signage to help guide visitors to parking facilities.
- Evaluate and upgrade, if appropriate, lighting along Bidwell Lane to provide increased nighttime security for those using lots along this roadway.

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- Consider new pedestrian connections between Bidwell Lane and Main Street and between Bidwell Lane and the Village Market Center.
- Periodically review the usage of spaces marked with two-hour time limits to determine if additional spaces should be added to this inventory.
- Work with employers to identify and secure remote parking for employees (long term parkers) freeing up more spaces for short term parkers in the core area. Evaluate lighting conditions and pedestrian connections for candidate locations.
- Monitor all downtown parking usage, at least annually, examining parking spaces beyond the geographic limits of this study.
- Maintain public access to parking at the 51 South Main Street property at least through completion of the reconstruction of Main Street.
- Continue to consider granting parking waivers in the study area to the extent that these can support reuse of historic buildings and a vibrant downtown. However, evaluations of future waiver requests should consider the findings of this study and any future updates. Likewise, any proposed updates to the Village Parking Regulations should consider the parking conditions quantified in this report.

Low Priority

- Explore the possibility of acquiring the TD Bank lot and conduct a feasibility analysis for constructing a parking deck over this lot.

Should new development be proposed in the Village center that would significantly increase parking demand it may be desirable to add to the parking supply in the center. The TD Bank lot is likely the only parcel of suitable size to support a parking deck.

For each of the above recommendations a "champion", a Village official, department or committee, should be identified to advance each proposal.

1.0 INTRODUCTION

Following the destruction caused by Tropical Storm Irene in 2011 the Village of Waterbury has seen a steady recovery in its downtown commercial district. This success has in turn increased pressures on the available downtown parking supply. This pressure is particularly felt under weekday, midday conditions and weekend evenings. The weekend demands are generated largely in part of the popular restaurants proximate the Stowe Street and Main Street intersection that draw locals and tourists alike. A committee of volunteers has been working with Village officials for several years to assess parking demands and develop policies to better serve these demands. Measures implemented to date include the expansion of designated two-hour limit

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parking zones, enforcement of the parking time limits and the posting of flyers to help direct visitors to public off-street parking spaces. Stantec was retained by the Village to work with the committee to collect additional parking demand data, evaluate the adequacy of the existing downtown parking supply and provide additional recommendations. Guidance has been requested relative to the disposition of the former municipal office building and its parking lot located at 51 South Main Street in the context of a planned reconstruction of Main Street. The Main Street reconstruction will have short-term and long-term impacts on the on-street parking supply. These evaluations, findings and recommendations are described below.

2.0 EXISTING CONDITIONS

Existing conditions data were collected and summarized with the aid of the Parking Committee and Town staff. Information was collected relative to parking supply, parking demand, and land use conditions. This data was used to assess the adequacy of existing parking conditions and to support analyses of future conditions.

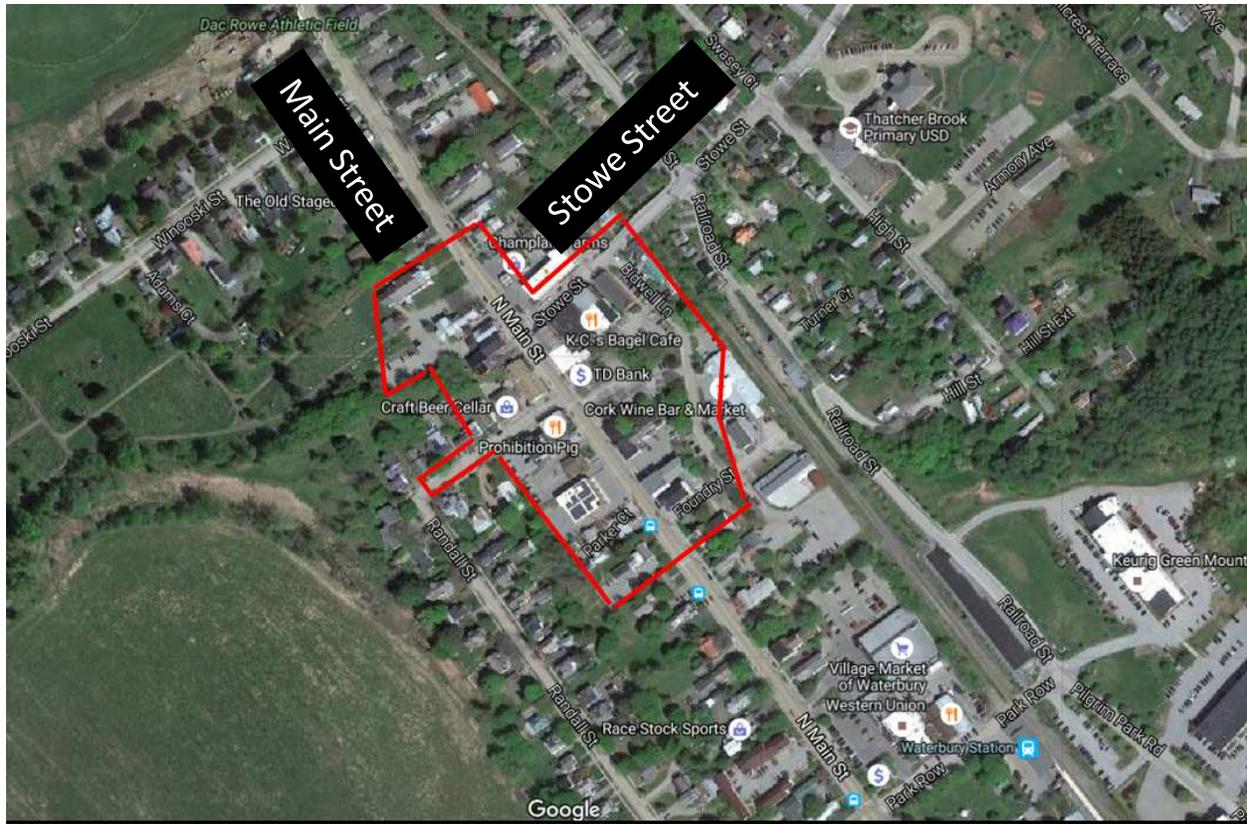
2.1 STUDY AREA

The parking study area includes a mix of public and private parking facilities radiating out from the Stowe Street/Main Street intersection. The study area limits are shown in Figure 1 and include the more densely developed portion of the downtown area. The study area extends 250 feet north of Stowe Street along Main Street to the Congregational Church and 450 feet south of Elm Street along Main Street to the former municipal building at 51 South Main Street. It also extends east of Main Street along Stowe Street for approximately 300 feet to Bidwell Lane and west along Elm Street approximately 400 feet to Randall Street. Off-street parking lots with access at Main Street, Elm Street, Foundry Street, or Bidwell Lane are also included. Approximately 345 public or private parking spaces were studied within this area.

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Figure 1 Parking Study Area Boundary



2.2 EXISTING PARKING FACILITIES AND SUPPLY

The Parking Committee inventoried the study area parking supply in July 2016. The supply is comprised of a combination of public on-street parking spaces and both public and private off-street parking lots. These facilities were grouped into three separate zones for analysis purposes. The first zone, the “core” area, includes the most visible and accessible spaces: the on-street spaces along Stowe Street, Elm Street and Main Street and the 15 space Elm Street lot. Three spaces along Foundry Street adjacent to Main Street are also included in the core zone. All these spaces are public spaces and, except for spaces in the Elm Street lot and at the northern and southern study area limits on Main Street, are generally posted with a two-hour time limit. There are 91 spaces in the core area as noted in Figure 2. Figure 3 locates spaces defined as Municipal or Two-Hour limit spaces. These are generally referred to as public spaces in this report although a few additional public spaces such as handicap parking stalls and stalls with 15-minute time limits are available to the public on a more restricted basis.

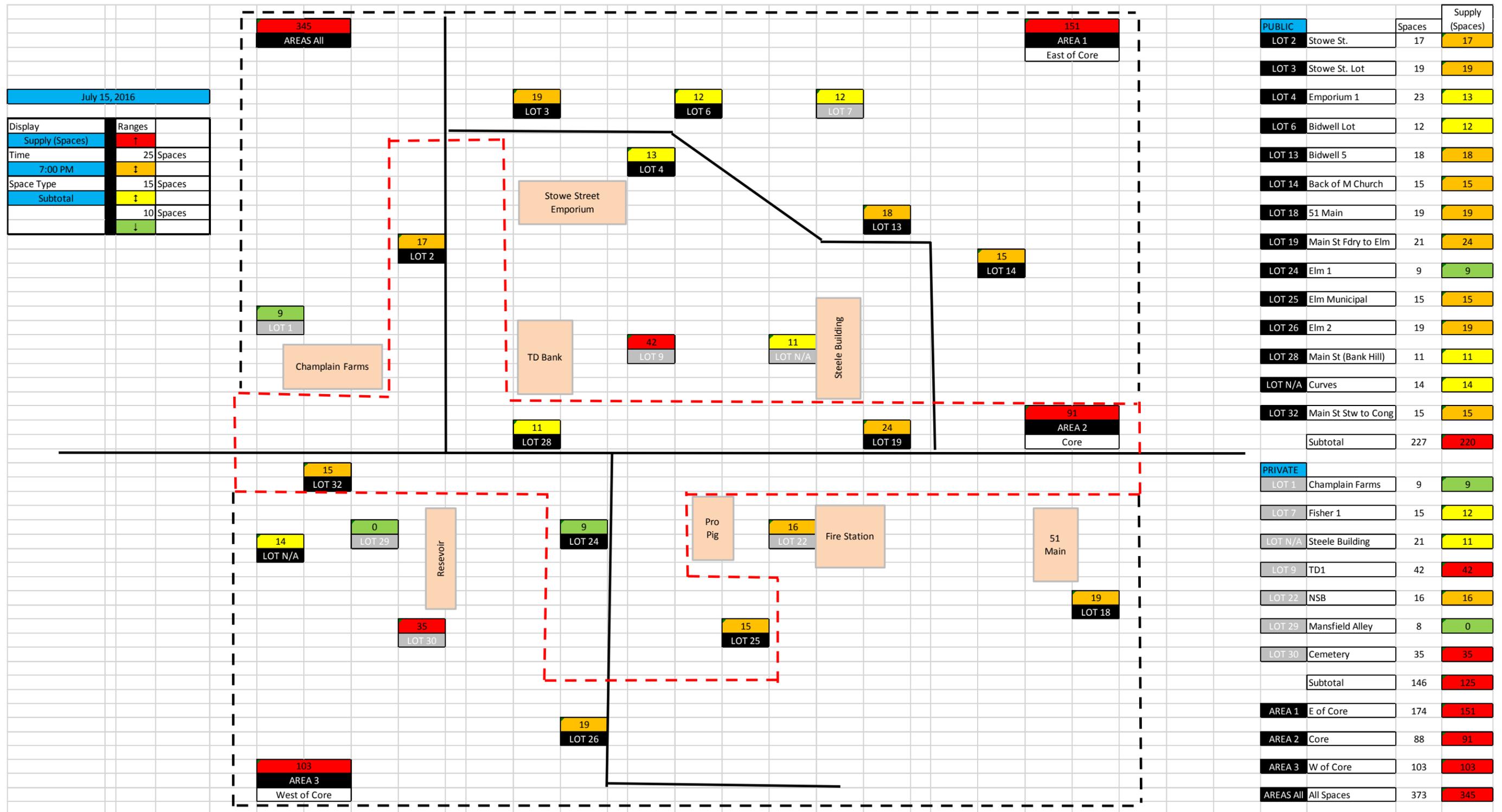


Figure 2 Total Parking Supply

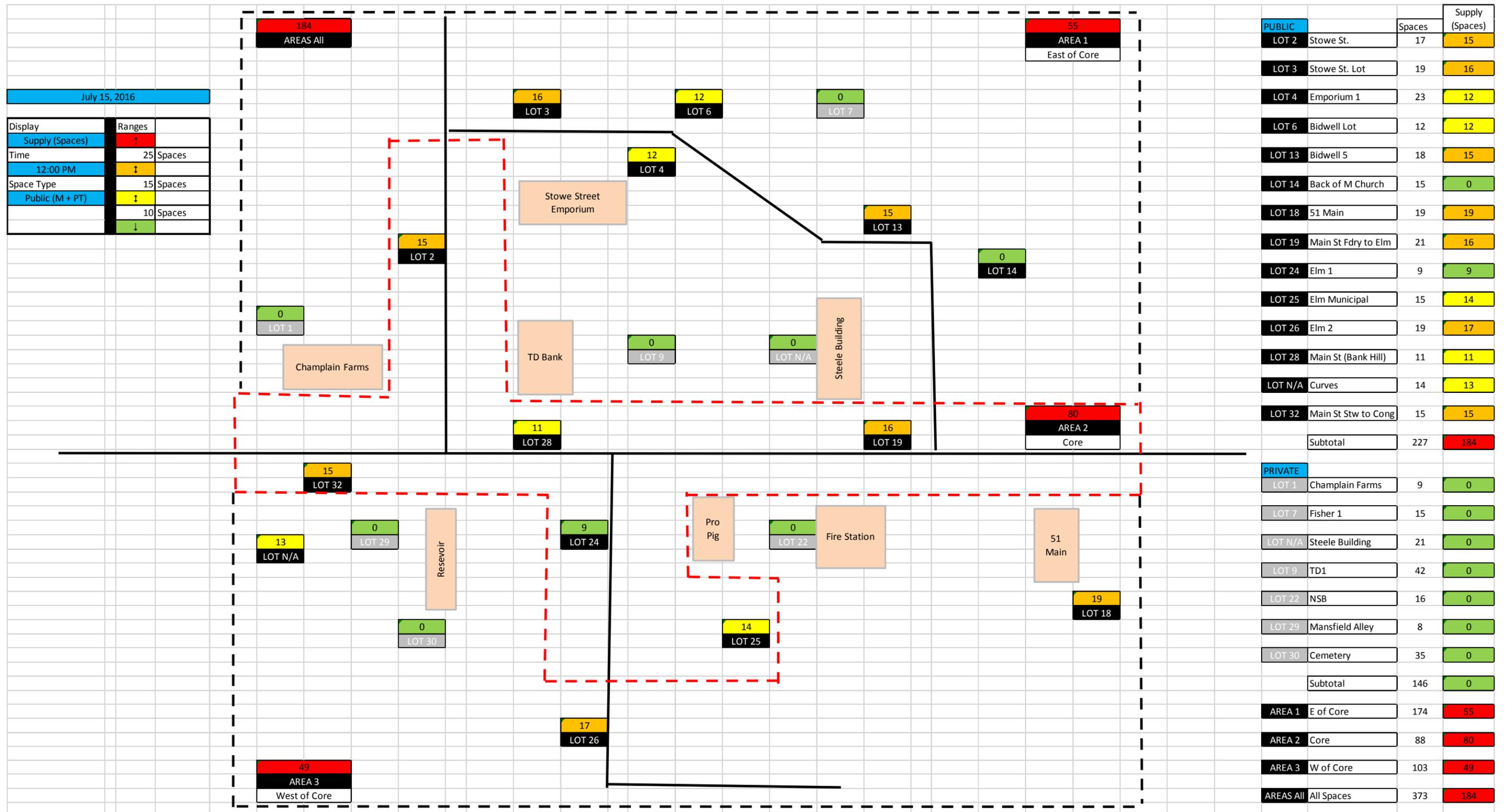


Figure 3 Public Parking Supply (Unrestricted and Two-Hour Spaces)

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Two other zones were defined: “east of core” and “west of core” with the directions indicating their relationship to Main Street. The east of core zone contains multiple public and private lots with access at Main Street, Bidwell Lane, and/or Foundry Street. Public lots include the Stowe Street lot and three Bidwell Lane lots. The 16-space Stowe Street lot is posted with a two-hour limit. There are no time limits at the other lots. A total of 55 public parking spaces is provided in this zone. Private parking in this zone includes 96 spaces with the TD Bank lot, Fisher lot and the Steele Building lot comprising 42, 15 and 11 spaces, respectively. On the other side of Main Street, the “west of core” zone, off-street public parking is available at the 51 South Main Street site and at the Congregational Church side lot. Public parking in this zone also includes on-street parking adjacent to the Congregational Church on Main Street and on Elm Street west of the Elm Street lot. There are 49 public spaces in this zone. Private parking is located at the Northfield Savings Bank, at the cemetery and along Mansfield Orthopedics alley. A total of 103 spaces are included in this zone. Table 1 provides a summary of the existing parking inventory by space type and lot. Appendix figures A1, A2 and A3 provide a graphical representation of this data showing the approximate geographic distribution parking spaces by lot.

Table 1 Parking Supply by Type and Zone

Type of Parking	West of Core	Core	East of Core	All Zones
Unrestricted, Public	49	39	39	127
Two-Hour Limit, Public	0	41	16	57
Subtotal-Public	49	80	55	184
All Other (Handicap, Business, Restricted, Not Legal, 15 Minute Limit)	54	11	96	161
Total	103	91	151	345

2.3 PARKING SURVEYS

Parking Committee members and other volunteers monitored parking use by space for each of the 21 parking areas identified in Figure 2. (Not all areas were monitored on all survey dates.) Surveys were conducted on multiple occasions dating back to 2014. Each parking stall in the study area was assigned a number and partial license plate numbers were recorded for vehicles parked in each stall on a minimum hourly basis. (Surveys were conducted every 30 minutes in 2014. Surveys we conducted hourly in 2016.) Surveys began as early as 8 AM and ended as late as 8 PM. The collected data was compiled and analyzed to determine the number of vehicles parked in the study area by time-of-day and location. The percentage of spaces occupied or utilization was also calculated. The recorded license plate data enabled the determination of estimated vehicle parking durations or length of stay.

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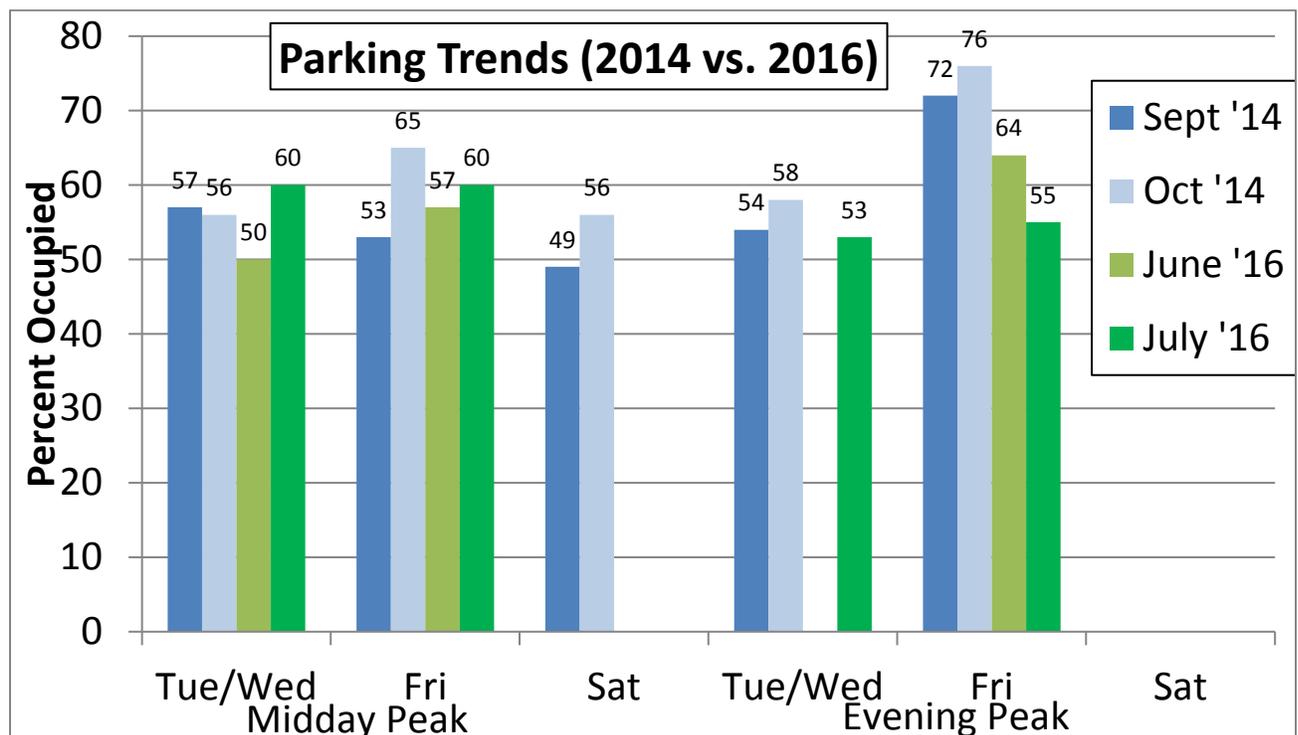
The results of the 2014 surveys were tabulated and reported by the Parking Committee in 2015. Key findings reported at the time include:

- In the core areas there is low turnover. At least 20 vehicles were observed parked continuously for five or more hours.
- Core areas are heavily utilized with occupancy reaching 73 percent on weekends.
- Out of state cars comprise up to 30 percent of the parking demand on weekends.

(The term “core areas” used in 2015 relates to the entire study area and not the more limited core zone described above.)

Stantec was responsible for compiling and analyzing the 2016 data. A customized spreadsheet tool was developed to facilitate querying the data. This tool enabled the parking data to be quickly examined by location, type of space and time of day. It also presents the data on a schematic map of the study area to illustrate the geographical distribution of parking demands. The data however, was first analyzed in aggregate form to allow for direct comparisons to the 2014 data. The comparison of peak utilization rates observed in 2014 to those observed in 2016 is presented in Figure 4. The data indicate that conditions have been stable over the last two years. There are no substantial differences in the utilization rates between the two survey periods and the minor differences that are noted may be due to seasonal effects.

Figure 4 Parking Utilization Trends



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Parking utilization reports were developed for each of the four 2016 survey days. As the data in Figure 4 suggests, there is little variation in parking utilization among the four days surveyed in 2016. Also, Friday, July 15, 2016 is the most critical day and more hours of data were collected on this day than some of the others. Accordingly, the detailed discussion of parking conditions which follows relates to this single day recognizing that results for other days surveyed will be comparable. Data summaries for the other three 2016 dates are provided in the appendix.

2.4 EXISTING (2016) PARKING UTILIZATION

Parking utilization was calculated for all spaces in the study area and for a subset of the study area. The overall analysis combines both public and private spaces. A second analysis considers just public parking spaces: short-term (two-hour time limit) and long-term (unrestricted time limit) parking spaces.

2.4.1 Overall Utilization

Overall parking demand by zone for Friday, July 15, 2015 is summarized in Figure 5. As shown, parking demand peaks at midday and a second peak occurs during the early evening hours. (Low counts at 3 PM and 5 PM reflect the fact that certain lots were not counted at these times due to field survey staffing issues.) At noon there were 224 vehicles parked in the study area. The early evening peak occurred at 7 PM when 204 vehicles were parked.

Hourly parking utilization by lot is summarized in Table 2 which indicates the percentage of spaces occupied in each lot. The table is color coded to highlight in red "hot spots", lots where occupancy exceeds 90 percent. As shown, the Bidwell lot is busy during the morning hours reaching 92 percent occupancy at 9 AM and 10 AM. This lot is again busy at lunchtime along with three other areas in the core area: Main Street between Elm and Stowe Streets; Elm Street east of the municipal lot; and, the Elm Street municipal lot. These same four parking areas are in or near the "red zone" at the 7 PM evening peak. Based on the data, the Bidwell Lot, Elm Street lot, Main Street (between Elm and Stowe Streets), Stowe Street and Elm Street are the preferred parking locations in the study area each operating at 85 percent of capacity or more during both the midday and evening peak hours.

The hot spot analysis is also presented graphically in Figures 6 and 7 for the midday and evening peak hours, respectively. These figures provide a schematic representation of the study area showing the zone lines, streets, and parking areas. At noon, the core area lots have an overall parking occupancy of 81 percent. The "cooler" spots in this zone are at the northern and southern ends of Main Street where occupancy is in the 63 to 67 percent range. Similarly, areas outside the core, the east of core and west of core zones, operate at only 61 to 67 percent of capacity. The entire study area operates at 66 percent of capacity. During the evening peak hour less utilized areas are again found moving away from the Stowe Street/Main Street intersection. Currently the core area operates at 74 percent of capacity while areas east and west of the core operate at 64 and 49 percent, respectively.

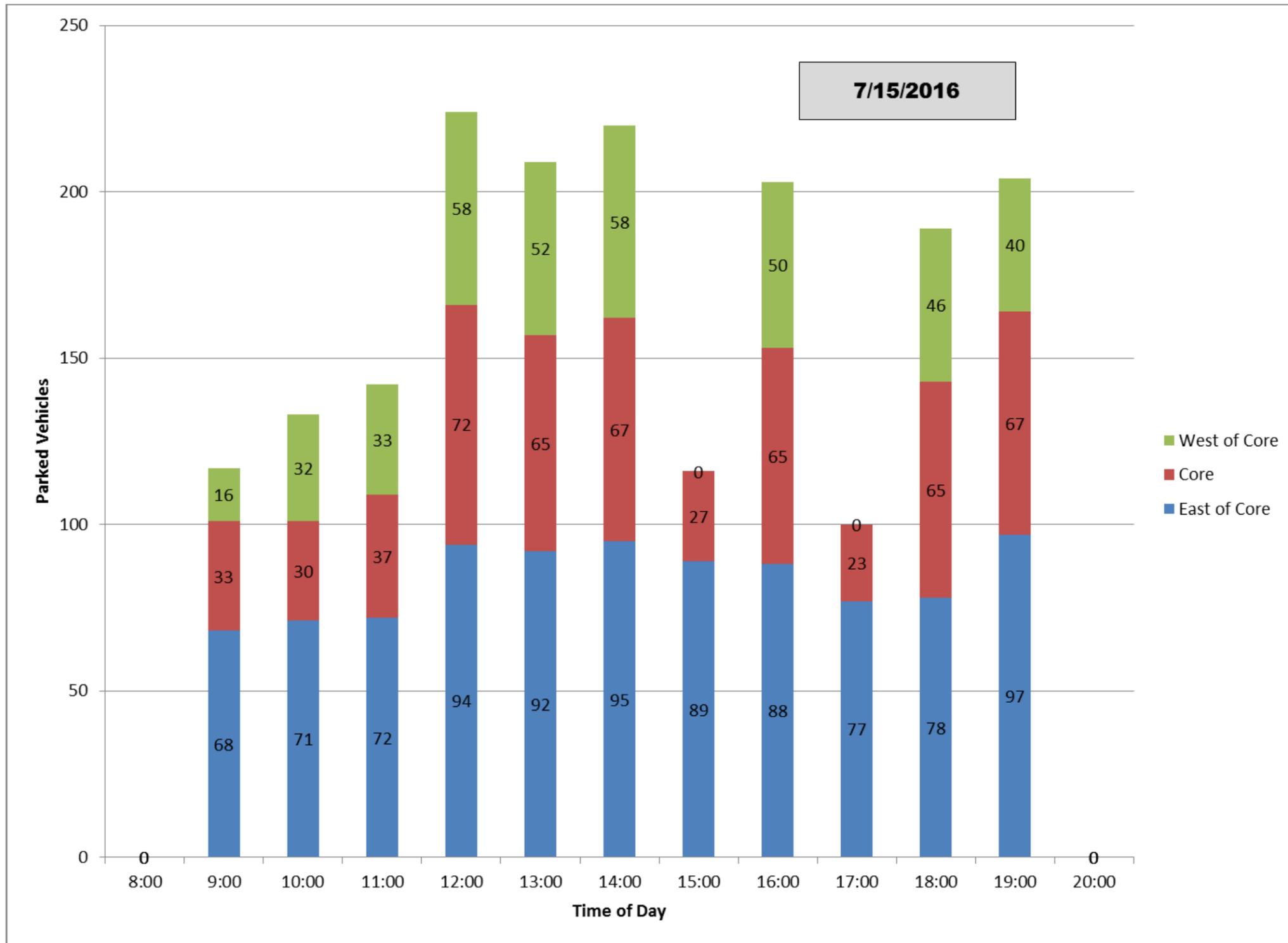


Figure 5 Hourly Parking Demands by Zone – July 15, 2016

July 15, 2016		Utilization (Percent) by Time of Day												
Lot #	Lot Description	Spaces	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	Peak
Core														
19	Main 3, 4 and 5 (Main Street east of Elm Street)	24	33	25	13	54	46	67	38	54	29	46	50	67
28	Main 2 (Main Street between Elm and Stowe)	11	27	18	73	100	100	100	55	91	27	100	100	100
32	Main 1 (Main Street west of Stowe Street)	15	7	7	7	67	73	60	0	87	0	67	47	87
24	Elm 1 (Elm Street north of municipal lot)	9	44	56	78	100	100	89	0	89	0	89	100	100
25	Elm Street municipal lot	15	60	60	73	93	93	87	0	87	0	67	87	93
2	Stowe Street north of Main	17	47	41	41	88	53	59	71	47	76	88	88	88
	Subtotal - Core	91	36	33	41	79	71	74	30	71	25	71	74	79
W of Core														
18	51 Main Street	19	5	11	16	89	68	84	0	47	0	32	37	89
22	NSB	16	31	63	56	50	50	56	0	44	0	19	63	63
26	Elm 2 (Elm Street south of municipal lot)	19	11	26	26	79	74	79	0	63	0	53	53	79
29	Mansfield Alley	0	0	0	0	0	0	0	0	0	0	0	0	0
30	Cemetery	35	14	17	20	26	23	23	0	31	0	43	37	43
N/A	Curves	14	21	64	64	64	64	71	0	79	0	86	71	86
	Subtotal - West of Core	103	16	31	32	56	50	56	0	49	0	45	49	56
E of Core														
14	Foundry 1	12	25	33	42	33	42	50	58	33	25	17	8	58
13	Bidwell 5	18	33	56	44	83	83	83	67	67	39	61	83	83
7	Fisher 1	15	47	67	53	53	47	73	53	73	47	27	40	73
3	Stowe Street Lot	19	47	32	37	74	58	68	68	53	68	68	79	79
1	Champlain Farms	9	33	56	44	33	44	33	44	44	44	33	56	56
6	Bidwell Lot	12	92	92	83	100	67	92	75	58	75	58	100	100
4	Emporium 1	13	85	69	77	85	77	77	85	77	69	77	85	85
9	ID Bank 1, 2, 3 and 4	42	29	24	33	48	60	55	45	57	50	60	76	76
N/A	Steele Building	11	55	55	55	64	64	27	55	55	36	27	0	64
	Subtotal - East of Core	151	45	47	48	62	61	63	59	58	51	52	64	64
	TOTAL - ALL LOTS	345	34	39	41	65	61	64	34	59	29	55	62	65

Table 2 Hourly Parking Utilization by Lot - July 15, 2016

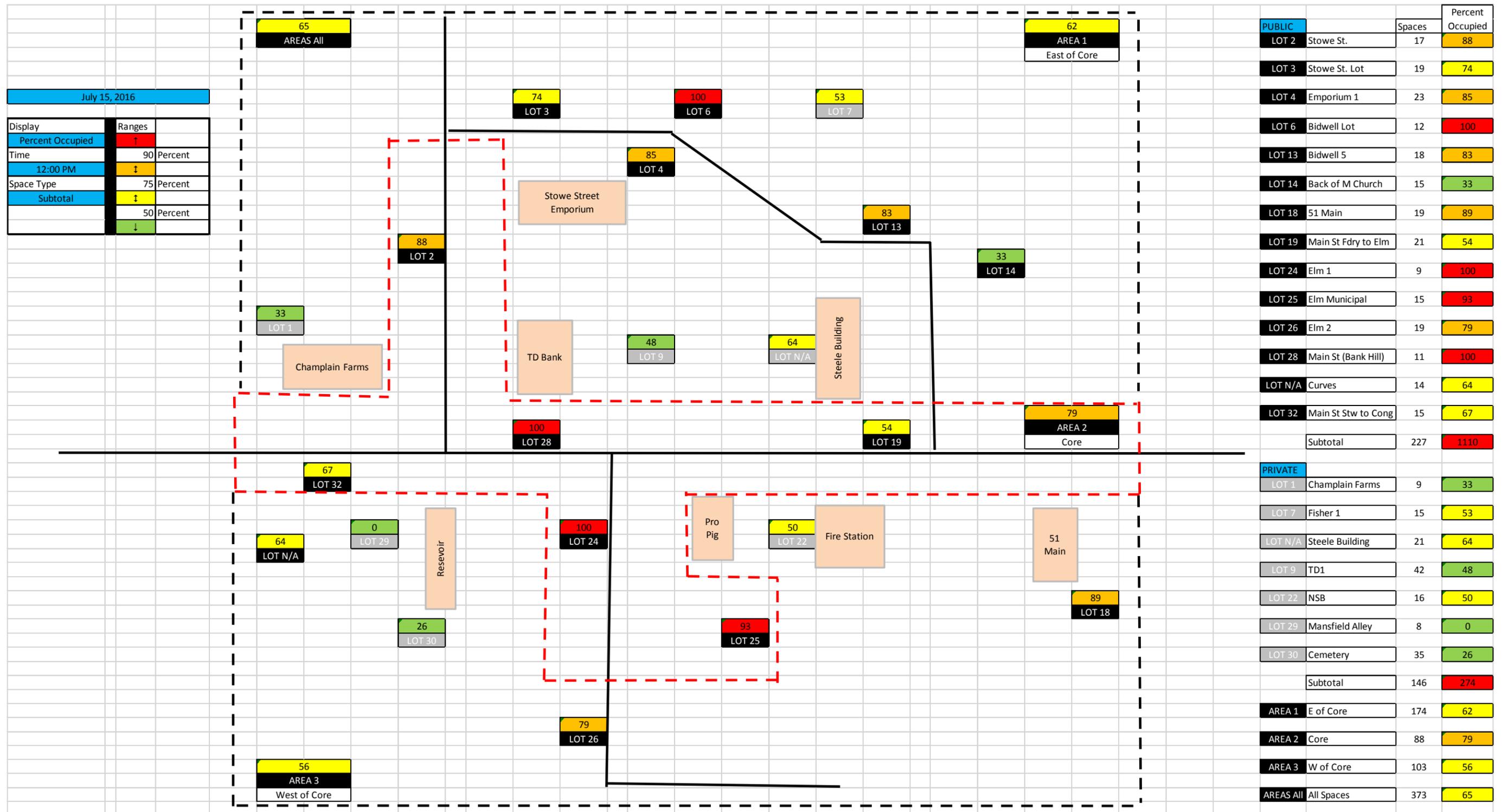


Figure 6 Midday Parking Utilization by Lot – July 15, 2016

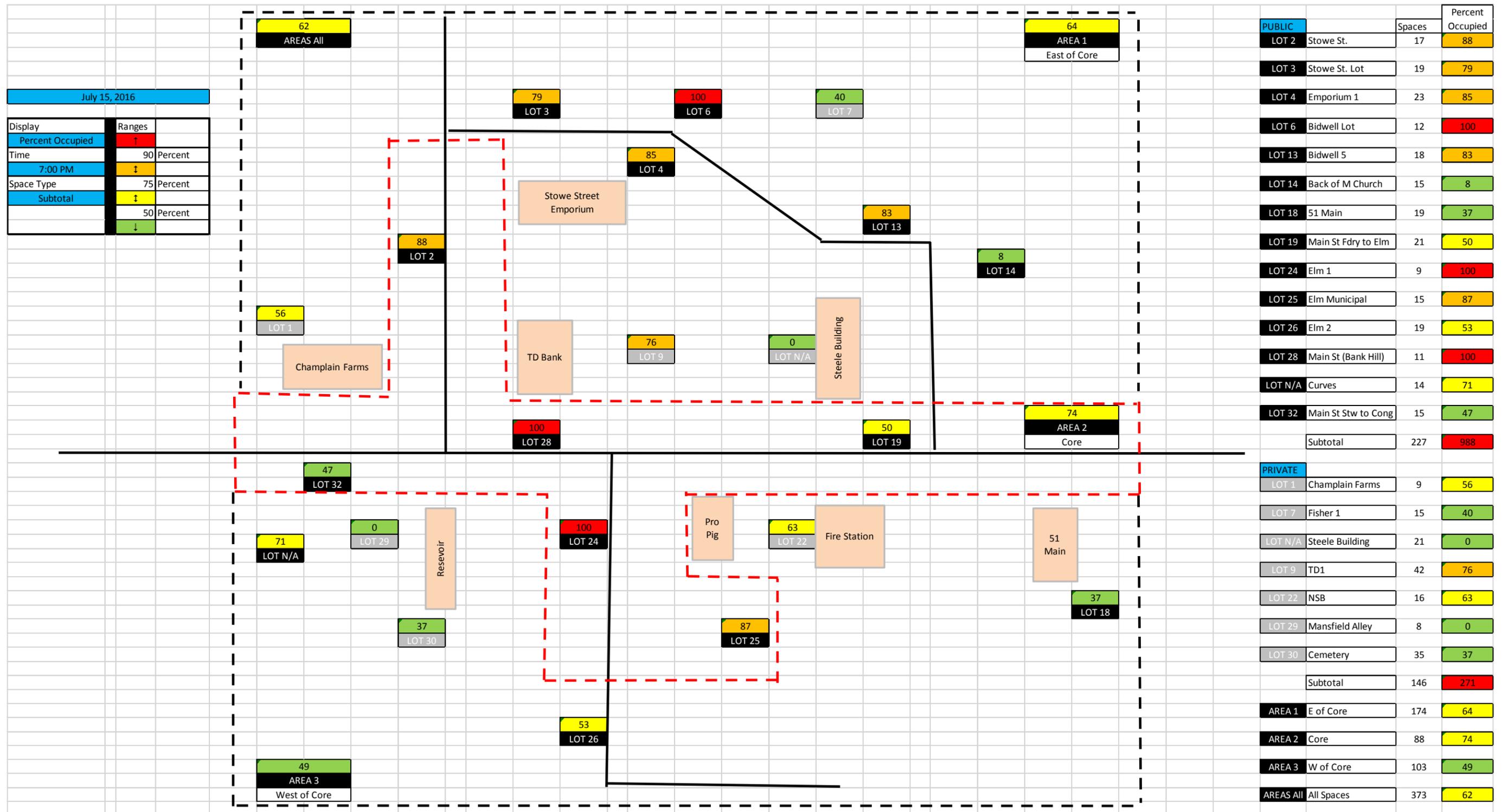


Figure 7 Evening Parking Utilization by Lot – July 15, 2016

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These spaces are consistently available, at the northern and southern ends of Main Street, are perhaps the least convenient to access. Motorists entering the Village on Main Street are likely to pass these empty spaces looking for parking closer to Stowe Street. Should they not find a space near Stowe Street, reversing direction to return to the empty spaces they passed is a difficult maneuver given the configuration of the street system.

2.4.2 Public Parking Utilization

The above hot spot analysis identified certain public parking areas as operating at or near capacity during peak hours. In some cases, these areas include informal (illegal), 15-minute limit, and/or handicap spaces. Another hot spot analysis was conducted where these spaces were excluded. Only spaces identified as either Municipal or Two-Hour Limit spaces are reflected in Figures 8 and 9 illustrating utilization for the midday and evening peak hours, respectively. At noon nine of the 13 public parking areas surveyed operate at 88 percent of capacity or more. All public areas combined operate at 86 percent. Only the parking areas at the northern and southern ends of Main Street, the Congregational Church side lot and the eight public spaces behind the Methodist Church operate below 86 percent of capacity. These lots are all located along the perimeter of the study area. Conditions are only slightly better at 7 PM when eight of the lots operate at 88 percent of capacity or more. Utilization at the 51 South Main Street, again a lot located at the perimeter of the study area, drops to 37 percent in the evening. (The Congregational Church side lot was not surveyed at 7 PM due to staffing issues. Data collected at 4 PM was used for this lot to allow comparisons to the midday condition.)

2.5 PARKING DURATION

As noted above, data from the 2014 surveys indicated that certain public spaces intended for frequent turnover were being used by vehicles parked all day. Since then two-hour parking limit signs were installed principally in the core area. The 2016 data were examined to determine existing parking durations. Since data were collected hourly, any vehicle observed in a space was assumed to occupy that space for a full hour. The results of this analysis are shown in Figure 10. As noted, each of the parking areas in the core area where two-hour time limits are imposed exhibited average parking durations of less than two hours. The average duration for the core is 87 minutes. Outside the core where time restrictions are not imposed and private parking is provided longer durations were observed. East of the core area the average duration was 135 minutes. West of the core area the average parking duration was 92 minutes. Again, the results presented are for Friday, July 15, 2016 and are considered representative of conditions observed on other survey dates. Data from the other survey dates are included in the appendix.

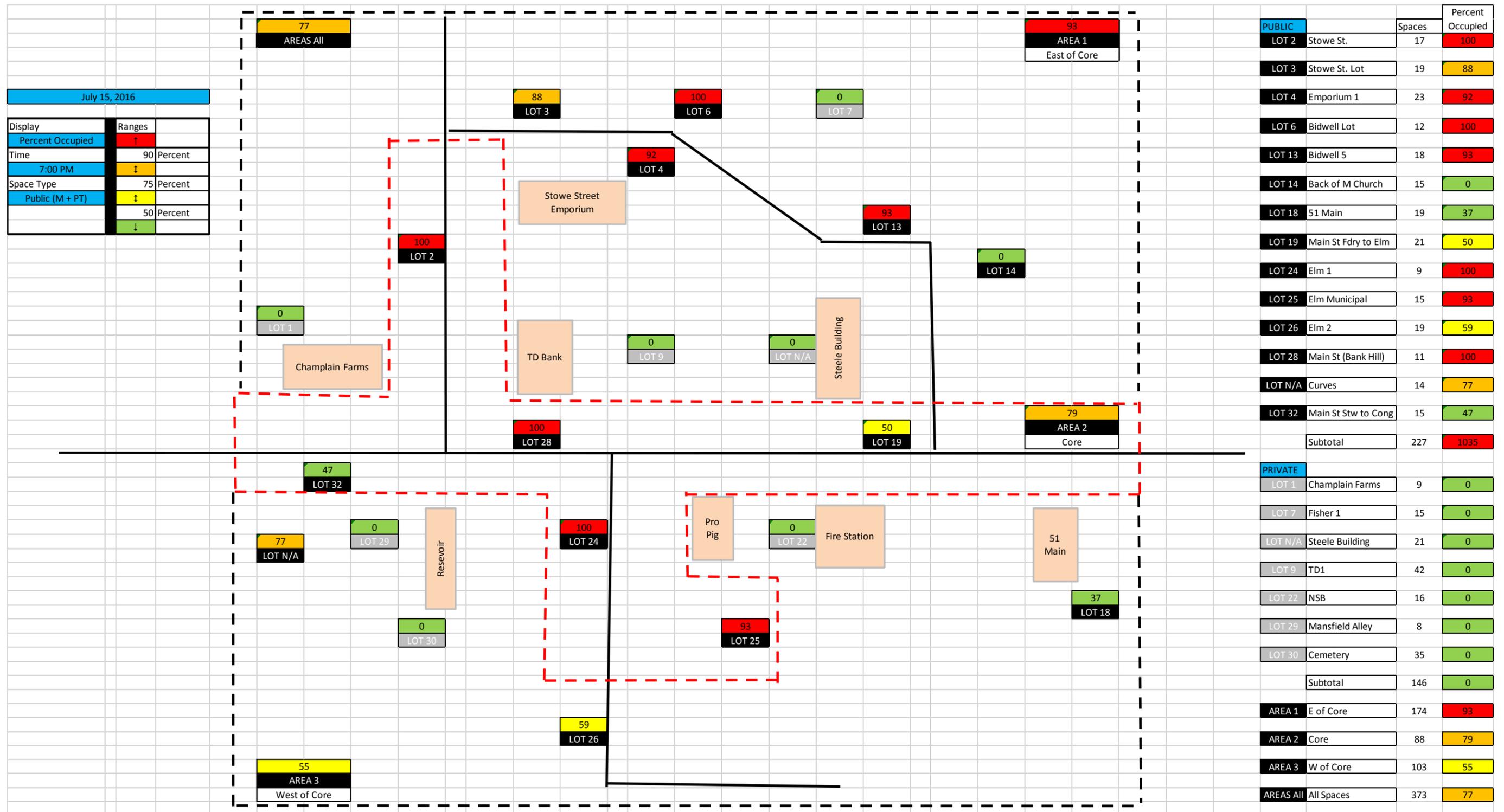


Figure 9 Evening Public Parking Utilization by Lot – July 15, 2016

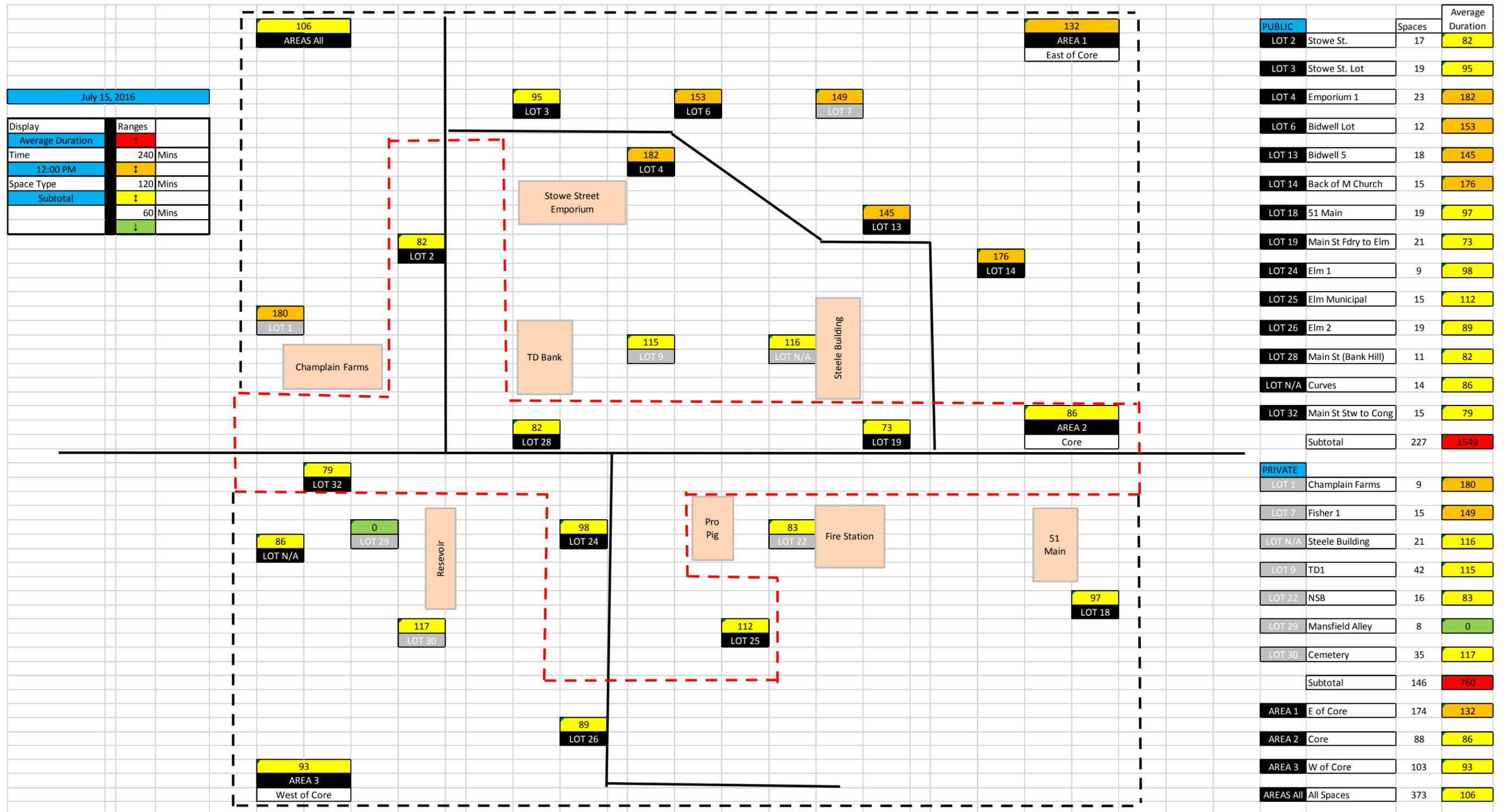


Figure 10 Average Parking Duration in Minutes by Lot

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2.6 PARKING DEMAND FORECASTING

Parking demands in the study area are related to existing land use conditions in the area. Recognizing that future changes in land use could impact future parking demand an analysis was conducted to establish parking rates that quantify a relationship between peak parking demand and land use. These rates could then be used to predict future parking demands as land use changes are proposed.

2.6.1 Land Use Conditions

The first step in determining parking rates for the study area was to quantify existing land use conditions. Stantec assisted the Parking Committee in developing a survey form that was distributed to property owners and business owners in the study area. The survey solicited information regarding the size of various businesses; building floor area in most cases and number of seats for restaurants. Additional questions were asked regarding employee counts, work shifts and peak activity periods. As shown in Table 3 there is an estimated 52,000 square feet of occupied commercial floor in the study area not including restaurants. The restaurants provide an estimated 629 seats. Land Use Data can be found in the appendix.

Table 3 Existing Land Use Conditions

Land Use	Size	
Medical Office Floor Area	10,167	Square Feet
Office Floor Area	19,583	Square Feet
Specialty Retail Floor Area	18,800	Square Feet
Bank Floor Area	3,500	Square Feet
Restaurant Seats	629	Seats

2.6.2 Parking Demand Formula

The above observed parking demands and existing land use conditions were compared to develop a formula that could be used to calculate future parking demands based on proposed changes in land use conditions. Typically parking demand estimates are determined by applying parking generation rates published by the Institute of Transportation Engineers (ITE) in *Parking Generation, Fourth Edition*. Based on data collected at existing facilities parking rates are available for each of the individual land uses listed in Table 3 above. The data used to establish these rates were collected principally at free-standing, suburban sites where virtually all trips to and from the sites are made by private automobile. The derived parking rates may therefore may not be directly applicable to downtown Waterbury as they would not account for the multi-purpose trip making and non-automobile trips that occur in a compact village setting such as Waterbury. Consequently, assumptions were made to adjust the ITE parking rates to reflect local conditions. Table 4 presents the unadjusted and adjusted ITE parking rates. This study does not project future changes in land use conditions in Waterbury however, the

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adjusted trip rates are offered here as a tool to analyze parking demands for future land use proposals if, and when, presented.

Table 4 Observed Existing Parking Rates

Land Use	Midday Parking Rates		Evening Parking Rates	
	ITE	Proposed for Waterbury	ITE	Proposed for Waterbury
Office	2.57	1.80	0.29	0.29
Medical Office/Services	2.82	1.97	0.32	0.32
Retail	2.94	2.06	2.62	0.52
Restaurant	0.30	0.21	0.46	0.39
Bank	4.00	2.80	0.40	0.40

Note: Rates indicate expected number of vehicles parked per 1000 square feet of building floor area except for the restaurant use where the rate relates to vehicles parked per seat.

Applying the adjusted parking rates to existing land use conditions indicates that restaurants account for the largest percentage of the downtown parking demand during both midday and evening peak hours. Table 5 indicates to what extent each of the commercial land uses in the study area contribute to the parking demand. It is estimated that 93 percent of the parking demand on a Friday evening is associated with the existing restaurants. Approximately 56 percent of the midday demand is associated with restaurants.

Table 5 Estimated Existing Parking Demand by Land Use

Land Use	Estimated Midday Parking Demand		Estimated Evening Parking Demand	
	Vehicles	Percent of Total	Vehicles	Percent of Total
Office	36	15%	6	2%
Medical Office/Services	20	8%	3	1%
Retail	37	16%	9	4%
Restaurant	132	56%	244	93%
Bank	10	4%	1	1%
Total	234	100%	263	100%

Note: Total demand relates to worst case scenario of all parking surveys, that is, approximately 65 percent total occupancy at midday and 75 percent total occupancy in the evening. Percentages obtained from the October 2014 surveys.

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2.7 PARKING ADEQUACY

Herein Stantec attempts to quantify the adequacy of the existing parking supply fully recognizing that determining parking adequacy is in fact a personal and subjective matter. Those who choose to park (or not) in Waterbury make their own determinations of the adequacy of the parking supply and the quality of service it offers. Some visitors may consider parking and then walking a certain distance from their vehicle to their destination to represent a perfectly satisfactory situation while others may consider the same walking distance to be excessive. This assessment may depend on an individual's trip purpose, fitness level and length of stay. Weather conditions may also be a factor. Even for the same individual a comfortable walking distance in fair weather may be unacceptable in foul weather. A person's perception of the parking experience could, among many other factors, affect their decision whether (or when) to visit Waterbury.

Professionals in the transportation industry have developed guidance that would allow for a quantitative assessment of the adequacy of parking resources. These relate to utilization and location. With respect to utilization, high-turnover parking facilities, such as the public facilities in the study area are designed to operate at 85 to 90 percent of capacity at peak times. This is intended to maintain reasonable search times for parkers looking to find an empty space and to provide some reserve capacity in the event of an unusual spike in demand. As noted above, certain lots/parking areas in the study area presently operate at utilization rates higher than 85 percent at peak. However, the entire study area operates at 65 percent and even the core zone operates at 81 percent. Since these rates are below the 85 to 90 percent design standard, the overall parking supply is more than adequate for existing conditions. As noted above, the public parking spaces in the study area operate at 86 percent of capacity at peak times. This figure is within the range of the design level occupancy rate, 85 to 90 percent. Consequently, the public parking supply is just adequate to meet existing demands.

With respect to location, transportation professionals have attempted to define how far people should walk between parking and their destination. The short answer to this question is "it depends". As noted above, a person's willingness to walk a certain distance depends on a variety of circumstances. City size is one factor that has been studied. An excerpt from *Traffic Engineering* (attached) concludes that parkers in large cities are willing to walk longer distances than those in small cities. A study of cities of various sizes concludes that on average people walk 500 feet to a parking space. Average walking distances however, range from 200 feet in small urbanized areas (10,000 people or less) to over 900 feet in large cities (population 10 million). An article from *Parking* magazine by Walker Consultants, addresses the issue of walking environment and walking distance. It defines walking "levels of service" ranging from Level of Service A (best) to Level of Service D (worst) for different conditions. Conditions range from "climate controlled", such as in an airport, to "outdoor/uncovered" as one would encounter in Waterbury. For outdoor walking, a distance of 400 feet indicates Level of Service A. Distances of up to 1600 feet are considered tolerable although the level of service associated with this distance is Level of Service D. Again, these standards are applicable to larger urban areas. The

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study referenced in *Traffic Engineering* suggests that an average walking distance closer to 200 feet may represent Level of Service A in smaller communities.

By Walker's suggested standards, the study area parking offers a high quality experience (Level of Service A) for visitors destined to businesses near the intersection of Stowe and Main Streets. The study area as whole operates at less than 85 percent of capacity at peak times and nearly every space is located within approximately 400 feet of the Stowe Street/Main Street intersection. (If the most distant spaces are 400 feet away the average walking distance may be half of this value or 200 feet.) Consequently, by Walker's suggested standards the overall parking supply in the study area is more than adequate. Of course, beyond the 400 feet radius there is additional parking that can serve the downtown parking demand albeit at a possible lower level of service. The parking supply just beyond the study area limits includes approximately 36 on-street spaces on Main Street between 51 South Main Street and Park Row. Park Row is located approximately 1200 feet from Elm Street. An estimated 20 spaces are located on Main Street between the Congregational Church the new town offices and library. These spaces are all located within 900 feet of Stowe Street. Off-street parking at the Village offices and library are also available for public use as are spaces along Park Row abutting Rusty Memorial Park. Parking in these areas could accommodate excess parking demand in the study area for those willing to walk longer distances to their destination. Figure 11 identifies walking distances on an aerial map representing Level of Service A, B, and C conditions as suggested by Walker. Again, alternative criteria may be appropriate for Waterbury.

Figure 11 Parking "Levels of Service" by Walking Distance



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3.0 FUTURE CONDITIONS

The above analysis indicates that the existing parking supply in the study area is providing a high quality of service. However, parking supply and parking demand conditions may change over time. Changes in land use can impact parking demand. Parking generation rates are provided above to assess the parking impacts of land use proposals when they surface. Parking supply conditions will change because of proposed the reconstruction of Main Street. Parking supply may also change should the existing informal public use of private lots be discontinued. Also, the available public parking supply may change if the Village sells the 51 South Main Street property. Each of these vulnerabilities which could affect the existing balance of supply and demand are discussed separately and in combination below.

3.1 MAIN STREET RECONSTRUCTION

Plans have been developed for the reconstruction of Main Street that, when implemented, will reduce the on-street parking supply. Along Main Street in the project study area (between the Congregational Church and 51 South Main Street) the number of spaces will be reduced from 32 spaces to 20 spaces for a loss of 12 spaces. Outside the study area, south of 51 South Main Street and north of Park Row, the reconstruction project will eliminate another eight spaces. The number of on-street spaces will decrease from 36 spaces to 28 spaces in this area. During project construction approximately 400 feet of Main Street will be closed to on-street parking at any given time. With parking removed from the 400 feet long segment between Stowe Street and the Steele Building, the on-street parking supply in the study area would be reduced by approximately 20 spaces. Consequently, the 345-space parking supply in the study area may be reduced to 325 spaces during construction and to 333 spaces upon completion of construction.

3.2 PUBLIC USE OF PRIVATE PARKING

The data summaries presented above indicate that the available parking supply in the study area is adequate to serve the existing midday and evening parking demands. However, the calculations leading to this finding do not recognize that private parking spaces are presently being extensively used as public parking. During evening hours there is little distinction between the public and private spaces as some businesses informally allow non-patrons access to their lots after business hours.

Additional parking utilization calculations were completed to consider the estimated public parking demand that is being accommodated in two private lots located on Main Street. These include the 42-space TD Bank lot on the east side of the street and the 16-space Northfield Savings Bank lot located on the west side of the street. Using data for Friday, July 15, 2016, the two lots combined accommodate 28 vehicles at midday and 42 vehicles at 7 PM. However, data provided by the Institute of Transportation Engineers (ITE) indicates that the expected

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parking demand for the two banks at midday is 12 vehicles. At 7 PM when the banks are closed the bank parking demand should be negligible. Consequently, an estimated 16 non-bank related vehicles are parked in these lots at midday and an estimated 42 non-bank related vehicles are parked in these lots at 7 PM. Presently, there are only 26 empty public parking spaces in the study area at noon and 41 empty parking spaces at 7 PM. If access to the bank lots was restricted and the non-bank parking demand had to be accommodated within the public parking areas, the public parking areas would operate at 95 percent of capacity at midday and parking demand would exceed capacity at 7 PM. The calculations supporting this analysis are summarized in Table 6.

Table 6 Public Parking Utilization Access to Bank Parking Lots

Time	Public Parking Demand (vehicles)			Public Parking Supply (spaces)	Utilization of Public Spaces (percent)	
	In Public Spaces	In Bank Lots	Total		Existing	Without Access to Bank Lots
12:00 PM	158	16	174	184	87%	95%
7:00 PM	143	42	185	184	78%	101%

Note: Based on data for Friday, July 15, 2016.

3.3 51 SOUTH MAIN STREET

The Village offices were formerly located in the now vacant and Village-owned building at 51 South Main Street. This property located, at the very southern end of the study area, provides 19 off-street parking spaces for public use. Occupancy in this lot on Friday, July 15, 2015 was 89 percent at noon and 37 percent at 7 PM. (Noontime occupancy on the other three 2016 survey days was only 37 percent on average.) The Village is considering whether to sell this property. Presumably, a sale of the property would mean that public parking would no longer be available at the site and that up to 17 vehicles would be displaced at noon and seven vehicles would be displaced in the evening. The collected parking data indicates challenges accommodating these vehicles. At noon there are only eight vacant, unrestricted (long term), public parking stalls proximate to 51 South Main Street in the study area. Consequently, more than half of the displaced vehicles, would likely relocate to spaces further south on Main Street.

3.4 CUMULATIVE ANALYSIS

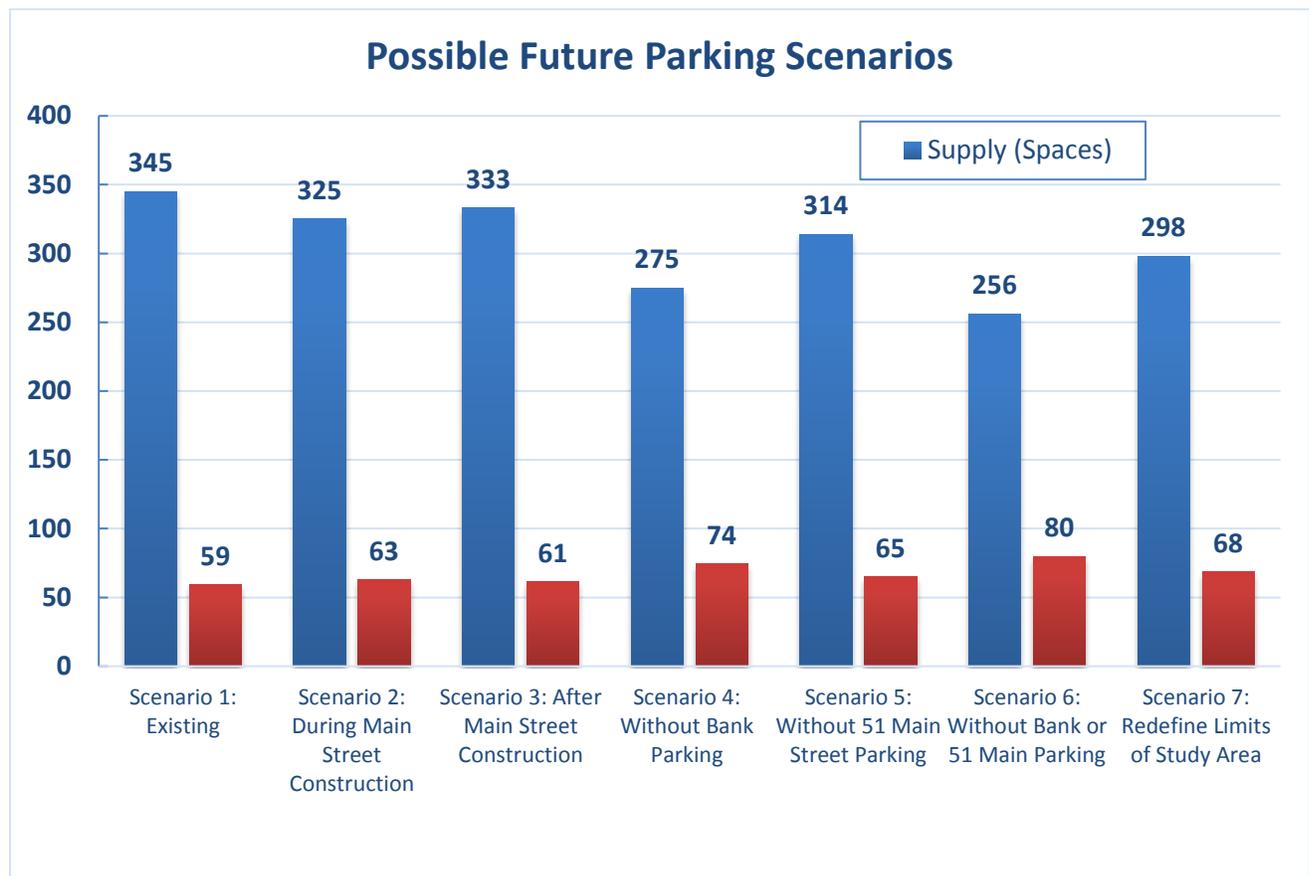
Described above are three separate conditions that could affect the parking supply in the study area. The potential cumulative impact of these proposals is presented in Figure 12. Figure 12 presents parking conditions in the study area for seven different scenarios. The first scenario represents existing Friday evening parking conditions as presented earlier with 345 spaces provided in the study area and utilization at 59 percent. The second scenario indicates a loss of

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20 spaces during the reconstruction of Main Street with the parking demand remaining constant relative to existing conditions at 204 vehicles. With this loss of parking the utilization rate increases to 63 percent. Upon completion of the Main Street project, Scenario 3, the parking supply in the study area is only reduced by 12 spaces and the resulting Friday evening parking utilization rate is only 61 percent. There are no current proposals to exclude public access to parking at TD Bank and Northfield Savings Bank however, losing public access would reduce the evening parking supply by another 58 spaces. This would be in addition to the 12 spaces lost to Main Street reconstruction. Under this scenario, Scenario 4, the parking utilization rate climbs to 74 percent. In Scenario 5 it is assumed that the Village disposes of the 51 South Main Street property and the 19 spaces at this location are no longer available. Loss of both the bank parking and 51 South Main Street parking is assumed in Scenario 6 raising the utilization rate to 80 percent. Scenario 7 considers an increase in the parking supply. This increase would not be the consequence of new parking construction but rather as a change in perspective. If longer walking distances are deemed acceptable such that all the parking on Main Street between the new Village offices and Park Row comprises the parking supply, then the utilization rate without the bank or 51 South Main Street parking drops to 68 percent. Under this scenario it is assumed the existing utilization rate for the spaces added to the study area is 25 percent.

Figure 12 Possible Future Parking Scenarios



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4.0 CONCLUSIONS AND RECOMMENDATIONS

Conclusions reached based on an analysis of the existing parking data, anticipated future changes in parking supply and observations of existing parking observations are presented below. These are followed by recommendations to address identified with respect to the adequacy and management of the parking supply.

4.1 CONCLUSIONS

The existing parking supply in the study area adequately serves existing parking demands based on published standards applicable to urban settings. The parking supply within approximately 400 feet of the Stowe Street/Main Street intersection operates at only 60 to 65 percent of capacity even at peak times. A walking distance from parking to one's destination of only 400 feet is considered a high level of service in urban areas. (Waterbury is not a large urban area. Residents and visitors here may be more accustomed to shorter walking distances.) However, when just the most readily accessible spaces in the study area are considered, those located along Main Street, Stowe Street, and Elm Street and generally within 300 feet of the Stowe Street/Main Street intersection, utilization rates are higher. These spaces, referred to as the core area in this study, operate at 74 to 81 percent of capacity at peak times. Even these ratios are adequate by most industry standards that suggest public parking should operate at no more than 85 to 90 percent of capacity at peak times.

Vulnerabilities associated with the existing parking supply will result in some anticipated and perhaps some unexpected reductions in the parking supply. The proposed reconstruction of Main Street will result in predictable losses in the short term and long term parking supplies. Utilization rates will rise when these spaces are lost however, the combined public/private parking supply rate will remain below 85 percent. A sale and reuse of the 51 South Main Street property would also have a predictable impact on the parking supply and raise utilization rates. Less certain is the future public use of the two large bank parking lots in the study area. Removing the bank spaces from the evening parking supply would increase the utilization rate for the combined public/private parking in the study area to 80 percent with many of the public parking areas operating at ratios above 90 percent.

4.2 RECOMMENDATIONS

The following actions are recommended to best manage the existing parking supply and to address future vulnerabilities with respect to parking supply and demand. As noted below, the Parking Committee made several of these recommendations in 2015.

4.2.1 High Priority Actions

Secure Access to the Bank Lots-The TD Bank lot and to a lesser extent the Northfield Savings Bank lot serve parking demands generated by nearby restaurants and other businesses during the

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evening hours. Loss of public access to the bank parking after 5 PM would significantly reduce parking capacity proximate to these restaurants forcing patrons to park further away from their destinations. If the Village seeks to maintain the high level of parking service that is currently provided to visitors it should consider negotiating agreements with the banks that indefinitely preserve public access to the lots during evening hours.

4.2.2 Medium Priority Actions

Public Outreach-The Village and the Parking Committee have been working to improve the user experience for parkers by developing, distributing, and posting flyers that direct visitors to the various off-street parking lots and inform parkers of time limits associated with individual parking areas. These efforts should continue to include the posting of more permanent, weather resistant signs in the parking areas and the dissemination of this information on the internet through the websites and social media outlets of the businesses that draw visitors. (The Parking Committee recommended public outreach in 2015 to alert parkers of the proposed conversion of unrestricted spaces to two-hour limit spaces and to encourage employers to direct employees to more remote, off-street parking lots where long term parking would be made available. The 51 South Main Street lot has since been added to the parking supply to serve long term parkers. New signs have also been installed to help guide visitors to off-street parking spaces.)

Parking Time Limits-Two-hour parking limits have been imposed on the most convenient and desirable parking spaces to encourage turnover. The time limits discourage all-day parkers, typically employees of downtown businesses from monopolizing the most accessible spaces that are of critical importance to the restaurant and retail businesses. The Village should continue this program along with the recent enforcement efforts to ensure that the regulations are effective. (The Parking Committee recommended in 2015 that part time staff be hired to enforce the two-hour parking limits. Enforcement has been initiated in recent months and is being monitored by the Parking Committee. A 2015 proposal to designate two-hour parking in the Elm Street lot has not been implemented. The time limit has been implemented in the Stowe Street lot.)

Remote Employee Parking-As noted above long term public parking in the study area is heavily utilized during peak hours. The Village should work with employers to assign long term parking to more remote locations. Employees parking for longer durations can generally tolerate longer walking distances than short term parkers. There may be underutilized private lots outside of the study area available for this purpose, particularly during the evening hours. (In 2015 the Parking Committee recommended that the 51 South Main Street lot and one of the Bidwell Lane lots be designated "all day" parking areas. These lots are available to all day parkers and operating at 85 percent of capacity or more during the day.)

Future Monitoring-Related to the above item, parking demands in the study area should be monitored periodically (annually). The survey method could be simplified relative to the surveys conducted to date to include just a count of the number of vehicles parked in each parking lot. License plate information would not be needed. The data could be used to reassess peak

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parking utilization and guide future parking management decisions. For example, new data could be used to determine if conversion of more unrestricted spaces to two-hour limit spaces is required.

Expand Study Area-Future parking surveys should also include and expanded study area. Since there is little reserve capacity in the current study area lots to absorb increased demand, parking conditions adjacent to the study area should be quantified. An evening survey conducted by Stantec including spaces as far north at the new Village offices lot and as far south as Park Row indicate that there is substantial parking supply available outside the current study area.

Street Lighting-The off-street lots along Bidwell Lane likely serve visitors to businesses on Main and Stowe Streets. Parking Committee members expressed concerns regarding security at night in these lots. Street lighting in these lots and along Bidwell Lane should be evaluated, and if appropriate, upgraded so that users of these lots feel safer and more secure in the evening hours. This evaluation may also look at the adequacy of pedestrian routes (walkways) connecting the Bidwell Lane lots to Main Street and to the Village Market Center. (In 2015 the Parking Committee recommended that burned out street lights be promptly replaced in these areas as a short term recommendation and that college campus-type lighting be installed as a long term recommendation.)

Parking Waivers-The Village Trustees have for the past 20 years granted parking waivers to property owners allowing development projects to move forward that do not meet the requirements of the zoning code from a parking perspective. Granting these waivers has proven effective in encouraging the reuse of historic buildings and in creating a densely developed, vibrant downtown. The data presented herein indicates that the approved projects are adequately being served by the downtown parking supply. However, the public parking supply in the study area is now heavily utilized. As such, the consequences of granting future parking waivers should be carefully considered on a case-by-case basis. Project location should influence the decision-making process. Projects located on the fringe of or outside of the study area may be proximate to underutilized public parking. The data and the parking demand forecast tool presented in this study should be considered in these evaluations.

51 South Main Street-The Village should consider retaining ownership of the 51 South Main Street property or maintain the rights to use the 19 parking spaces at this site at least until the Main Street reconstruction project is completed. Presently, the long-term public parking supply in the study area is not adequate to absorb vehicles that would be displaced from this lot and the Main Street reconstruction project will further reduce the available on-street parking supply. Vehicles displaced from this lot would likely use on-street spaces further south on Main Street. After Main Street is reconstructed with associated sidewalk upgrades, the pedestrian experience along Main Street may be enhanced and longer walking distances may be less objectionable to parkers. Demolishing the existing building on the site to create even more parking is not considered necessary to mitigate the impacts of the Main Street reconstruction project.

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4.2.3 Low Priority Actions

TD Bank Lot -In order to accommodate any significant long-term growth in parking demand proximate to the Stowe Street/Elm Street intersection while maintaining the existing high level of parking service provided, a feasibility study should be prepared for the construction of a parking deck over the TD Bank lot. This size and topography of this site suggest that it could, perhaps, cost-effectively support a parking deck. Access to the lower level would be maintained by way of Main Street and the upper level could be accesses by way of Bidwell Lane. No ramps would be required connecting the two levels allowing for the efficient use of space. Should the feasibility study determine that a deck is viable, the Village should consider securing a right of first refusal for the purchase of the TD Bank lot.

4.2.4 The “Do Nothing” Alternative

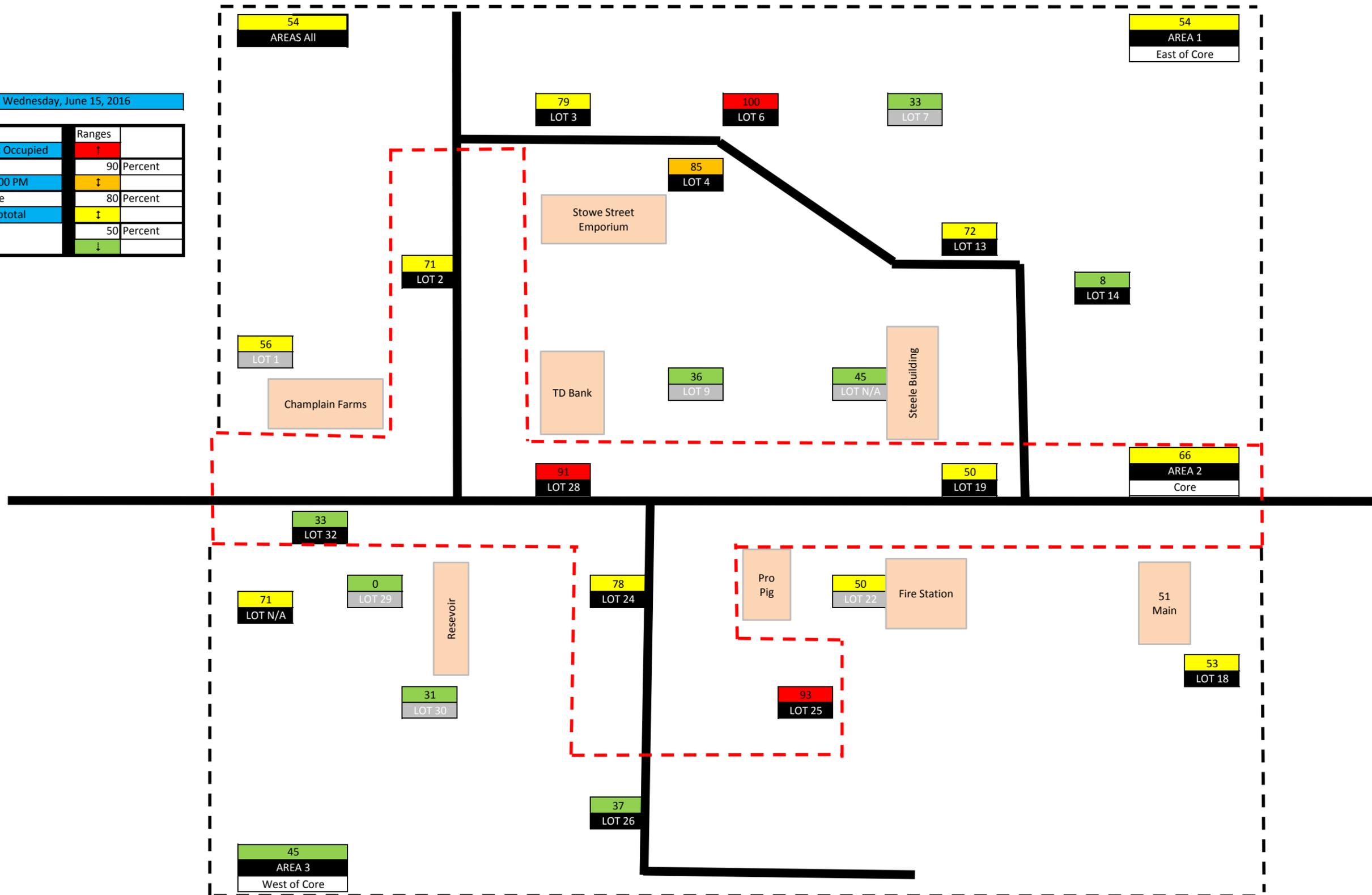
The consequences of taking no action to enhance, manage or increase the parking supply in the study area are limited. Fortunately, the parking supply in downtown Waterbury includes many more spaces than just those considered in study area and those spaces, generally located along Main Street north and south of the study area are underutilized. If the vulnerabilities cited above are realized (parking demand increases significantly and/or public use of private spaces is restricted), parking demands could readily be accommodated in the more remote parking areas. Use of more remote spaces implies longer walking distances and a perhaps a lower parking level of service. This could possibly be perceived as a negative outcome reducing the attractiveness of downtown Waterbury as a destination for visitors and as a home for employers. On the other hand, a certain level of parking congestion denotes vibrancy which in turn may enhance the attractiveness of the downtown area.

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Appendix A

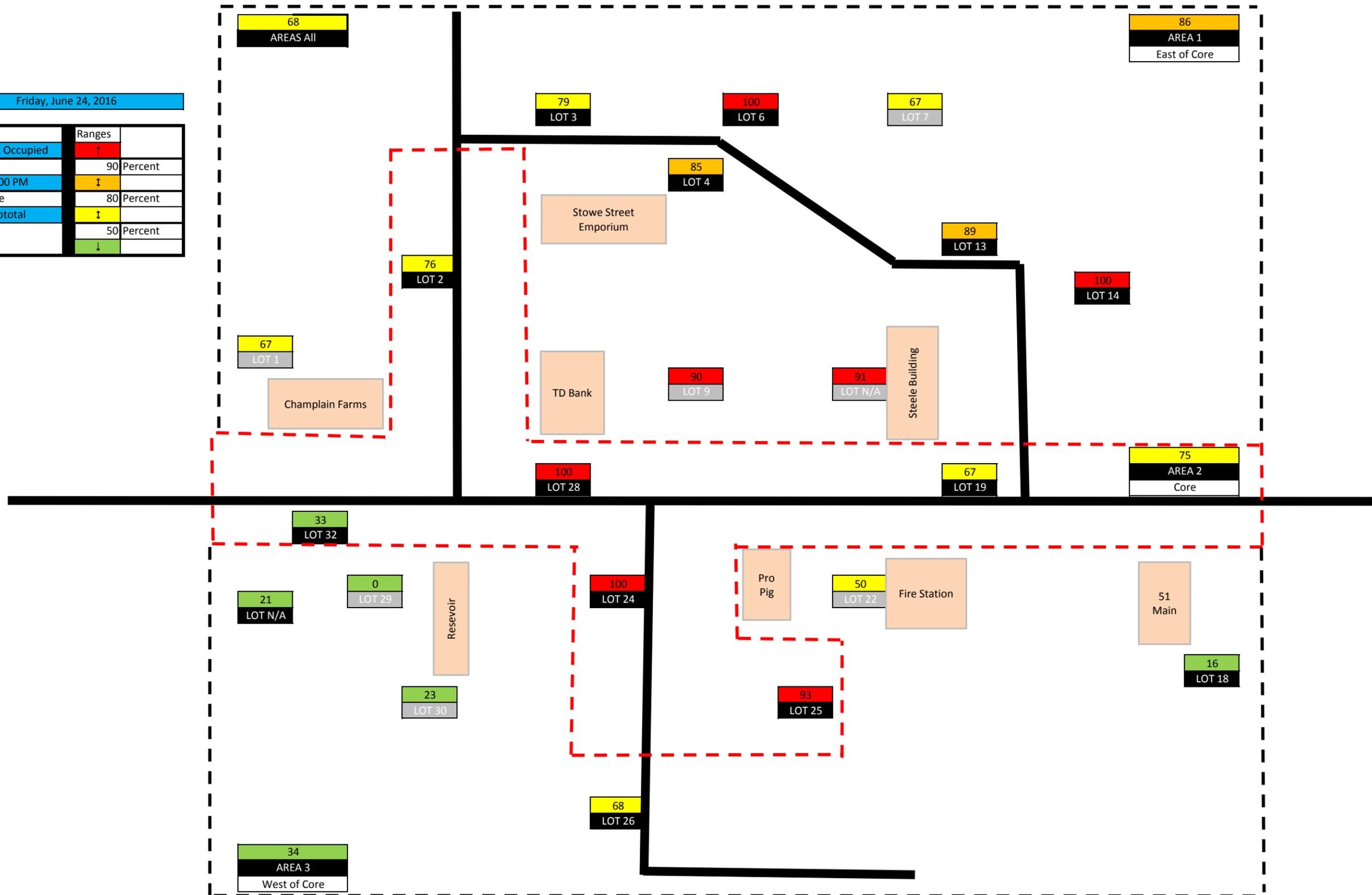
Wednesday, June 15, 2016	
Display	Ranges
Percent Occupied	↑
Time	90 Percent
12:00 PM	↓
Space Type	80 Percent
Subtotal	↓
	50 Percent
	↓



- PUBLIC**
- LOT 2 Stowe St.
- LOT 3 Stowe St. Lot
- LOT 4 Emporium 1
- LOT 6 Bidwell Lot
- LOT 13 Bidwell 5
- LOT 14 Back of M Church
- LOT 18 51 Main
- LOT 19 Main St Fdry to Elm
- LOT 24 Elm 1
- LOT 25 Elm Municipal
- LOT 26 Elm 2
- LOT 28 Main St (Bank Hill)
- LOT N/A Curves
- LOT 32 Main St Stw to Cong
- Subtotal
- PRIVATE**
- LOT 1 Champlain Farms
- LOT 7 Fisher 1
- LOT N/A Steele Building
- LOT 9 TD1
- LOT 22 NSB
- LOT 29 Mansfield Alley
- LOT 30 Cemetery
- Subtotal
- AREA 1 E of Core
- AREA 2 Core
- AREA 3 W of Core
- AREAS ALL All Spaces

Figure A1 Midday Parking Utilization by Lot - Wednesday, June 15, 2016

Friday, June 24, 2016	
Display	Ranges
Percent Occupied	↑
Time	90 Percent
12:00 PM	↓
Space Type	80 Percent
Subtotal	↓
	50 Percent
	↓

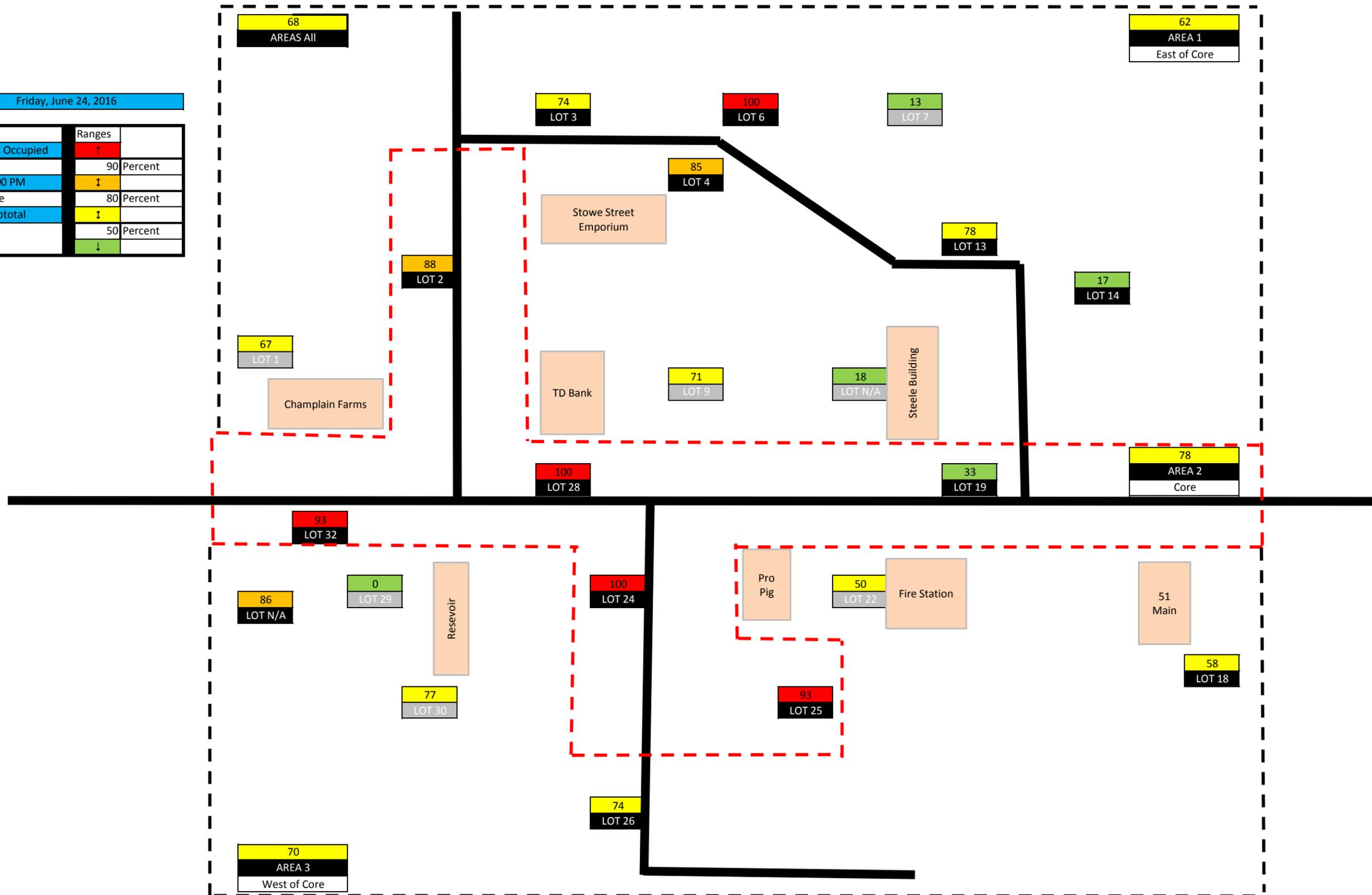


PUBLIC	
LOT 2	Stowe St.
LOT 3	Stowe St. Lot
LOT 4	Emporium 1
LOT 6	Bidwell Lot
LOT 13	Bidwell 5
LOT 14	Back of M Church
LOT 18	51 Main
LOT 19	Main St Fdry to Elm
LOT 24	Elm 1
LOT 25	Elm Municipal
LOT 26	Elm 2
LOT 28	Main St (Bank Hill)
LOT N/A	Curves
LOT 32	Main St Stw to Cong
Subtotal	
PRIVATE	
LOT 1	Champlain Farms
LOT 7	Fisher 1
LOT N/A	Steele Building
LOT 9	TD1
LOT 22	NSB
LOT 29	Mansfield Alley
LOT 30	Cemetery
Subtotal	
AREA 1	E of Core
AREA 2	Core
AREA 3	W of Core
AREAS ALL	All Spaces

Figure A2 Midday Parking Utilization by Lot, Friday June 24, 2016

Friday, June 24, 2016

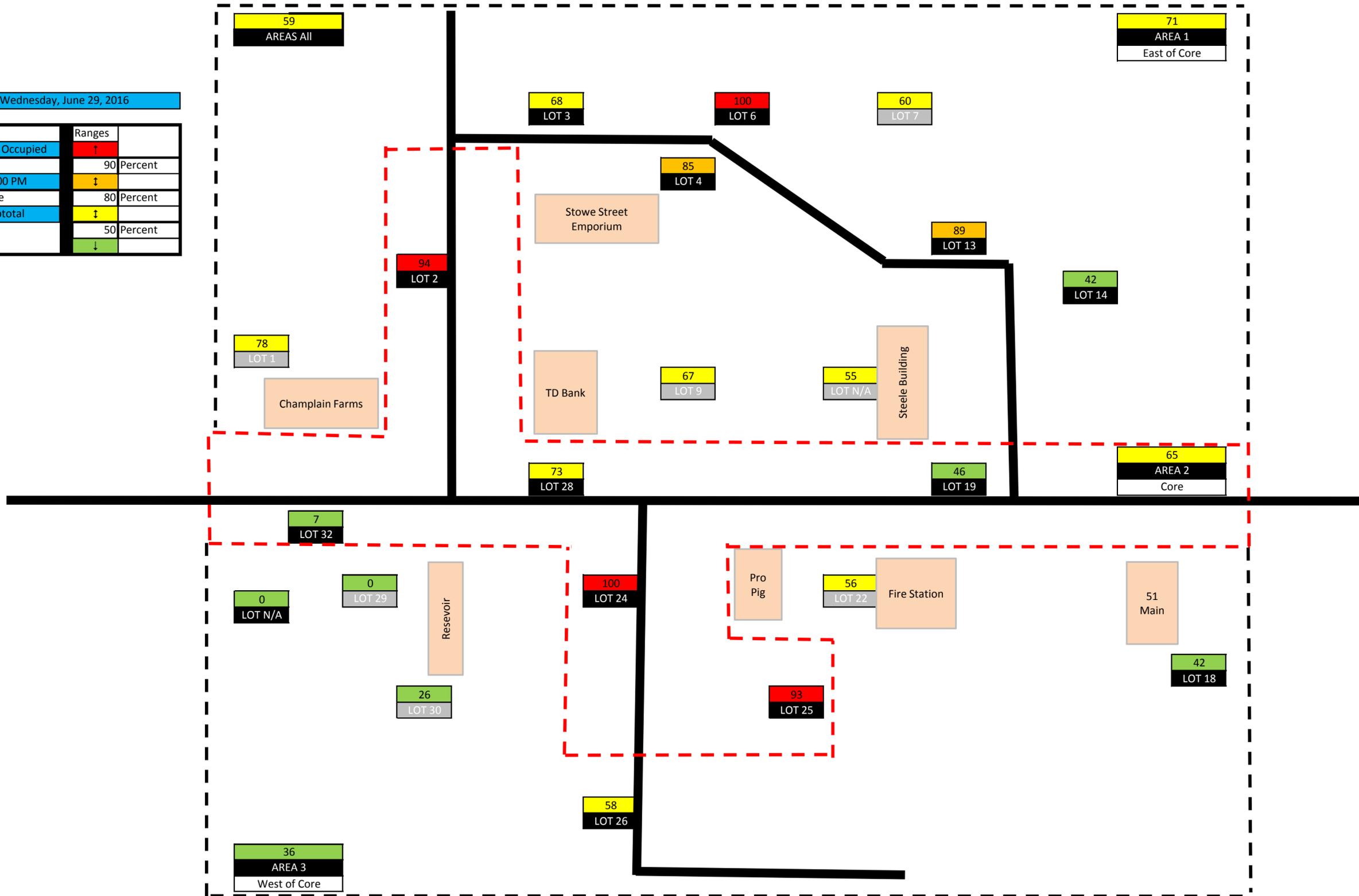
Display	Ranges	
Percent Occupied	↑	
Time	90	Percent
6:00 PM	↓	
Space Type	80	Percent
Subtotal	↓	
	50	Percent
	↓	



PUBLIC	
LOT 2	Stowe St.
LOT 3	Stowe St. Lot
LOT 4	Emporium 1
LOT 6	Bidwell Lot
LOT 13	Bidwell 5
LOT 14	Back of M Church
LOT 18	51 Main
LOT 19	Main St Fdry to Elm
LOT 24	Elm 1
LOT 25	Elm Municipal
LOT 26	Elm 2
LOT 28	Main St (Bank Hill)
LOT N/A	Curves
LOT 32	Main St Stw to Cong
Subtotal	
PRIVATE	
LOT 1	Champlain Farms
LOT 7	Fisher 1
LOT N/A	Steele Building
LOT 9	TD1
LOT 22	NSB
LOT 29	Mansfield Alley
LOT 30	Cemetery
Subtotal	
AREA 1	E of Core
AREA 2	Core
AREA 3	W of Core
AREAS ALL	All Spaces

Figure A3 Evening Parking Utilization by Lot, Friday, June 24, 2016

Wednesday, June 29, 2016	
Display	Ranges
Percent Occupied	↑
Time	90 Percent
12:00 PM	↓
Space Type	80 Percent
Subtotal	↓
	50 Percent
	↓

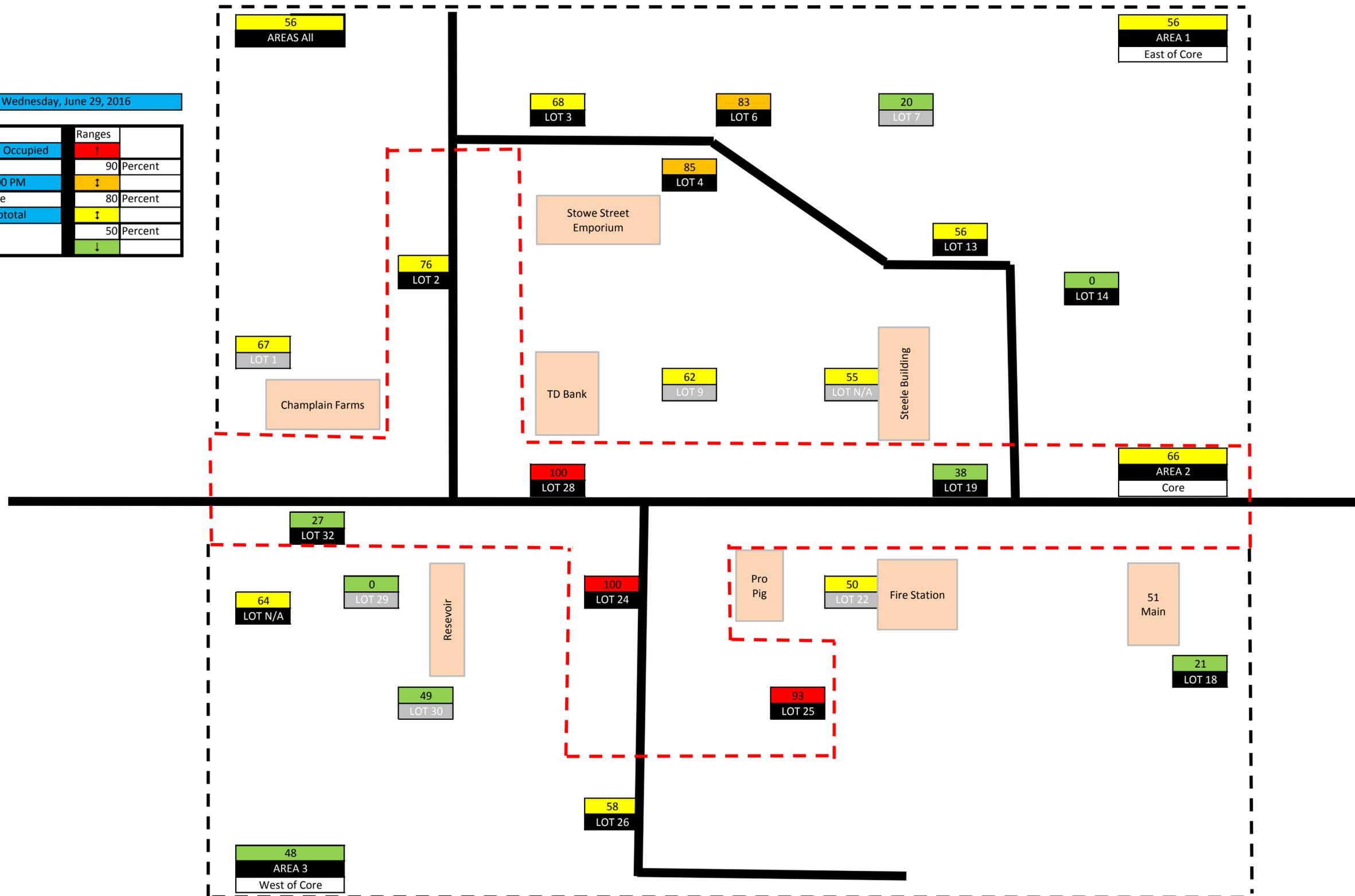


PUBLIC	
LOT 2	Stowe St.
LOT 3	Stowe St. Lot
LOT 4	Emporium 1
LOT 6	Bidwell Lot
LOT 13	Bidwell 5
LOT 14	Back of M Church
LOT 18	51 Main
LOT 19	Main St Fdry to Elm
LOT 24	Elm 1
LOT 25	Elm Municipal
LOT 26	Elm 2
LOT 28	Main St (Bank Hill)
LOT N/A	Curves
LOT 32	Main St Stw to Cong
	Subtotal
PRIVATE	
LOT 1	Champlain Farms
LOT 7	Fisher 1
LOT N/A	Steele Building
LOT 9	TD1
LOT 22	NSB
LOT 29	Mansfield Alley
LOT 30	Cemetery
	Subtotal
AREA 1	E of Core
AREA 2	Core
AREA 3	W of Core
AREAS ALL	All Spaces

Figure A4 Midday Parking Utilization by Lot - June 29, 2016

Wednesday, June 29, 2016

Display	Ranges	
Percent Occupied	↑	
Time	90	Percent
6:00 PM	↓	
Space Type	80	Percent
Subtotal	↓	
	50	Percent
	↓	



PUBLIC	
LOT 2	Stowe St.
LOT 3	Stowe St. Lot
LOT 4	Emporium 1
LOT 6	Bidwell Lot
LOT 13	Bidwell 5
LOT 14	Back of M Church
LOT 18	51 Main
LOT 19	Main St Fdry to Elm
LOT 24	Elm 1
LOT 25	Elm Municipal
LOT 26	Elm 2
LOT 28	Main St (Bank Hill)
LOT N/A	Curves
LOT 32	Main St Stw to Cong
Subtotal	
PRIVATE	
LOT 1	Champlain Farms
LOT 7	Fisher 1
LOT N/A	Steele Building
LOT 9	TD1
LOT 22	NSB
LOT 29	Mansfield Alley
LOT 30	Cemetery
Subtotal	
AREA 1	E of Core
AREA 2	Core
AREA 3	W of Core
AREAS ALL	All Spaces

Figure A5 Evening Parking Utilization by Lot, Wednesday, June 29, 2016

FIGURE B-1 - LAND USE / BUSINESS SURVEY RESPONSE

Company Name	Type of Business	Approximate Floor Space/Seats	Light Industrial	Medical Office Floor Area	Office Floor Area	Specialty Retail Floor Area	Restaurant Seats	Dwelling Units	Bank Floor Area	Days of Operation	Hours of Operation	Number of Employees During Peak Shift	Time of Peak Shift	respondent SAYS Number of Off-Street Parking Spaces	ZONING REQUIREMENTS (by Industry) (effective zoning date 4/13/15)	(via permit file research) Parking REQUIREMENTS:	(PERMIT file Says:) SPACE ALLOCATION ISSUED (Trustee approval may not be verified)	(PERMIT file says:) Effective Date of SPACE ALLOCATION	(PERMIT FILE SAYS:) Actual On-Site Private (off street) spaces
Craft Beer Cellar	Specialty Retail	1,600 sf				1600				7 Days/Week	11 AM- 9 PM	4-5 employees	Friday-Saturday PM	0	1 space/300 sqft	NM			
Jeremy Ayers Pottery	Retail	500 sf				500				Tues-Sat	12 PM-5 PM	1 employee	12 PM- 5 PM		1 space/300 sqft	10		Feb-13	11
Vermont Environmental Research Associates (Keller & Lowe Bldg)	Office	1,200 sf			1200					Mon-Fri	9 AM-5 PM	5 employees	N/A	0	1 space/300 sqft				
New Cork	retail/restaurant/bar	20 Seats + 300sq ft retail				300	20			Mon-Sun	12 PM-10 PM	2	5pm-8:30 PM	12	20 seats (+7) plus 300sf retail (+1)	9	8	Jun-16	12
(4 businesses other than Cork @ 40 Foundry: Fisher Auto Parts, Little Soap Factory, Sunja's, Aztlan,	light industrial	8,276	8,267		4,134					mon-Fri	7:30-5	20 (does not include Cork)	8am-12pm	4	1 space/ every employee employed at peak times	20	21	Jun-16	4
Champlain Farms Shell Station	Service/Retail					500								8	1 space/300 sqft	NM		Nov-95	8
Sunflower Salon & Boutique.	Service			300											1 space/300 sqft	7	6	May-13	1
Mansfield Orthopaedics	Service			1500											1 space/300 sqft	37 (NM)		Sep-13	37
The Reservoir Restaurant & Tap Room.	Restaurant	4000 sf, 125 seats (summer), 100 seats (winter)					125			7 Days/Week	11 AM weekends, 3:30 PM weekdays	20 employees	7:00 PM	4	1 space/3 seats -+1 person working during any shift (10/12 permit; 33 spaces for 99 seats, 8 spaces for 8 employees at max shift)=41	33 for the 99 seats plus 8 spaces for 8 employees at max shift for total 41 spaces	45	Aug-12	2
Rez Upstairs Party room /Restaurant	Business Professional AND/OR "Events room"	24 seats (840 sq ft) (limit 50 persons)					24			"parking impact would be no greater than the impact of the current permitted use of bus professional"				8	8	Aug-12	0		
Milone and MacBroom	Engineering Firm	1700sf			1700					Mon-Fri	8 AM-5 PM	4 employees	9:00 AM	0	1 space/300 sqft	6	6	Aug-12	0
Arvads Grill	Office and Bar/Restaurant	127 Restaurant Seats					80			7 Days/Week	11 AM-11 PM	5-9 employees			any shift	41	41	May-95	
Bus Prof office (Arvads) 720sq ft	office	720 sf			720									0	1 space /300 sqft				
Environmental Compliance Services (ecs)	Office	2,320			2,320					5	8 AM-6PM	9 employees	N/A	0	1 space/300 sqft	8	8	May-08	
Green Mountain Coins & Estate Jewelry	Retail	800 sf				800				Tues-Sat	11-5:30	1	N/A	0	1 space/300 sqft	3	3		
Breen Insurance Agency	Service			300											1 space/300 sqft	4	4		
Garfield's Hairdressing	Hair Salon			300						Mon-Sat	Mon-Thurs: 8 AM-7 PM, Fri: 8 AM-5 PM, Sat: 8 AM-2 PM	2 employees	NA	0	1 space/300 sqft	3	3	ref 6/1999	
TD Bank	Bank	1,500 SF						1500		Mon-Sat	8 AM-6 PM	6 employees	3 PM-5 PM	30 spaces	Bank/Retail/Svc: 1 space/ 300 sqft		0	8/19977	24
Prohibition Pig Brewery	Bar/Restaurant	3,600 sf					80			7 Days/Week	8 AM-12 PM	14 employees	3 PM-7 PM	0	1 space/3 seats -+1 person working during any shift	8	8	Jun-15	0
Prohibition Pig	Bar/Restaurant	3,600 sf					80			7 Days/Week	8 AM-12 PM	14 employees	3 PM-7 PM	0	1 space/3 seats -+1 person working during any shift	20	20	Jun-03	0
Prohibition Pig bldg (upstairs photo studio)	Bar/Restaurant	3,600 sf					80			7 Days/Week	8 AM-12 PM	14 employees	3 PM-7 PM	0	1 space/3 seats -+1 person working during any shift	20	20	Jun-03	0
VSECU	Bank - Credit Union	1,000 SF						1000		Mon-Fri	8 AM-5 PM	3 employees	11 AM-1 PM	0	bank/Retail/Svc: 1 space/ 300 sqft	8	8	Jul-11	0
Northfield Savings Bank	Bank							1000		Mon-Thurs	8-5, 8-5:30	6 employees	12-2pm and Friday afternoon	16	Bank/Retail/Svc: 1 space/ 300 sqft	16 (NM)	0		16
Bargain Boutique	Retail					3000				Mon-Friday, Sat & Sun	9-5, 10-4	1 employee	9-10am	0	1 space/300 sqft	23	16	Nov-97	7
Revitalizing Waterbury, 2ND FLOOR, 46 So Main	Office	1,000 sf			1000					Mon-Fri	5-Sep	2 employees	N/A	2	1 space/300 sqft		0		
RSVP 2ND FLOOR, 46 So Main	Office				500					Mon-Fri	5-Sep	2 employees	N/A	0	1 space/300 sqft		0		
Edgeworks Creative 2ND FLOOR 46 So Main	Office	1,108 sf			1108					Mon-Fri (some weekends)	8 AM-6 PM	4 employees	N/A	2	1 space/300 sqft		0		
Custom Tours, Inc. 2ND FLOOR 46 So Main	Office	400 sf			400					Mon-Fri	7:30 AM-5 PM	3 employees	9 AM-2 PM	1	1 space/300 sqft		0		
Waterbury Integrative Health 1ST FLOOR, 46 So Main	Medical Office	NA		2500						NA	NA	NA	NA	2	1 space/300 sqft	2		Jan-12	2
Waterbury Village PD. 3RD FLOOR, 46 So Main	Office	1,652 sf			1652					weekends	8 AM-12 AM	2, max of 5	3:00 PM	2	1 space/300 sqft	2		Jun-12	2
Waterbury Sports 1ST FLOOR, 46 So Main	Retail	2,100 sf				2100				7 Days/Week	M-Th: 10 AM-6 PM, Fri/Sat: 9 AM-7 PM, Sun: 10 AM-4 PM	3 employees	9-11 AM/4-7 PM	2	1 space/300 sqft	6		Jul-15	
Perkins-Parker Funeral Home and Cremation Service	Funeral Home	3,300 sf		500						7 Days/Week	24 hours/day	2 employees	N/A	3	1 space/300 sqft	(NM)			
Waterbury Service Center	Service	1,976 SF		1967						Mon-Sat, Sun (seasonal)	7:30-5, varies on season	1 employee, 1 part time	Varies	16	1 space/300 sqft	0	0	9/1888 ?	
Jeffrey Kilgore, PLC	Service	1,000 SF		1000						mon-fri	8-5pm	2 employees	N/A	2	1 space/300 sqft	2	2	Oct-76	
Waterbury Senior Center		75 seat capacity. Peak @ lunch is avg 45people			1000					mon - Friday	8am - 5pm	2 employees, plus volunteers	10am - 2pm	2	1 space per 4 persons based on Max capacity	7	7	Mar-02	0 (there may actually be 2 signed spots)
Martha Lewis Antiques	Retail	1300 sf				1300				mon - Saturday	10 - 5pm	1		0	1 space/300 sqft	4	4	Mar-02	0
Axel's Gallery and Frame Shop	Retail	900 SF				900				Tues-Sat	Tues-Fri: 8 AM-6 PM, Sat: 8 AM-4 PM	2 Part-time employees	11:30 AM-3 PM	0	1 space/300 sqft	(NM)			
American Canadian Tour (ACT)	Office	1,450 sf			1450					Mon-Fri	8 AM-5 PM	5-6 employees	N/A	0	1 space/300 sqft	(NM)			
WDEV Radio Vermont	Radio Station				1000					24/7	24/7	25 employees	6am-7pm	0	1 space/300 sqft	(NM)			
The Blue Stone	Restaurant						60			7 Days/Week	1130-930, 1030 fri and sat	10 employees	6pm-8pm	10 spaces (NOT CORRECT)= 0 or 1	1 space/300 sqft	7	7	Feb-94	0 (there may be a signed spot for 1 car in back)
K.C.'s Bagel Café	Bar/Restaurant	24 seats					24			7 Days/Week	6 AM-2 PM	4 employees	6:30 AM-9 AM, 11 AM- 1 PM	1 space	1 space/3 seats -+1 person working during any shift	9	9	Sep-95	0 (there is an actual sign for 1 car for KC Bagel)

FIGURE B-1 - LAND USE / BUSINESS SURVEY RESPONSE

Company Name	Type of Business	Approximate Floor Space/Seats	Light Industrial	Medical Office Floor Area	Office Floor Area	Specialty Retail Floor Area	Restaurant Seats	Dwelling Units	Bank Floor Area	Days of Operation	Hours of Operation	Number of Employees During Peak Shift	Time of Peak Shift	respondent SAYS: Number of Off-Street Parking Spaces	ZONING REQUIREMENTS (by Industry) (effective zoning date 4/13/15)	(via permit file research) Parking REQUIREMENTS:	(PERMIT file Says:) SPACE ALLOCATION ISSUED (Trustee approval may not be verified)	(PERMIT file says:) Effective Date of SPACE ALLOCATION	(PERMIT FILE SAYS:) Actual On-Site Private (off street) spaces
LaStrada Bakery & Catering	Food Service	800 sf				800				mon-Fri	7-3pm	2 employees	11am-1pm	2, though rarely available	1 space/300 sqft	3	3	Sep-95	0
Ruelle Boutique	Retail	1,100 sf				1100				7 Days/Week	AM-5 PM, Sun 11 AM-3 PM	1 employee	12 PM-1 PM	0	1 space/300 sqft	4	4	Sep-95	0
Freemasons				500			50								1 space/ 4 seats	(NM)	0		
Stowe Street Emporium	Retail	2,500 sf				2500				mon-fri, sat, sun	930-530, 5, 11-3	3 employees	Varies	0	1 space/300 sqft	9	9	Oct-94	0
Bridgeside Books	Retail	2,500 sf				2500				7 Days/Week	Mon-Sat 9:30 AM-6 PM, Sun 11 AM-3 PM	1 employee	12 PM-1 PM, late afternoon	0 (really 1)	1 space/300 sqft	9	7	Oct-00	2 (it's really 1)
Stowe Street Café	Restaurant	20 seats					20			Tues-Sat	7:30 AM-6 PM, special evening events	3 employees	12 PM-1 PM	4 (wrong, they do not have 4 spaces)	1 space/3 seats - +1 person working during any shift	9	9	Mar-15	0
American Legion Post 59	Hall Rental & Club	174 Seats					50			7 Days/Week	3 PM -9 PM	1-2 employees/function	NA	1	1 space/ 4 seats	(NM)		Aug-86	
Blackback Pub	Bar/Restaurant	37 Seats					37			Tues-Sun	12 PM-12 AM	6 employees	NA	0	1 space/3 seats - +1 person working during any shift	9	9	8.4.11	0
1st Floor FORMER Cork	Bar/Restaurant						25								1 space/3 seats - +1 person working during any shift	12	12	8.4.11	0
Lisa Major Skin Care	Office	1,400 sf			1400					Mon-Fri	8:30 AM-6 PM	8 employees	9 AM-5 PM	0	1 space/300 sqft	6	6	8.4.11	0
Stagecoach Digital	Office	1000 sf			1000					Mon-Fri	9 AM-5 PM	5 employees	N/A	0	1 space/300 sqft	6	6	8.4.11	0
Salon on Main	Hair salon	500 sf		300						Mon-Sat	By Appt	1 employee	10 AM-5 PM	0	1 space/300 sqft	4	4	Aug-11	0
Congregational Church																			
Methodist Church																			