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TECHNICAL MEMORANDUM

Date:	October 2, 2018
To:	Cara Seiderman
Organization:	City of Cambridge
Cc:	Chris Balerna, Kleinfelder
From:	Heather Georgallas, EIT Ashley Haire, Ph.D., P.E.
Project:	Cambridge Street – Quincy Street to Fayette Street (6085.03B)
Re:	Cambridge Street On-street Parking Study – Post-construction Update

Executive Overview

This technical memorandum has been prepared by Toole Design Group (TDG) to evaluate the parking impacts of adding separated bicycle lanes to Cambridge Street between Quincy Street and Fayette Street. Prior to design and implementation of the bike lanes on Cambridge Street, TDG first collected parking occupancy data during peak hours along the project corridor and side streets, performed analyses of the data with current and proposed parking demand, and, together with the City of Cambridge, relocated or adjusted curbside uses, including parking spaces by type, to minimize parking impacts for residents and business owners in the area.

The pre-implementation parking assessment was conducted on June 30th, 2017. TDG worked with the City to determine the existing parking supply and demand for Cambridge Street and surrounding streets. TDG performed a parking study to determine:

- Existing curbside uses by type and number of spaces; and
- Existing on-street parking demand on various days and at various times.

Parking spaces were inventoried through a desktop review and verified in the field in late March 2017. No private spaces were included in the inventory. Parking space utilization was assessed by determining whether each space was occupied or vacant. In addition to parking occupancy, any vehicles not adhering to the parking signs were also noted (e.g., double parking, idling).

Separated bike lanes were implemented on Cambridge Street in August 2017. Following the installation of the separated bicycle lanes, TDG again collected parking utilization data along Cambridge Street and the immediately adjacent side streets on March 27th (Tuesday), March 28th

(Wednesday), and March 31st (Saturday), 2018. This memorandum compares the data from March 2018 with the data and previous analysis from April 2017 to identify impacts to the immediate areas surrounding the newly installed bicycle lanes on Cambridge Street.

Study Area

The study area consists of the following Cambridge Street corridor and side streets, shown in **Figure 1**:

- Cambridge Street (Quincy Street to Fayette Street);
- Quincy Street (Kirkland Street to Broadway);
- Prescott Street (Cambridge Street to Broadway);
- Sumner Road (Kirkland Street to Cambridge Street);
- Irving Terrace (Sumner Road to Irving Street);
- Felton Street (Cambridge Street to Broadway);
- Irving Street (Kirkland Street to Cambridge Street);
- Trowbridge Street (Kirkland Street to Cambridge Street);
- Roberts Road (Kirkland Street to Cambridge Street);
- Magnolia Avenue (Roberts Road to Line Street);
- Ellery Street (Cambridge Street to Broadway);
- Myrtle Avenue (Kirkland Street to Magnolia Avenue);
- Line Street (Kirkland Street to Cambridge Street);
- Hovey Avenue (Magnolia Avenue to Cambridge Street);
- Dana Street (Cambridge Street to Broadway);
- Ellsworth Avenue (Cambridge Street to Broadway);
- Ellsworth Park (Ellsworth Avenue to dead end);
- Greenough Avenue (Ellsworth Avenue to Highland Avenue);
- Leonard Avenue (Line Street to Cambridge Street);
- Highland Avenue (Cambridge Street to Broadway);
- Highland Park (Highland Avenue to dead end);
- Marie Avenue (Highland Avenue to Maple Avenue);
- Maple Avenue (Cambridge Street to Broadway);
- Fainwood Circle (Fayette Street to dead end); and
- Fayette Street (Cambridge Street to Broadway).

Figure 1: On-street Parking Study Area

Baseline

Before the implementation of separated bicycle lanes along the focus segment of Cambridge Street, there were a total of 1,065 on-street parking spaces within the study area.

Figure 2 maps the types of on-street parking in the pre-implementation conditions and provides an overview of the distribution of these types within the study area. **Figure 3** presents the pre-implementation breakdown of parking type by percentage in four areas: the entire study area, Cambridge Street, side streets north of Cambridge Street, and side streets south of Cambridge Street.

Figure 2: Type of Parking within Study Area Under Baseline (Pre-implementation) Conditions

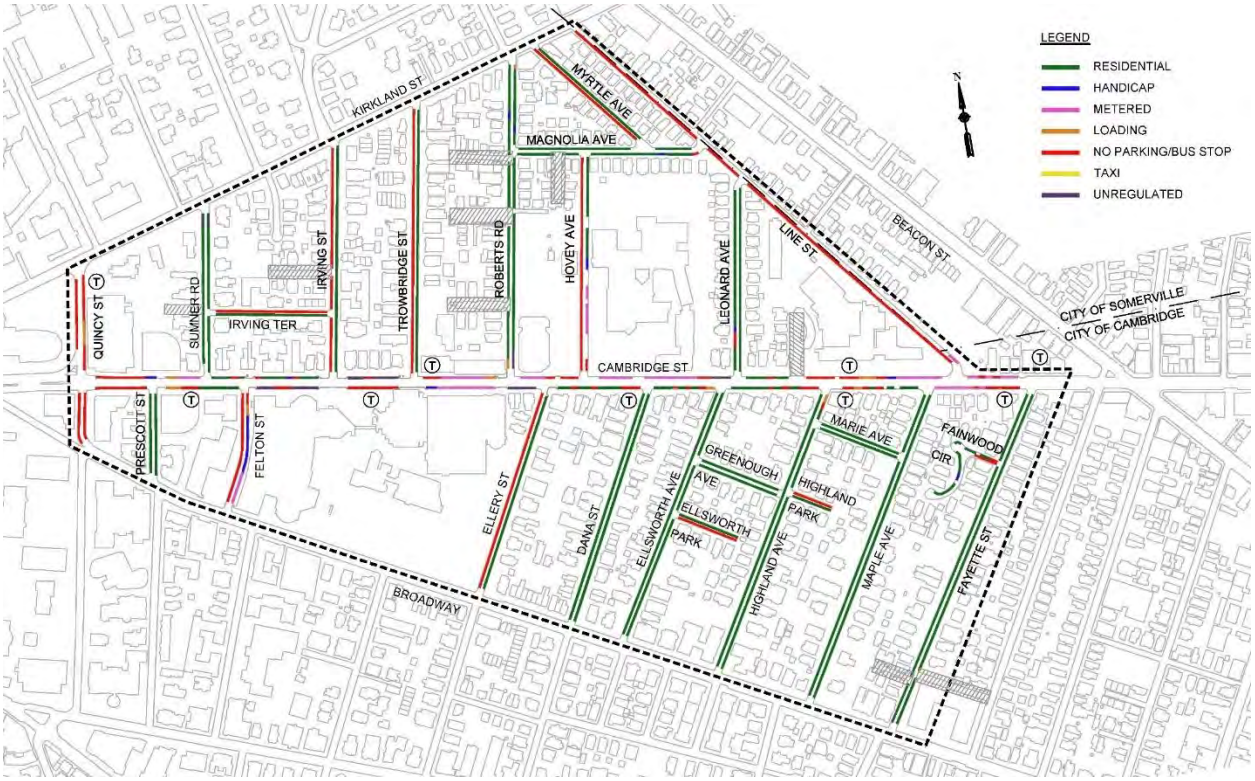
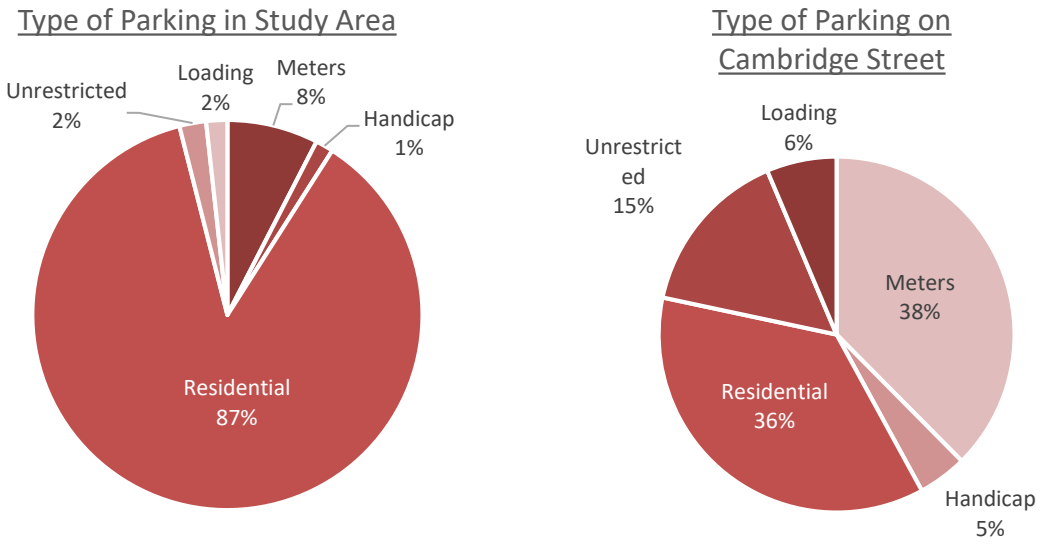
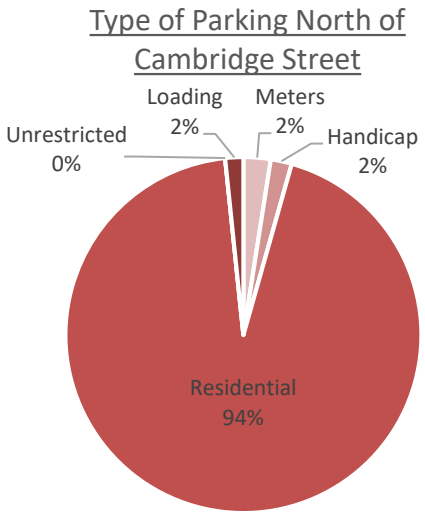
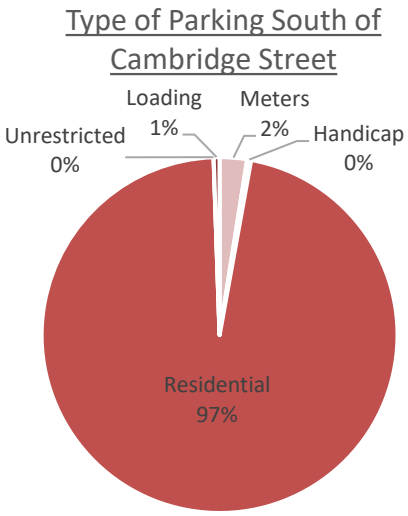


Figure 3: Baseline (Pre-implementation) Type of Parking in Study Area (Percentage)







Figures 2 and 3 show that parking on Cambridge Street serves a variety of functions that cater to residents, visitors, businesses, and MBTA Bus Route 69 passengers. Side streets north and south of Cambridge Street are heavily residential, with 94% and 97% of parking allotted for that purpose, respectively. Parking demand in the study area was determined for three time periods (10:00 AM, 3:00 PM, and 12:00 AM) and summarized for four sections: the entire study area, Cambridge Street, north side of Cambridge Street, and south side of Cambridge Street (**Table 1**).

Table 1: Baseline (Pre-implementation) Parking Occupancy Rates

Street/Area	Time of Day	Weekday	Saturday
Study Area	10:00 AM	74%	75%
	3:00 PM	72%	68%
	12:00 AM (Midnight)	78%	73%
Cambridge Street	10:00 AM	76%	86%
	3:00 PM	73%	78%
	12:00 AM (Midnight)	51%	56%
North Side Streets	10:00 AM	76%	77%
	3:00 PM	75%	65%
	12:00 AM (Midnight)	74%	67%
South Side Streets	10:00 AM	73%	74%
	3:00 PM	72%	69%
	12:00 AM (Midnight)	78%	80%

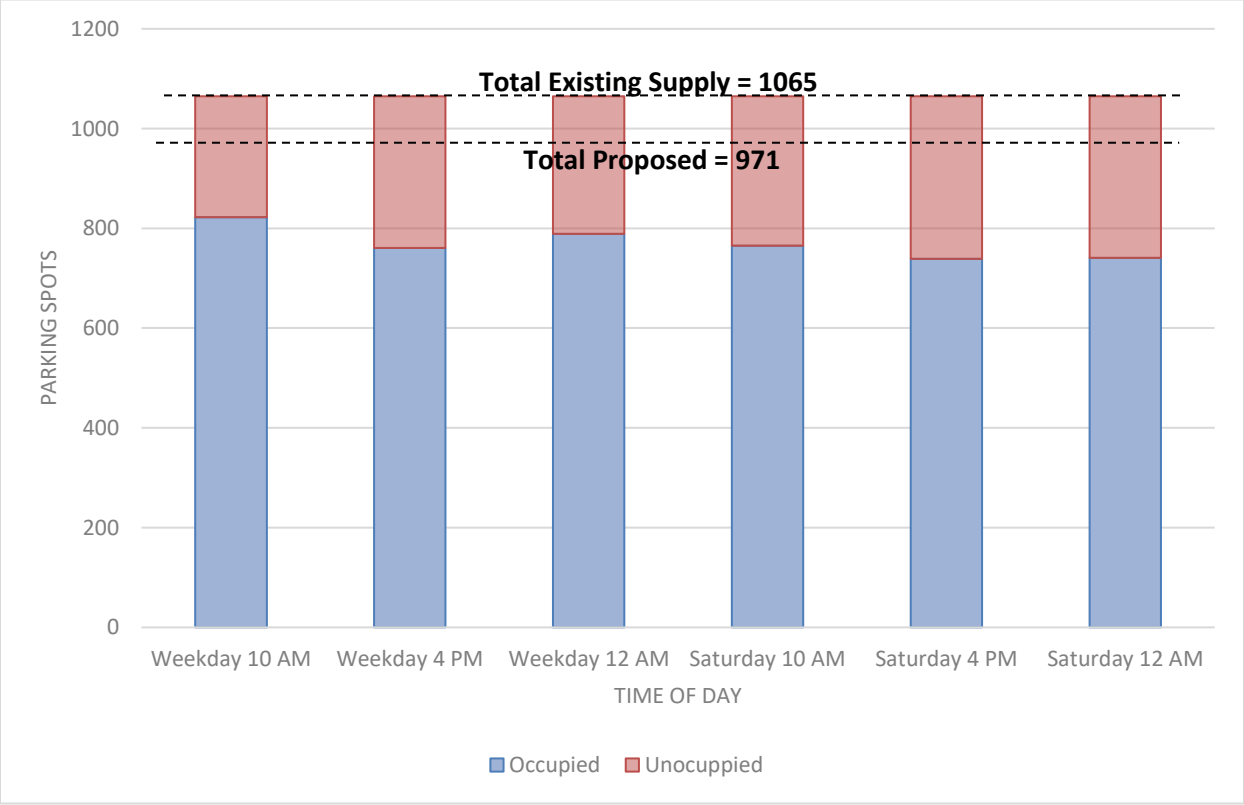
In the overall study area, the parking occupancy remained steady during the time periods observed. During these time periods, the amount of unoccupied spaces was approximately 8% of the total, or 83

spaces. However, focusing only on Cambridge Street, the quantity of unoccupied spaces peaks during late night hours, while on the side streets, parking spaces are least occupied on Saturdays and weekday evenings.

Parking Removal and Mitigation

Retrofitting separated bicycle lanes onto Cambridge Street within the study area required removal of parking along one side of the street. At the time of the initial (pre-implementation) parking utilization study, the proposed design called for reducing the amount of on-street parking spaces by 94 spaces, adjusting the total proposed supply to 971 parking spaces. The results of the initial parking analysis indicated that the proposed design and reduced parking supply would be adequate to meet demand, as shown in **Figure 4**.

Figure 4: Comparison of Pre-Construction Supply to Proposed Supply within Study Area



As part of the initial parking assessment, handicap spaces were studied on Cambridge Street and adjusted as needed to fit the proposed separated bicycle lane design and newly proposed parking conditions. The City of Cambridge reviewed the existing handicap spaces and determined that:

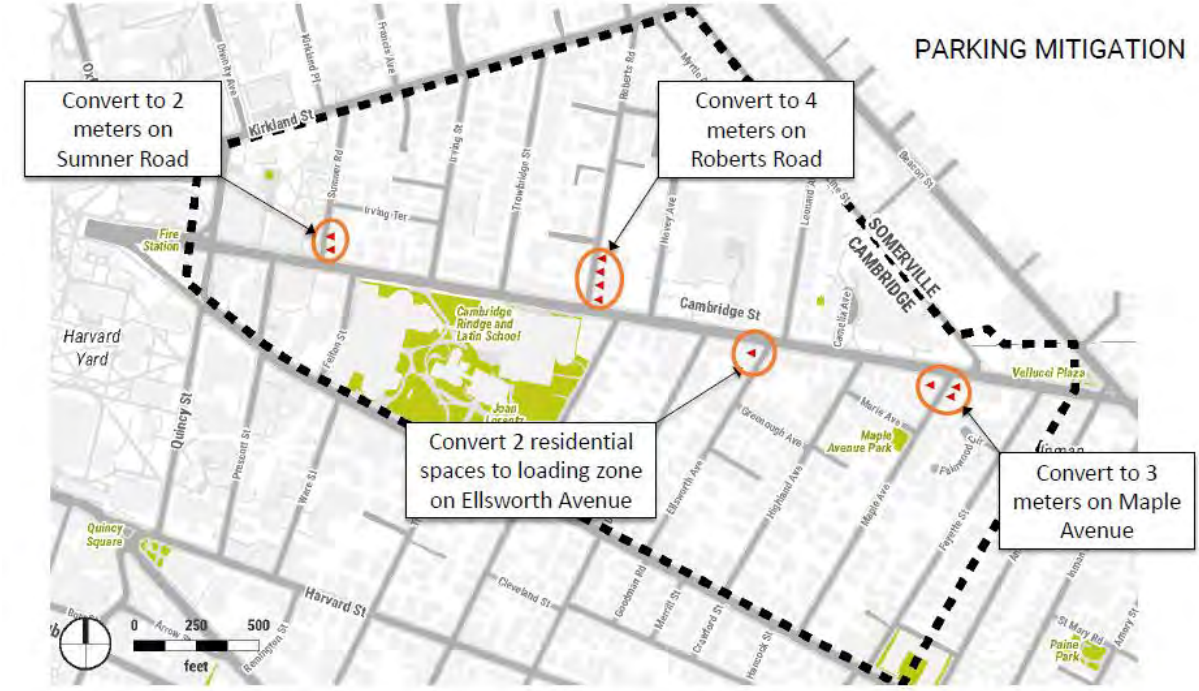
- One handicap space could be relocated on the north side of Cambridge Street between Sumner Road and Irving Street to the north side of Cambridge Street opposite Felton Street; and

- Two handicap spaces could be removed on the north side of Cambridge Street between Camelia Avenue and Line Street (near Cambridge Hospital).

In order to supplement the available metered spaces on Cambridge Street within the study area, potential candidates for converting some parking spaces along the side streets to metered parking were identified. These would be metered parking during the daytime hours and resident permit parking in the evening/overnight hours. A total of 11 metered spaces were identified as possible candidates for conversion (see **Figure 5**):

- Two (2) parking spaces on Sumner Road (east side) could be converted to metered spaces;
- Four (4) parking spaces on Roberts Road (east side) could be converted to metered spaces;
- Three (3) parking spaces on Maple Avenue (east and west sides) could be converted to metered spaces; and
- Two (2) parking spaces on Ellsworth Avenue (west side) could be converted to loading zone.

Figure 5: Initially Proposed Parking Mitigation within Study Area



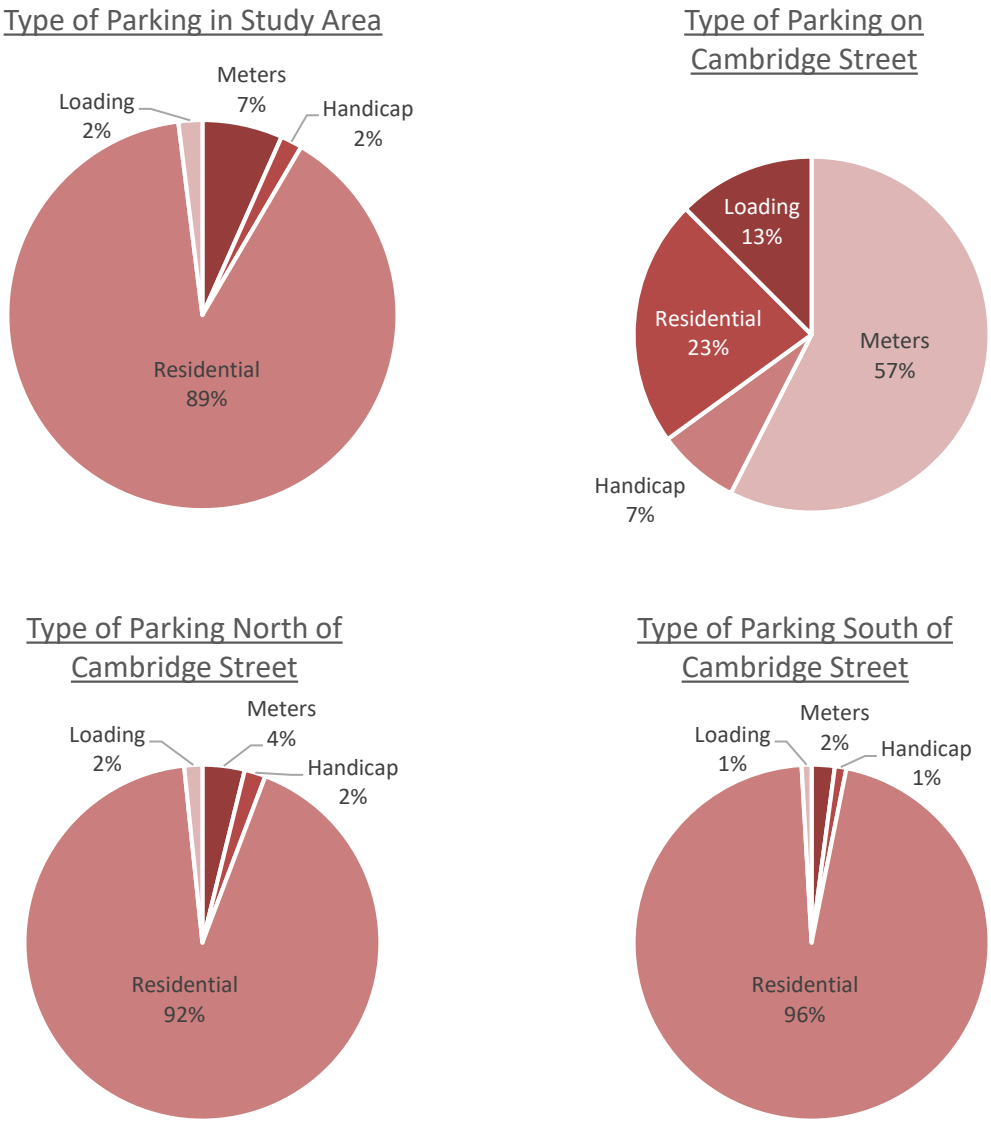
Opportunities for potential changes were evaluated and discussed through the community process. The following parking changes were undertaken along with the other roadway changes:

- Two (2) parking spaces converted to metered spaces on Sumner Road (east side);
- Three (3) parking spaces converted to metered spaces on Roberts Road (east side); and
- Two (2) residential parking spaces converted to a loading zone along Ellsworth Avenue (west side).

TDG confirmed that the overall existing parking supply aligns with that proposed during the initial parking assessment in 2017. **Figure 6** maps the types of on-street parking and provides an overview of the distribution of these types within the study area post-construction. **Figure 7** presents the new breakdown of parking type by percentage in four areas: the entire study area, Cambridge Street, side streets north of Cambridge Street, and side streets south of Cambridge Street.

Figure 6: Type of Parking within Study Area Under Post-Construction Conditions

Figure 7: Post-Construction Type of Parking in Study Area (Percentage)



Figures 6 and 7 show that parking on Cambridge Street continues to serve a variety of street users. Cambridge Street initially had relatively the same percentage of residential parking and metered parking (36% and 38%, respectively). With the removal of 94 on-street parking spaces, Cambridge Street now consists of 23% residential parking and 57% metered parking. Side streets north and south of Cambridge Street are heavily residential, with 92% and 96% of parking allotted for that purpose, respectively.

Post-Construction Parking Conditions

As previously discussed, implementation the Cambridge Street project resulted in the removal of 94 on-street parking spaces. The following discussion provides an overview of the post-construction

parking conditions along Cambridge Street between Quincy Street and Fayette Street, and along the surrounding side streets.

The data revealed that the removal of 94 parking spaces along Cambridge Street did not significantly alter the overall parking utilization rates throughout the study area. Parking supply displaced by the redesign of Cambridge Street is readily accommodated within the study area. Standard best practices for parking management suggest that 85% utilization represents an ideal balance of parking supply and demand. The Cambridge Street study area data indicated that parking within the study area is generally well utilized with occupancy rates ranging from about 52% to a maximum utilization rate of 87%. The maximum occupancy rate for the study area as a whole was 77%, which occurred during the weekday midnight period.

A comparison of parking utilization before and after the separated bicycle lanes were implemented is provided in **Table 2**; results are separated into four (4) categories: entire study area, Cambridge Street, side streets to the north of Cambridge Street, and side streets to the south of Cambridge Street. As shown in the right-most columns of Table 2, removal of on-street parking along Cambridge Street resulted in virtually no change in the parking utilization rates. The parking demand affected by the removal of 94 on-street parking spaces along Cambridge Street has been absorbed by the available parking supply in other parts of the study area and other surrounding areas. The only notable change in parking utilization rates occurred along Cambridge Street during the week, where there was an increase between 4 and 14% in parking utilization. During all other observed time periods, parking utilization differentials between the pre- and post-implementation periods were negligible.

Table 2: Comparison of Parking Occupancy Rates

Street/Area	Time of Day	Pre-Construction		Post-Construction		Change in Occupancy	
		Weekday	Saturday	Weekday	Saturday	Weekday	Saturday
Study Area	10:00 AM	74%	75%	74%	74%	0%	-1%
	3:00 PM	72%	68%	72%	67%	0%	-1%
	12:00 AM	78%	73%	77%	71%	-1%	-2%
Cambridge Street	10:00 AM	76%	86%	86%	85%	+10%	-1%
	3:00 PM	73%	78%	87%	77%	+14%	-1%
	12:00 AM	51%	56%	55%	52%	+4%	-4%
North Side Streets	10:00 AM	76%	77%	75%	76%	-1%	-1%
	3:00 PM	75%	65%	75%	64%	0%	-1%
	12:00 AM	74%	67%	73%	66%	-1%	-1%
South Side Streets	10:00 AM	73%	74%	71%	71%	-2%	-3%
	3:00 PM	72%	69%	69%	68%	-3%	-1%
	12:00 AM	78%	80%	81%	76%	+3%	-4%

As shown in **Figures 8** through **11**, the post-construction parking demand does not exceed the new supply of parking.

Figure 8: Summary of Post-Construction Occupancy Within Study Area

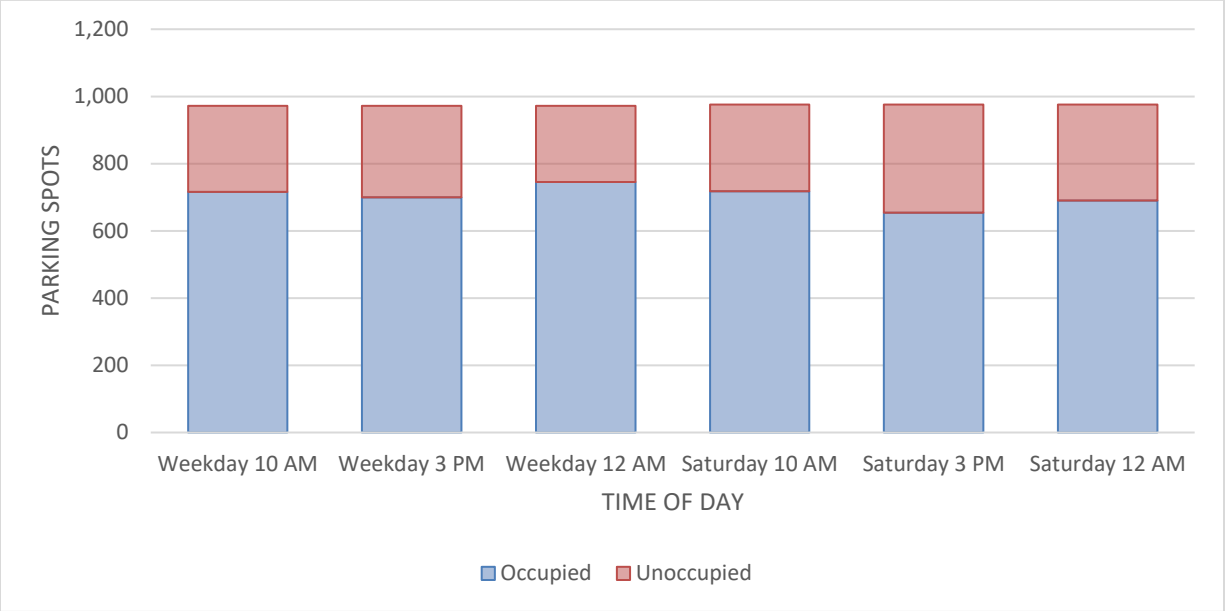
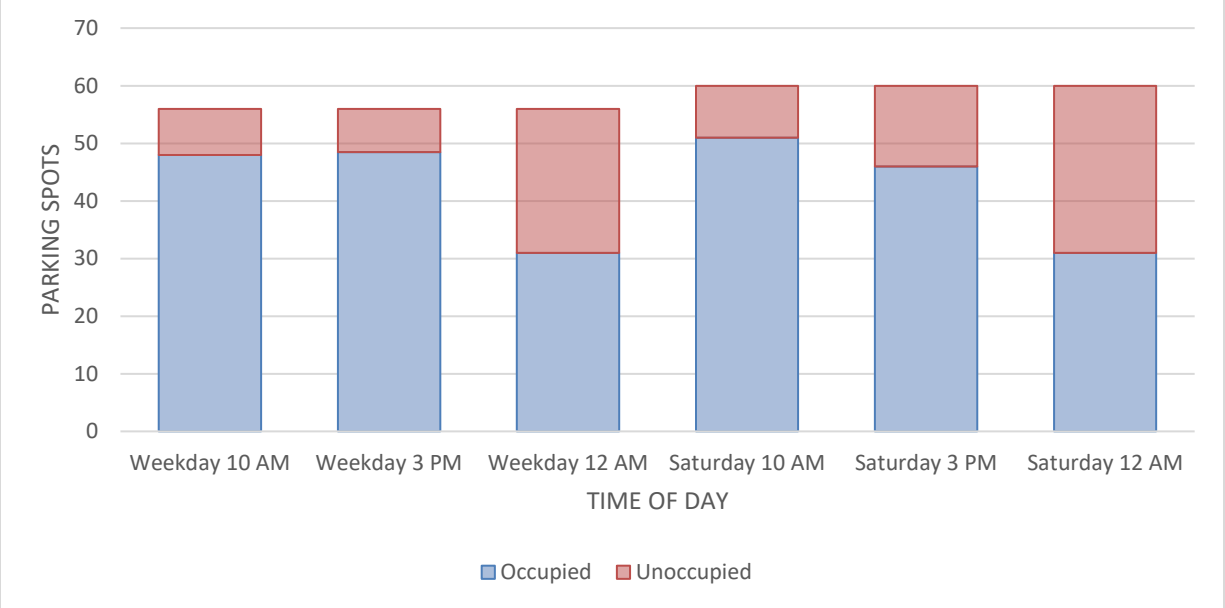


*Figure 9: Summary of Post-Construction Occupancy Along Cambridge Street**



*There are four (4) additional unrestricted parking spaces provided on the weekends. On weekdays the space is utilized for a bus stop.

Figure 10: Summary of Post-Construction Occupancy North of Cambridge Street

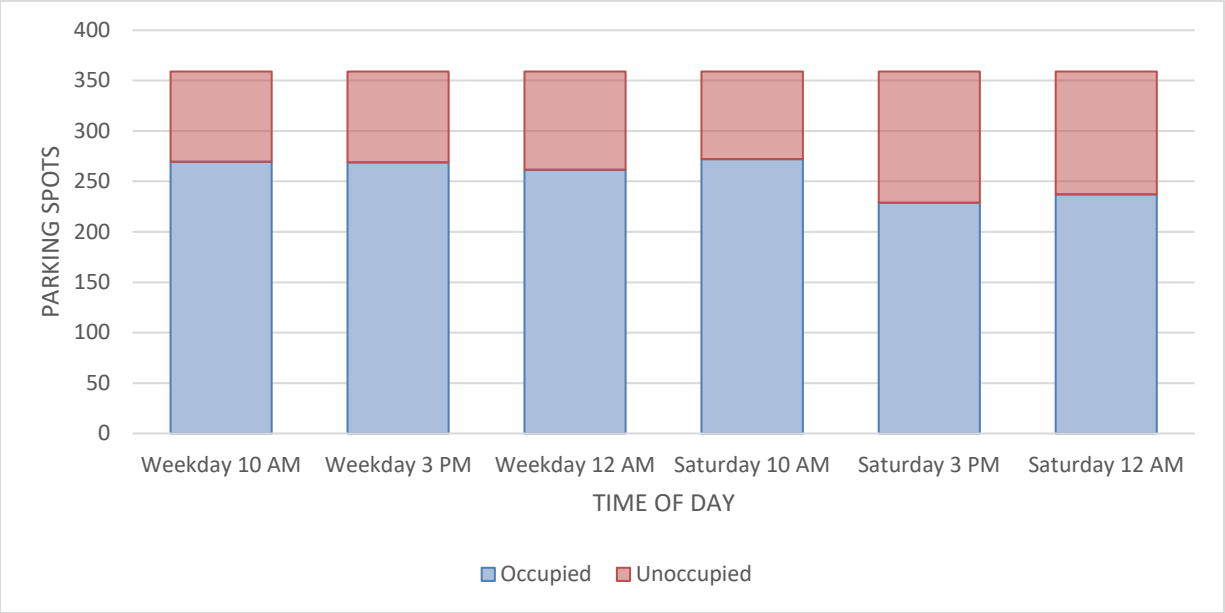
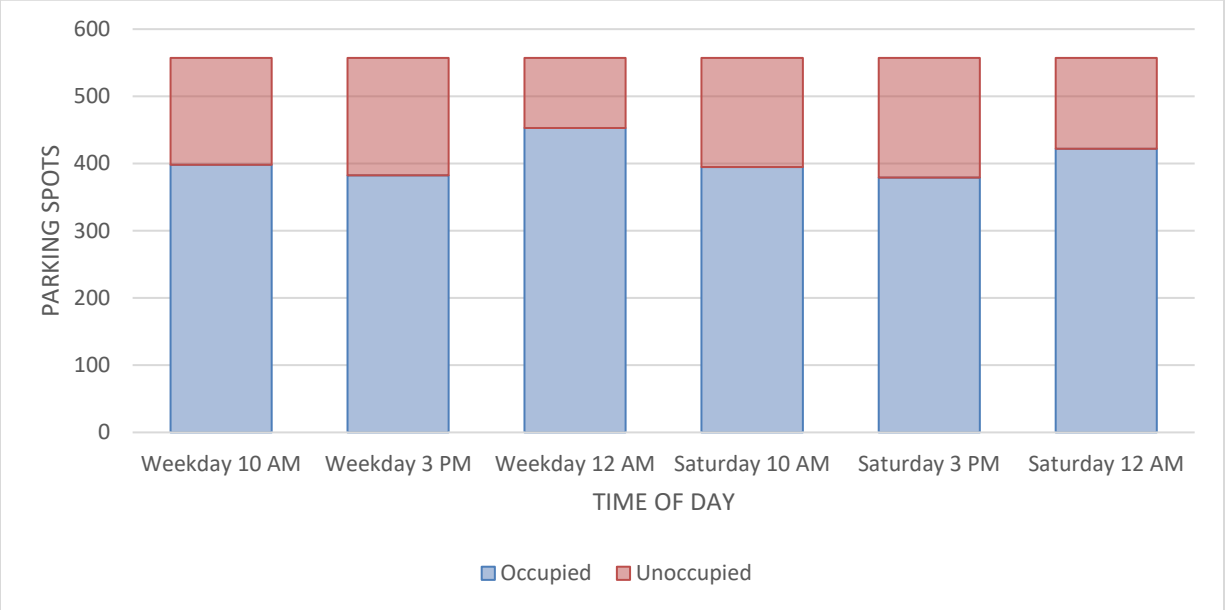


Figure 11: Summary of Post-Construction Occupancy South of Cambridge Street



Figures 12 through 16 illustrate parking utilization rates for each segment of the streets in the study area. Metered parking in these figures is designated with a unique line style. It can be seen from these figures that metered parking is more highly utilized on the western end of the project corridor near the retail establishments. Parking occupancy broadly is higher for the study area during overnight hours when occupants of the residences that border and surround the project area are at home.

Figure 12: Weekday Morning Peak Parking Utilization

Figure 13: Weekday Afternoon Peak Parking Utilization

Figure 14: Weekday Midnight Peak Parking Utilization

Figure 15: Saturday Morning Peak Parking Utilization

Figure 16: Saturday Afternoon Peak Parking Utilization

Figure 17: Saturday Midnight Peak Parking Utilization

It should be noted that there was construction underway on Sumner Street during the time of the parking data collections. The construction vehicles that were occupying on-street parking spaces were counted as part of this analysis. Vehicles doing short deliveries (UPS truck, mail van, Oil delivery truck) were not included in the occupancy rate due to the short time period the vehicles were illegally parked and that the vehicles were observed to not have been left unattended. On the other hand, all other illegally parked vehicles were included in the analysis.

It should be noted that there were parking spaces observed to be utilized for snow storage. the parking spaces utilized for snow storage at the time of the parking utilization data collection were not included in the study, but it should be noted that this affects the total number of spaces that were actually available; there were 13 more parking spaces available in the study area in the "pre" count than in the "after" count. The spaces occupied with snow during the time of the field visits accounted for approximately 2% of the total parking supply. The number of spaces being utilized for snow storage are noted below:

- Quincy Street – 2 parking spaces
- Highland Avenue - 1 parking spaces
- Maple Street - 3 parking spaces
- Roberts Road - 4 parking spaces
- Hovey Avenue - 1 parking spaces
- Magnolia Avenue - 2 parking spaces

It was also observed that due to the good weather, some spaces being utilized for snow storage at the beginning of the parking data collection were no longer being utilized for snow storage by the end of the data collection effort.

Antrim Street

Antrim Street is located on the eastern end of the study area. Parking utilization data were collected along Antrim Street; however, these data were not incorporated within this parking analysis. Based on conversations with the City of Cambridge, it was decided that analysis of Antrim Street will be part of the Inman Square project rather than this project. Parking utilization data for Antrim Street are shown below in **Table 3** for the convenience of the City.

Table 3: Comparison of Parking Occupancy Rates

Street/Area	Time of Day	Pre-Construction		Post-Construction		Change in Occupancy	
		Weekday	Saturday	Weekday	Saturday	Weekday	Saturday
Antrim Street	10:00 AM	88%	58%	79%	82%	-9%	+25%
	3:00 PM	74%	68%	69%	68%	-5%	0%
	12:00 AM	94%	71%	88%	94%	-6%	+23%

As indicated in **Table 3**, parking along Antrim Street was well utilized before the implementation of the separated bicycle lanes along Cambridge Street. Based on the parking data, Antrim Street continues to be well utilized, however still provides opportunities for motorists wishing to park during any of the observed time periods.

Conclusions and Recommendations

The pre-construction parking supply within the study area was 1,065 parking spaces, which was reduced to 971 parking spaces as part of the Cambridge Street design. However, based on the parking inventory observations collected post-construction, the analysis revealed that although there was a loss of on-street parking spaces along Cambridge Street, the study area has enough parking supply to meet the demand. The City of Cambridge also maintained the loading areas and bus stops along Cambridge Street. Parking in the study area is well utilized, with occupancy rates ranging from 52% to a maximum utilization rate of 87%. The maximum occupancy rate for the study area as a whole was 77% which occurred during the weekday midnight period. Metered parking is more highly utilized on the western end of the project corridor near the retail establishments. Parking occupancy for the study area is higher during overnight hours when occupants of the residences that border and surround the project area are at home. The only notable change in parking utilization rates occurred along Cambridge Street during the week, where there was an increase between 4 and 14% in parking utilization. Otherwise, during all other observed time periods, the parking utilization differentials were negligible.

Attachments

Comparison of Parking Occupancy Rates Tables

Comparison of Parking Occupancy Rates Along Cambridge Street

Cambridge Street Segment	Time of Day	Pre-Construction		Post-Construction		Change in Occupancy	
		Weekday	Saturday	Weekday	Saturday	Weekday	Saturday
Fayette Street to Line Street	10:00 AM	67%	0%	125%	75%	+58%	+75%
	3:00 PM	33%	67%	138%	125%	+105%	+58%
	12:00 AM	67%	67%	38%	75%	-29%	+8%
Line Street to Camelia Avenue	10:00 AM	90%	50%	83%	83%	-7%	+33%
	3:00 PM	80%	70%	100%	92%	+20%	+22%
	12:00 AM	25%	40%	88%	58%	+63%	+18%
Camelia Avenue to Leonard Avenue	10:00 AM	83%	83%	-	-	-	-
	3:00 PM	100%	83%	-	-	-	-
	12:00 AM	33%	33%	-	-	-	-
Leonard Avenue to Dana Street Crosswalk	10:00 AM	100%	50%	75%	100%	-25%	+50%
	3:00 PM	67%	75%	75%	75%	+8%	0%
	12:00 AM	17%	42%	31%	25%	+14%	-17%
Dana Street Crosswalk to Hovey Avenue	10:00 AM	60%	0%	70%	100%	+10%	+100%
	3:00 PM	40%	60%	90%	100%	+50%	+40%
	12:00 AM	0%	20%	60%	60%	+60%	+40%
Hovey Avenue to Roberts Road	10:00 AM	75%	100%	-	-	-	-
	3:00 PM	25%	100%	-	-	-	-
	12:00 AM	0%	0%	-	-	-	-
Roberts Road to Trowbridge Street	10:00 AM	43%	86%	50%	100%	+7%	+14%
	3:00 PM	100%	100%	67%	100%	-33%	0%
	12:00 AM	14%	14%	0%	0%	-14%	-14%
Trowbridge Street to Irving Street	10:00 AM	88%	88%	-	-	-	-
	3:00 PM	100%	100%	-	-	-	-
	12:00 AM	25%	50%	-	-	-	-
Irving Street to Felton Street Crosswalk	10:00 AM	90%	70%	80%	100%	-10%	+30%
	3:00 PM	100%	50%	70%	80%	-30%	+30%
	12:00 AM	70%	60%	90%	100%	+20%	+40%

Comparison of Parking Occupancy Rates Along Cambridge Street (Continued)

Cambridge Street Segment	Time of Day	Pre-Construction		Post-Construction		Change in Occupancy	
		Weekday	Saturday	Weekday	Saturday	Weekday	Saturday
Felton Street Crosswalk to Sumner Road	10:00 AM	100%	100%	50%	100%	-50%	0%
	3:00 PM	100%	50%	100%	0%	0%	-50%
	12:00 AM	75%	100%	100%	0%	+25%	-100%
Sumner Road to Prescott Street	10:00 AM	100%	100%	100%	100%	0%	0%
	3:00 PM	100%	75%	50%	33%	-50%	-42%
	12:00 AM	0%	25%	17%	0%	+17%	-25%
Prescott Street to Quincy Street	10:00 AM	50%	0%	100%	100%	+50%	+100%
	3:00 PM	0%	0%	50%	50%	+50%	+50%
	12:00 AM	0%	50%	25%	0%	+25%	-50%
Prescott Street to Felton Street	10:00 AM	100%	100%	100%	100%	0%	0%
	3:00 PM	100%	57%	25%	100%	-75%	+43%
	12:00 AM	71%	43%	75%	100%	+4%	+57%
Felton Street to Irving Street Crosswalk	10:00 AM	100%	100%	-	-	-	-
	3:00 PM	100%	100%	-	-	-	-
	12:00 AM	50%	75%	-	-	-	-
Trowbridge Street Crosswalk to Roberts Road Crosswalk	10:00 AM	82%	64%	75%	50%	-7%	-14%
	3:00 PM	55%	91%	25%	50%	-30%	-41%
	12:00 AM	0%	36%	0%	0%	0%	-36%
Roberts Road Crosswalk to Ellery Street	10:00 AM	100%	80%	75%	100%	-25%	+20%
	3:00 PM	80%	100%	100%	100%	+20%	0%
	12:00 AM	60%	40%	0%	50%	-60%	+10%
Ellery Street to Dana Street	10:00 AM	78%	89%	-	-	-	-
	3:00 PM	78%	44%	-	-	-	-
	12:00 AM	56%	67%	-	-	-	-
Dana Street to Ellsworth Avenue	10:00 AM	80%	100%	-	-	-	-
	3:00 PM	80%	60%	-	-	-	-
	12:00 AM	100%	80%	-	-	-	-

Comparison of Parking Occupancy Rates Along Cambridge Street (Continued)

Cambridge Street Segment	Time of Day	Pre-Construction		Post-Construction		Change in Occupancy	
		Weekday	Saturday	Weekday	Saturday	Weekday	Saturday
Ellsworth Avenue to Highland Avenue	10:00 AM	100%	91%	107%	43%	+7%	-48%
	3:00 PM	73%	73%	121%	71%	+48%	-2%
	12:00 AM	64%	64%	79%	100%	+15%	+36%
Highland Avenue to Maple Avenue	10:00 AM	100%	83%	-	-	-	-
	3:00 PM	83%	67%	-	-	-	-
	12:00 AM	83%	100%	-	-	-	-
Maple Avenue to Fayette Street	10:00 AM	86%	43%	-	-	-	-
	3:00 PM	100%	43%	-	-	-	-
	12:00 AM	57%	43%	-	-	-	-

Comparison of Parking Occupancy Rates North of Cambridge Street

Street	Time of Day	Pre-Construction		Post-Construction		Change in Occupancy	
		Weekday	Saturday	Weekday	Saturday	Weekday	Saturday
Sumner Road	10:00 AM	94%	65%	89%	91%	-5%	+26%
	3:00 PM	86%	53%	73%	55%	-13%	+2%
	12:00 AM	63%	55%	62%	50%	-1%	-5%
Irving Terrace	10:00 AM	93%	93%	84%	67%	-9%	-26%
	3:00 PM	15%	87%	71%	60%	+56%	-27%
	12:00 AM	93%	100%	62%	93%	-31%	-7%
Irving Street	10:00 AM	100%	85%	93%	88%	-7%	+3%
	3:00 PM	88%	79%	90%	79%	+2%	0%
	12:00 AM	79%	82%	93%	79%	+14%	-3%
Trowbridge Street	10:00 AM	75%	86%	64%	95%	-11%	+9%
	3:00 PM	81%	75%	70%	70%	-11%	-5%
	12:00 AM	86%	67%	78%	76%	-8%	+9%
Roberts Road	10:00 AM	76%	74%	79%	87%	+3%	+13%
	3:00 PM	71%	56%	77%	61%	+6%	+5%
	12:00 AM	68%	59%	67%	57%	-1%	-2%
Hovey Avenue	10:00 AM	65%	30%	57%	30%	-8%	0%
	3:00 PM	78%	52%	72%	65%	-6%	+13%
	12:00 AM	57%	39%	48%	48%	-9%	+9%
Magnolia Avenue	10:00 AM	54%	75%	57%	71%	+3%	-4%
	3:00 PM	52%	75%	67%	56%	+15%	-19%
	12:00 AM	92%	88%	83%	83%	-9%	-5%
Myrtle Avenue	10:00 AM	53%	100%	87%	67%	+34%	-33%
	3:00 PM	73%	73%	83%	100%	+10%	+27%
	12:00 AM	93%	80%	87%	100%	-6%	+20%
Leonard Avenue	10:00 AM	70%	79%	71%	65%	+1%	-14%
	3:00 PM	55%	57%	74%	60%	+19%	+3%
	12:00 AM	79%	66%	73%	62%	-6%	-4%
Line Street	10:00 AM	100%	0%	50%	0%	-50%	0%
	3:00 PM	100%	50%	100%	50%	0%	0%
	12:00 AM	50%	0%	100%	100%	+50%	+100%

Comparison of Parking Occupancy Rates South of Cambridge Street

Street	Time of Day	Pre-Construction		Post-Construction		Change in Occupancy	
		Weekday	Saturday	Weekday	Saturday	Weekday	Saturday
Prescott Street	10:00 AM	100%	94%	94%	87%	-6%	-7%
	3:00 PM	94%	90%	92%	87%	-2%	-3%
	12:00 AM	77%	71%	74%	84%	-3%	+13%
Felton Street	10:00 AM	93%	100%	90%	93%	-3%	-7%
	3:00 PM	67%	100%	73%	93%	+6%	-7%
	12:00 AM	20%	53%	90%	27%	+70%	-26%
Ellery Street	10:00 AM	92%	96%	88%	88%	-4%	-8%
	3:00 PM	100%	92%	83%	81%	-17%	-11%
	12:00 AM	58%	73%	48%	54%	-10%	-19%
Dana Street	10:00 AM	79%	69%	70%	79%	-9%	+10%
	3:00 PM	68%	64%	68%	81%	0%	+17%
	12:00 AM	90%	82%	94%	86%	+4%	+4%
Ellsworth Avenue	10:00 AM	59%	61%	52%	58%	-7%	-3%
	3:00 PM	42%	65%	46%	41%	+4%	-24%
	12:00 AM	83%	68%	78%	68%	-5%	0%
Greenough Avenue	10:00 AM	54%	79%	61%	87%	+7%	+8%
	3:00 PM	67%	83%	76%	83%	+9%	0%
	12:00 AM	96%	92%	93%	100%	-3%	+8%
Ellsworth Park	10:00 AM	38%	25%	50%	100%	+12%	+75%
	3:00 PM	13%	50%	81%	75%	+68%	+25%
	12:00 AM	100%	63%	88%	88%	-12%	+25%
Highland Avenue	10:00 AM	72%	80%	69%	73%	-3%	-7%
	3:00 PM	73%	85%	74%	81%	+1%	-4%
	12:00 AM	93%	90%	90%	92%	-3%	+2%
Marie Avenue	10:00 AM	92%	67%	88%	75%	-4%	+8%
	3:00 PM	92%	75%	75%	54%	-17%	-21%
	12:00 AM	92%	88%	94%	88%	+2%	0%

Comparison of Parking Occupancy Rates South of Cambridge Street (Continued)

Street	Time of Day	Pre-Construction		Post-Construction		Change in Occupancy	
		Weekday	Saturday	Weekday	Saturday	Weekday	Saturday
Highland Park	10:00 AM	86%	43%	79%	57%	-7%	+14%
	3:00 PM	71%	71%	71%	143%	0%	+72%
	12:00 AM	100%	86%	86%	100%	-14%	+14%
Maple Avenue	10:00 AM	66%	50%	63%	52%	-3%	+2%
	3:00 PM	52%	49%	63%	54%	+11%	+5%
	12:00 AM	62%	59%	71%	60%	+9%	+1%
Fayette Street	10:00 AM	94%	69%	86%	71%	-8%	+2%
	3:00 PM	90%	74%	73%	61%	-17%	-13%
	12:00 AM	88%	79%	91%	74%	+3%	-5%
Fainwood Circle	10:00 AM	31%	94%	50%	63%	+19%	-31%
	3:00 PM	38%	81%	47%	56%	+9%	-25%
	12:00 AM	75%	81%	88%	69%	+13%	-12%