

# Public Parking Utilization and Analysis Final

October 2017

# **Durham Parking Utilization and Analysis**

October 2017

#### **Data Collection Method**

Municipal parking data was collected during the first two weeks of October 2017 for the same locations in previous studies, and then summarized by the following "Parking Areas" with similar restrictions:

- Downtown Parking: Parking in proximity to downtown businesses including Main Street (excluding near the Memorial Union Building/Presidents House), Sammy's Lot, Pettee Brook Lane, Jenkin's Court and Madbury Road between Main Street and Mathes Terrace.
- Permit Only Parking: Parking restricted to business permit holders at the Pettee Brook Permit Lot, East side of Madbury Road and Cowell Drive.
- Meter & Permit Parking: The Pettee Brook lot and the west side of Madbury Road.
- Campus Parking: Parking on Garrison Avenue and the north side of Main Street near the Memorial Union Building.
- Remote Business Parking: Parking along Stafford Avenue (excluding UNH parking in proximity to Adams Tower) and on the Middle School side of Garrison Lane.

More surveys were conducted than in the past with the time expanded to between the hours of 9AM and 5PM during weekdays. A total of 15 surveys were conducted of Durham's 340+ parking spaces. Data was summarized according to the survey time – morning, midday and afternoon. The figures in the report are for midday when parking demand is the highest, however, available spaces and utilization of parking is provided for all three periods. The data collection, summaries and analysis were conducted by Carden Welsh, Sandra Hebert and Jim Lawson.

## **Parking Use Threshold**

It is recommended that parking utilization be kept at or below an 85% threshold<sup>1</sup> in downtown Durham. Below this threshold allows downtown customers to find parking without unnecessary frustration or cycling, and assures that there will be parking in a reasonable proximity of their destination. However, customers who expect a parking spot directly in front of their destination will inevitably be disappointed in any busy and vibrant downtown – including Durham's.

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<sup>&</sup>lt;sup>1</sup> "Town of Durham – Parking Pricing & Management Report", TND Engineering, November 2011, Page 31

### **Parking Data and Summary**

All of the data collected is provided in Appendix A. The Parking Areas are shown in Figure 1, and the utilization is summarized in Table 1 for different parking types. Table 2 provides the results from April 2016 for comparison.

Of great concern is the parking available to customers of downtown businesses. The average utilization of Downtown parking during the peak period was 81.4% with an average of 22.8 spaces available. Downtown parking on the north side of Main Street in front of businesses had an average of 4-5 spaces available, but there were samples times when only one spot was available in this area.



Figure 1 – Downtown Parking Areas

Table 1 – Parking Area Utilization and Spaces Available during the <u>October 2017</u> Study

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		9-11AM Utilization	11AM-2PM Utilization	2-5PM Utilization
		Average Spaces Avail	Average Spaces Avail	Average Spaces Avail
Downtown Parking (DT)	Utilization	53.0%	81.4%	67.2%
Jenkins Court, Main St Short Term, Main Street Long Term, Sammy's Lot	Available Spaces	57.8	22.8	40.3
Downtown Parking and Business Permit (DTBP)	Utilization	71.6%	82.7%	72.2%
Pettee Brook Lot, Pettee Brook Lane, Madbury Road (west side) Mathes Terrace to Garrison	Available Spaces	29.0	17.7	28.3
Downtown Business Permit (BP)	Utilization	87.8%	93.2%	85.5%
Pettee Brook Permit Lot, Cowell Drive, Madbury Road (East Side)	Available Spaces	4.8	2.7	5.7
Near Campus Parking (CP)	Utilization	77.9%	79.5%	57.1%
Garrison Av, Main Street (Across from MUB)	Available Spaces	11.5	10.7	22.3
Remote Business Permit (RBP)	Utilization	7.3%	9.0%	11.1%
Garrison Ave (Near Middle School), Stafford Ave.	Available Spaces	22.3	21.8	21.3

Table 2 – Parking Area Utilization and Spaces Available during the *April 2016* Study

Parking Area	Utilization	Ave. Spaces Available During Peak
Downtown Parking	73.7%	40.2
Permit Parking	96.1%	1.6
Remote Permit Parking	5.0%	11.4
West Madbury Road Parking	33.6%	16.6
Campus Parking	86.1%	8.2
Meter & Permit	96.3%	1.8

Figure 2 summarizes the parking utilization for specific lots and streets. Figures 3 and 4 show the data from April 2016 and September 2015.

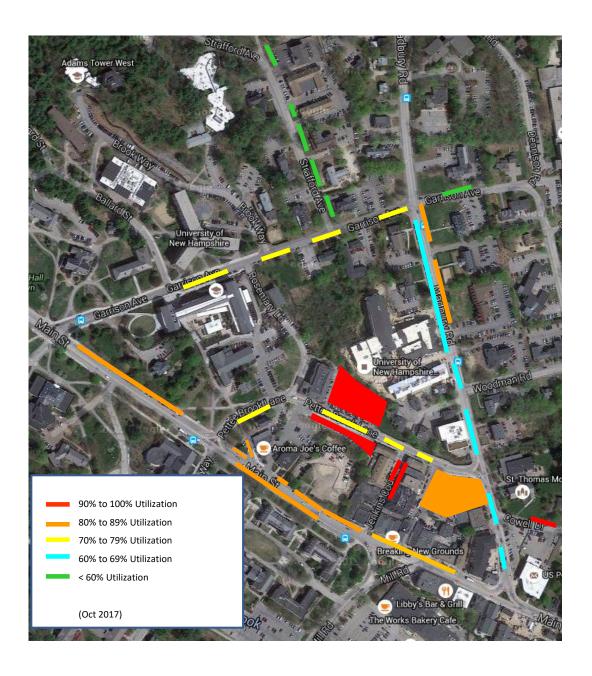


Figure 2 – On Street and Parking Lot Utilization (October 2017)



Figure 3 – On Street and Parking Lot Utilization (April 2016)

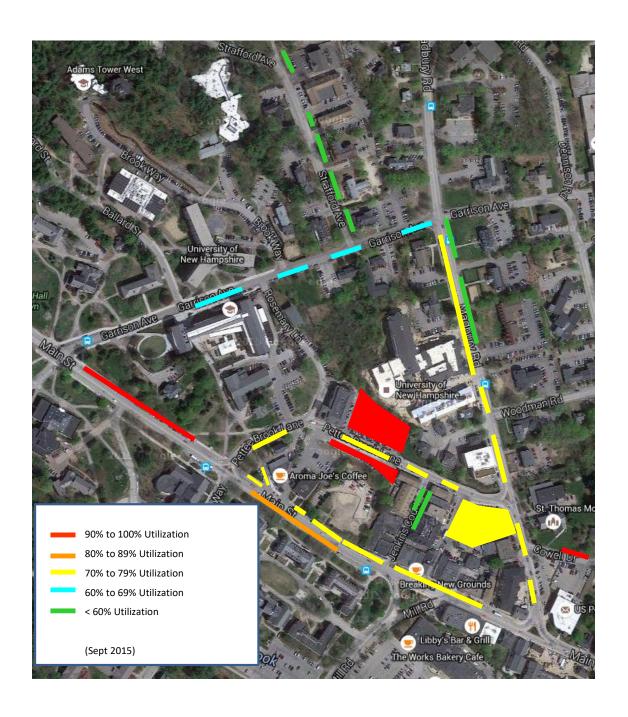


Figure 4 – On- Street and Parking Lot Utilization (Sept 2015)

### **Summary and Recommendations**

#### Summary

- Parking in the Downtown is highly utilized and is approaching the 85% threshold for short term parking. Some short term parking areas exceed this threshold.
- Permit Parking is highly utilized, but allowing permit parking on the west side of Madbury Road
  is allowing permit parkers to find spaces.
- Parking in the Pettee Brook Lot continues to be highly utilized with the majority of users having a business permit.
- Parking in the remote Business Permit areas are under utilized

#### Recommendations

- Collect Data in May while UNH is in session.
- Analyze the October 2017 parking data from the Kiosks (type of parking being purchased) and examine current parking policies.
- Consider changing the parking on Main Street in front of Huddleston and Fairchild Halls to short term downtown parking.
- Transition some Business Permit holders from the downtown to remote permit parking on Garrison Avenue and Stratford Avenue through pricing incentives or restricting Downtown Permit parking.

Questions or Comments? Please contact Dave Kurz (dkurz@ci.durham.nh.us) or Jim Lawson (lawsonje24@comcast.net).

# Appendix A

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		Date	4-Oct	6-Oct	3-Oct	5-Oct	10-Oct	2-Oct	5-Oct
		Time	9:40	9:50	9:50	10:25	11:05	11:10	11:40
Cowell Drive	Total Spaces	6	6	6	6	6	6	6	6
	Open Spaces	<u>BP</u>	0	2	2	0	0	0	0
Jenkins Court	Total Spaces	10	10	10	10	10	10	10	10
	Open Spaces	DT	7	4	6	7	1	0	0
Garrison Avenue Meter	Total Spaces	31	31	31	31	31	31	31	31
	Open Spaces	<u>CP</u>	10	8	2	11	3	4	8
Garrison Avenue Permit (Near Middle School)	Total Spaces	12	12	12	12	12	12	12	12
	Open Spaces	RBP	10	12	12	11	12	11	11
Madbury Road - Main to Mather Ter	Total Spaces	20	20	20	20	20	20	20	20
	Open Spaces	<u>DT</u>	14	13	8	15	12	9	9
Madbury Rd - Mather Terr to Garrison Meter	Total Spaces	25	25	25	25	25	25	25	25
	Open Spaces	DTBP	12	16	17	10	7	9	6
Madbury Road - Permit	Total Spaces	15	15	15	15	15	15	15	15
	Open Spaces	BP	3	9	2	0	3	0	1
Main Street - Downtown Short Term	Total Spaces	32	32	32	32	32	32	32	32
	Open Spaces	<u>DT</u>	11	19	7	17	7	1	2
Main Street - Long Term Huddleston/Fairchild	Total Spaces	15	15	15	15	15	15	15	15
	Open Spaces	<u>DT</u>	6	9	2	4	2	0	1
Main Street - Long Term near MUB/ Presidents House	Total Spaces	21	21	21	21	21	21	21	21
	Open Spaces	<u>CP</u>	2	9	2	2	4	0	8
Pettee Brook Metered Lot	Total Spaces	50	50	50	50	50	50	50	50
	Open Spaces	DTBP	0	7	2	0	1	0	0
Pettee Brook Lane	Total Spaces	27	27	27	27	27	27	27	27
	Open Spaces	DTBP	16	14	5	17	8	4	14
Pettee Brook Permit	Total Spaces	18	18	18	18	18	18	18	18
	Open Spaces	<u>BP</u>	0	1	0	0	0	0	0
Sammy's Lot	Total Spaces	46	46	46	46	46	46	46	46
	Open Spaces	<u>DT</u>	28	26	1	27	12	18	16
Strafford Ave	Total Spaces	12	12	12	12	12	12	12	12
	Open Spaces	RBP	12	12	10	10	11	10	12

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		Date	5-Oct	3-Oct	9-Oct	4-Oct	6-Oct	10-Oct	5-Oct	3-Oct
		Time	12:20	12:35	13:20	13:38	13:45	13:58	14:30	16:50
Cowell Drive	Total Spaces	6	6	6	6	6	6	6	6	6
	Open Spaces	<u>BP</u>	0	0	0	0	0	0	0	3
Jenkins Court	Total Spaces	10	10	10	10	10	10	10	10	10
	Open Spaces	<u>DT</u>	2	1	0	3	4	6	3	0
Garrison Avenue Meter	Total Spaces	31	31	31	31	31	31	31	31	31
	Open Spaces	<u>CP</u>	11	13	3	5	11	11	17	18
Garrison Avenue Permit (Near Middle School)	Total Spaces	12	12	12	12	12	12	12	12	12
	Open Spaces	<u>RBP</u>	11	12	11	11	12	11	11	12
Madbury Road - Main to Mather Ter	Total Spaces	20	20	20	20	20	20	20	20	20
	Open Spaces	<u>DT</u>	5	5	3	8	6	9	12	8
Madbury Rd - Mather Terr to Garrison Meter	Total Spaces	25	25	25	25	25	25	25	25	25
	Open Spaces	DTBP	9	3	22	3	7	5	7	10
Madbury Road - Permit	Total Spaces	15	15	15	15	15	15	15	15	15
	Open Spaces	BP	1	0	8	4	9	0	1	4
Main Street - Downtown Short Term	Total Spaces	32	32	32	32	32	32	32	32	32
	Open Spaces	DT	6	7	3	8	6	12	11	8
Main Street - Long Term Huddleston/Fairchild	Total Spaces	15	15	15	15	15	15	15	15	15
	Open Spaces	DT	2	2	3	5	1	3	5	6
Main Street - Long Term near MUB/ Presidents House	Total Spaces	21	21	21	21	21	21	21	21	21
	Open Spaces	<u>CP</u>	5	2	3	3	6	5	5	11
Pettee Brook Metered Lot	Total Spaces	50	50	50	50	50	50	50	50	50
	Open Spaces	DTBP	0	2	1	2	5	1	1	23
Pettee Brook Lane	Total Spaces	27	27	27	27	27	27	27	27	27
	Open Spaces	DTBP	11	5	4	14	19	17	13	8
Pettee Brook Permit	Total Spaces	18	18	18	18	18	18	18	18	18
	Open Spaces	BP	0	0	3	0	1	0	0	9
Sammy's Lot	Total Spaces	46	46	46	46	46	46	46	46	46
	Open Spaces	<u>DT</u>	1	1	6	19	3	16	19	3
Strafford Ave	Total Spaces	12	12	12	12	12	12	12	12	12
	Open Spaces	RBP	10	10	10	10	8	12	8	10

		Date	9-11AM Utilization	11AM-2PM Utilization	2-5PM Utilization
		Time	Average Spaces Avail	Average Spaces Avail	Average Spaces Avail
Cowell Drive	Total Spaces	6	83.3%	100.0%	83.3%
	Open Spaces	BP	1.00	0.00	1.00
Jenkins Court	Total Spaces	10	40.0%	93.3%	70.0%
	Open Spaces	<u>DT</u>	6.00	0.67	3.00
Garrison Avenue Meter	Total Spaces	31	75.0%	77.4%	50.5%
	Open Spaces	<u>CP</u>	7.75	7.00	15.33
Garrison Avenue Permit (Near Middle School)	Total Spaces	12	6.3%	5.6%	5.6%
	Open Spaces	<u>RBP</u>	11.25	11.33	11.33
Madbury Road - Main to Mather Ter	Total Spaces	20	37.5%	64.2%	51.7%
	Open Spaces	<u>DT</u>	12.50	7.17	9.67
Madbury Rd - Mather Terr to Garrison Meter	Total Spaces	25	45.0%	62.7%	70.7%
	Open Spaces	DTBP	13.75	9.33	7.33
Madbury Road - Permit	Total Spaces	15	76.7%	85.6%	88.9%
	Open Spaces	<u>BP</u>	3.50	2.17	1.67
Main Street - Downtown Short Term	Total Spaces	32	57.8%	86.5%	67.7%
	Open Spaces	<u>DT</u>	13.50	4.33	10.33
Main Street - Long Term Huddleston/Fairchild	Total Spaces	15	65.0%	88.9%	68.9%
	Open Spaces	<u>DT</u>	5.25	1.67	4.67
Main Street - Long Term near MUB/ Presidents House	Total Spaces	21	82.1%	82.5%	66.7%
	Open Spaces	<u>CP</u>	3.75	3.67	7.00
Pettee Brook Metered Lot	Total Spaces	50	95.5%	98.7%	83.3%
	Open Spaces	<u>DTBP</u>	2.25	0.67	8.33
Pettee Brook Lane	Total Spaces	27	51.9%	71.6%	53.1%
	Open Spaces	DTBP	13.00	7.67	12.67
Pettee Brook Permit	Total Spaces	18	98.6%	97.2%	83.3%
	Open Spaces	BP	0.25	0.50	3.00
Sammy's Lot	Total Spaces	46	55.4%	80.4%	72.5%
	Open Spaces	<u>DT</u>	20.50	9.00	12.67
Strafford Ave	Total Spaces	12	8.3%	12.5%	16.7%
	Open Spaces	RBP	11.00	10.50	10.00