

2015 Parking Utilization Study Downtown Portsmouth, NH




Parking & Traffic Safety Committee
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John M. Burke, CAPP, Consultant
Parking, Transit & Downtown Development


Introduction

John Burke, CAPP, Consultant
Parking, Transit & Downtown Development


- Certified Administrator of Public Parking (CAPP)
 - Transportation Engineer
 - MBA/Public Finance
 - 25+ years experience
 - Former Parking & Transportation Director
 - Lewiston/Auburn, ME MPO
 - City of Portsmouth, NH
 - City of Evanston, IL
 - ❖ Independent consultant since 2009
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Introduction

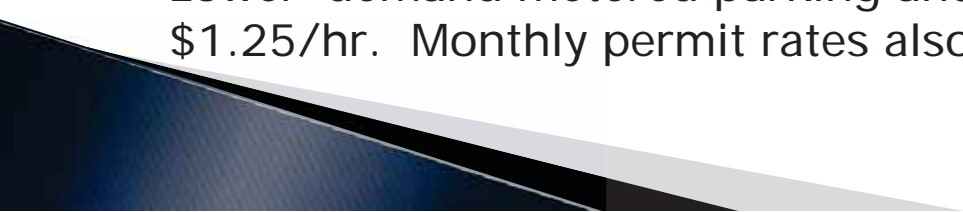
Municipal Parking Projects in New England

- Haverhill, MA
 - Manchester, CT
 - Mansfield, MA
 - Narragansett, RI
 - **Newburyport, MA**
 - Newport, RI
 - Plymouth, MA
 - Portsmouth, NH
 - **Rye, NH**
 - Wareham, MA
 - Worcester, MA
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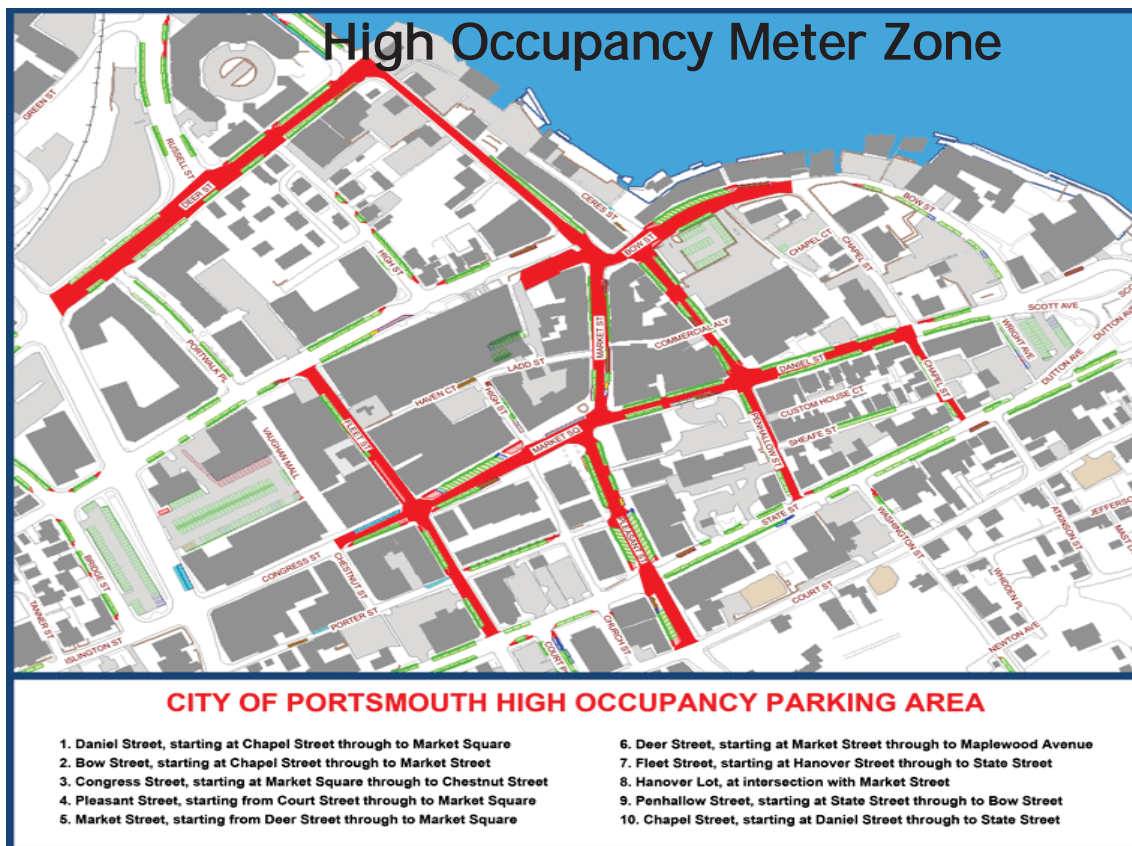
Study Overview

- I. Study Background/History
 - II. Parking Survey Objectives
 - III. Parking Survey Methodology
 - IV. Parking Occupancy Survey
 - V. Duration-of-Stay/Turnover Survey
 - VI. Study Recommendations
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I. Study Background/History

- ❖ 2011 – City adopts an Omnibus approach to integrating supply-side parking improvements & land use/zoning strategies with demand-based pricing. Baseline parking use survey completed.
 - ❖ 2012 – High Occupancy Meter (HOM) Zone established in and around Market Square at \$1.50/hr. based on demand. All other metered parking set at \$1.00/hr. High-Hanover Parking Facility (HHPF) set at \$0.75/hr. with 1st-hour free promotion.
 - ❖ 2013 – Residents allowed to park free in HHPF on Sundays.
 - ❖ 2014 – HHPF rate raised to \$1.00/hr. & 1st-hr. free promotion ended. On-street parking time limits extended from 2 to 3-hrs.
 - ❖ 2015 – HOM Zone expanded with rate increase to \$1.75/hr. Lower-demand metered parking and HHPF rate increased to \$1.25/hr. Monthly permit rates also increased.
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I. Study Background/History



II. Parking Survey Objectives (2015)

- Conduct May and October occupancy counts to evaluate the need for annual parking rate adjustments based on demand.
 - Conduct “peak” summer parking occupancy counts (July) to evaluate the seasonality of use;
 - Expand parking survey area to include non-metered streets & lots located on the fringe of downtown; and
 - Conduct “spot” duration of stay and turnover counts to evaluate parking efficiency, the effectiveness of on-street time limits and enforcement.
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III. Parking Survey Methodology

- Parking occupancy counts conducted on an hourly basis from 8 a.m. to 8 p.m. on typical Thursdays and Saturday in May, July and October.




III. Parking Survey Methodology

- Parking duration-of-stay/turnover counts were conducted on Thursday, September 24th from 9 a.m. to 5 p.m. on portions of the following streets:
 - State Street
 - Fleet Street
 - Congress Street
 - Daniel Street
 - Bow Street
 - Market Street
 - Deer Street
 - Bridge Street
 - Islington Street

 - All occupancy and duration-of-stay/turnover counts were conducted on good weather days free of rain and any major special event that could skew results.
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IV. Parking Occupancy Survey (2015)

- Parking occupancy rates were calculated for public use parking lots and streets at the block level.
 - 4-day average occupancy rates (Noon to 7 p.m.) period were calculated for May/Oct, 2015 and compared to May/Oct, 2014 rates.
 - Increases/decreases in occupancy rates year-over-year were quantified.
 - 4-day average occupancy rates above 85% are considered exceeding effective capacity and considered for a rate increase; below 40% underutilized and considered for a rate decrease.
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IV. Parking Occupancy Survey/Rates

2014/2015 Average 4-Day Parking Occupancy Rates May/Oct., 12:00 p.m. to 7:00 p.m.

Street/Lot	Segment	Thursday (5/28/15)	Thursday (10/15/15)	Saturday (5/30/15)	Saturday (10/17/15)	2015 4-day Avg.	2014 4-day Avg.	Current Hourly Rate
Market St.	Deer to Hanover	93.9	84.3	95.9	99.0	93.3	90.0	\$1.75
Market St.	Hanover to Market Sq.	-----	92.5	95.5	92.5	93.5*	93.0	\$1.75
Congress St.	Market Sq. to Chestnut	87.5	92.3	91.7	100.0	92.9	90.8	\$1.75
Pleasant St.	Market Sq. to State	90.1	99.1	88.8	100.0	94.6	86.2	\$1.75
Pleasant St.	State to Court	85.7	93.9	93.9	95.9	92.3	79.9	\$1.75
Bow St.	Market to Chapel	94.0	91.0	100.0	91.7	94.2	85.0	\$1.75
Daniel St.	Market Sq. to Chapel	81.9	90.0	80.8	87.8	85.0	82.4	\$1.75
Hanover St. Lot	Parking Lot	96.1	93.5	98.7	98.7	96.8	94.4	\$1.75
Penhallow St.	Bow to State	90.8	90.8	90.3	98.6	92.6	90.0	\$1.75
Chapel St.**	Daniel to State	-----	-----	-----	-----	-----	109.2	\$1.75
Fleet St.	Hanover to State	87.4	100.8	84.9	102.5	93.9	91.0	\$1.75
Deer St.	Market to Maplewood	76.8	88.5	90.0	99.5	88.7	89.3	\$1.75
Bow St.	Chapel to Daniel	66.1	73.2	67.8	78.6	71.4	65.6	\$1.25
Daniel St.	Chapel to Bow	73.0	92.1	50.8	92.1	77.0	75.4	\$1.25
State St.	Fleet to Penhallow	83.0	76.6	80.9	92.1	83.2	82.5	\$1.25
State St.	Penhallow to Marcy	69.9	85.4	83.3	96.8	83.8	75.9	\$1.25
Wright Ave. Lot	Parking Lot	88.9	87.6	90.8	97.7	91.2	79.0	\$1.25
Marcy St.	Court to State	10.7	66.1	82.1	85.7	61.2	68.4*	\$1.25
Market St.	Russell to Deer	62.8	72.4	70.4	89.8	73.8	67.6	\$1.25
Russell St.	Market to Deer	44.6	51.0	34.5	87.6	54.4	62.2	\$1.25
Hanover St.	Market to Maplewood	61.6	83.6	78.0	90.6	78.5	81.7	\$1.25
High St.	Hanover to Deer	71.4	76.6	90.9	93.5	83.1	81.8	\$1.25
High St.	Congress to Haven Ct.	97.1	80.0	71.4	82.8	82.8	83.6	\$1.25
Ladd St. Lot	Parking Lot	83.3	90.5	88.1	94.0	89.0	-----	\$1.25
Worth Lot	Parking Lot	87.3	88.6	94.4	100.0	91.3	80.3	\$1.25
Bridge Lot	Parking Lot	61.9	94.6	88.4	100.0	86.7	80.8	\$1.25
Porter St.	Pleasant to Fleet	73.2	62.5	89.3	82.1	76.8	81.7	\$1.25
State St.	Fleet to Middle	66.7	97.8	70.0	97.8	83.1	75.2	\$1.25

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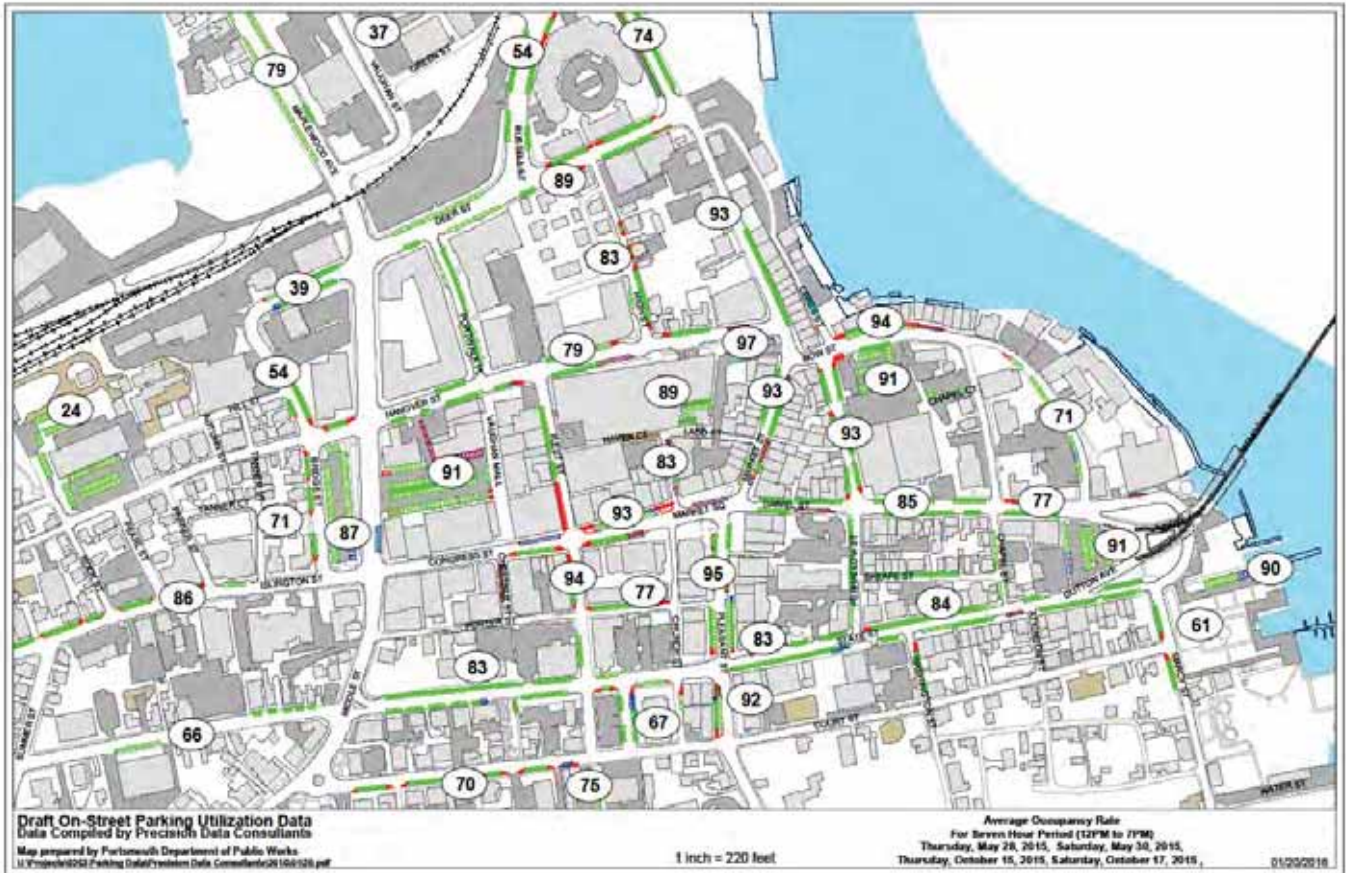
IV. Parking Occupancy Survey/Rates

2014/2015 Average 4-Day Parking Occupancy Rates May/Oct., Noon to 7:00 p.m.

Street/Lot	Segment	Thursday (5/28/15)	Thursday (10/15/15)	Saturday (5/30/15)	Saturday (10/17/15)	2015 4-day Avg.	2014 4-day Avg.	Current Hourly Rate
Court Place	State to Court	78.6	72.5	58.9	59.3	67.3	72.4	\$1.25
Fire Station Lot	Parking Lot	74.7	76.2	74.7	74.7	75.1	72.8*	\$1.25
Vaughn St. Lot	Parking Lot	5.6	21.3	44.9	76.7	37.1	-----	\$1.25
Bridge	Hanover to Islington	61.9	66.7	66.7	90.5	71.4	72.3	\$1.25
Court	Fleet to Middle	72.3	83.0	58.9	67.2	70.4	56.3	\$1.25
Deer	Maplewood to Bridge	14.3	36.4	7.1	59.5	39.1	12.1	\$1.25
Bridge	Deer to Hanover	30.2	63.5	28.6	93.6	54.0	38.4	\$1.25
Hanover**	Maplewood to Bridge	-----	-----	-----	-----	-----	28.6	\$1.25
S. Mill Pond Lot	Parking Lot	87.7	88.0	46.1	47.9	67.4	-----	FREE
Parrott Ave. Lot	Parking Lot	98.1	99.7	99.7	99.1	99.2	-----	FREE
Parrott Avenue	Junkins to Richards	81.5	86.5	79.5	94.3	85.4	-----	FREE
Masonic Lot	Parking Lot	69.2	51.3	60.3	69.9	62.7	-----	FREE
Middle Street	Court to Summer	67.4	67.3	55.4	47.6	59.4	-----	FREE
Prescott Park Lot	Parking Lot	78.6	94.3	92.8	95.7	90.4	-----	FREE
State Street	Middle to Summer	66.9	62.3	65.0	71.0	66.3	-----	FREE/Meter
Rock Street Lot	Parking Lot (weekends)	-----	-----	18.0	31.0	24.5	-----	FREE
Islington Street	Bridge to Summer	86.7	80.2	81.4	97.3	86.4	-----	FREE
Maplewood Ave.	Raynes to Vaughn	73.8	83.6	70.1	90.4	79.4	-----	FREE/Meter
McIntyre Lot	Parking Lot (weekends)	-----	-----	93.9	87.9	90.9	-----	FREE
CCC Lot	Parking Lot	9.8	13.2	45.0	31.8	25.0	-----	FREE
Peak-Hour Count in Parking Garage								
High-Hanover	Parking Garage(900sp.)	766	831	899	809	826.2	-----	\$1.25
Count conducted		(1-2pm)	(1-2pm)	(5-6pm)	(5-6pm)			
between:		Did not fill	12:50 pm	6:30 pm	5:30 pm			
Garage reported full by City at:								

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IV. Parking Occupancy Survey/Rates



IV. Parking Occupancy Survey - Findings

- **2015 parking occupancy rates have increased from the 2014 survey.** However, the full impact of the \$0.25/hr. rate increase of Sept. 2015 on parker behavior/use is not captured by the 2015 occupancy survey.
- **City's shortage of long-term parking is evident**
 - HHPF (900 spaces) continues to fill and close routinely
 - Parrott Ave. & Lot (300+/- spaces combined) at eff. capacity
 - Vaughan St., Raynes Ave. & Maplewood Ave. (100+/- spaces combined) at eff. capacity
 - Very few available long-term parking spaces (free or paid) within a 5-min. walk of Market Square.
- **All HOM Zone streets are either at or exceeding the 4-day average occupancy rate of 85%**

IV. Parking Occupancy Survey - Findings

- **None of the standard meter zone street segments exceed the 4-day average occupancy rate of 85%**
 - However, the Bridge St. Lot (86.7%), Worth/Maplewood Lot (91.3%) and Wright Ave./Memorial Bridge Lot did (91.2%)
- **Only one metered street segment and one metered lot were underutilized (below 40% use)**
 - Deer Street – Maplewood Ave. to Bridge St. (39.1%)
 - Vaughan St. Lot – (37.1%)
- **The following free lots and street segments exceeded the 4-day average occupancy rate of 85%**
 - Parrott Ave. Lot (99.2%) - McIntyre Lot (90.9%) – Sat.
 - Parrott Ave. - Junkins Ave. to Richards Ave. (85.4%)
 - Islington St. – Bridge St. to Summer St. (86.4%)
 - Prescott Park Lot (90.4%)

IV. Parking Occupancy Survey - **Seasonality**

Peak Summer vs. Shoulder Months

Comparison of Avg. Peak (July) vs. Off-Peak (May/Oct.)

Streets/Lots	May/Oct. 2015	July 2015
HOM Zone	90.1	92.4
Standard Meter Zone	72.2	81.5
Unmetered/Free Areas	82.0	86.7
Avg. Total	80.0	85.8

- Total average use of the entire public parking supply in July exceeds 85% - effective capacity.
- Peak spreading is evident.
- The highest priced parking zone has the highest use. The free parking areas on the fringe of downtown has higher use than the moderately-priced, standard meter zone.

V. Duration-of-Stay/Turnover Survey

Duration of Stay – amt. of time a car parks at a given space

Turnover – # of unique cars that park in a given space over a specified time period.

Time-Limit Non-Compliance – % of cars parked in excess of posted time limits; and # moved to another parking space on the same block-face to avoid receiving a ticket.

These rates are useful in determining parking efficiency and the effectiveness of parking time limits and enforcement.



V. Duration-of-Stay/Turnover Survey - Findings

Duration of Stay

- Overall avg. duration-of-stay (1 hour, 34 minutes) – within typical range found in mixed-use, downtown retail districts.
- All streets had average stays well within their posted time limits with the exception of the 2-hour zone on Islington St. between Bridge and Summer St.

Turnover Rates

- Highest turnover rates in retail areas leading into and through Market Square. Lowest rates at edge of paid parking areas.


Compliance to Posted Time Limits

- Avg. % of vehicles exceeding time limits is quite low (3.9%) with exception of Islington St. – Bridge to Summer St. (13.1%) and Fleet Street – State to Congress (9.5%)
- Very little employee/merchant “shuffling” of cars was observed.


V. Duration-of-Stay/Turnover Survey

Summary Findings


“Overall, the street segments surveyed exhibited healthy levels of turnover with a relatively low number of time limit violations despite extremely high average occupancy levels and a shortage of long-term parking. These measures are an indication of consistent enforcement and appropriate rates. By extending on-street time limits from 2 hours to 3 hours, the City was able to reduce the number of time-zone citations issued without driving turnover rates out of an acceptable range.”



VI. Study Recommendations

- With future rate adjustments, consider widening the pricing gap between the HOM Zone (\$1.75/hr.) and standard meter zone (\$1.25/hr.) to incentive parkers to use lower-cost parking outside of the HOM Zone.
 - Change time limits on Deer & Russell Streets from 4 to 3 hours
 - Meter Islington St. between Bridge and Summer Streets and change 2-hour time limit on Islington St. and 4-hour time limit on Bridge St. to 3 hours for consistency
 - Replace all remaining coin-only parking meters with credit card-enabled meters in the \$1.25 meter zone
 - Eliminate the six parking meters on outer State St. just east of Summer Street.
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VI. Study Recommendations

- Offer discounted monthly parking in the underutilized 90-space Vaughan St. Lot and install 3-hour metered parking on the 90+ on-street spaces on Vaughan St., Raynes Ave., and Maplewood Ave. that are being primarily used for all-day employee parking.
 - Continue to actively promote the limited available long-term parking that exists in the South Mill Pond and Masonic Parking Lots and on outer State and Middle Street.
 - Continue to investigate the feasibility of implementing a more dynamic, demand-based pricing system.
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QUESTIONS/DISCUSSION

