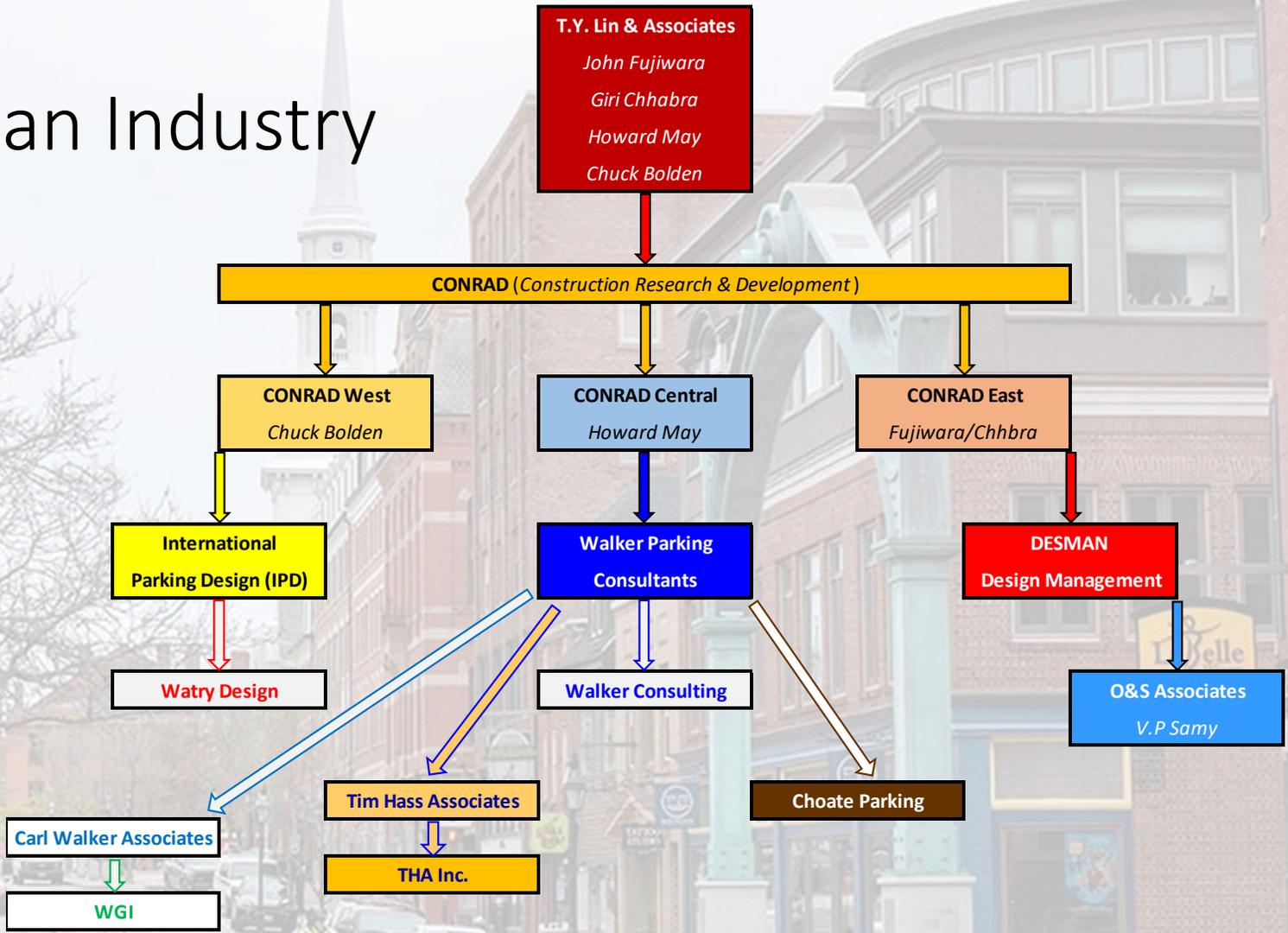


# Parking Supply & Demand Analysis for Downtown Portsmouth

RFP #11-23

Interview: 11:00 AM, 2/7/2023

# Birth of an Industry



# SLR Consulting



In January of 2020, Milone & MacBroom, Inc. merged with SLR International Corporation (SLR). Milone & MacBroom's professionals are among SLR's 450 employees located in offices throughout the United States.

Our team represents a broad and diverse range of technical and environmental capabilities.

SLR's in-house professionals offer a blend of experience incorporating engineers, landscape architects, geologists, planners, remediation specialists, regulatory and compliance specialists, and environmental scientists, as **one team with endless capabilities.**

## SLR Parking Projects:

- Pawtucket, RI
- Yarmouth, ME
- York, ME
- New Haven, CT
- New London, CT
- Stamford, CT
- Greenwich, CT
- Waterbury, CT
- University of New Haven, CT

# A Team with a History of Collaboration

## Tidewater Landing

### TIDEWATER SITE

- 1 USL CHAMPIONSHIP SOCCER STADIUM
- 2 PARKING LOT
- 3 RIVER WALK
- 4 EVENT PLAZA
- 5 STADIUM AMENITY BUILDING
- 6 RETAIL RESTAURANT
- 7 SOCCER TEAM FRONT OFFICE
- 8 PARKING GARAGE
- 9 RESIDENTIAL BUILDING
- 10 TOWN LANDING
- 11 PEDESTRIAN BRIDGE

### DIVISION STREET DEVELOPMENT

- 12 POP-UP RETAIL
- 13 AMPHITHEATER TO WATER
- 14 PARKING LOT
- 15 OFFICE
- 16 RETAIL / FOOD HALL
- 17 EVENT / DINING PLAZA
- 18 GROUND FLOOR RETAIL
- 19 RESIDENTIAL BUILDING WITH PARKING
- 20 RESIDENTIAL BUILDING
- 21 PARKING LOT
- 22 OVERLOOK PARK
- 23 FESTIVAL PIER



## Nashua Downtown Parking Plan

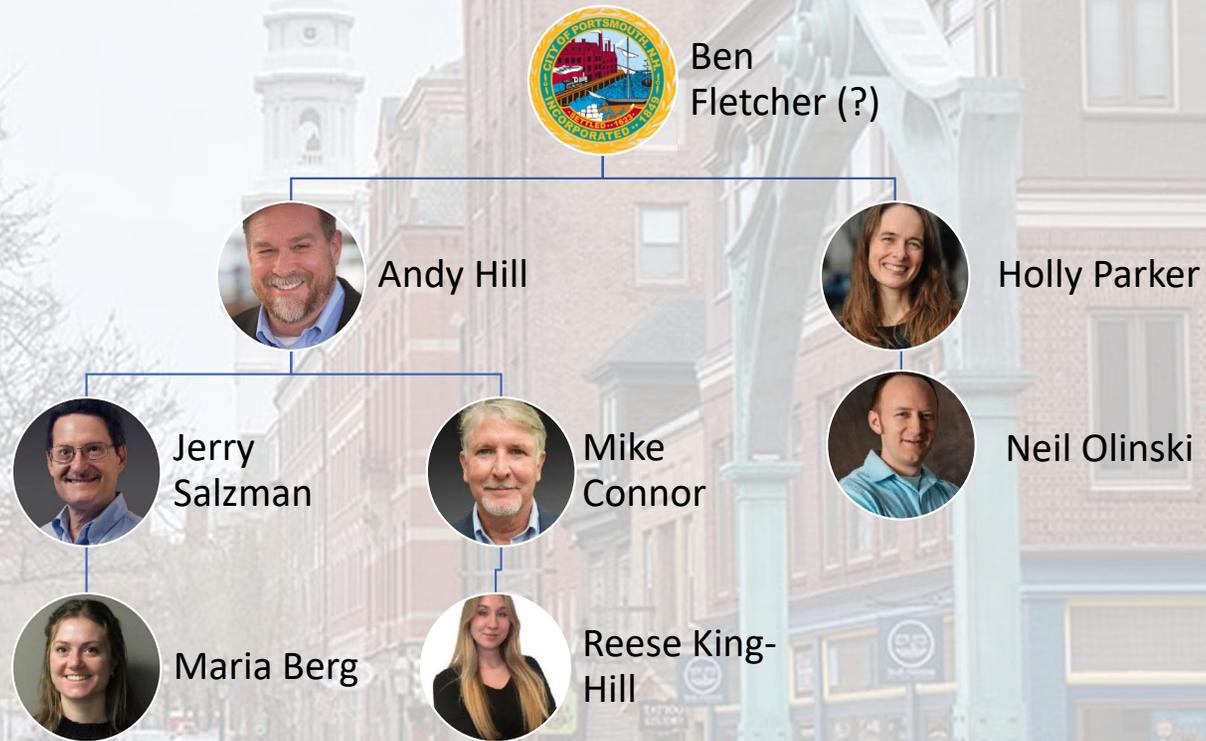


Biddeford Mill District Garage

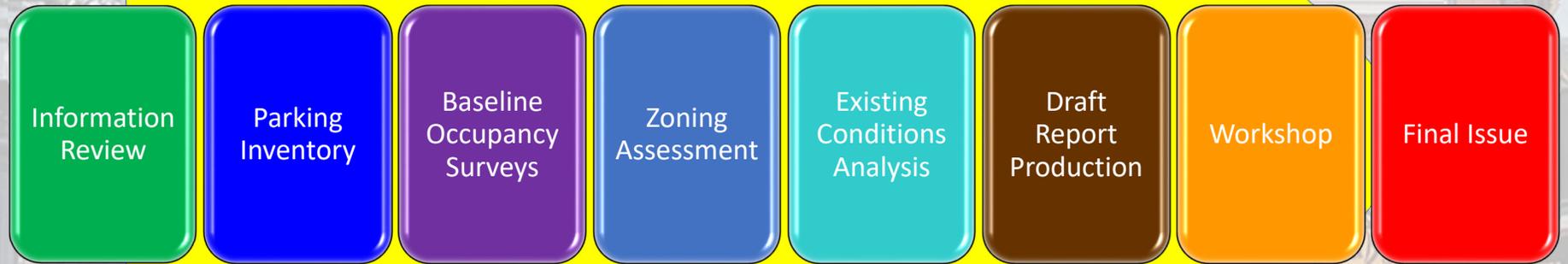


Biddeford Mill District Garage

# Proposed Project Team



# Parking Supply & Demand Methodology



# Zoning Analysis & Benchmarking

Municipality:	<i>Nashua, NH</i>	Albany, NY	Ann Arbor, MI	Asheville, NC	Concord, NH	Lowell, MA	Manchester, NH	Missoula, MT	Portland, ME	Portsmouth, NH	Rochester, MN	West Hartford, CT
Parking Minimums	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Parking Maximums	Y	Y <sup>7</sup>	Y <sup>15</sup>	Y	N	N	N	Y <sup>40</sup>	N	Y	Y	N
Satellite Option	< 300'	< 300'	< 500'	< 500'	< 500'	< 1,500'	< 500'	< 500'	< 1,500'	< 300'	< 1,200'	< 1,000'
Standard Stall Dimensions (90°)	9' x 20' <sup>1</sup>	9' x 20'	9' x 18'	9' x 18'	9' x 19'	8'-9.5' x 18'	8.5' x 18.5'	9' x 20'	9' x 18'	8.5' x 19'	8.75' x 17'	10' x 20'
Parallel Stall Dimensions	9' x 23' <sup>2</sup>	9' x 22'	9' x 20'	N	9' x 22'	8' x 22'	8' x 22.5'	9' x 23'	N	8.5' x 20'	10' x 21'	10' x 20'
Conditional Use Waiver	Y <sup>3</sup>	Y <sup>8</sup>	Y <sup>16</sup>	Y <sup>20</sup>	Y <sup>26</sup>	Y <sup>31</sup>	Y <sup>37</sup>	Y	Y <sup>47</sup>	Y	Y <sup>53</sup>	Y
Public Parking Credits	Y <sup>4</sup>	Y <sup>9</sup>	Y	Y <sup>21</sup>	N	Y <sup>32</sup>	Y <sup>38</sup>	N	N	N	Y <sup>54</sup>	N
Intradevelopment Shared Parking	Y <sup>5</sup>	Y <sup>10</sup>	N	Y <sup>22</sup>	Y <sup>27</sup>	Y <sup>33</sup>	N	Y <sup>41</sup>	N	Y	Y <sup>55</sup>	N
Interfacility Shared Parking	N	N	N	Y <sup>23</sup>	Y <sup>27</sup>	Y <sup>34</sup>	N	Y <sup>42</sup>	Y <sup>48</sup>	Y	Y <sup>56</sup>	Y <sup>60</sup>
District Waiver	Y <sup>6</sup>	Y <sup>11</sup>	Y <sup>17</sup>	Y <sup>24</sup>	Y <sup>28</sup>	Y <sup>35</sup>	Y <sup>39</sup>	Y <sup>43</sup>	Y <sup>49</sup>	Y	Y <sup>57</sup>	N
In Lieu Waiver	N	Y <sup>12</sup>	Y <sup>18</sup>	N	N	N	N	N	Y <sup>50</sup>	N	N	N
Bicycle Parking Requirements	N	Y	Y	Y	N	N	N	Y <sup>44</sup>	Y	Y	Y	N
Transit Reductions	N	Y <sup>13</sup>	N	Y <sup>25</sup>	Y <sup>29</sup>	N	N	Y <sup>45</sup>	Y <sup>51</sup>	N	Y <sup>58</sup>	N
Other Features	N	Y <sup>14</sup>	Y <sup>19</sup>	N	Y <sup>30</sup>	Y <sup>36</sup>	N	Y <sup>46</sup>	Y <sup>52</sup>	N	Y <sup>59</sup>	N

# Zoning Analysis & Benchmarking

Municipality:		<i>Nashua,</i>	Albany,	Ann Arbor	Asheville	Concord,	Lowell,	Manchester,	Missoula,	Portland,	Portsmouth,	Rochester,	West Hartford,
<u>Land Use</u>	<u>Metric</u>	<i>NH</i>	NY	MI	NC	NH	MA	NH	MT	ME	NH	MN	CT
Single-Family Residential	Spaces per Unit	<b>2.00</b>	1.00	1.00	2.00	2.00	2.00	2.00	2.00	1.00	1.30	2.00	2.00
Rooming House	Spaces per Room	<b>0.25</b>	0.25	0.33	0.50	1.00	1.00	1.00	1.00	0.20	0.50	1.00	1.00
Elder Housing	Spaces per Unit/Room	<b>1.00</b>	1.00	1.00	1.00	1.00	1.00	1.00	0.75	0.33	0.50	0.17	0.33
Multi-Family Residential	Spaces per Unit	<b>1.50</b>	1.00	1.50	2.00	2.00	2.00	2.00	1.50	1.00	1.00	1.50	1.50
Hotel (core)	Spaces per Room	<b>1.00</b>	0.75	1.00	0.50	1.10	1.00	1.25	1.00	0.25	1.25	1.00	1.00
Hotel (ancillary)	Spaces per 1,000 sf GFA	<b>1.25</b>	n/a	n/a	n/a	25.00	n/a	n/a	n/a	n/a	10.00	n/a	n/a
Drinking/Eating Establishments	Spaces per 1,000 sf GFA	<b>13.33</b>	6.67	10.00	n/a	13.33	20.00	n/a	2.08	6.67	10.00	n/a	n/a
Restaurant	Spaces per Seat	<b>0.25</b>	n/a	n/a	0.33	n/a	n/a	0.33	0.25	n/a	n/a	0.33	0.33
Department Stores/Flea Markets	Spaces per 1,000 sf GFA	<b>6.67</b>	2.50	3.23	2.86	5.00	2.00	4.00	2.78	5.00	3.33	6.67	6.67
Convenience Stores	Spaces per 1,000 sf GFA	<b>5.00</b>	3.33	3.23	2.86	4.00	2.00	4.00	2.78	5.00	3.33	10.00	6.67
Shopping Centers/Warehouse Clubs	Spaces per 1,000 sf GFA	<b>4.00</b>	2.50	3.51	2.86	5.00	2.00	4.50	2.78	5.00	3.33	6.67	6.67
Soft Goods Retail/Groceries	Spaces per 1,000 sf GFA	<b>3.33</b>	3.33	3.23	2.86	4.00	2.00	4.00	2.78	5.00	3.33	6.67	6.67
Photography Studio	Spaces per 1,000 sf GFA	<b>2.50</b>	3.33	1.67	n/a	4.00	1.00	5.00	2.08	5.00	1.00	n/a	6.67
Personal Services/Goods Retail	Spaces per 1,000 sf GFA	<b>2.00</b>	3.33	3.23	2.86	4.00	2.00	4.00	2.78	5.00	2.50	5.00	6.67
Commercial Uses in Mixed-Use	Spaces per 1,000 sf GFA	<b>1.67</b>	2.50	3.23	2.86	4.00	1.11	4.00	2.78	5.00	3.33	6.67	6.67
General/Professional Service Offices	Spaces per 1,000 sf GFA	<b>1.00</b>	2.50	3.00	2.86	3.33	2.50	3.33	2.08	2.50	2.86	5.00	4.00
Flex/Industrial/Manufacturing Space	Spaces per 1,000 sf GFA	<b>0.67</b>	1.00	1.67	n/a	2.50	1.00	1.00	2.78	1.00	2.00	5.00	n/a
Warehouse/Storage	Spaces per 1,000 sf GFA	<b>1.00</b>	1.00	0.50	n/a	1.25	0.63	1.00	n/a	1.00	0.50	0.83	n/a
Outdoor Recreational Uses	Spaces per 1,000 sf GFA	<b>1.67</b>	3.33	0.00	n/a	n/a	5.00	n/a	2.08	n/a	0.00	0.00	n/a
Fitness/Indoor Recreation Uses	Spaces per 1,000 sf GFA	<b>1.54</b>	3.33	10.00	5.00	8.33	5.00	5.00	2.08	n/a	4.00	3.33	6.67
Casino	Spaces per 1,000 sf GFA	<b>8.00</b>	n/a	n/a	n/a	20.00	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Community Centers	Spaces per 1,000 sf GFA	<b>1.50</b>	3.33	5.00	2.86	25.00	1.67	5.00	2.78	6.67	5.00	2.00	n/a
Performing Arts Center/Cinema	Spaces per Seat	<b>0.17</b>	0.25	0.33	0.25	0.33	0.20	0.25	0.25	0.20	0.40	0.25	0.33

# Future Needs Analysis

Establish existing land uses

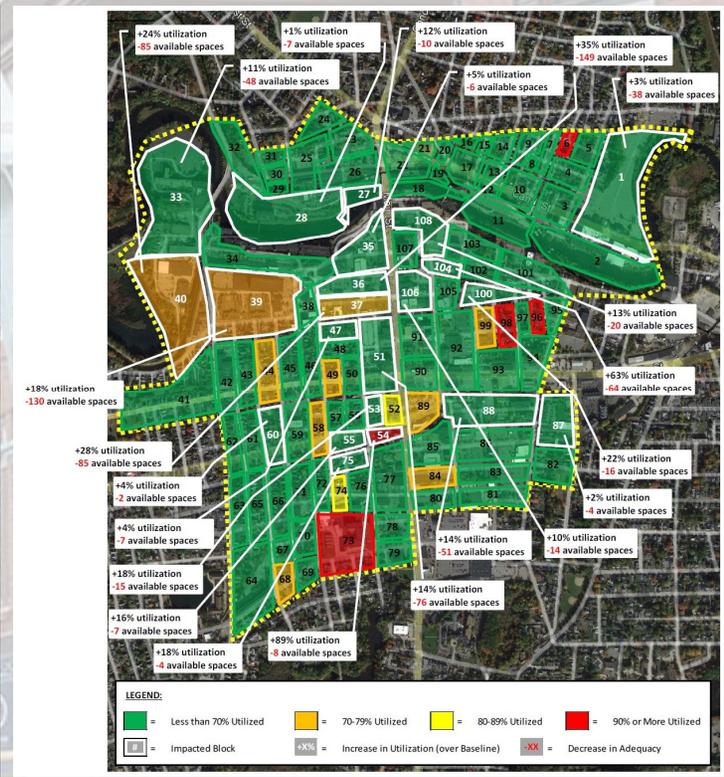
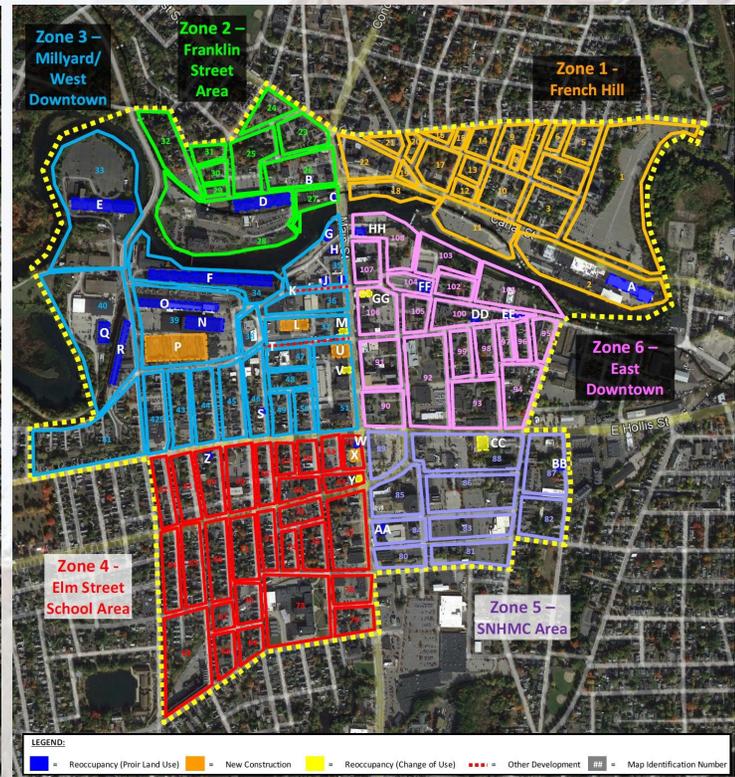
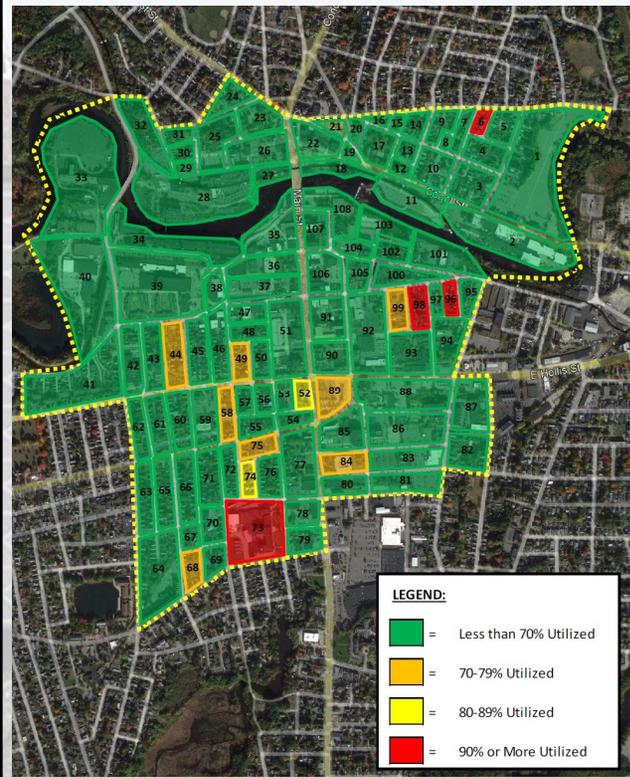
Develop demand model

Calibrate to existing conditions

Input emerging developments data

Project future need according to local standards

# Projecting Future Needs



# Emerging Developments



# Demand-Responsive Pricing



**LEGEND**

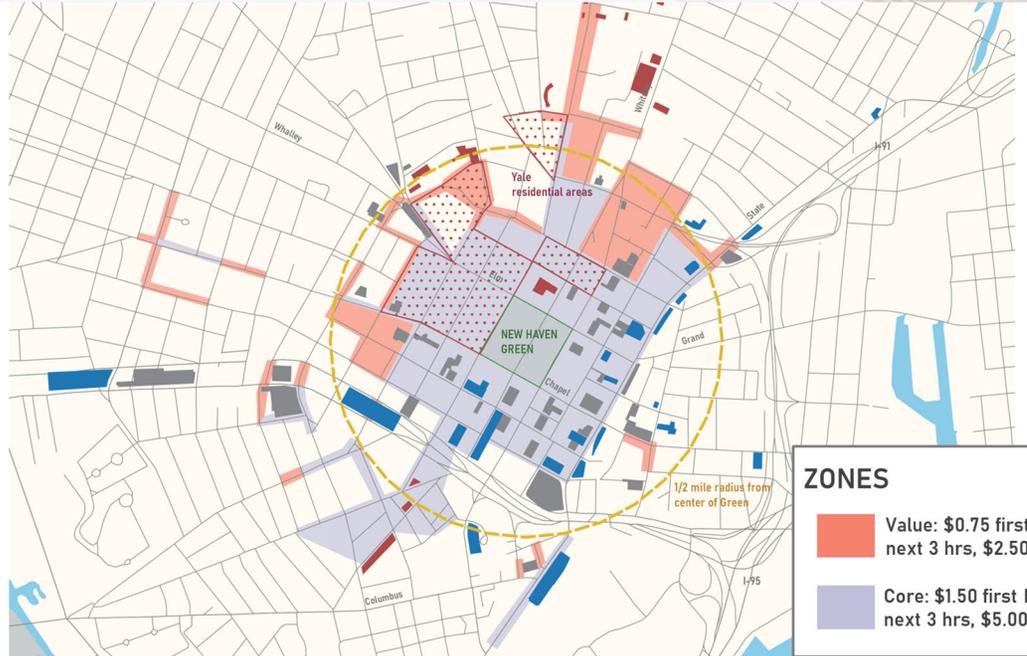
Occupancy	Adjustment	
0-20%	Unreliable	U
20-60%	Decrease	-
60-80%	No Change	
80-100%	Increase	+

2018 On-Street Metered Parking Occupancy By Quarter

**Quarter 2 - Spring**

BLOCK					BLOCK					BLOCK				
	MORNING	AFTERNOON	EVENING	ADJUSTMENT		MORNING	AFTERNOON	EVENING	ADJUSTMENT		MORNING	AFTERNOON	EVENING	ADJUSTMENT
ASHMUN GROV-Y SPL	0.46	0.56	0.14	-	DWIGHT SFRONT-NFRONT	0.17	0.19	0.05	U	PROSPECT SACH-EDWD	0.11	0.12	0.05	U
AUDUBON ORNG-WHIT	0.45	0.52	0.65	-	ELM CHUR-TMPL	0.45	0.54	0.33	-	PROSPECT TRMB-PRPP	0.06	0.10	0.02	U
AUDUBON STAT-ORNG	0.83	0.76	0.52	-	ELM COLL-HIGH	0.43	0.52	0.64	-	SACHEM HILH-PRSP	0.46	0.67	0.24	-
BRADLEY LINC-WHIT	0.26	0.20	0.09	U	ELM HIGH-YORK	0.60	0.68	0.64	-	SACHEM PRSP-MANS	0.20	0.20	0.03	U
BROADWAY YORK-TWRP	0.61	0.79	0.72	-	ELM LYNW-HOWE	0.09	0.17	0.29	U	SACHEM WHIT-HILH	0.44	0.46	0.22	-
CEDAR CONG-YORK	0.38	0.39	0.73	-	ELM ORNG-CHUR	0.73	0.76	0.53	-	SHERMAN CHAP-EDGW	0.05	0.05	0.00	U
CEDAR GLBT-CONG	1.02	0.90	0.74	+	ELM PARK-LYNW	0.18	0.26	0.33	-	SHERMAN GEOR-CHAP	0.49	0.52	0.07	U
CEDAR WASH-GLBT	1.02	0.97	0.52	+	ELM STAT-ORNG	0.62	0.70	0.61	-	STATE AUSB-TRMB	0.73	0.74	0.92	-
CENTER ORNG-CHUR	0.43	0.60	0.57	-	ELM Tmpl-COLL	0.48	0.59	0.50	-	STATE CORT-ELM	0.69	0.76	0.64	-
CHAPEL BEER-SHER	0.68	0.75	0.65	-	ELM YORK-PARK	0.50	0.60	0.48	-	STATE CRWN-CHAP	0.56	0.67	0.75	-
CHAPEL COLL-HIGH	0.69	0.85	0.85	+	GEORGE COLL-HIGH	0.77	0.77	0.79	-	STATE CRWN-GEOR	0.40	0.50	0.74	-
CHAPEL HIGH-YORK	0.55	0.79	0.88	-	GEORGE GRNW-SHER	0.29	0.30	0.09	U	STATE ELM-WALL	0.09	0.17	0.09	U
CHAPEL DAY-ORCH	0.06	0.05	0.03	U	GEORGE HIGH-YORK	0.73	0.79	0.70	-	STATE GROV-AUDB	0.05	0.12	0.17	U
CHAPEL OLIV-UNON	0.54	0.52	0.19	U	GEORGE ORCH-GRNW	0.15	0.12	0.05	U	STATE TRUMBUL-BRADLY	0.16	0.37	0.78	-
CHAPEL ORANGE-CHURCH	0.50	0.56	0.73	-	GEORGE YORK-PARK	0.62	0.65	0.26	-	STATE WALL-GROV	0.05	0.07	0.00	U

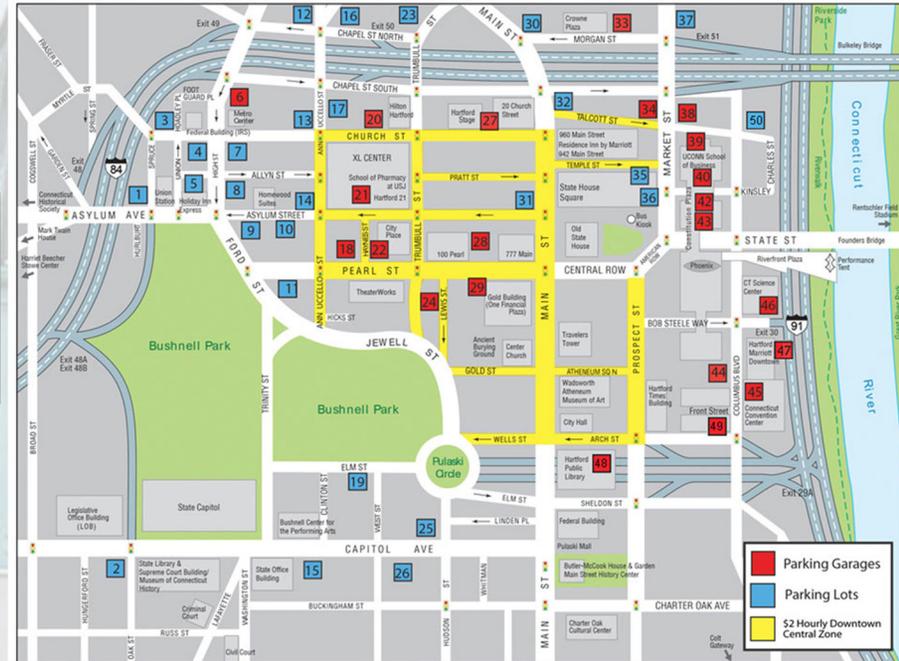
# Demand-Responsive Pricing



**ZONES**

<span style="color: red;">■</span>	Value: \$0.75 first hour, \$1.50 next 3 hrs, \$2.50 over 4 hrs
<span style="color: blue;">■</span>	Core: \$1.50 first hour, \$2.50 next 3 hrs, \$5.00 over 4 hrs

## DOWNTOWN HARTFORD, CT - PARKING LOTS AND GARAGES



# Mode-Shift Strategies

## TRANSPORTATION

### Commuter Transportation

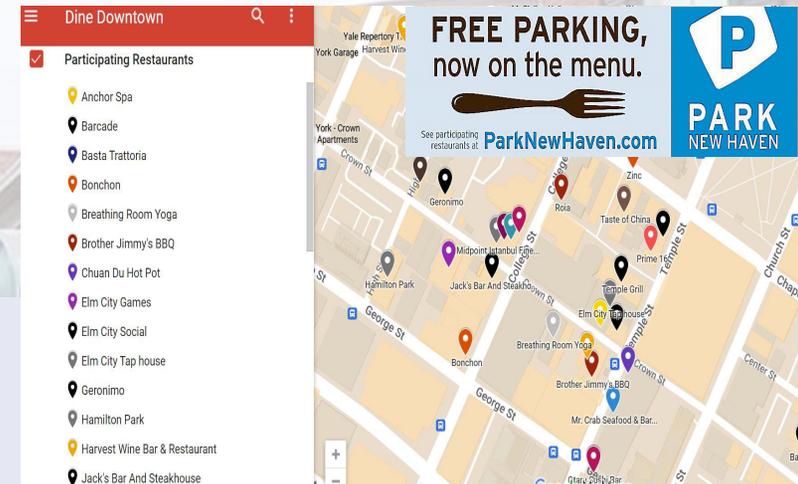
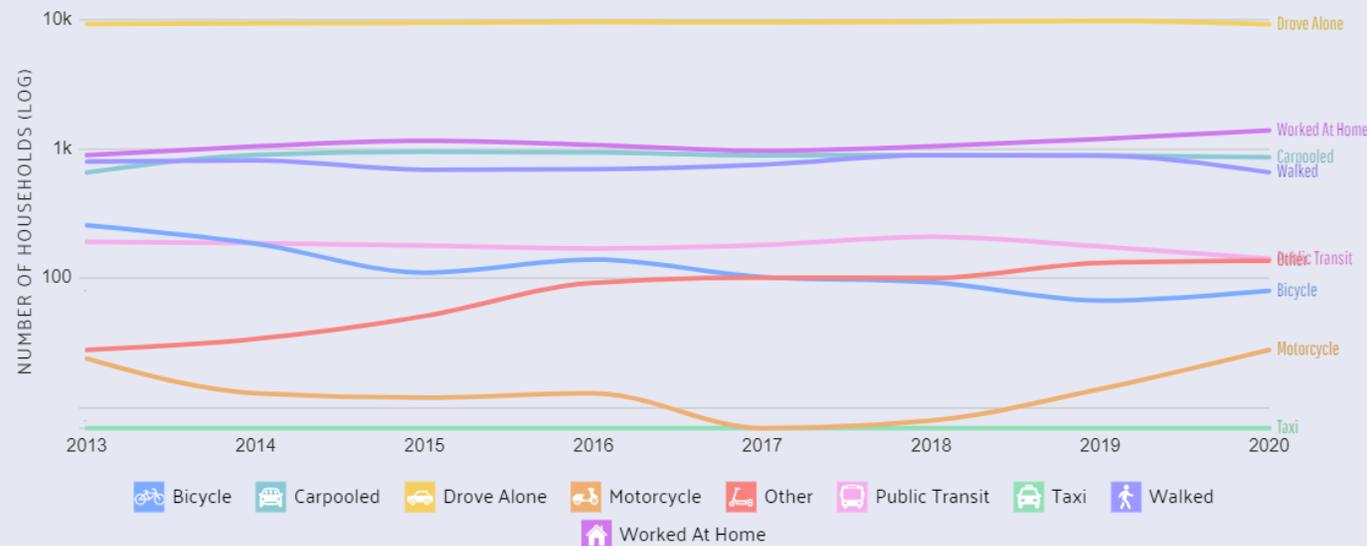
MOST COMMON COMMUTE IN 2020

1. Drove Alone (73.6%)
2. Worked At Home (11.2%)
3. Carpooled (6.91%)

In 2020, 73.6% of workers in Portsmouth, NH drove alone to work, followed by those who worked at home (11.2%) and those who carpooled to work (6.91%).

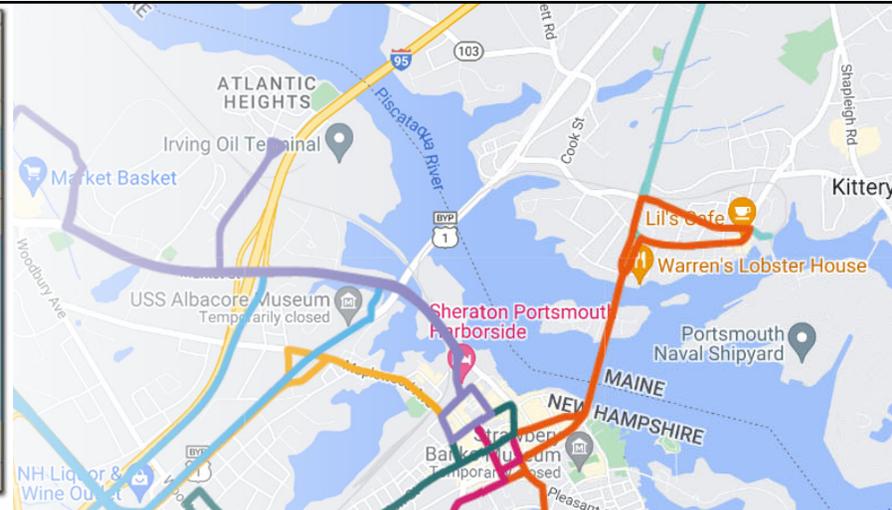
The following chart shows the number of households using each mode of transportation over time, using a logarithmic scale on the y-axis to help better show variations in the smaller means of commuting.

Data from the [Census Bureau ACS 5-year Estimate](#).

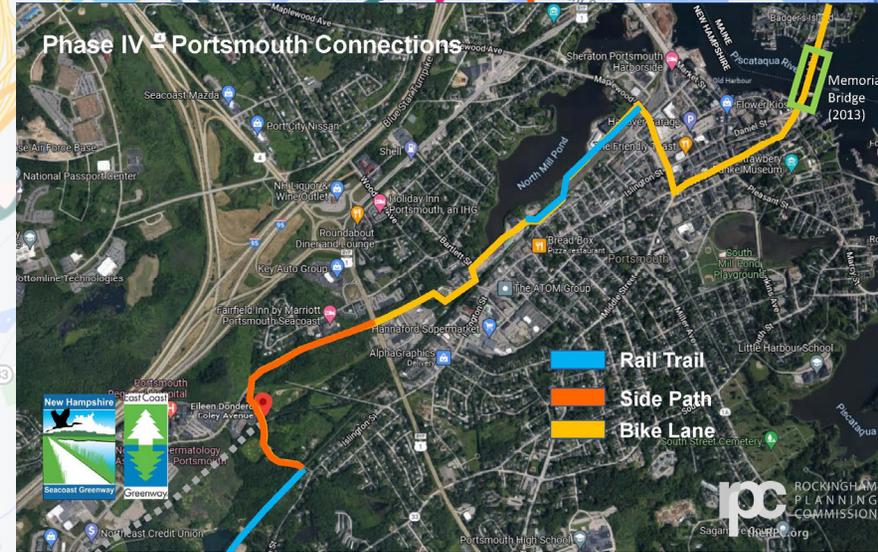




★ Bus Stop → Bus Route



# Mode-Shift Strategies



- 13
- 14
- 40
- 41
- 42
- 43
- 44



# Shared Parking Strategies



### NET GAIN OF 29 SPACES

Shared Parking Project	Garage	Lot	Total
Existing Spaces	20	4	24
Eliminated Spaces	(13)	0	(13)
Retained Spaces	7	4	11
New Lot Spaces	----	42	42
<b>Total Parking Area Spaces</b>	<b>7</b>	<b>46</b>	<b>53</b>
<i>Net Space Gain</i>			<b>29</b>



# Public Engagement

PLAN THE COMMON

HOME ABOUT PARTICIPATE CONTACT

Join the effort to  
**PLAN THE COMMON**  
in Downtown Westbrook

**THE WESTBROOK COMMON**

The Westbrook Common is one of the most visible, centrally-located public spaces in the downtown with the potential to become a vital destination activated by adjacent businesses, community activities and events.

Please join the community initiative to PLAN THE COMMON in Downtown Westbrook.

**THE FORUM**  
Join the discussion

Sign up to participate in the community forum. Share your ideas and your feedback in real time.

**THE SURVEY**  
Take the on-line survey

Take the brief on line survey to let us know how the community feels about and uses the Common.



**THE WESTBROOK COMMON**  
www.planthecommon.com

**THE WESTBROOK COMMON**  
REGISTRATION PROJECT

**THE WESTBROOK COMMON**  
REGISTRATION PROJECT

Brattleboro VT Walk/Bike  
Action Plan Storymap  
<https://arcg.is/1Oe04q>

Nashua, NH Parking Study  
Storymap  
<https://slrusa.maps.arcgis.com/apps/CrowdsourcingReporter/index.html?appid=5d3024401f8e428ba27a7867c51d5bce>

# Schedule & Project Management Strategy



**LEGEND:** Major Task = [Blue Bar] Action Item = [Yellow Bar] Project Meeting = [Red Bar] Public Meeting = [Orange Bar] Field Work = [Green Bar] Deliverable = [Blue Bar]

**Notes:**  
 A. Meeting to review draft Existing Conditions deliverables  
 B. Meeting to review draft Future Conditions deliverables  
 C. Meeting to review draft full report (including Recommendations)  
 D. Presentation summarizing Existing and Future Conditions  
 E. Presentation summarizing Recommendations  
 F. Scheduling of this event is conceptual. Should the event occur later in the project schedule, delivery of draft work products may be delayed.

# Value Proposition

## With DESMAN you get:

- 50 years of award winning parking design and restoration practice
- A division solely focused on parking planning, finance and operations
- Staff members with operational, administration and consulting experience
- Local knowledge and sensibilities

## With SLR you get:

- A track record of successful transportation, complete streets, and streetscape experience
- Deep in-house knowledge of parking and transportation design and policy best practices
- Innovative and interactive approaches to public engagement
- Local knowledge and sensibilities

## Together, we bring:

- Over 100 years of direct (assigned staff) experience to this engagement
- A proven record of delivering plans that are environmentally, fiscally, and politically sustainable
- An approach centered on pragmatic, implementable solutions, not academic best practices
- Integrated parking & transportation planning, engineering and design expertise, as well other available disciplines in-house
- Recommendations that are Sustainable (environmentally, fiscally, politically)

A street scene in a historic town, likely Nantucket, Massachusetts. The street is lined with multi-story brick buildings. In the background, a prominent white church steeple with a clock tower rises above the rooftops. A large, ornate green metal archway stands in the foreground on the right. Various signs are visible on the buildings, including "LaBelle Winery" and "Kearsarge House". The sky is overcast and grey. The text "Thank you for the opportunity!" is overlaid in the center of the image.

Thank you for the opportunity!