



City of Rochester

Monetization Study Findings



Monetization Study Update

Background

Project Kickoff: Goals

The team kicked off the study with the Parking Review Group in Winter 2023. At the kickoff, the group discussed the following goals:

1. Get above break even
2. Collect funds for a parking structure
3. Collect funds for a parking employee
4. Consider a potential Tax Increment Financing (TIF) district
5. Consider a Parking Benefit District (PBD) to support walkability
6. Use pricing to create availability, particularly in evenings



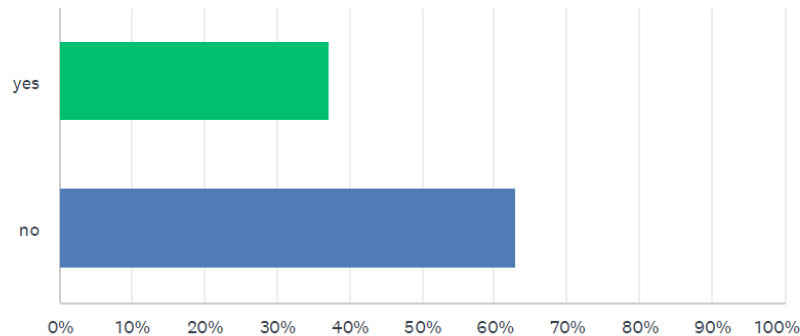
City Outreach

The City held a poster session in Winter 2023, as well as distributing an online survey with nearly 600 respondents. Respondents at the in-person meeting generally said they would be okay with pricing, while those online were more divided.

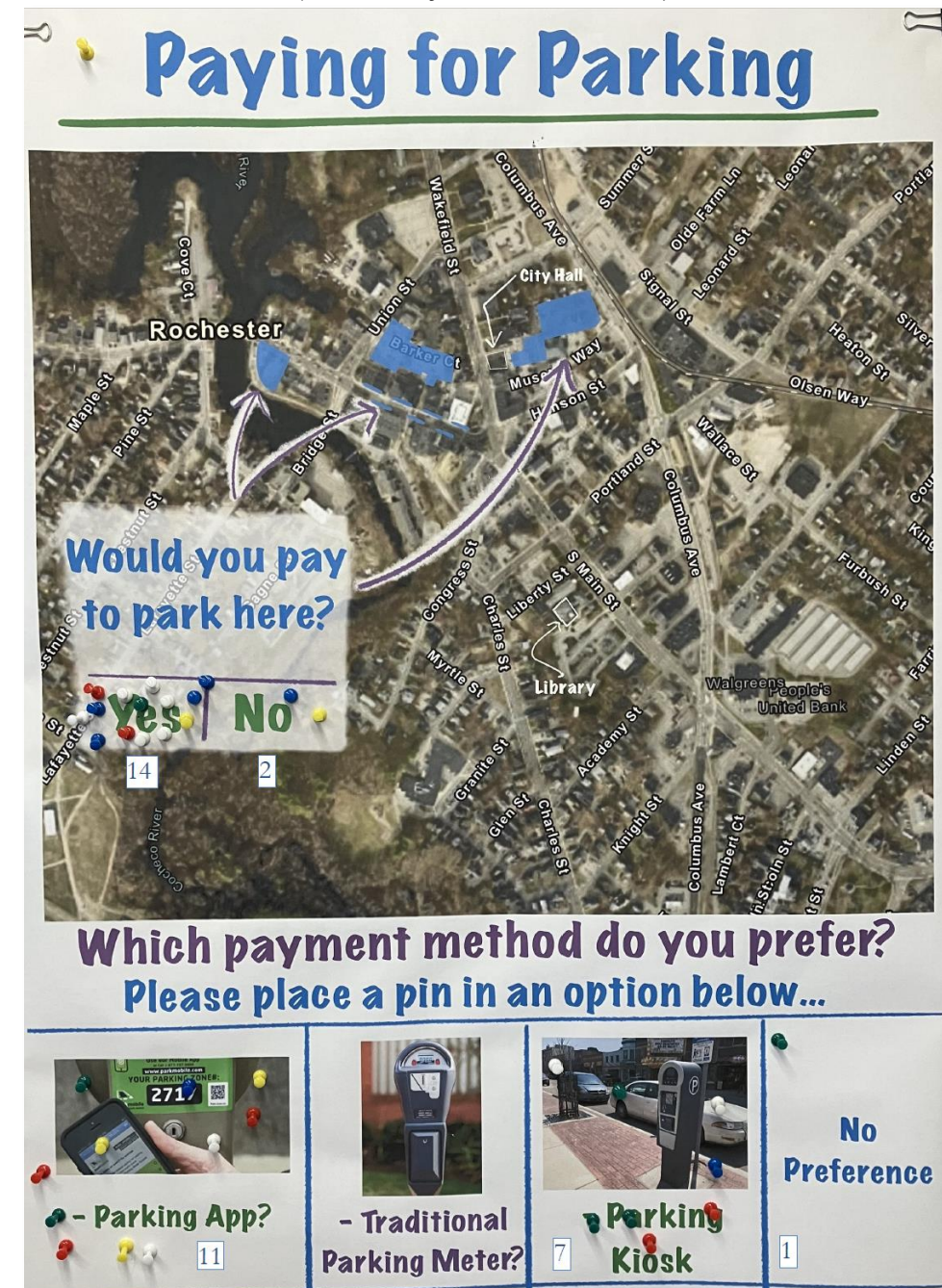
Survey Results (Source: City of Rochester, 2023)

Q6 The City is considering charging for parking. Would you be willing to come downtown if parking cost \$1.00 per hour?

Answered: 589 Skipped: 1



ANSWER CHOICES	RESPONSES	
yes	37.01%	218
no	62.99%	371
TOTAL		589



Parking Pricing in Peer Cities

Generally, peer cities have fairly low prices for hourly parking, ranging from \$0.25 per hour in Littleton to as high as \$5 per hour (for stays of longer time periods) in Portsmouth, NH.

Community	Population	Parking Rate	Est. Number of Spaces Charged
Rochester, NH	32,900	<ul style="list-style-type: none"> On street - free Lots - free 	N/A
Claremont, NH	12,900	<ul style="list-style-type: none"> On street - free Lots - free 	N/A
Laconia, NH	16,900	<ul style="list-style-type: none"> On street - free Lots - \$2.00~\$2.50/hr 	N/A ~300 Off street
Littleton, NH	6,000	<ul style="list-style-type: none"> On street - \$0.25/hr Lots - free 	~100 On street N/A
Franklin, NH	8,700	<ul style="list-style-type: none"> On street - free Lots - free 	N/A
Portsmouth, NH	22,000	<ul style="list-style-type: none"> On street - \$1.50-\$5.00/hr (\$5.00 after 2+ hours) Lots - \$0.50-\$5.00/hr Garages - \$1.00-\$2.00/hr 	~ 500 ~120 600+
Hanover, NH	11,900	<ul style="list-style-type: none"> On street - \$0.50/hr Lots - \$0.50/hr Garage - \$1.00/hr. or \$20.00/day 	600+ 90 289
Dover, NH	32,700	<ul style="list-style-type: none"> On street - \$1~\$3/hr (\$3 after 5+ hours) Lots - \$0.50/hr.~\$3/day~\$15/2 weeks 	

Permit Pricing in Peer Cities

Permit pricing in peer cities varies, with a cluster of permits between about \$15 to \$55 and others (Hanover and Portsmouth) topping \$100 per month.

Community	Price	Est. Monthly Price	Source	Administration Notes
Rochester, NH	\$15-30 per space (Columbus Ave lot, exclusive use)	\$15-30	<ul style="list-style-type: none"> Rochester Parking Study 	<ul style="list-style-type: none"> Leases only through developer agreements
Franklin, NH	\$200 annually	\$16	<ul style="list-style-type: none"> City of Franklin, NH Traffic Rules and Regulations: § 284-20.1 Permit parking 	<ul style="list-style-type: none"> User must renew annually Physical permit on rearview mirror
Portsmouth, NH	\$200/\$275 (residents/non residents) in Hanover Parking garage \$100/\$125 (residents/non residents) at Foundry Place garage	\$100-200	<ul style="list-style-type: none"> Parking Rates City of Portsmouth 	<ul style="list-style-type: none"> Permits obtained in person at City Hall Pass card issued, transferrable to other vehicles
Hanover, NH	\$135 for garage monthly \$90 for CBD surface lots monthly \$80 for remote lots every 2 months Free remote (shuttle/12 m walk) \$5 daily metered parking	\$40-135	<ul style="list-style-type: none"> Leased & Permit Parking Hanover, NH (hanovernh.org) https://www.hanovernh.org/244/Employee-e-Parking 	<ul style="list-style-type: none"> TBD
Dover, NH	\$25-55 monthly Available on-street and off	\$25-55	<ul style="list-style-type: none"> Parking Permit Information (nh.gov) 	<ul style="list-style-type: none"> Automatically renews monthly unless user cancels Sticker on vehicle

Monetization Study Update

Utilization Assessment

Utilization Data Collection

To understand the magnitude of demand for parking that would potentially be priced, the team collected and analyzed utilization data in publicly available facilities in a focused part of the Downtown area. The first count was conducted during the Parking Study, and derived from aerial imagery due to the ongoing COVID-19 pandemic. The monetization study built on the inventory established during the Parking Study to do counts in April and May of 2023. Counts specifically included:

- Midday, October 2016*.
- Weekday, April/May 2023:
 - 11:30 am – 12:30 pm
 - 5:30 – 6:30 pm
- Weekend, April 2023:
 - 11:30 am – 12:30 pm
 - 4:30 – 5:30 pm

In general, weekend occupancy in these facilities was only slightly lower than weekday, so the analysis uses the weekday data.

The following pages show the observations and key findings from the data collected.

- Each page has a map showing occupancy by facility or general parking zone.
- There are also summary charts that show total availability and occupancy at different count times.
- Even though the individual facilities have varying occupancies throughout the day, the overall utilization in the area is consistent all day, hovering between 40%-50%.

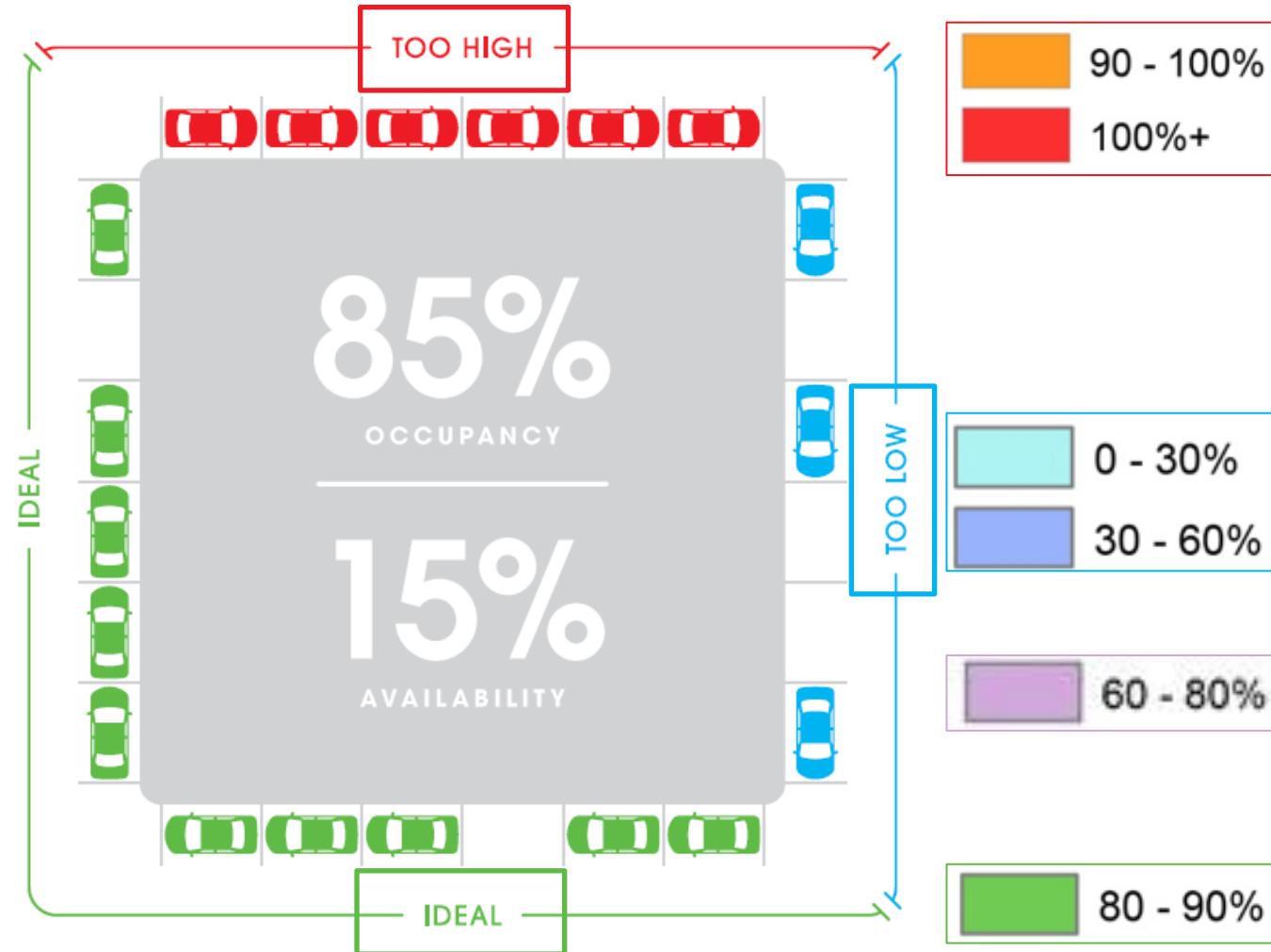
*The most recent weekday with imagery available consisted of Google Earth satellite imagery from Wednesday, October 5, 2016, which produced the most reliable utilization for the Parking Study (2021-22). Although more recent imagery was available, counts which reflect a weekday ensure that parking utilization is reflected at peak occupancy times associated with office and retail activity. Typically, this occurs during the midday peak in a community; shadows shown in the satellite imagery indicated that aeriels were likely collected around 12:00 PM.

Utilization Patterns

Generally, the industry rule of thumb for **optimal utilization is between 85-90%**.

At this point, most spaces are being used, but about one in every ten spaces is available for the next arrival. Anything lower than that represents a parking facility that is underutilized, and anything higher indicates a parking “crunch.”

The following maps use this scale to show occupancy in individual facilities or parking zones.



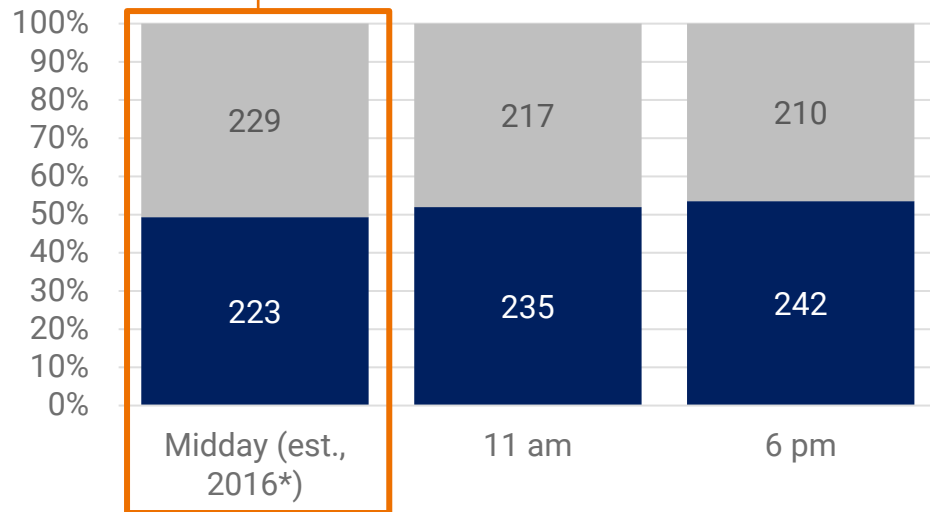
Utilization Counts

Utilization patterns include:

- Public lots near Main St are under-utilized during mid-day.
- City Hall Lot also has available spaces at this time.
- On-street spaces on N Main St seem to be busier, near the commercial uses.

Time period shown on map

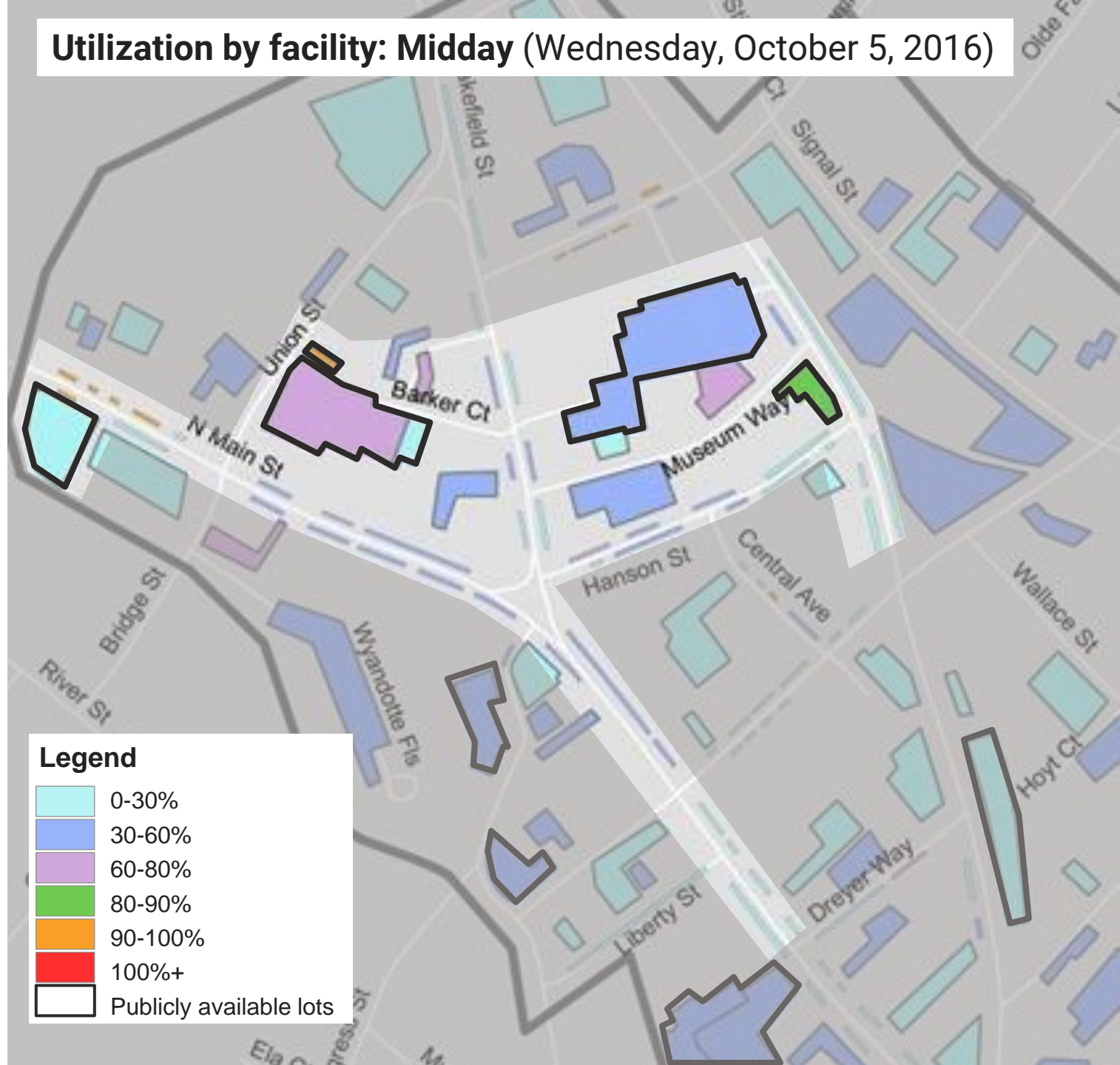
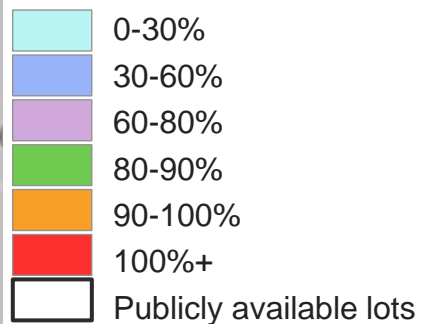
Occupancy by Time of Day: All Facilities



*est. from aerial

■ Occupied ■ Vacant

Legend



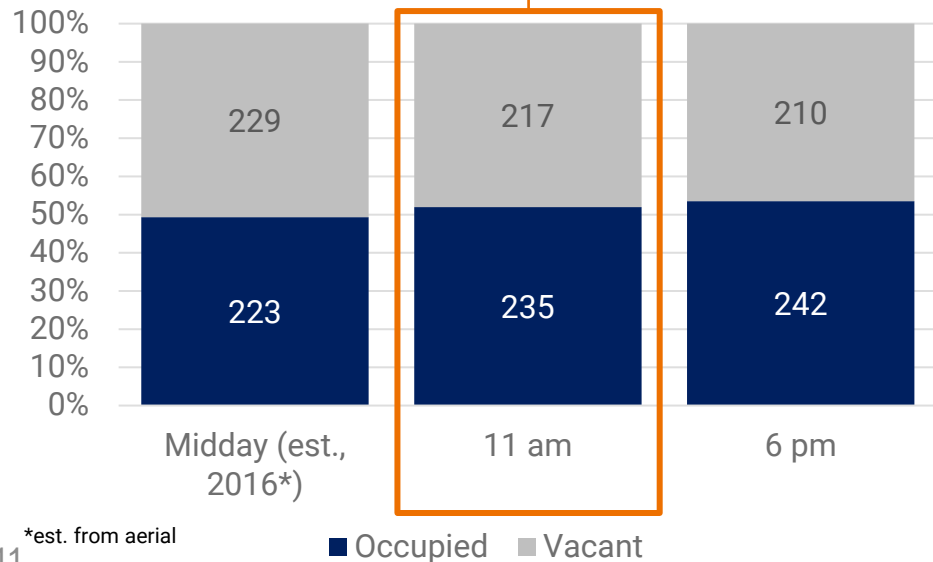
11:00 am Utilization

Further counts in 2023 confirmed patterns observed in 2016. During the midday:

- About half of publicly available spaces are available.
- The City Hall Lot and central Main Street parking are busy.
- There is availability elsewhere.

Time period shown on map

Occupancy by Time of Day: All Facilities



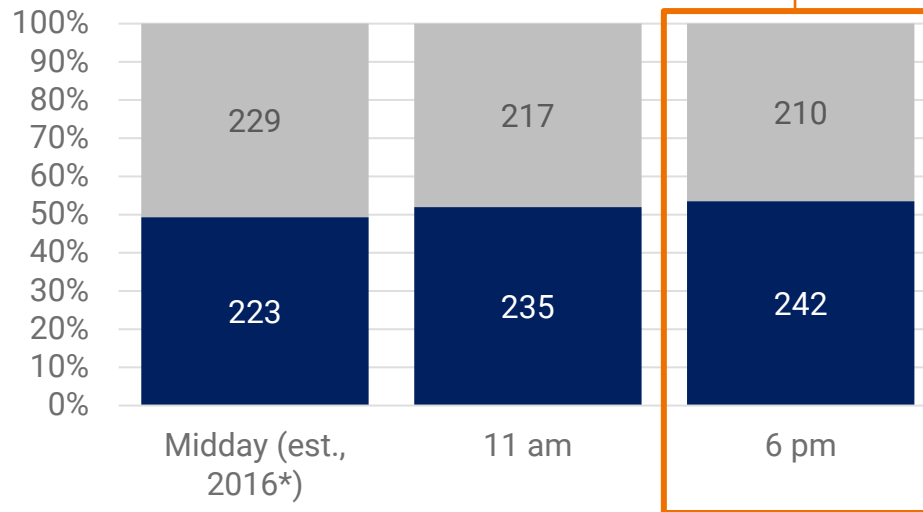
6:00 pm Utilization

On a Thursday evening:

- Utilization is optimal in the Union Street lot and parts of Main St.
- The Upper Mill Lot in Zone F is completely full.
- There is availability on more remote blocks of Main Street and in the City Hall Lot.

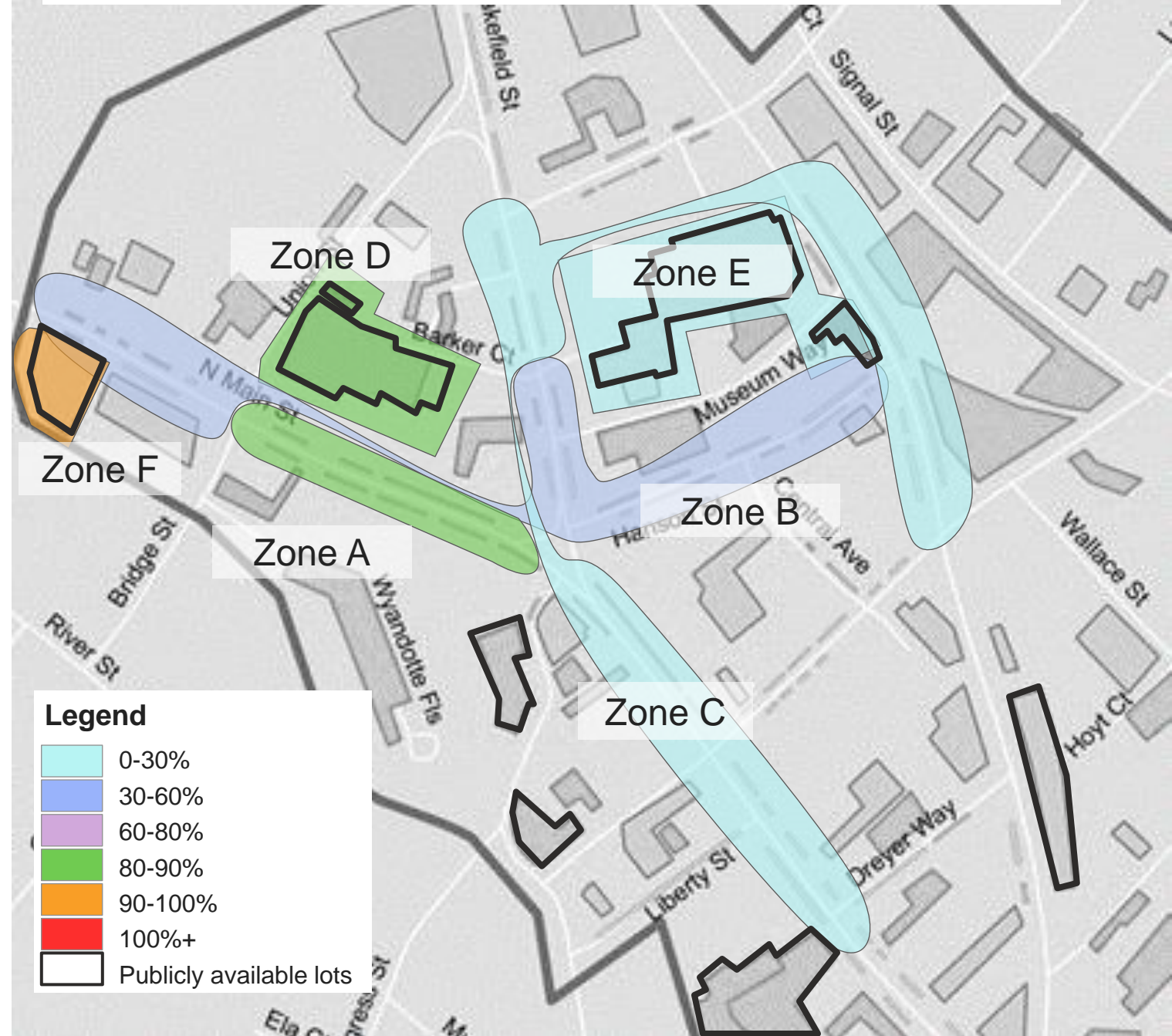
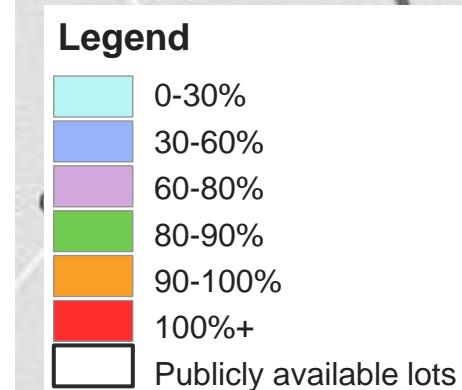
Time period
shown on map

Occupancy by Time of Day: All Facilities



*est. from aerial

■ Occupied ■ Vacant



Utilization Findings

In addition to the findings from the Parking Study, this close review of utilization counts and additional data from today's parking patterns provided some clarity as to the need for pricing. These are as follows:

- Standard thresholds for pricing on a block face is 85% occupancy.
- Overall, **public parking in the focus area is never more than 60% utilized, so pricing in response to current demand is not recommended.**
- Although some blocks downtown may approach this at key time periods such as midday or the dinner hour, additional counts show that **there is parking available a short walk away.**



Utilization Findings

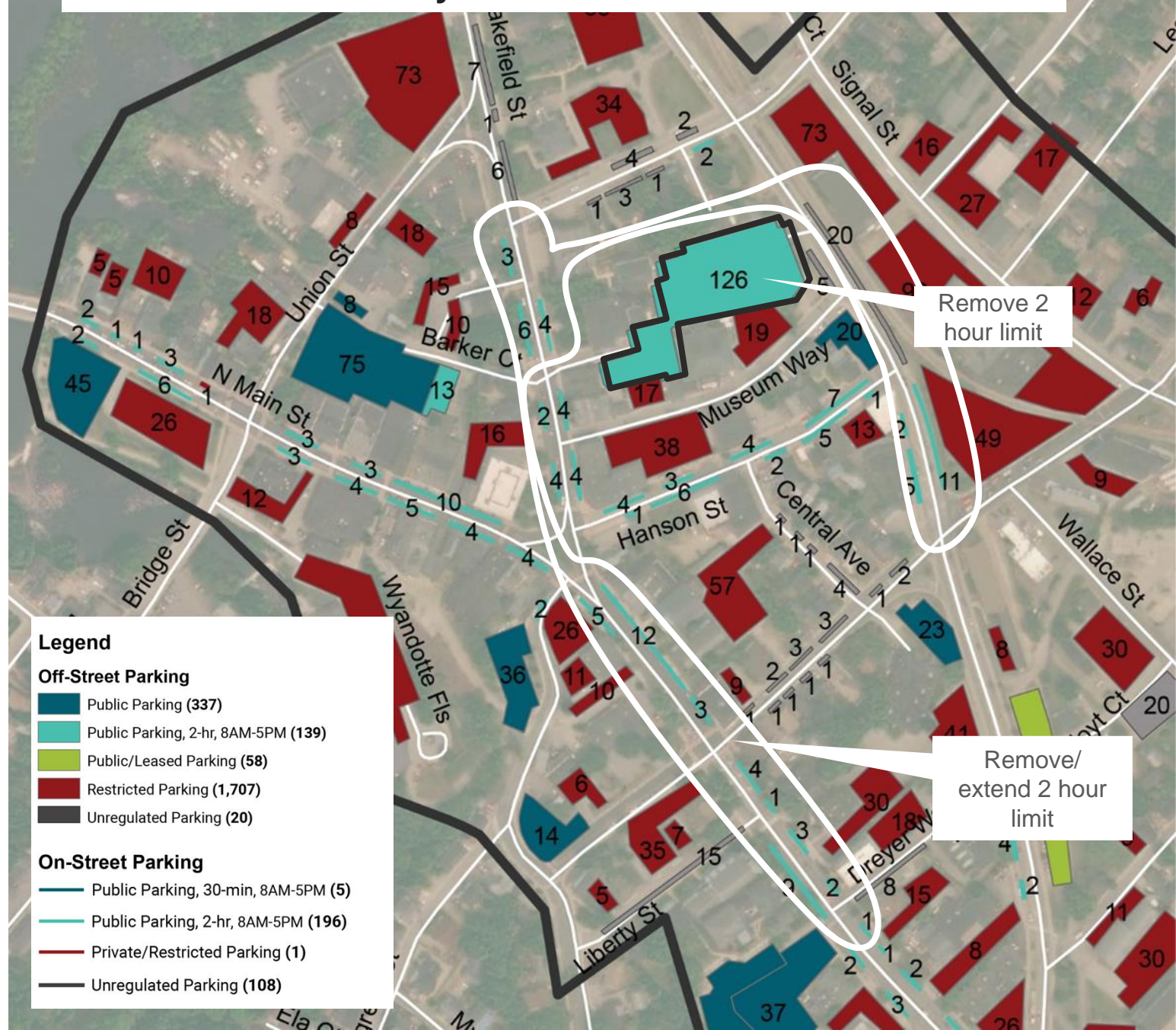
To alleviate perceptions of a parking crunch, encourage people to **use lots and blocks that are further away from the downtown core.**

Typically, the first solutions tested would be without adjusting price. As recommended in the Parking Study, this could include **adjusting time limits and wayfinding.**

For example, allowing longer-term parking in the City Hall Lot and outside the core area of demand may encourage employees or other people coming into town for longer time periods to use those facilities.

Wayfinding should include signing on primary areas for short-term customer parking, with clear directions to long-term parking elsewhere. We note that wayfinding is an essential component for pricing correctly. Starting with this approach and monitoring the response may go a long way toward addressing the immediate issue.

Potential time limit adjustments



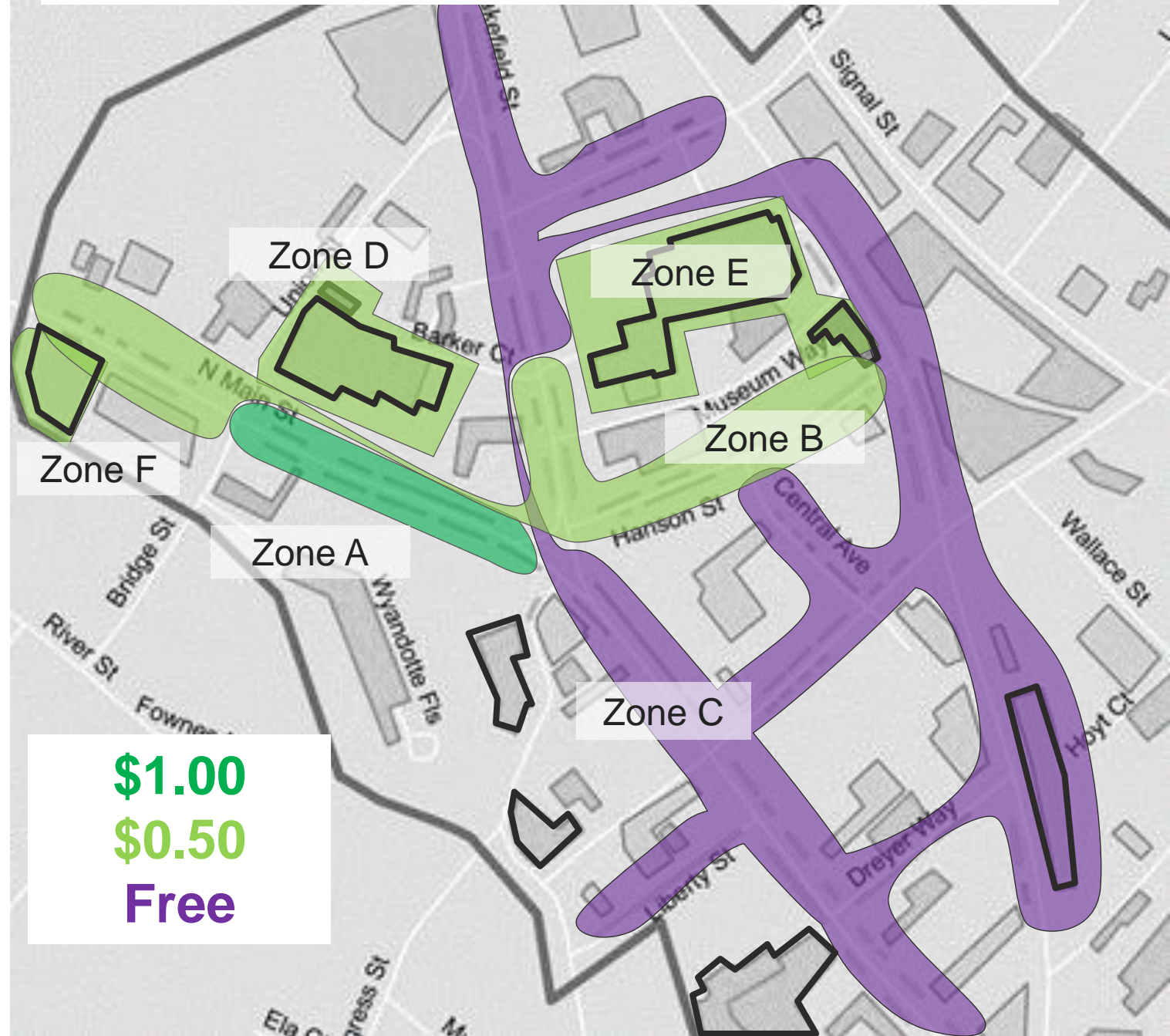
Monetization Study Update

Proposed Pricing

Proposed Pricing Zones (used for analysis)

Pricing Zones

Drawing from observed utilization patterns and the review of peer city pricing, the team worked with the City to identify proposed pricing zones for analysis, shown on the map to the right.



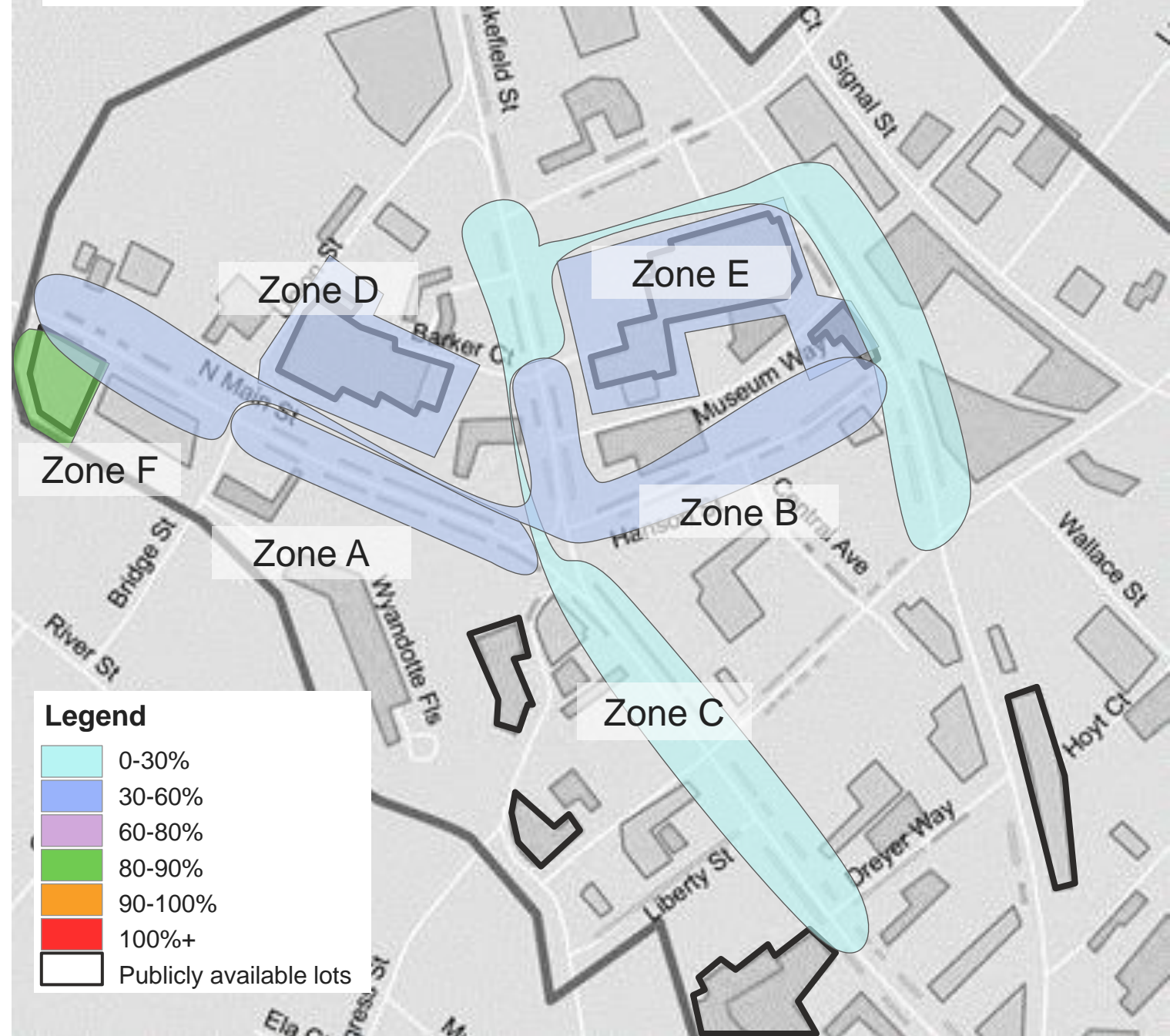
Pricing Zones

Using an elasticity equation, the study modeled future availability in these zones if pricing were implemented.

Est. Future Availability

Zone	8:00 am - 10:00 am	11:00 am - 1:00 pm	2:00 pm - 4:00 pm	5:00 pm - 7:00 pm
A	29	20	18	15
B	50	42	35	30
C	55	33	28	31
D	75	59	38	27
E	113	41	55	95
F	33	29	14	8
Total	355	224	188	206

Estimated Future Utilization, 6:00 pm (with proposed pricing)



Key Costs Associated with Pricing Implementation

There are multiple factors to consider with implementing priced parking, including:

- Kiosks v. Meters (or both)
- Shipping and installation
- Ongoing costs – Enforcement, software, maintenance
- Mobile app*

The model considers multiple cost scenarios. Generally, an all-kiosk scenario is less expensive as it requires less equipment/installation/maintenance overall. Some communities find that customers prefer meters to kiosks, particularly on-street. Thus for cost-estimating purposes, the study assumed a mix of on-street double-space meters and off-street kiosks in lots.

**Not included in current cost estimates*

Scenario 1: All Kiosk



Scenario 2: Kiosks + Meters (preferred)



Monetization Study Update

Permit Considerations

Permit Pricing

The model indicates that with the addition of priced parking, there may be additional space available in lots and on-street that could be used for longer-term permits.

The table to the right provides an estimate based on existing land use of how many permits the City may sell.

Based on the peer review, this analysis estimates that the City could sell permits for about \$30/month.

Overall, Zones E (City Hall lot) and C (on-street, Main and Columbus) are best suited to cover employee permit demand. For residents, City Hall and the Union Street lot could be good locations as they are closer to future development sites. In addition, permits are a good way to pursue shared parking arrangements with private landowners, because the potential additional parkers are limited. The parking study identified the former Ben Franklin lot as a potential shared parking location, which could also be used to meet the need for permit spaces, particularly for residents.

Est. Parking Sales

Permit Type	Demand	Est.	Proposed
Office Employee*	Daytime	40	E, C
Service Employee*	Part-time, evening	39	E, C
Res Permits	Day and evening	40	E Union St Shared lot?
Total		118	

**Likely that these folks are part of today's utilization numbers, meaning that selling permits in these lots may not significantly increase today's utilization).*

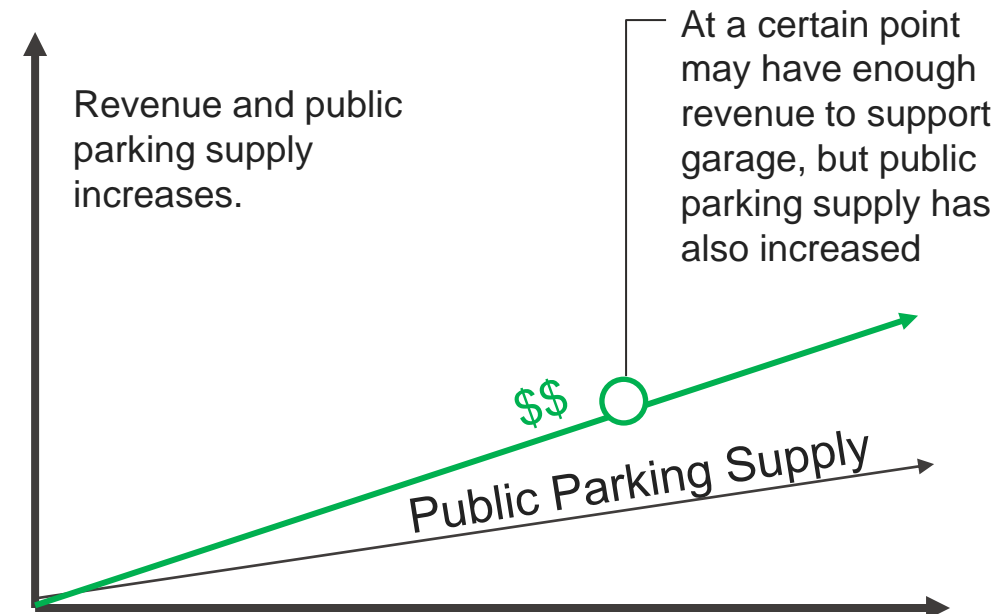
Standard Shared Parking Practices for Residential / Long-Term

As noted in the Rochester Parking Study, capacity exists today in the parking system, but regulations limit access to spaces. Parking uses valuable land downtown, so **parking programs should maximize the use of each space**. Specifically:

- Developers may be able to build less parking but share all / make all publicly available
- Move away from specific leases of specific spaces
- Move toward (paid) passes:
 - Nights/weekends passes (for residents)
 - All day passes
- Necessary to support shared system, inc. regulations in a potential future garage
- **Monitor and adjust, including price and location, as needed**

Permit administration best practices include:

- Use a plate-based system in addition to stickers/hangtags
- Consider License Plate Recognition (LPR) for enforcement
- For non-residents, consider monthly renewal to avoid “locking in”
- Use digital platforms to limit paperwork



Monetization Study Update

Monetization Estimate

Est. Monetization Results

	Double-Space and Kiosk	All Kiosk	All Double-Space Meters
Proposed Annual Meter Revenue	\$199,020	\$199,020	\$199,020
Proposed Annual Meter Revenue w/Scofflaw Rate	\$139,314	\$139,314	\$139,314
Proposed Violation Revenue	\$9,951	\$9,951	\$9,951
Permit Revenue	\$28,656	\$28,656	\$28,656
Subtotal Annual Revenue	\$177,921	\$177,921	\$177,921
Total Upfront Cost	(\$418,039)	(\$442,411)	(\$431,602)
Annual Costs	(\$7,398)	(\$8,632)	(\$3,142)
Annual FTE Cost	(\$60,000)	(\$60,000)	(\$60,000)
Total Year 1 Cost	(\$485,437)	(\$511,043)	(\$494,744)
Total Annual Costs	(\$67,398)	(\$68,632)	(\$63,142)
Year 1 Net	(\$307,516)	(\$333,122)	(\$316,823)
Year 10 Accumulated Net	\$687,190	\$650,482	\$716,186

Break Even Estimate: Year 4

Year	1	2	3	4	5	6	7	8	9	10
Cumulative Costs	\$485,437	\$552,835	\$620,233	\$687,631	\$755,030	\$822,428	\$889,826	\$957,224	\$1,024,622	\$1,092,020
Cumulative Revenues	\$177,921	\$355,842	\$533,763	\$711,684	\$889,605	\$1,067,526	\$1,245,447	\$1,423,368	\$1,601,289	\$1,779,210
Cumulative Net	(\$307,516)	(\$196,993)	(\$86,470)	\$24,053	\$134,575	\$245,098	\$355,621	\$466,144	\$576,667	\$687,190

Note: This assessment does not include debt service, inflation, or potential to increase revenues/pricing.

Appendix

Monetization Estimate Sources /Assumptions

Equipment pricing:

- Metropolitan Area Planning Council, Parking Meter Contracts (most prices from 2022). For more information, see <https://www.mapc.org/public-works-collective-purchasing-program/#parkingpaymentsystems>
- Key equipment pricing assumptions include:
 - City to take on maintenance (per conversations with City), no costs included for this
 - 30% markup to account for COVID / lack of collective bargaining costs
 - 20% markup to account for inflation
 - One FTE (or equivalent) needed for enforcement

Change in parking demand: 0.3 elasticity

Scofflaw rate: 30%

Permits:

- ~100 monthly
- \$30 per month

Does not include rate adjustment/inflation/debt service

