



City of Binghamton | BMTS Comprehensive Downtown Parking Study and Strategic Plan

Initial Findings

November 2015

Agenda

- Study Process
- Key Findings
 - Parking Inventory
 - Parking Utilization & Turnover
 - Public Input
 - Land Use & Parking
- Initial Considerations
- Next Steps



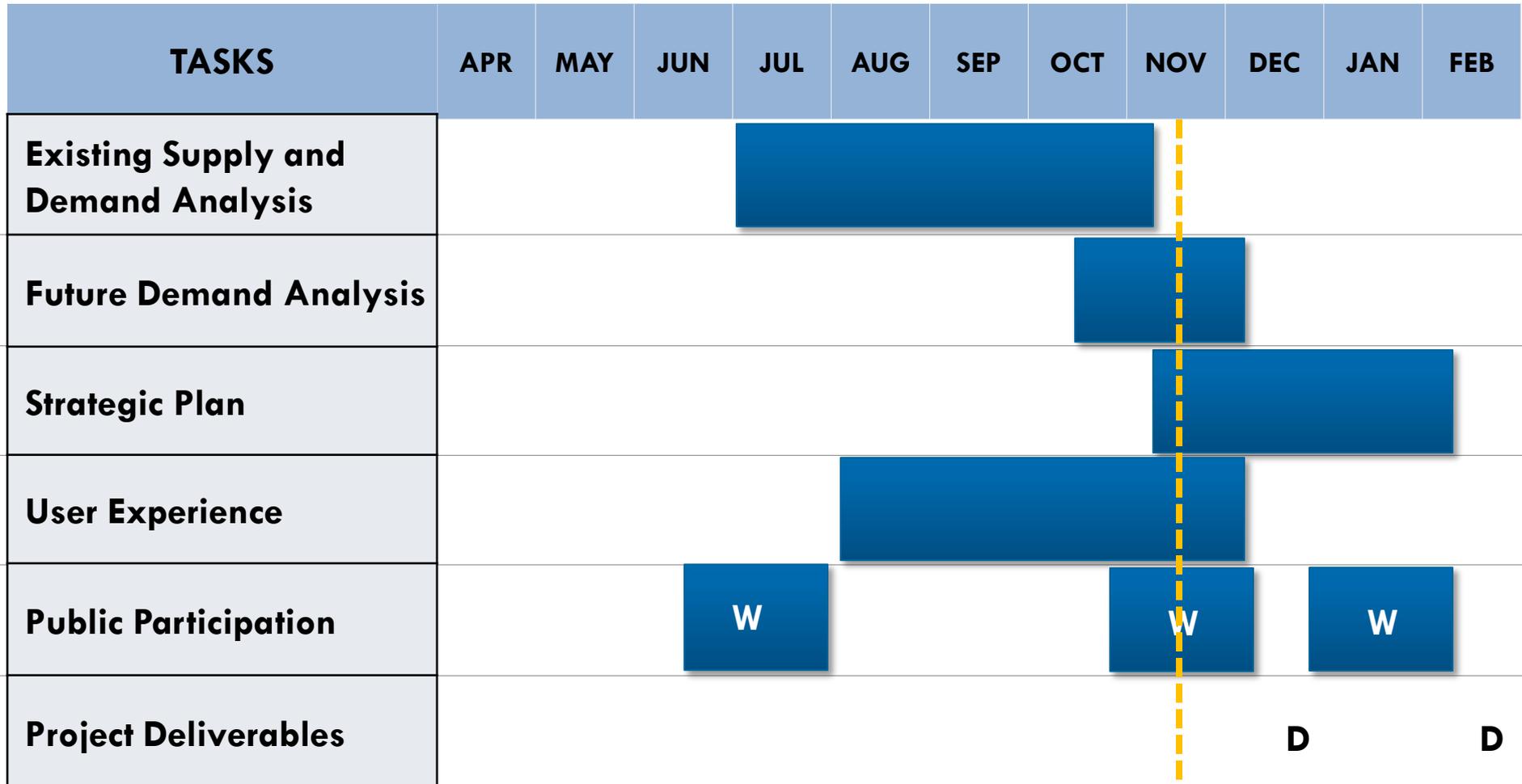


Study Process

Downtown Binghamton Study Goals

- Analyze **existing parking supply and demand**
- Assess the **existing and expected future demand**
- Identify **deficiencies** of existing and expected future parking demand
- Propose **new strategies** to mitigate deficiencies and/or provide and promote optimal conditions to support continued growth and development within the central business district
- Analyze **impact of bicycle, pedestrian traffic, and transit**
- Identify **supportive parking needs**: special event issues, business needs, disabled parking, etc.

Project Schedule



W-Public Workshop, D-Deliverables

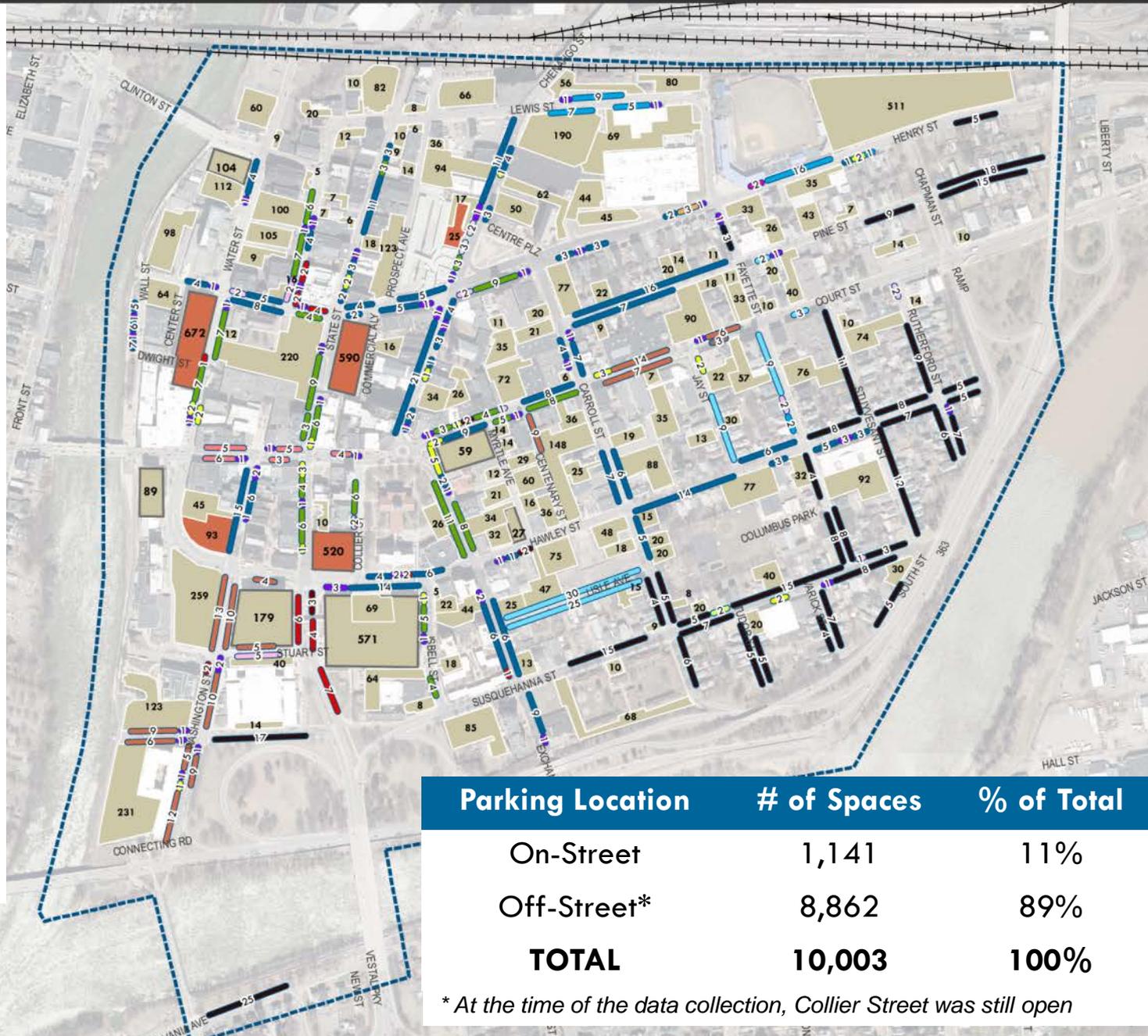


Parking Inventory

Downtown Binghamton Comprehensive Parking Study_DRAFT Inventory

LEGEND

-  Study Area
- On-street Parking**
-  15 Minute Free
-  15 Minute Meter (\$0.50/hr)
-  30 Minute Free
-  30 Minute Meter (\$0.50/hr)
-  1 Hour Free
-  1 Hour Meter (\$0.50/hr)
-  2 Hour Free
-  2 Hour Meter (\$0.25/hr)
-  2 Hour Meter (\$0.50/hr)
-  4 Hour Meter (\$0.50/hr)
-  Meter No Time Limits (\$0.50/hr)
-  Government/Official Parking
-  Disabled
-  Loading Zone
-  Residential Permit
-  Taxi Cabs Only
-  Unregulated
- Surface Lot Parking**
-  General Access
-  Restricted Access
- Ramp/Underground Parking**
-  General Access
-  Restricted Access



Parking Location	# of Spaces	% of Total
On-Street	1,141	11%
Off-Street*	8,862	89%
TOTAL	10,003	100%

* At the time of the data collection, Collier Street was still open

On-Street and Off-Street

■ On-Street Parking (11%)

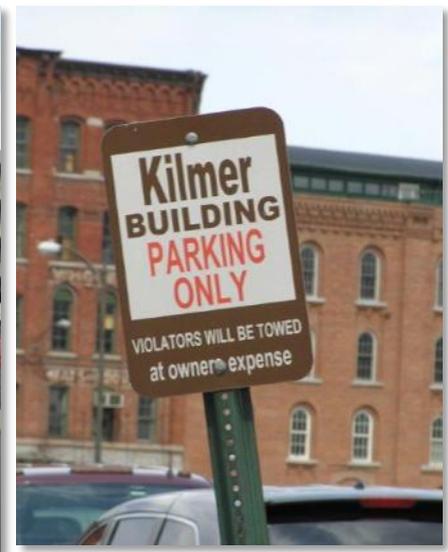
- 1,100 spaces
- 12 different regulations
 - 2 hr – 37%
 - 1 hr – 11%
 - 4 hr – 10%
 - Unregulated – 25%
- 43% are free, 57% metered



■ Off-Street Parking (89%)

- 8,900 spaces
 - 6,100 in surface lots
 - 2,800 in ramps*
- 21% publicly accessible, 79% restricted access

** Include Collier Street in full service*

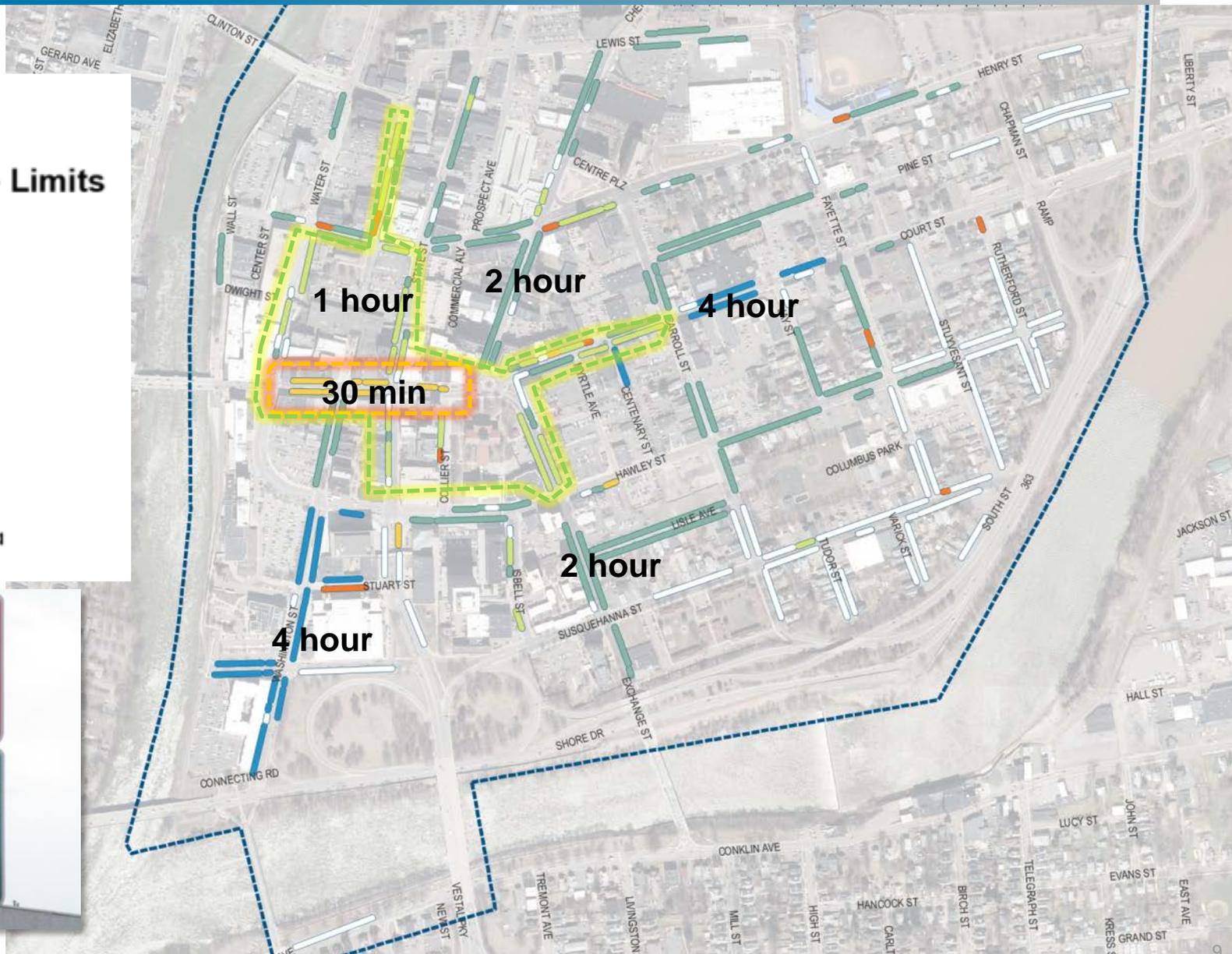


68% of 1,100 On-Street Spaces Have Time Limits

LEGEND

On-street Time Limits

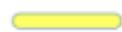
- 4 Hour
- 2 Hour
- 1 Hour
- 30 Minute
- 15 Minute
- NA
- Study Area

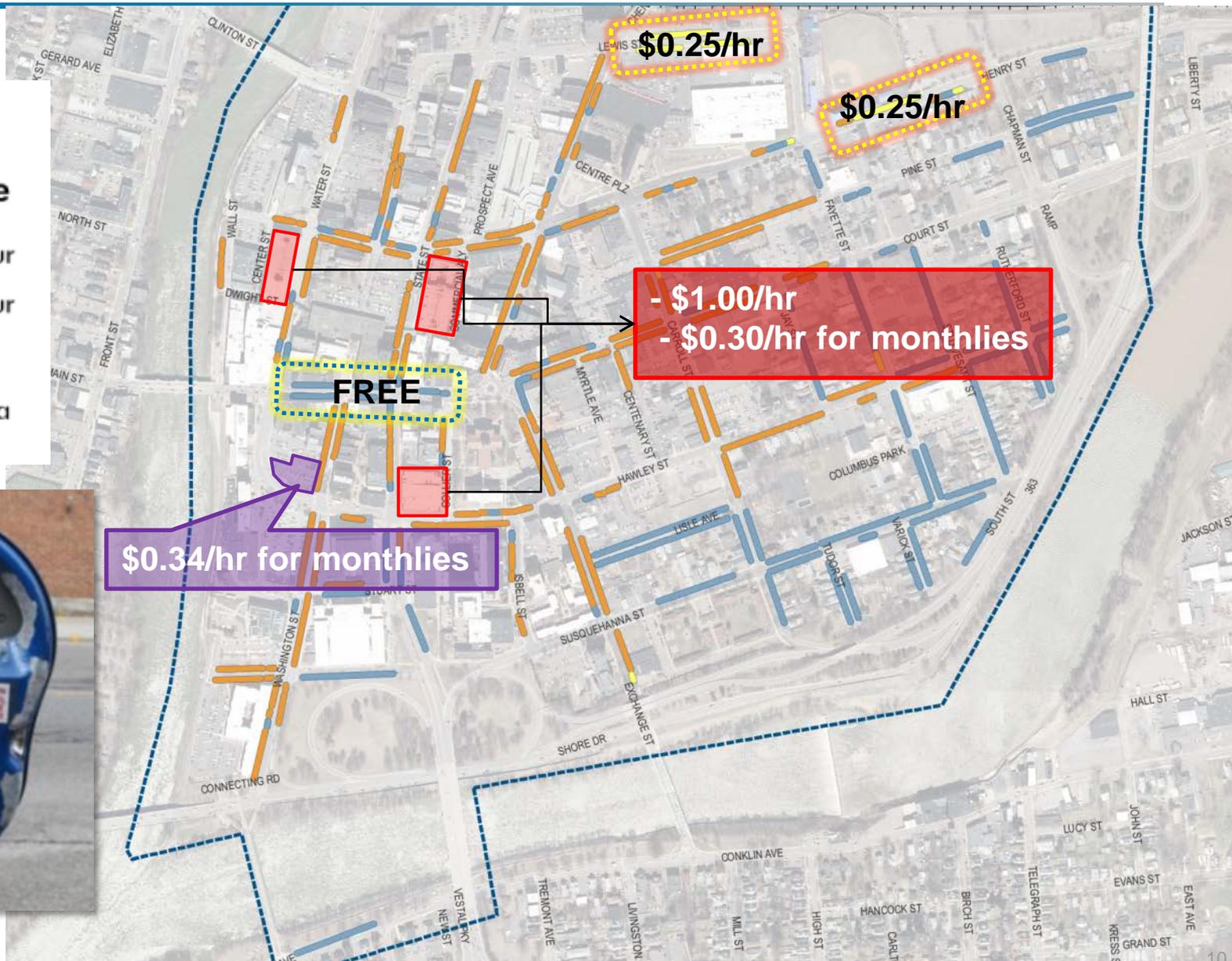


57% of 1,100 On-Street Spaces are Metered

LEGEND

On-street Price

-  \$0.50/hour
-  \$0.25/hour
-  Free
-  Study Area



Inventory Key Findings

- 10,000 parking spaces
 - Most off-street
 - Most are “restricted” access
- Most on-street spaces are regulated by varied price and time limits
- Off-street parking is more expensive than on-street parking
- Inventory impacts:
 - Collier St Ramp – 220 spaces open of 520 total spaces
 - Water St Ramp – 423 spaces open of 672 total spaces



Parking Utilization & Turnover

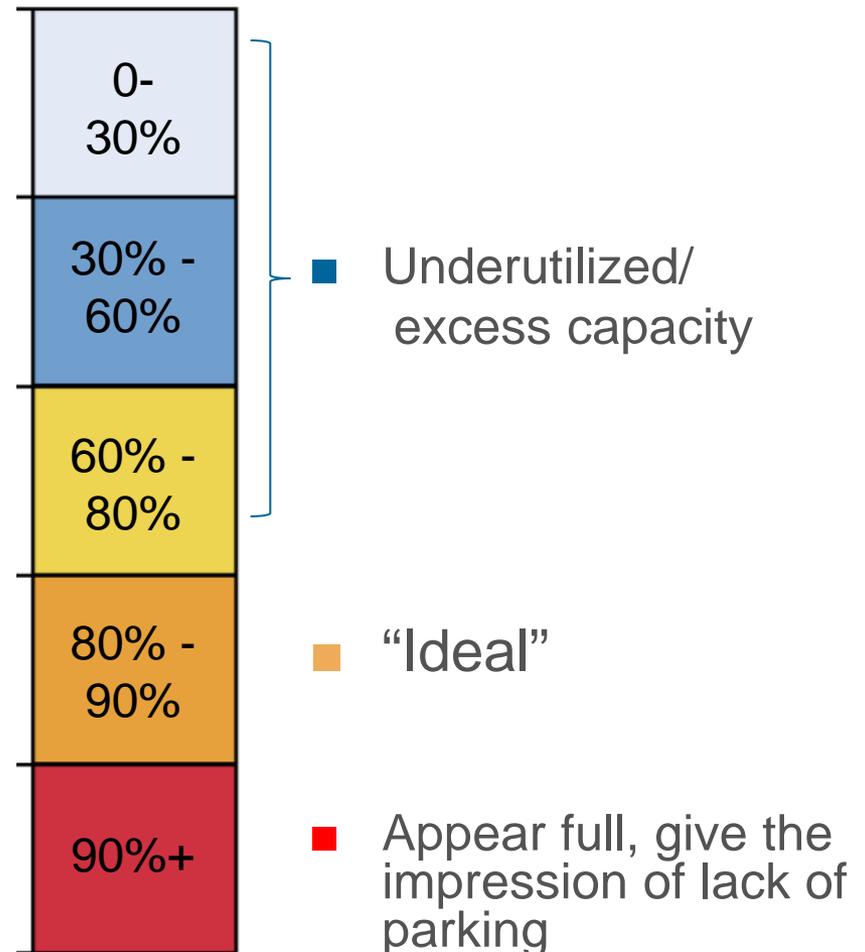
Parking Demand Counts

Utilization Counts

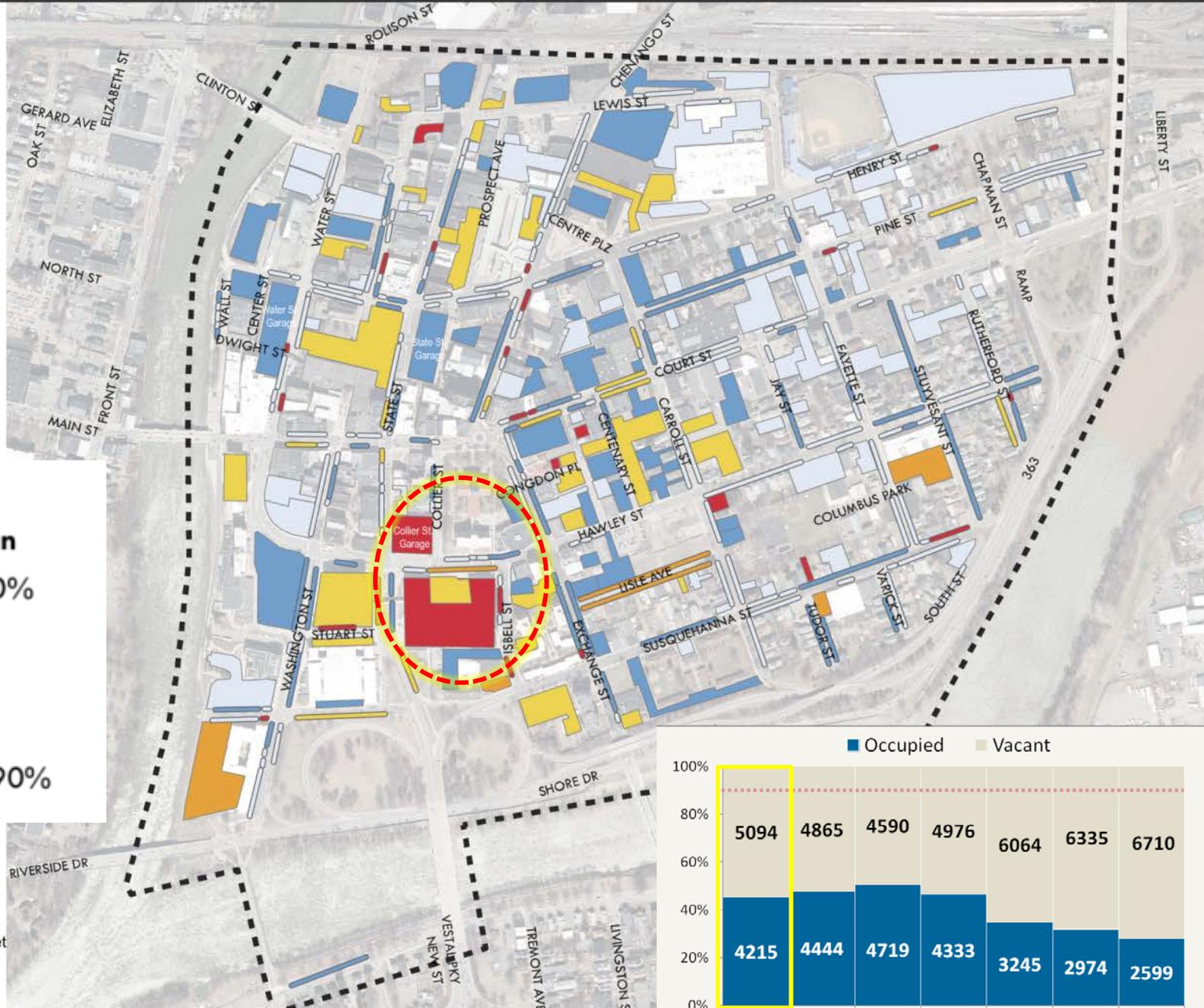
- Thursday, September 24
8 a.m. to 10 p.m.
- Saturday, September 26
10 a.m. to 10 p.m.

-
- Every two hours
 - All public and private parking
 - Collier St and Water St ramps partially open; all cars counted and only spaces open are included

Utilization Legend



Downtown Binghamton Parking Utilization - Thursday September 24, 8 a.m. - 10 a.m.



LEGEND

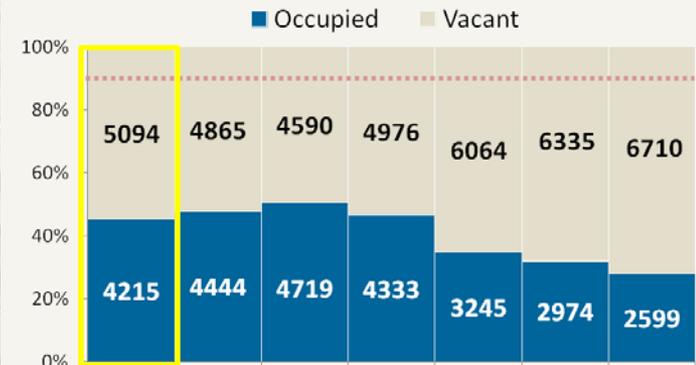
Parking Utilization

- Less than 30%
- 31-60%
- 61-80%
- 81-90%
- More than 90%

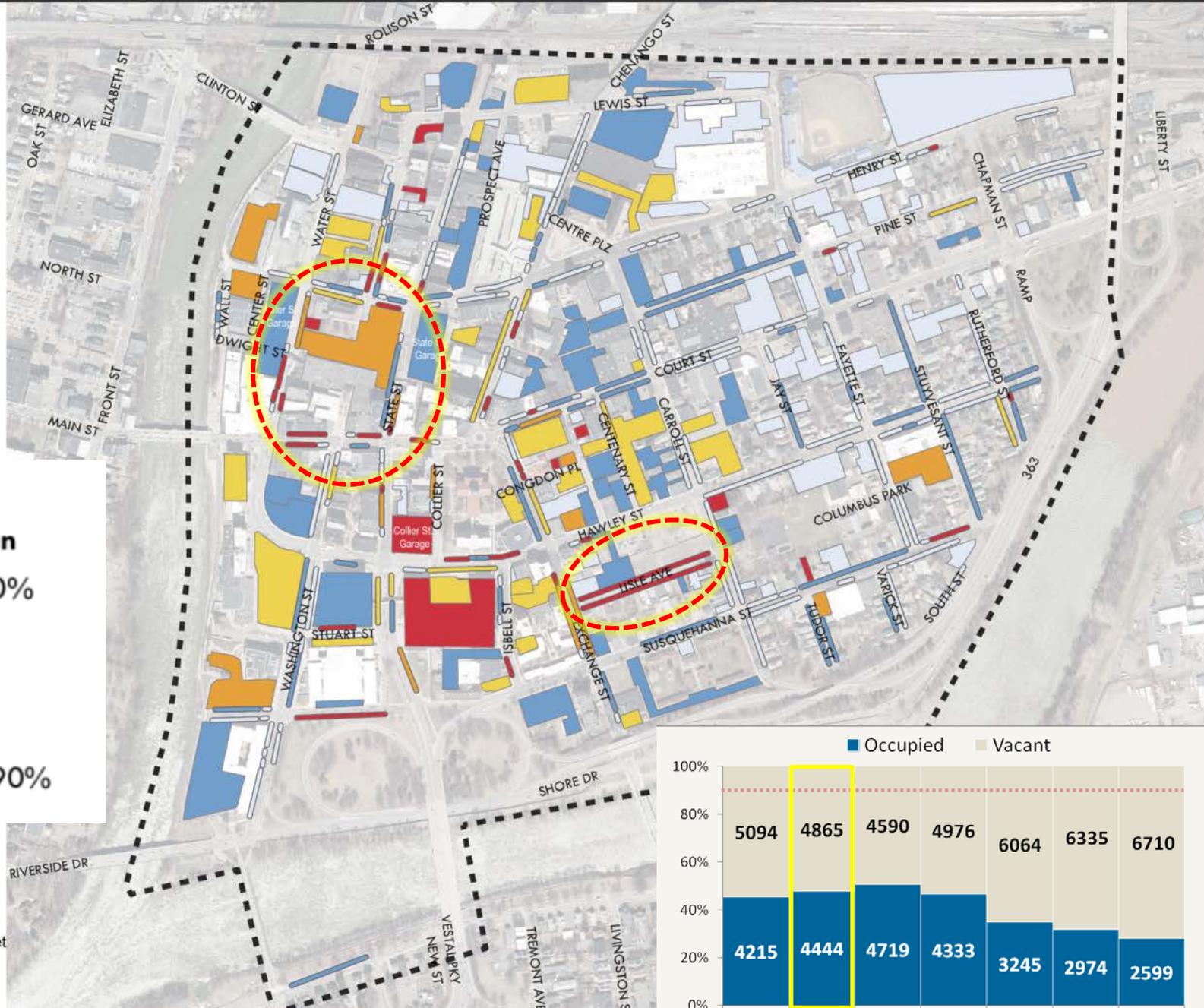


0 500 1,000 Feet

Data collected by Nelson\Nygaard in September 2015



Downtown Binghamton Parking Utilization - Thursday September 24, 10 a.m. - 12 p.m.



LEGEND

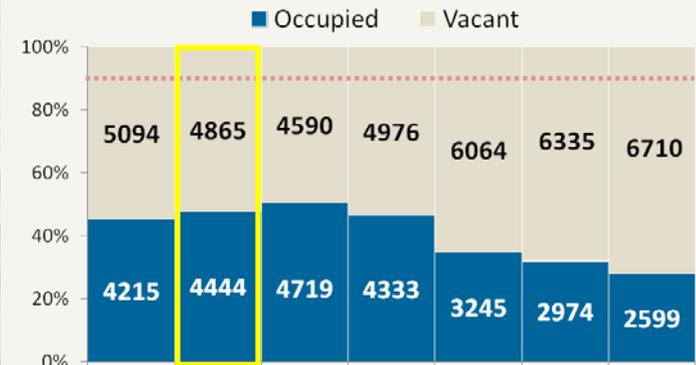
Parking Utilization

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- More than 90%



0 500 1,000 Feet

Data collected by Nelson\Nygaard in September 2015



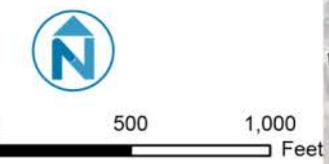
Downtown Binghamton Parking Utilization - Thursday September 24, 12 p.m. - 2 p.m. Peak: 51%

 Restaurants

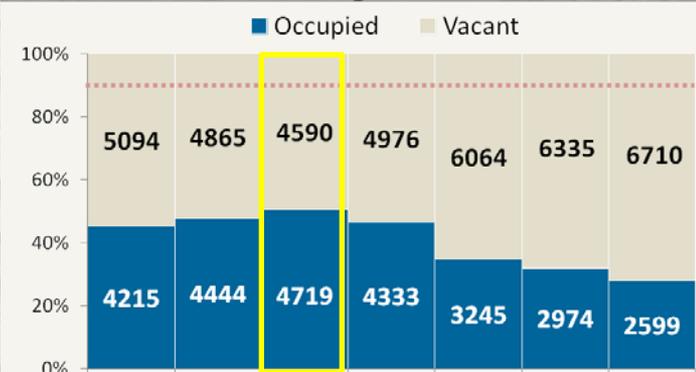
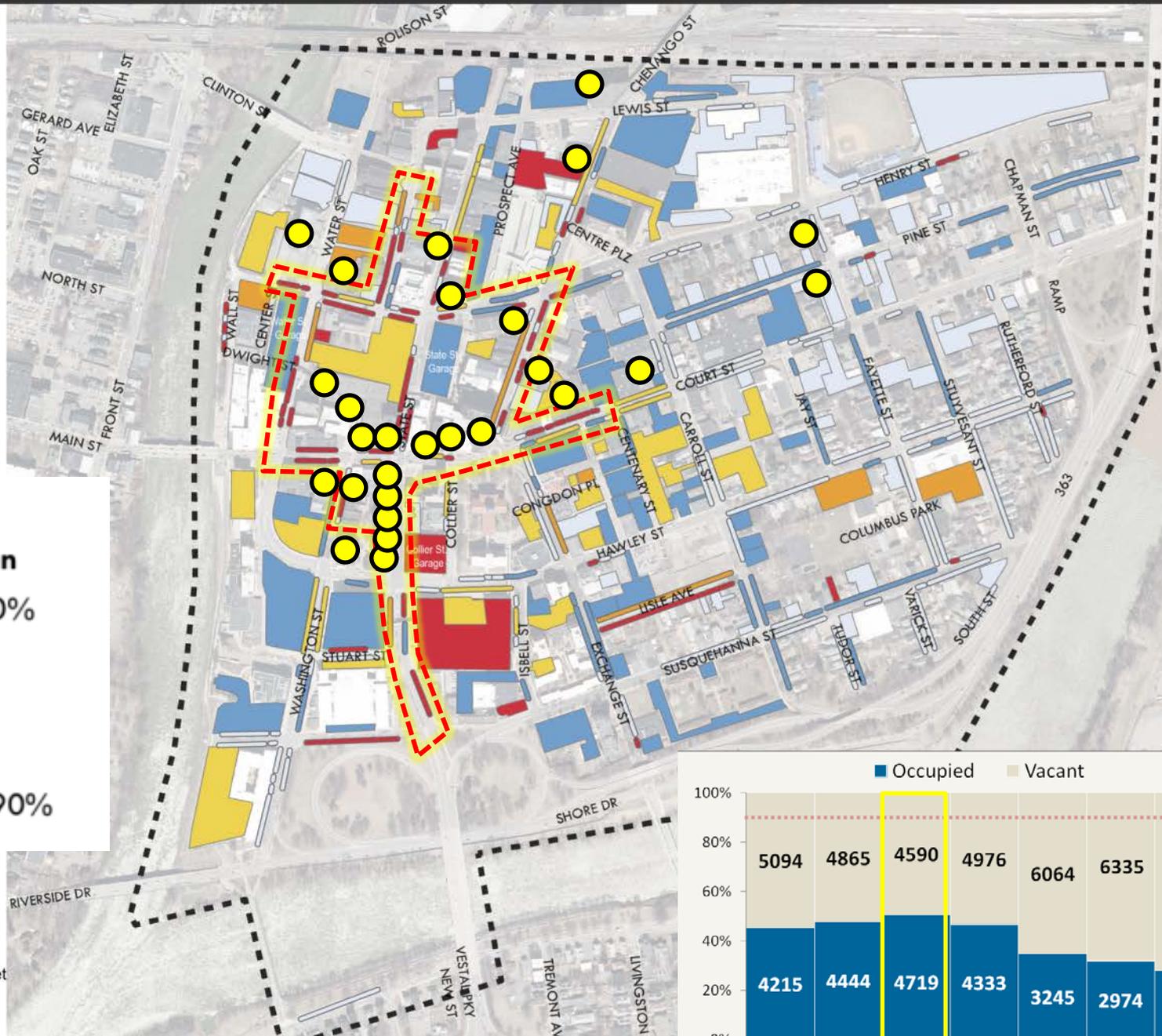
LEGEND

Parking Utilization

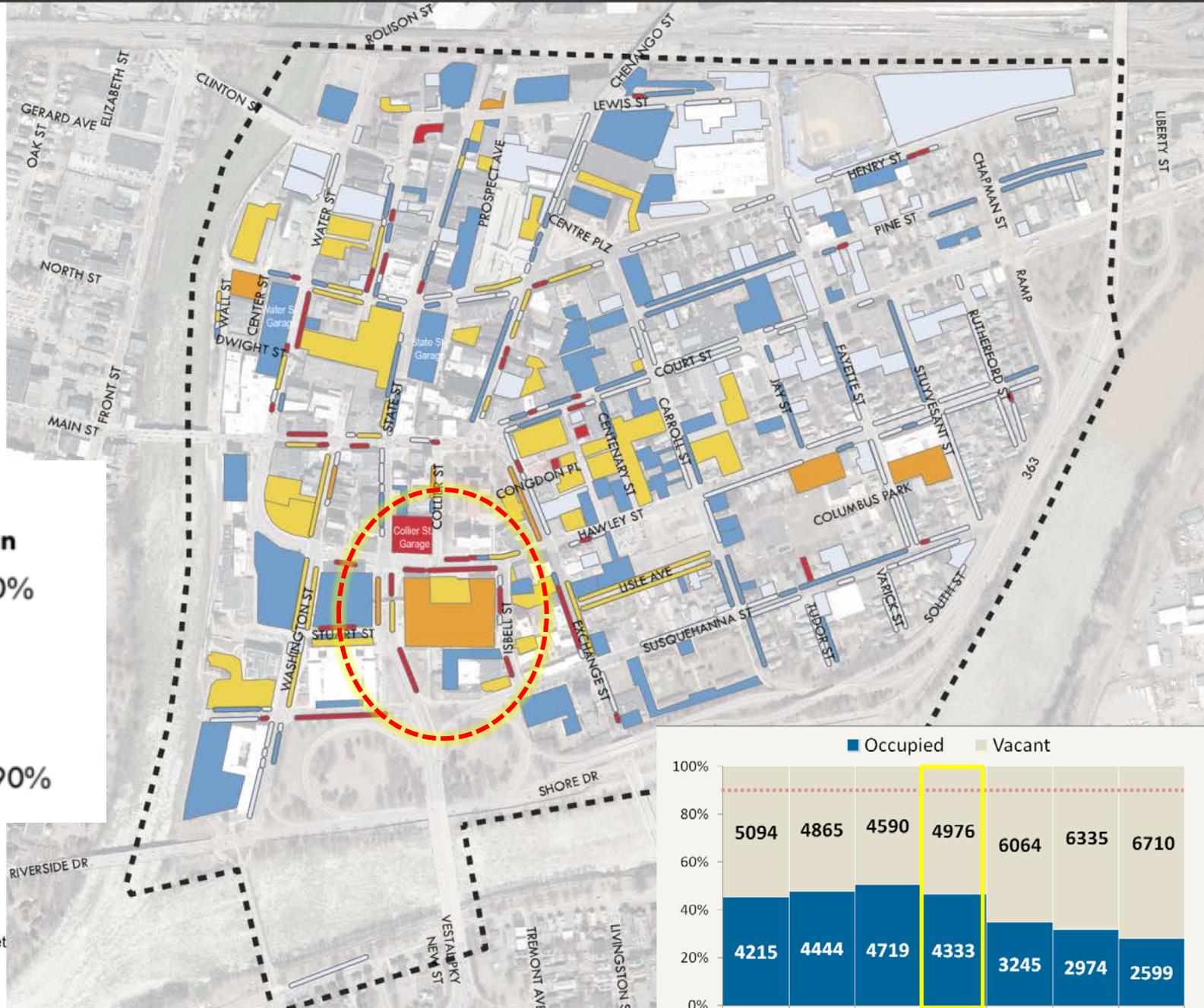
-  Less than 30%
-  31-60%
-  61-80%
-  81-90%
-  More than 90%



Data collected by Nelson\Nygaard in September 2015



Downtown Binghamton Parking Utilization - Thursday September 24, 2 p.m. - 4 p.m.



LEGEND

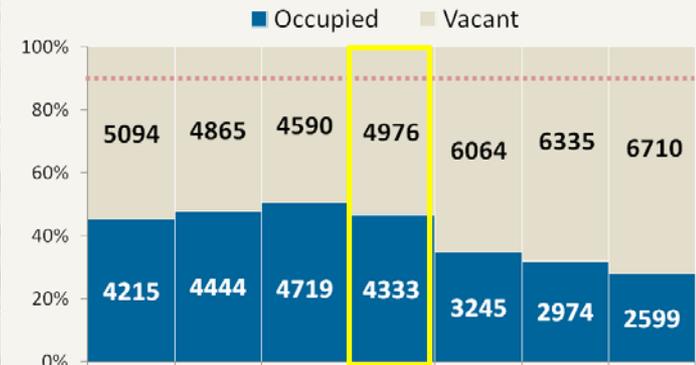
Parking Utilization

- Less than 30%
- 31-60%
- 61-80%
- 81-90%
- More than 90%

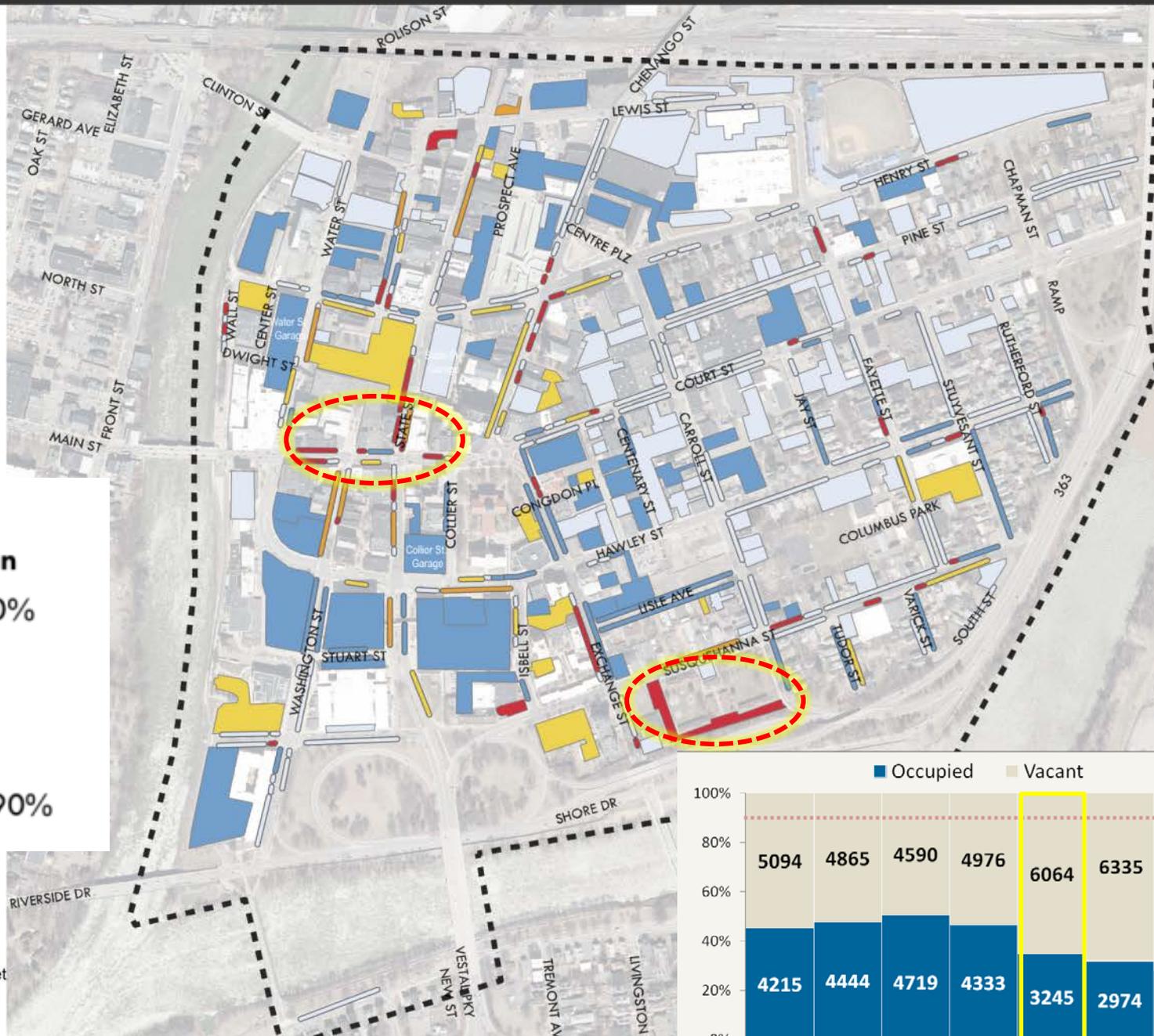


0 500 1,000 Feet

Data collected by Nelson\Nygaard in September 2015

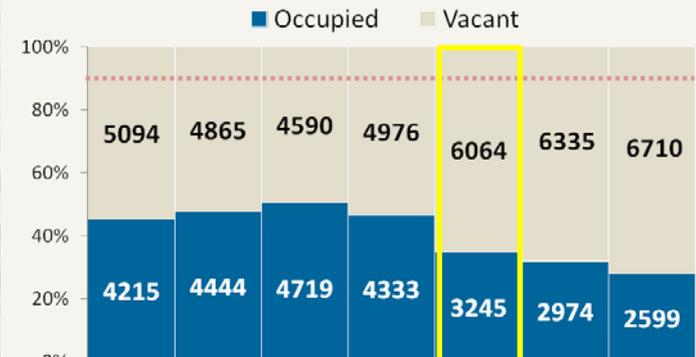


Downtown Binghamton Parking Utilization - Thursday September 24, 4 p.m. - 6 p.m.



LEGEND

- Parking Utilization**
- Less than 30%
 - 31-60%
 - 61-80%
 - 81-90%
 - More than 90%



Data collected by Nelson\Nygaard in September 2015

Downtown Binghamton Parking Utilization - Thursday September 24, 6 p.m. - 8 p.m.

 Restaurants

LEGEND

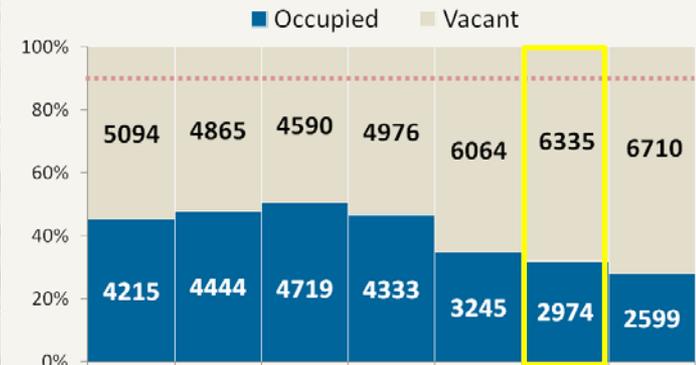
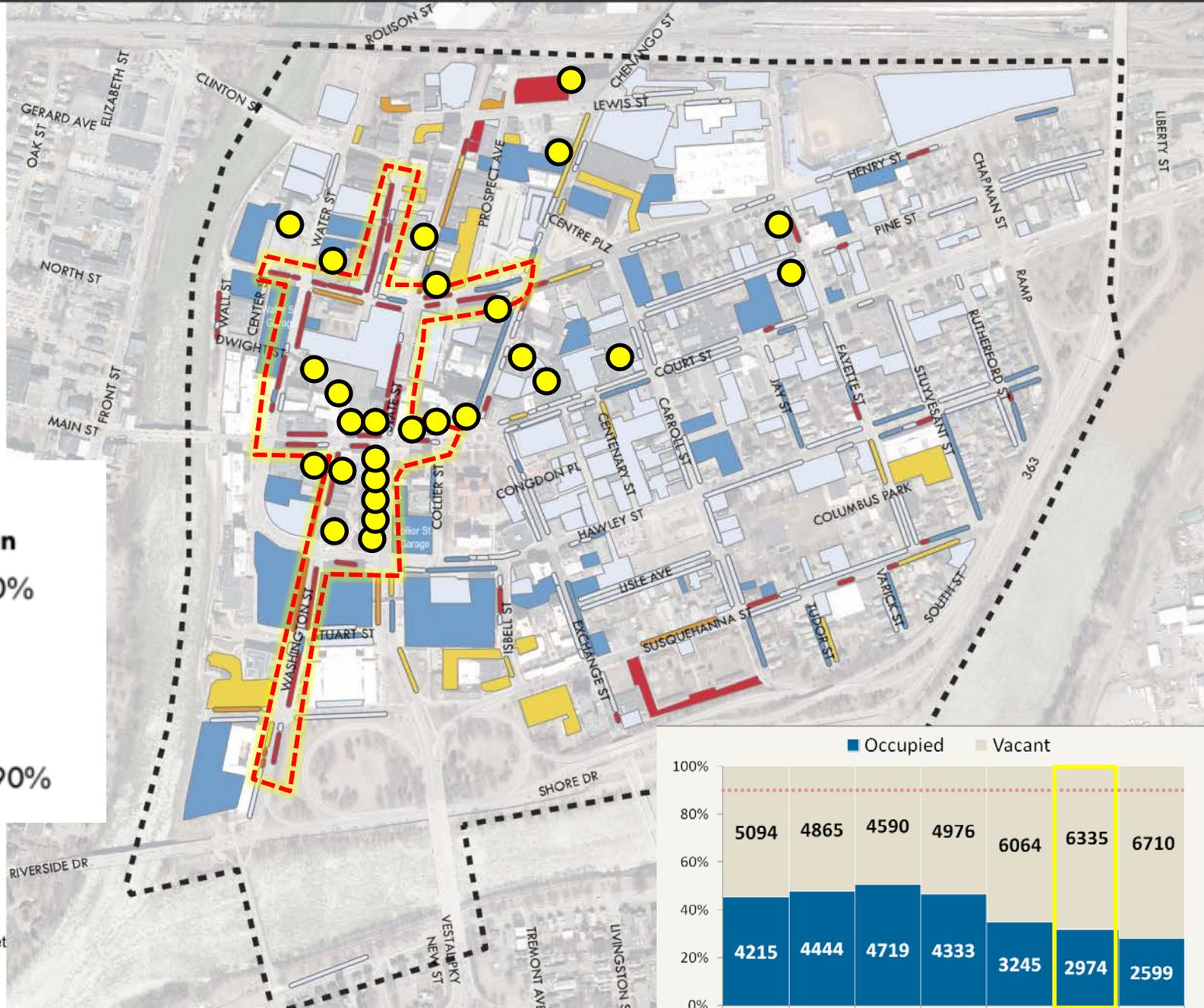
Parking Utilization

-  Less than 30%
-  31-60%
-  61-80%
-  81-90%
-  More than 90%

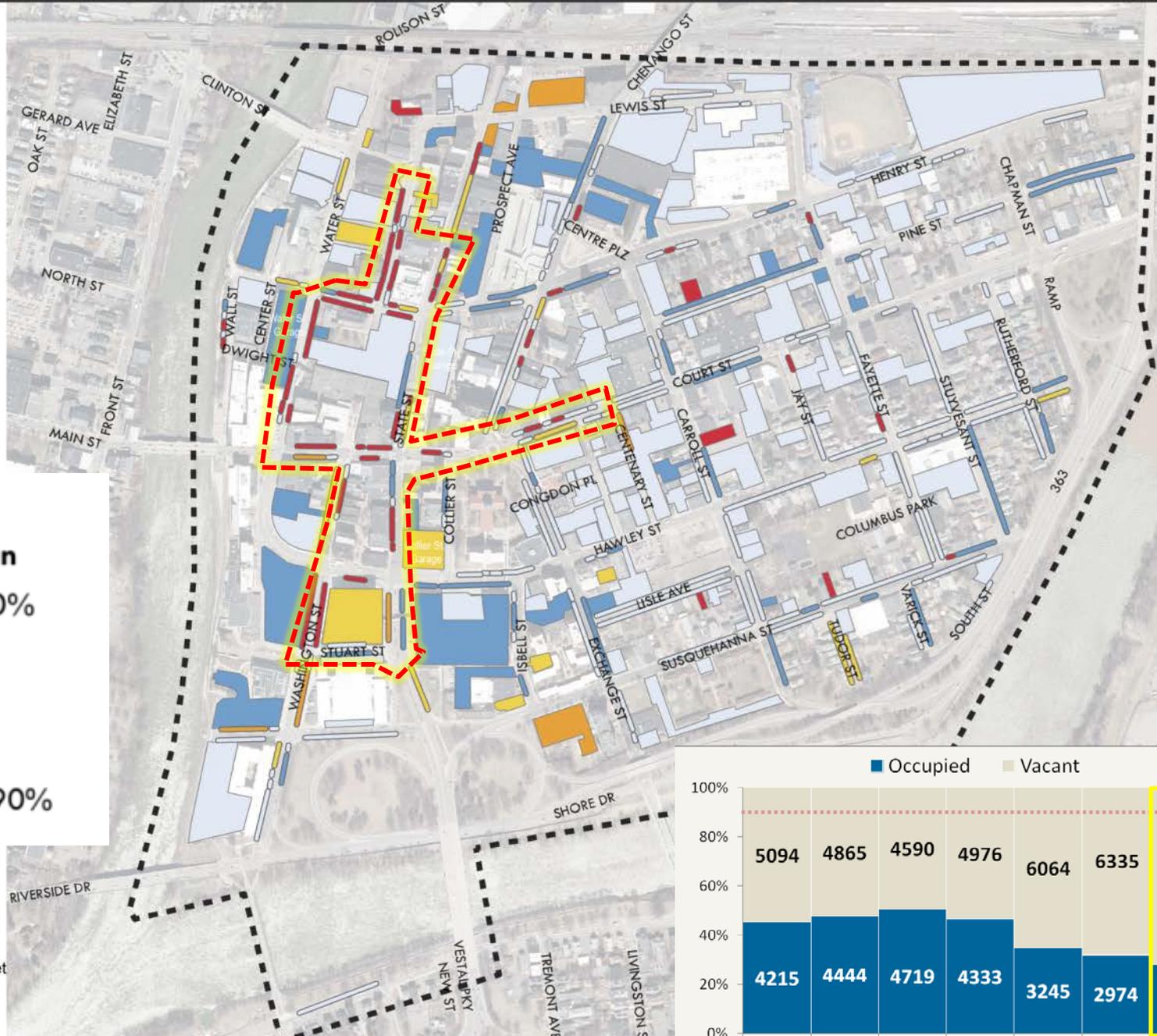


0 500 1,000 Feet

Data collected by Nelson\Nygaard in September 2015



Downtown Binghamton Parking Utilization - Thursday September 24, 8 p.m. - 10 p.m.



LEGEND

Parking Utilization

- Less than 30%
- 31-60%
- 61-80%
- 81-90%
- More than 90%



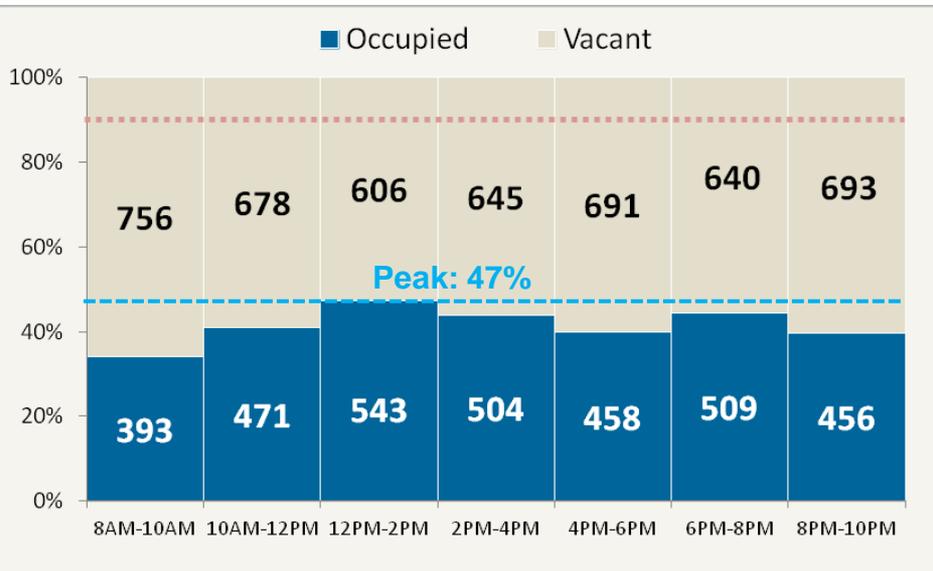
0 500 1,000 Feet

Data collected by Nelson\Nygaard in September 2015

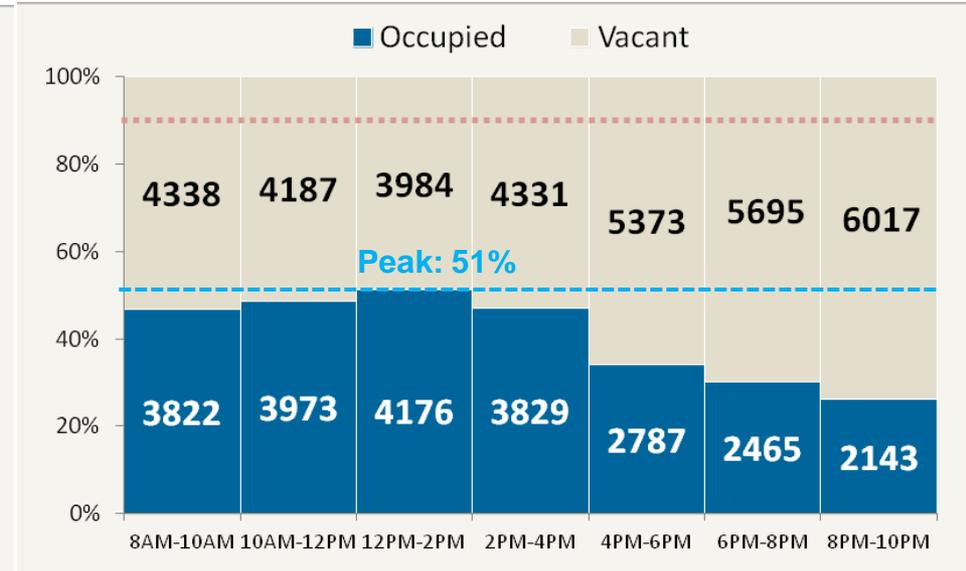


Parking Utilization – Thursday

On-Street

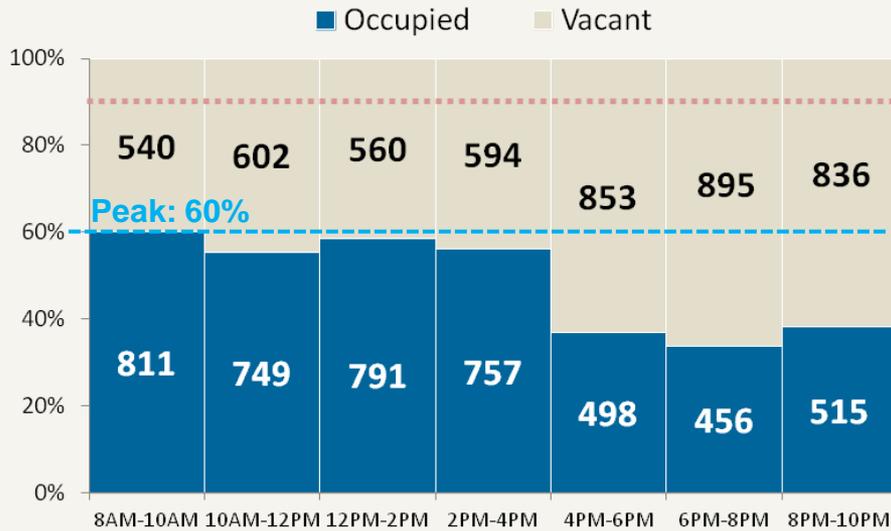


Off-Street

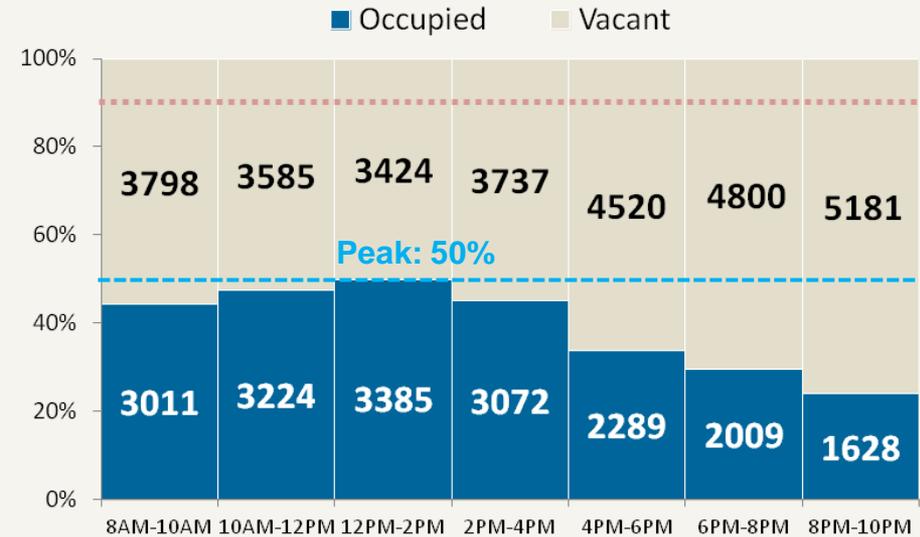


Off-Street Parking Utilization – Thursday

Publicly Accessible



Restricted Access

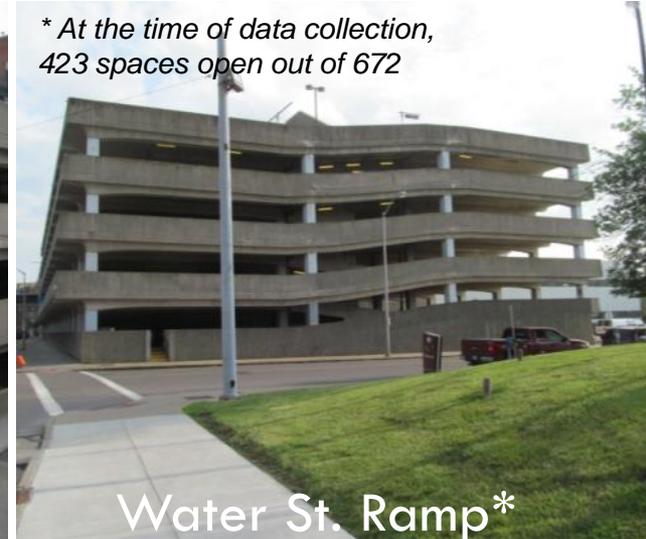


Public Ramps Utilization – Thursday

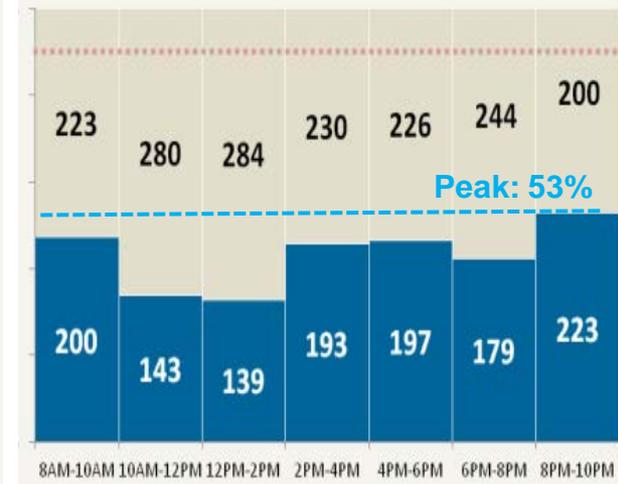
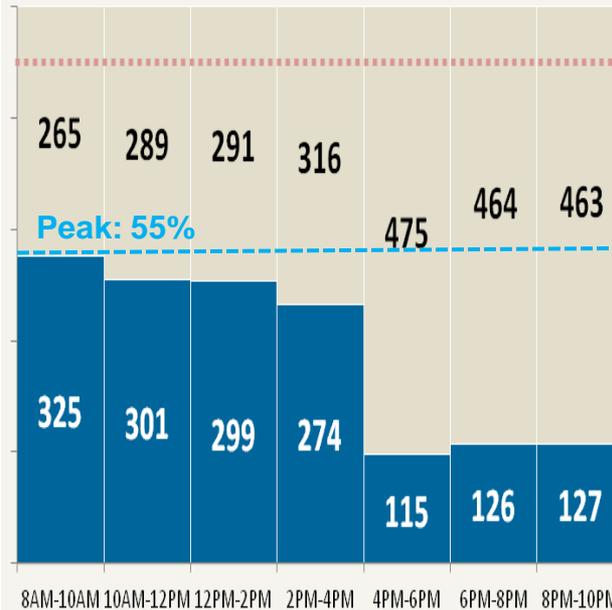
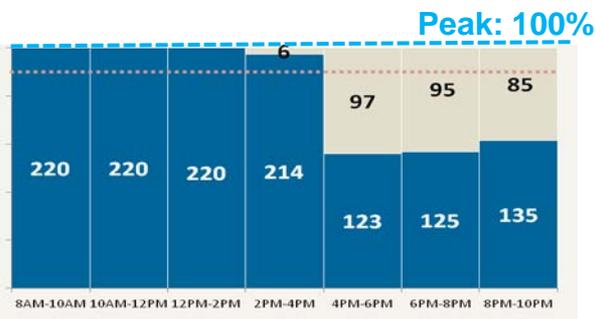
• At the time of data collection, ~220 spaces open out of 520



* At the time of data collection, 423 spaces open out of 672

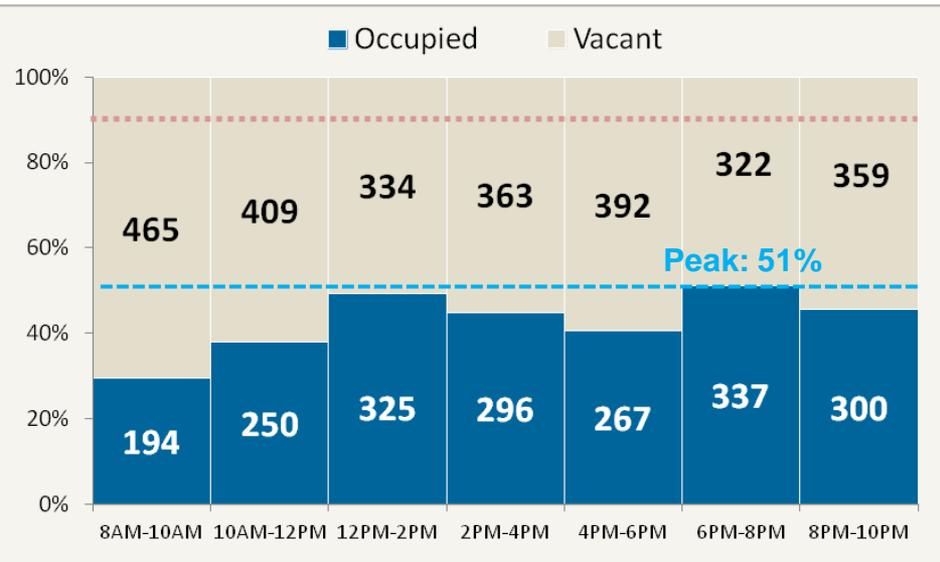


■ Occupied ■ Vacant

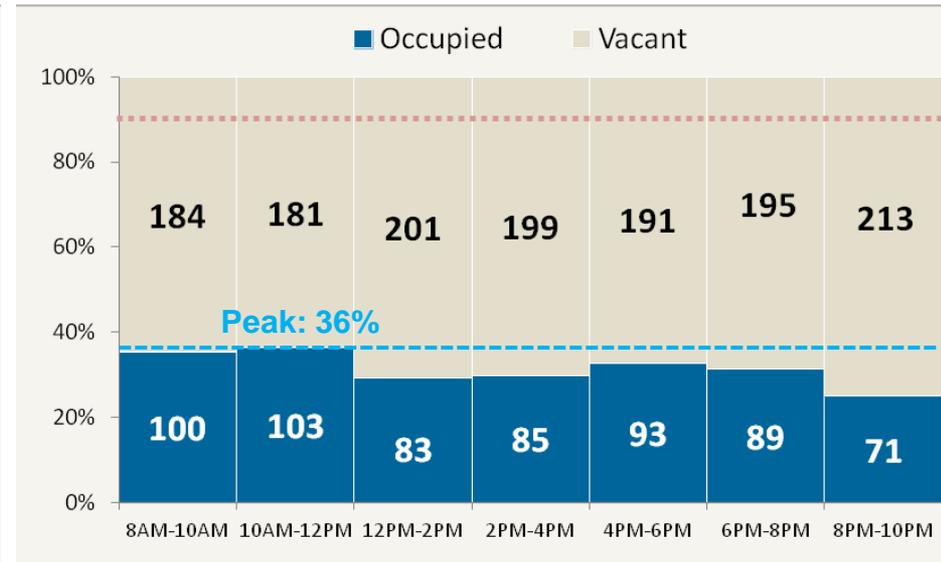


On-Street Parking Utilization – Thursday

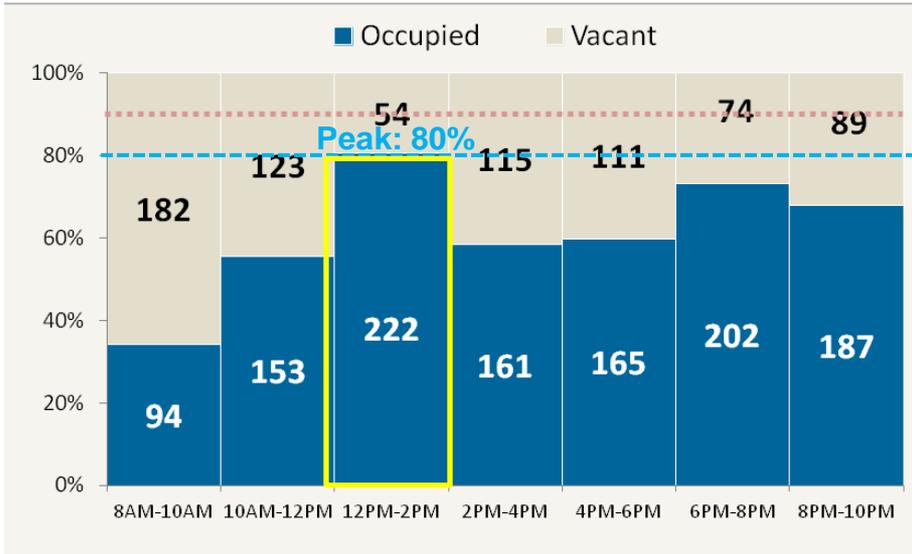
Metered



Unregulated

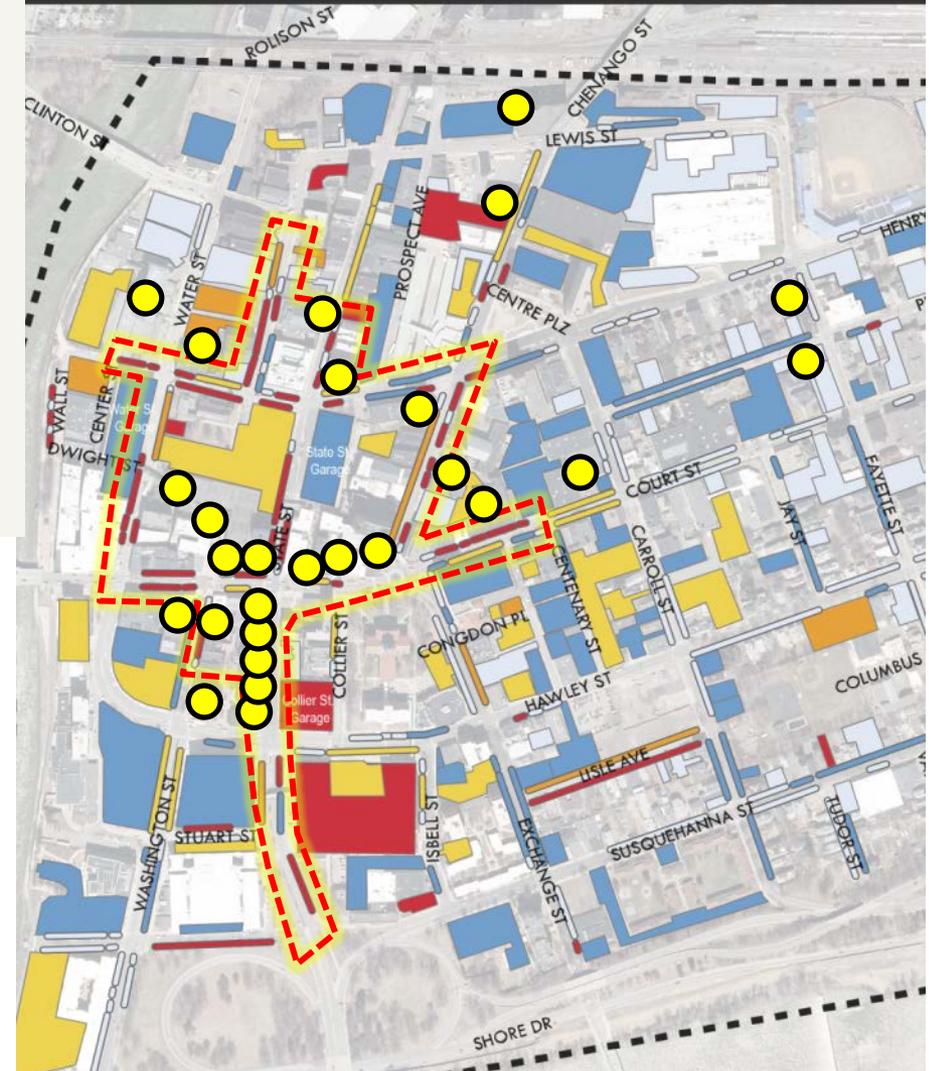


On-Street Core Area Parking Utilization - Thursday



- 88% utilized **excluding** Government, Handicapped and Loading Zones

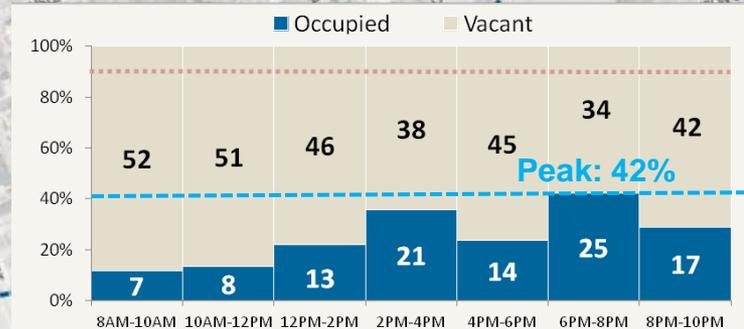
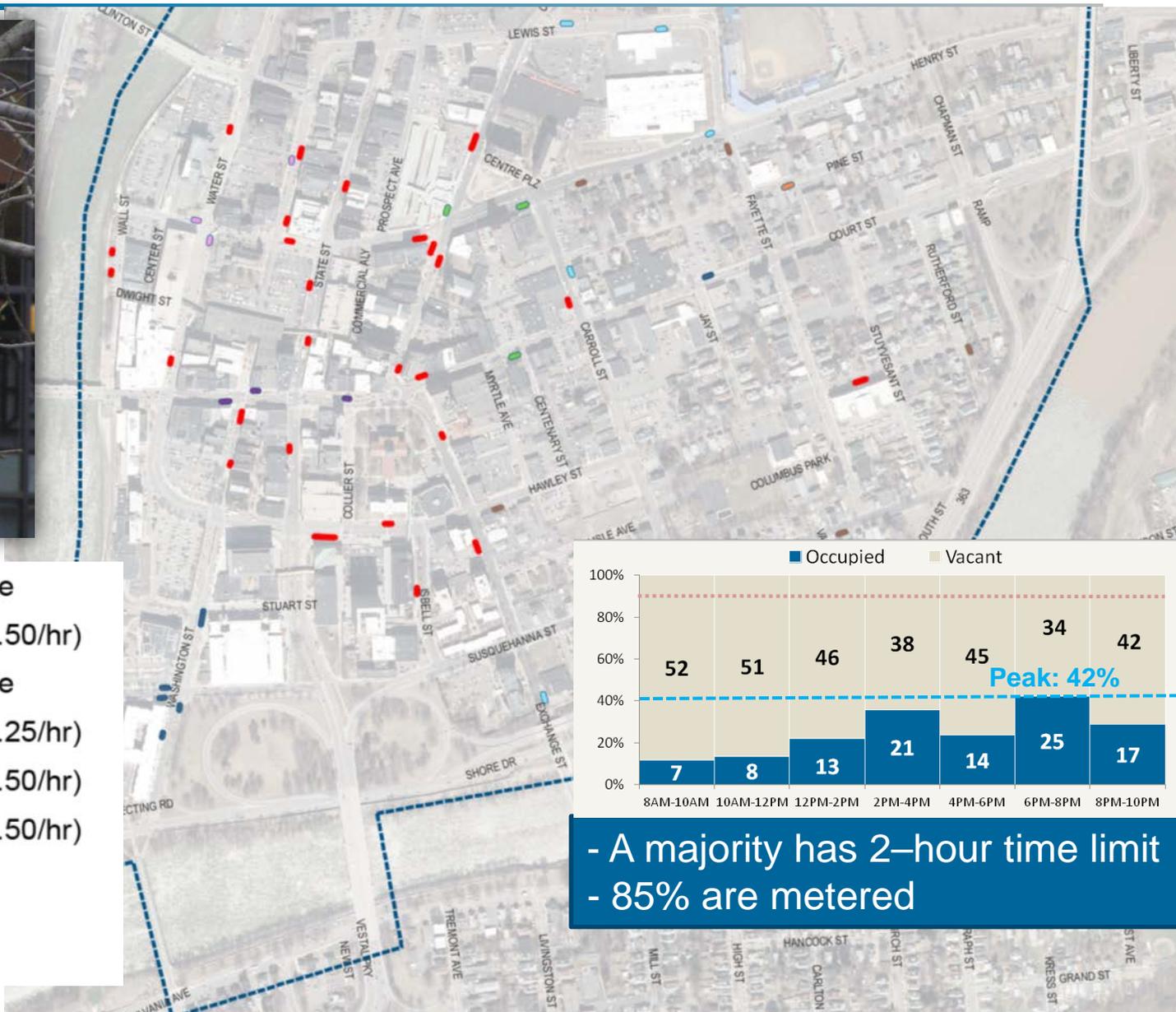
Utilization - Thursday September 24, 12 p.m. - 2 p.m.



Disabled Parking – 5% of On-Street Parking



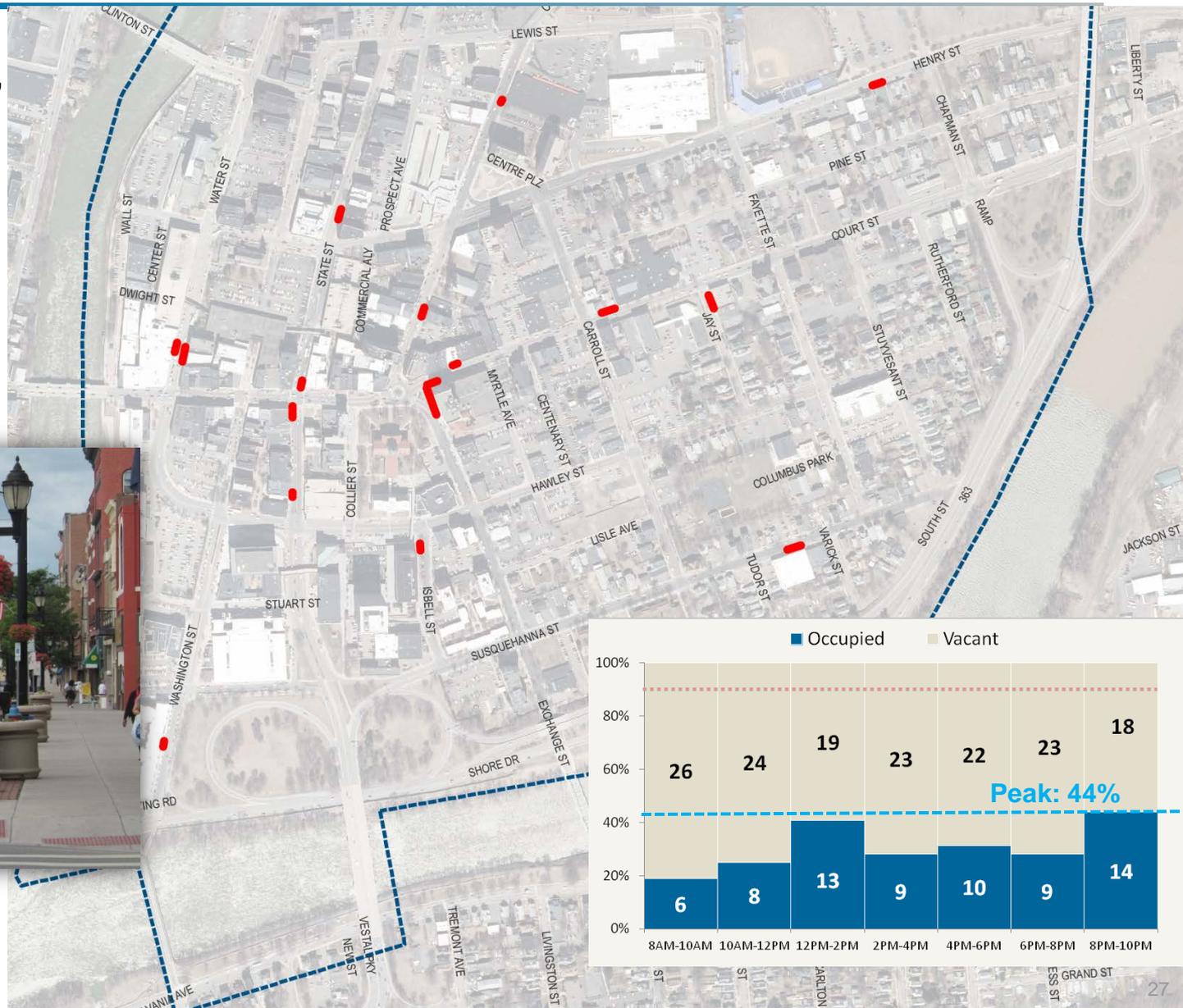
- Disabled 30 Min Free
- Disabled 1 Hour (\$0.50/hr)
- Disabled 2 Hour Free
- Disabled 2 Hour (\$0.25/hr)
- Disabled 2 Hour (\$0.50/hr)
- Disabled 4 Hour (\$0.50/hr)
- Disabled Free
- Disabled (\$0.25/hr)
- Disabled (\$0.50/hr)



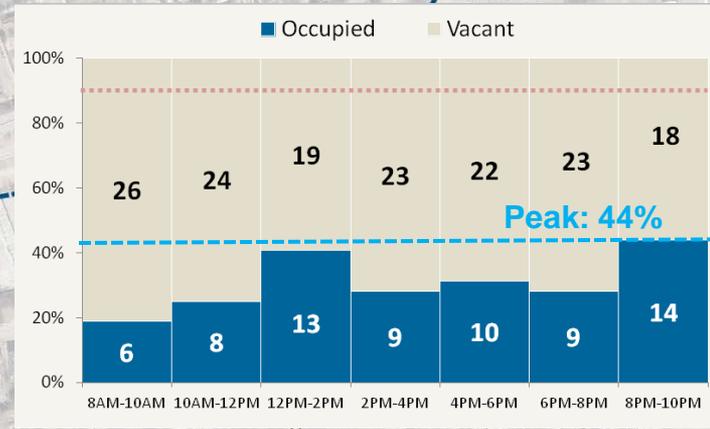
- A majority has 2-hour time limit
 - 85% are metered

Loading Zone – 3% of On-Street Parking

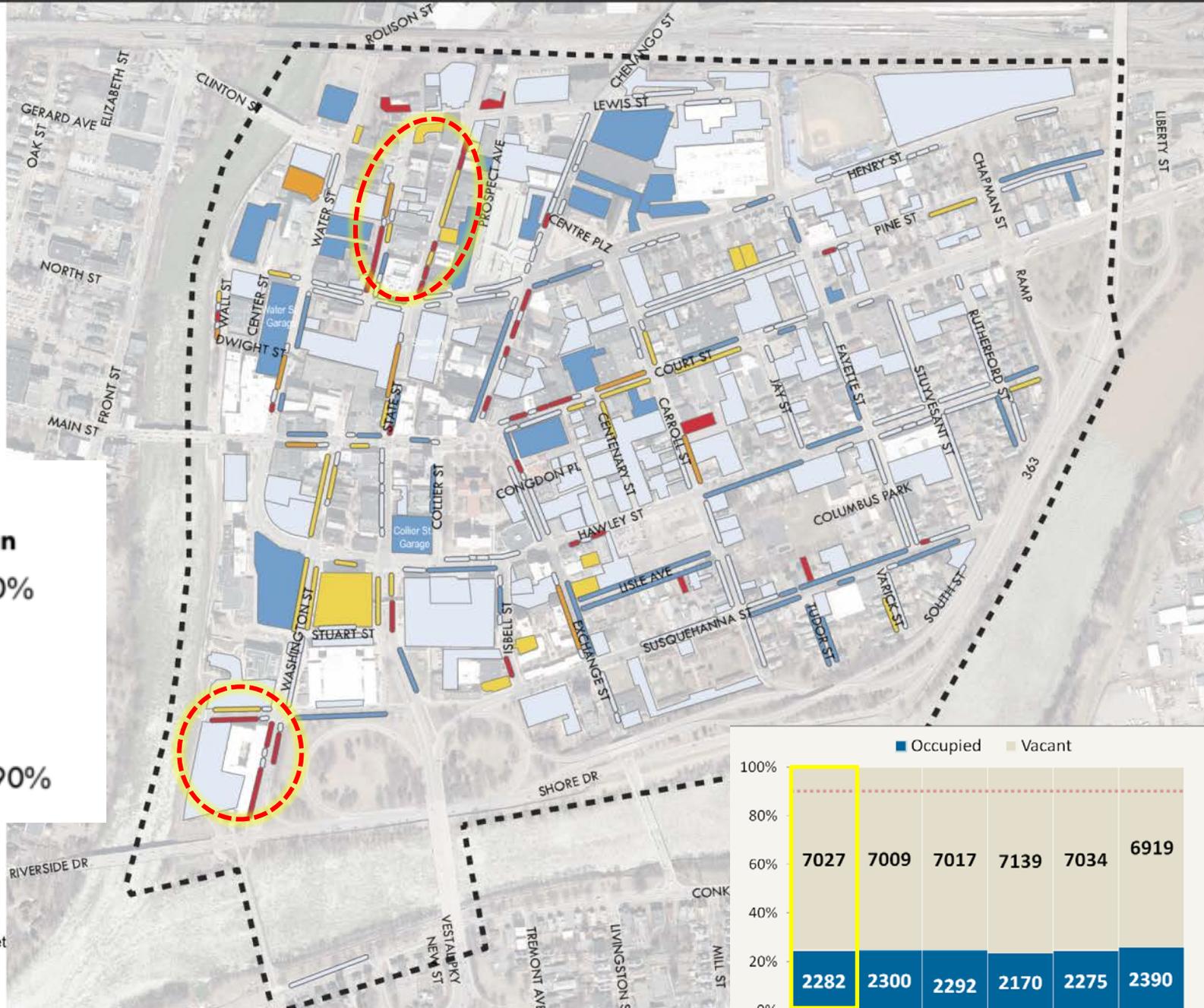
- 6 (or 8) am to 7pm M-F,
8am to noon, SAT



 Loading



Downtown Binghamton Parking Utilization - Saturday September 26, 10 a.m. - 12 p.m.



LEGEND

Parking Utilization

- Less than 30%
- 31-60%
- 61-80%
- 81-90%
- More than 90%

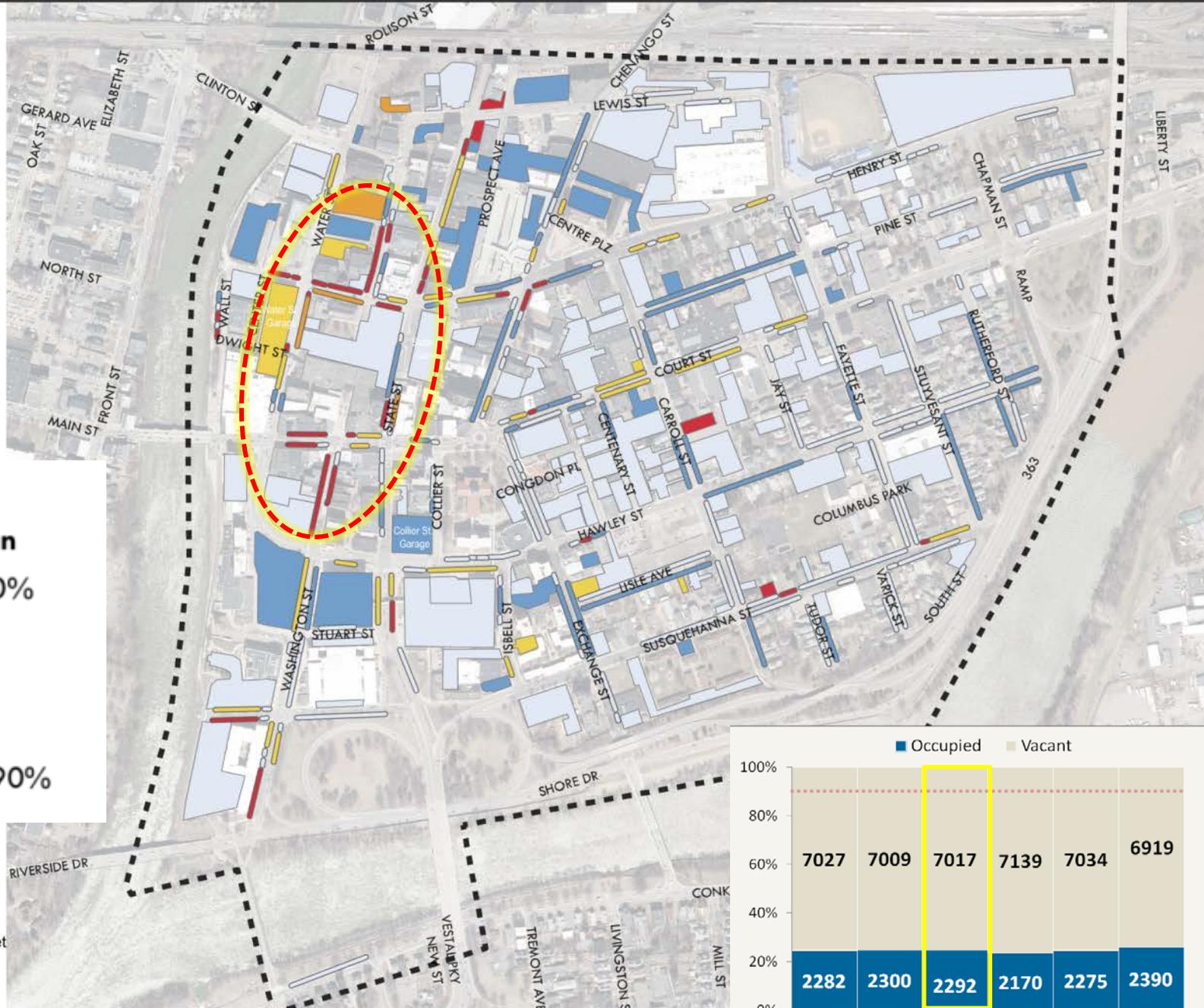


0 500 1,000 Feet

Data collected by Nelson\Nygaard in September 2015

	Occupied	Vacant	Occupied	Vacant	Occupied	Vacant
100%						
80%						
60%						
40%						
20%						
0%						
	7027	7009	7017	7139	7034	6919
	2282	2300	2292	2170	2275	2390

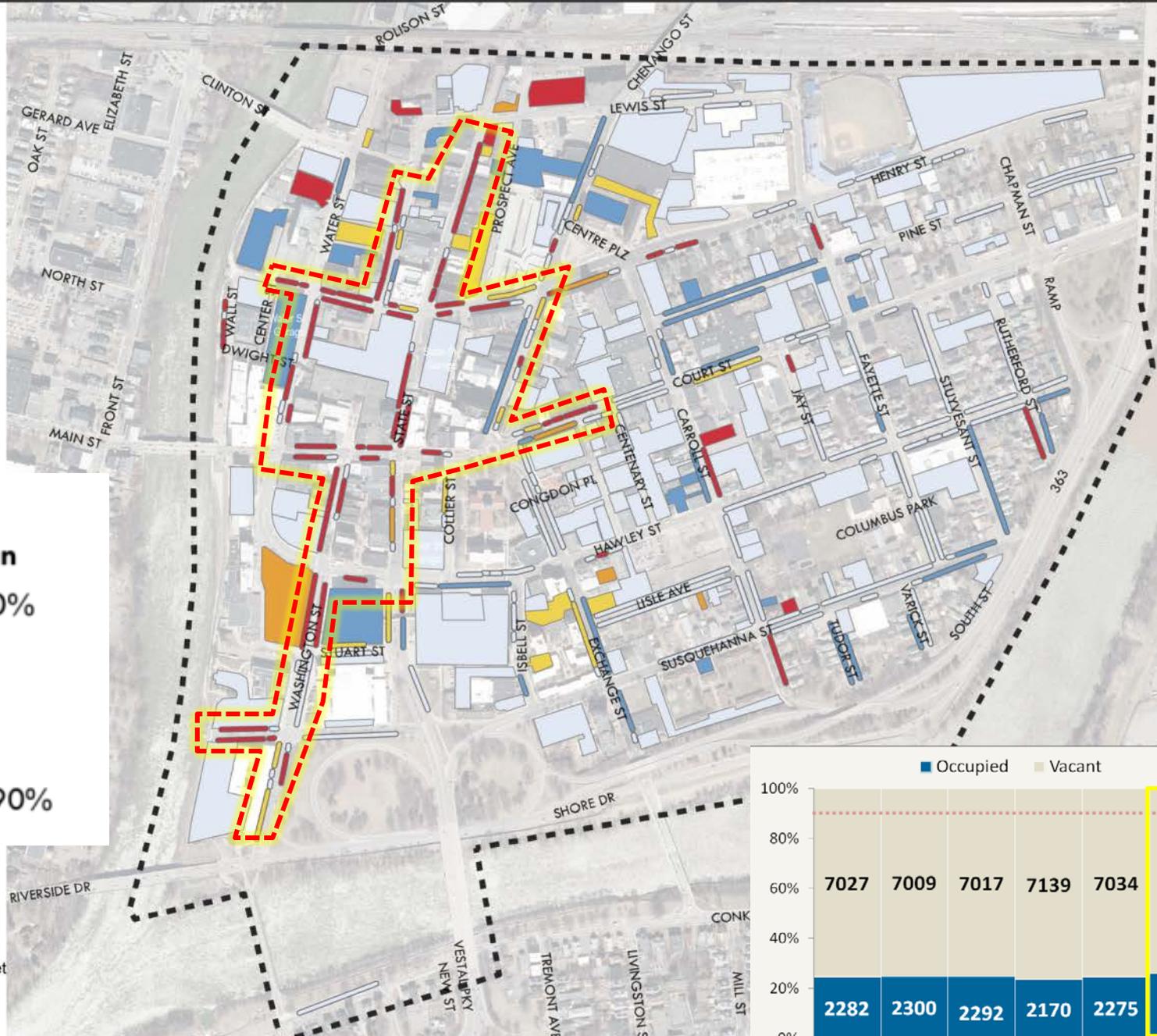
Downtown Binghamton Parking Utilization - Saturday September 26, 2 p.m. - 4 p.m.



0 500 1,000 Feet

Downtown Binghamton Parking Utilization - Saturday September 26, 8 p.m. - 10 p.m.

Peak: 26%



LEGEND

Parking Utilization

- Less than 30%
- 31-60%
- 61-80%
- 81-90%
- More than 90%



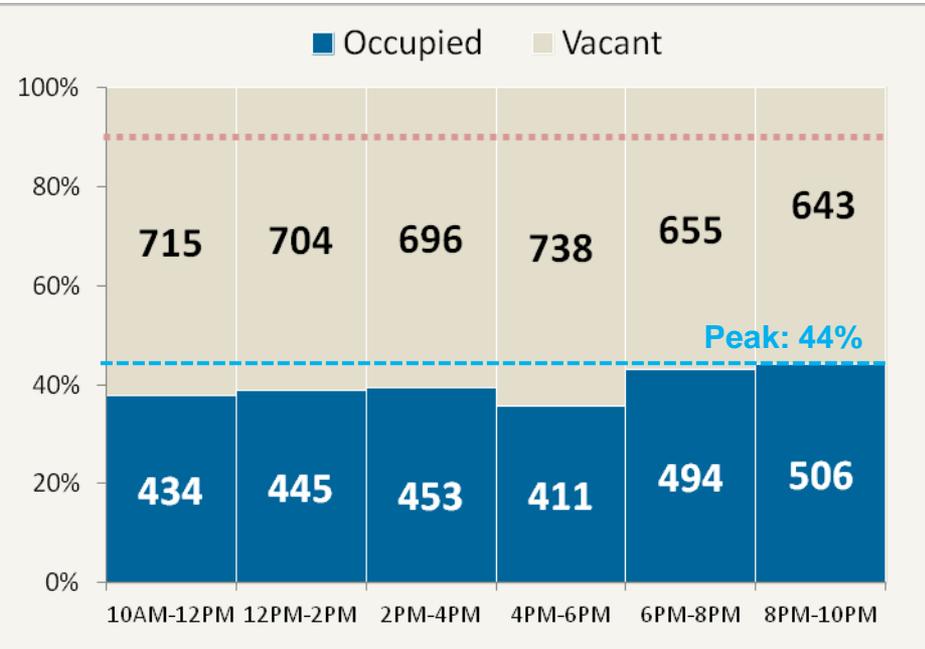
0 500 1,000 Feet

Data collected by Nelson\Nygaard in September 2015

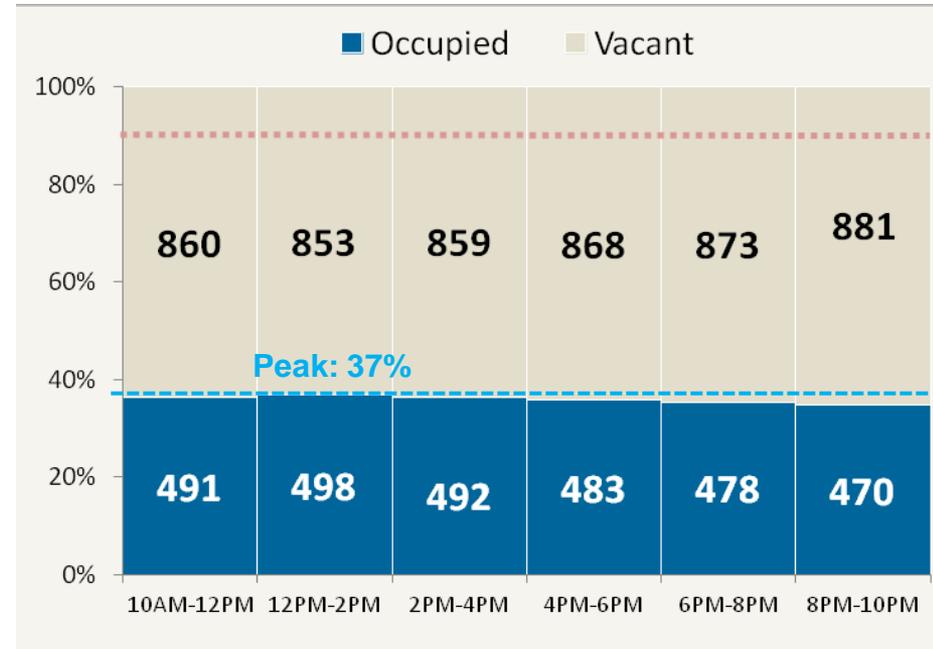
	Occupied	Vacant
100%		
80%		
60%	7027	7009
40%	7017	7139
20%	7034	6919
0%	2282	2300
	2292	2170
	2275	2390

Parking Utilization – Saturday

On-Street



Off-Street Public Accessible

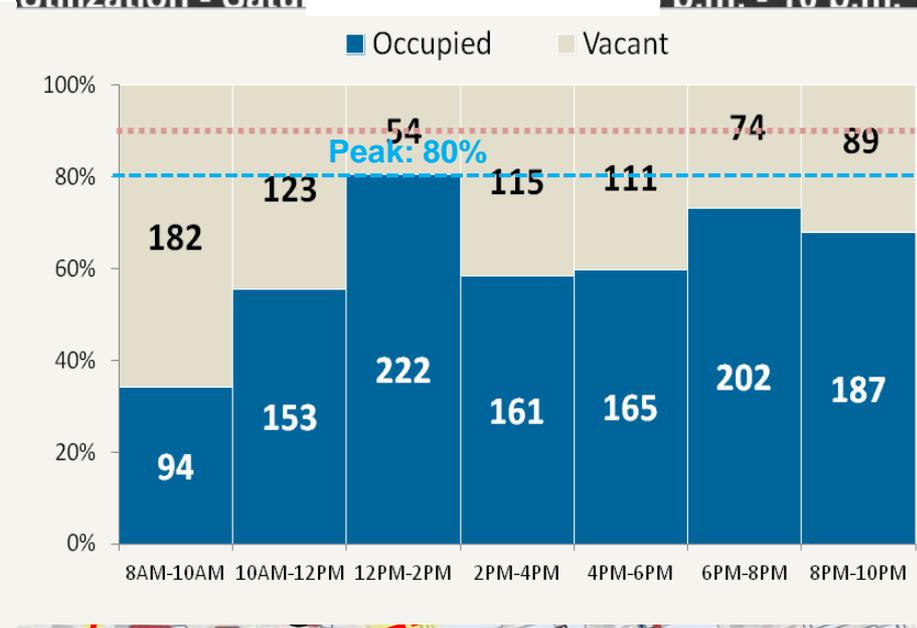
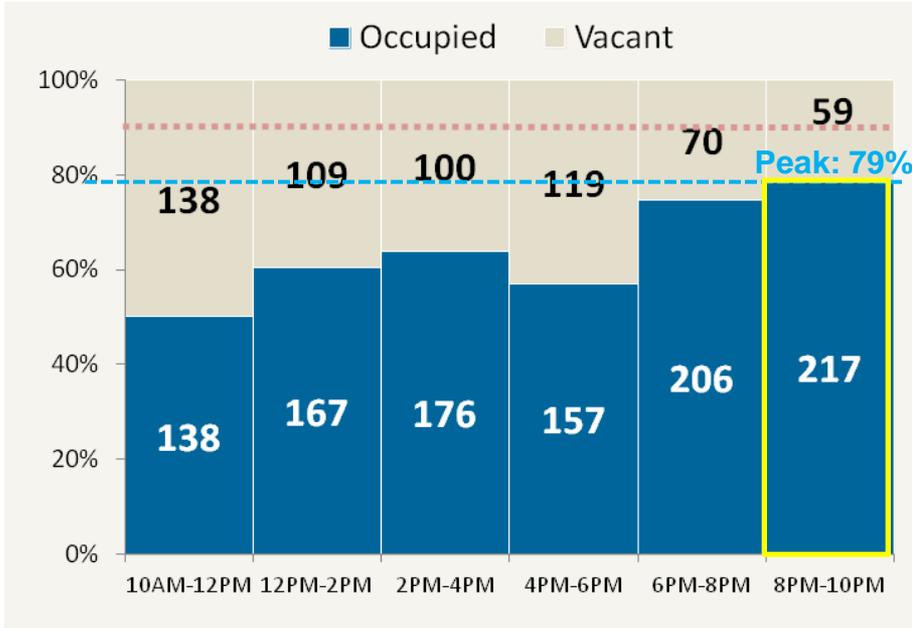


On-Street Core Area Parking Utilization Saturday

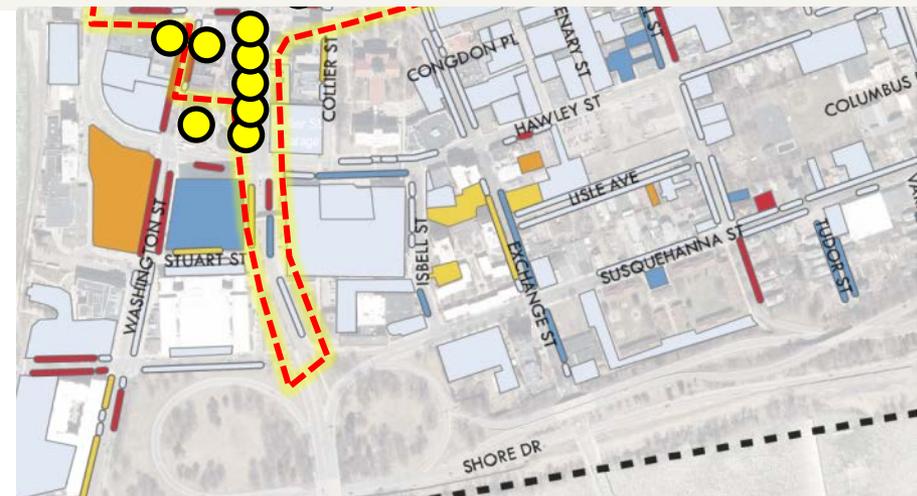
Utilization - Saturday

Thursday

p.m. - 10 p.m.

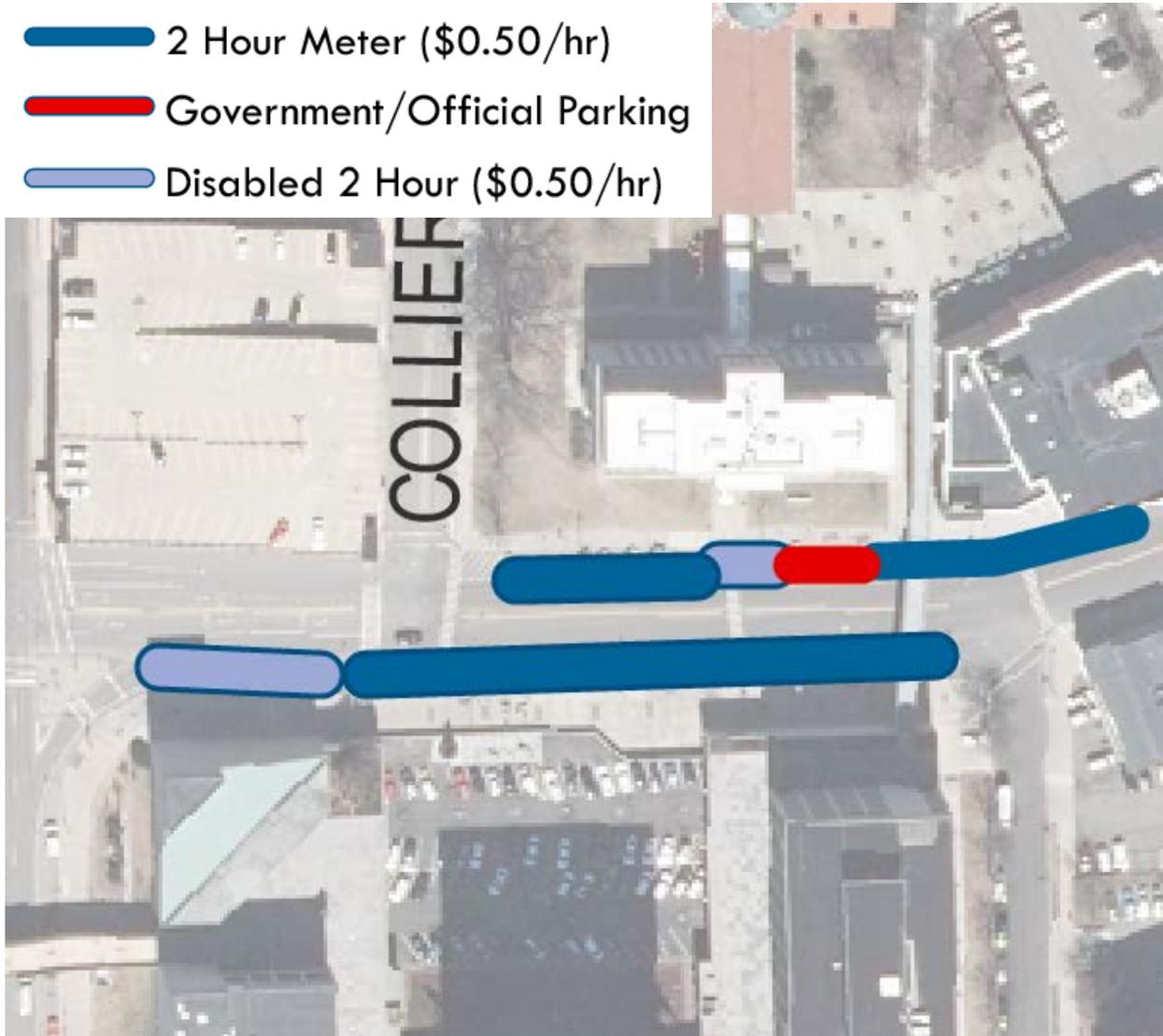


- 91% utilized **excluding** Government, Handicapped and Loading Zones



Turnover Key Findings: Hawley Street

- 2 Hour Meter (\$0.50/hr)
- Government/Official Parking
- Disabled 2 Hour (\$0.50/hr)

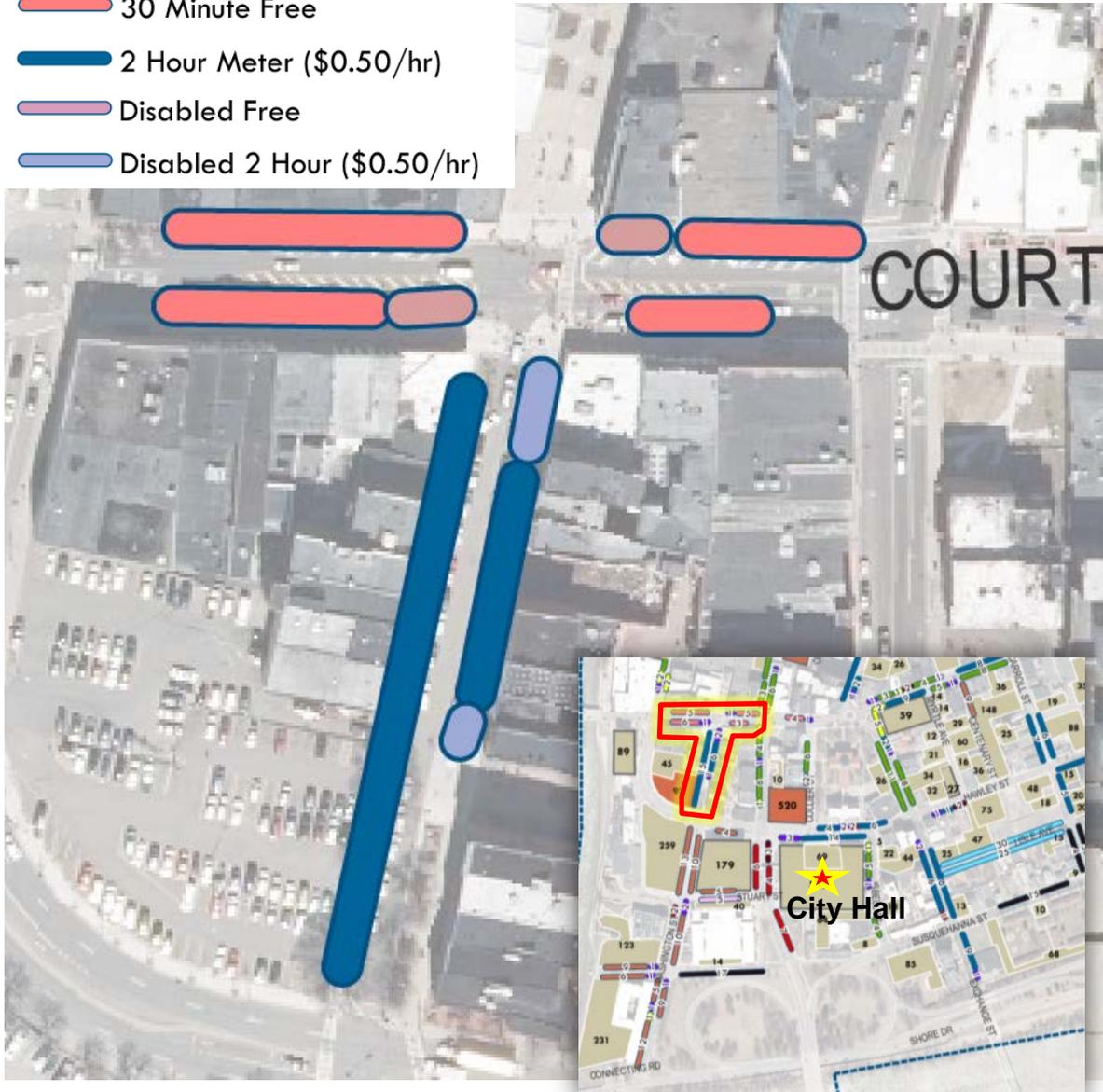


64% of cars parked for <30 minutes



Turnover Key Findings: Court and Washington

- 30 Minute Free
- 2 Hour Meter (\$0.50/hr)
- Disabled Free
- Disabled 2 Hour (\$0.50/hr)



Court Street

38% of cars stayed for longer than 30 minutes

Washington Street

20% of cars stayed for longer than 2 hours

Utilization and Turnover Key Findings

- Overall parking availability (peak 51% 12pm – 2pm)
- Some areas are full:
 - On-street core
 - Collier Street ramp (under construction) before closed (State and Water ramps have 500+ spaces unused)
 - Government Plaza underground garage
- After 4pm, ample availability in off-street facilities
- Saturday demand is very high for on-street parking in the core, but very low overall
- Short time limits are abused



Public Input

Input on Parking Issues and Opportunities

- Spring 2015 Workshop
- Online Survey
- “Stakeholder” interviews

Binghamton Downtown Parking Survey



1. User Questions

13%

On behalf of the City of Binghamton, we are conducting a survey of parking activity and preferences in Downtown Binghamton. Your accurate responses will help to guide our recommendations.

THE SURVEY WILL TAKE LESS THAN 10 MINUTES - YOUR RESPONSE IS VERY IMPORTANT.

This survey is anonymous.

As you answer questions, please think back to the last day you traveled to Downtown Binghamton. This may be today or at some time in the past. This is intended to be a snapshot of your experience.

1. What zip code do you live in? (enter 5-digit ZIP code; for example, 13901)

* 2. How do you typically get to Downtown Binghamton?

Drive

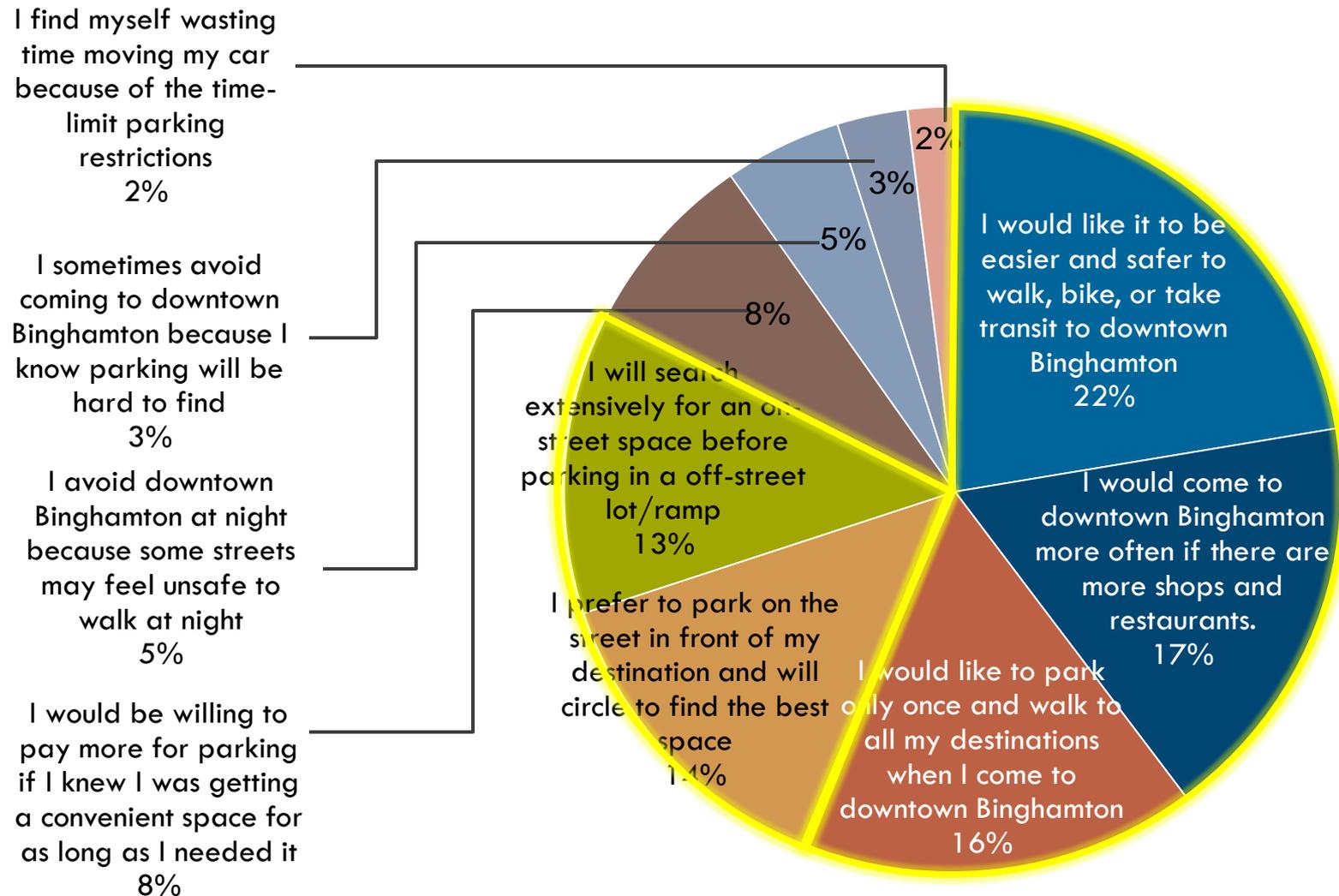
Carpool

Walk

Bike

Transit (bus, shuttle, etc)

Voting Exercise Results

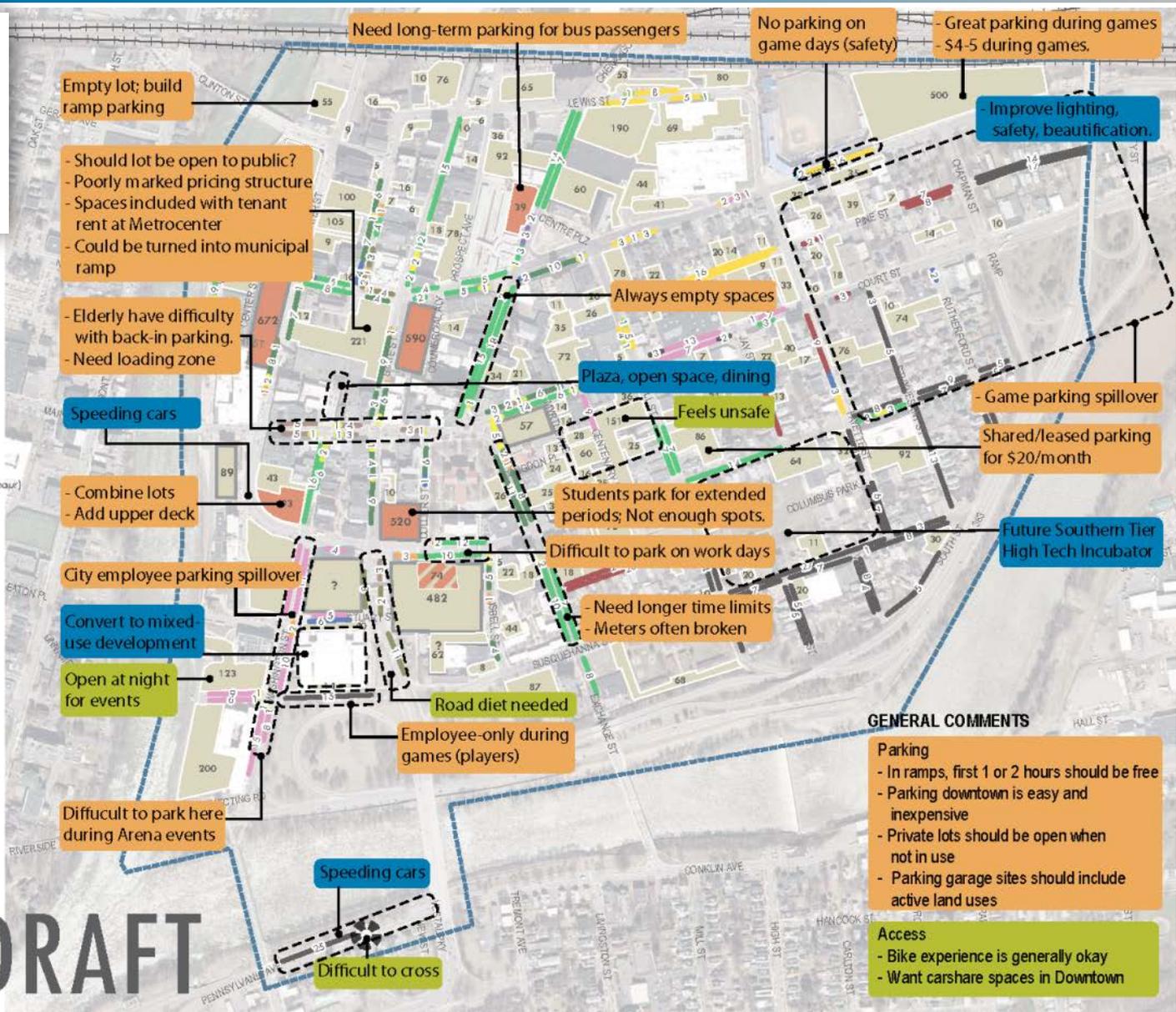


Open Comment Map Summary

COMMENTS LEGEND

- Parking**
- Access**
- Other**

- 1.5 Minute Free
 - 1.5 Minute Meter (\$0.5/hour)
 - 30 Minute Meter (\$0.5/hour)
 - 1 Hour Meter (\$0.5/hour)
 - 2 Hour Free
 - 2 Hour Meter (\$0.25/hour)
 - 2 Hour Meter (\$0.5/hour)
 - 4 Hour Meter (\$0.5/hour)
 - Government
 - Handicapped Parking Free
 - Handicapped Parking (\$0.25/hour)
 - Handicapped Parking (\$0.5/hour)
 - Handicapped Parking 2 Hour (\$0.5/hour)
 - Loading Zone
 - Residential Permit
 - Taxi Cabs Only
 - Unregulated
-
- Surface Lot Parking**
- Public Lot
 - Private Lot
 - Public/Private
-
- Garage Parking**
- Private
 - Public
- Study Area



- GENERAL COMMENTS**
- Parking**
 - In ramps, first 1 or 2 hours should be free
 - Parking downtown is easy and inexpensive
 - Private lots should be open when not in use
 - Parking garage sites should include active land uses
 - Access**
 - Bike experience is generally okay
 - Want carshare spaces in Downtown



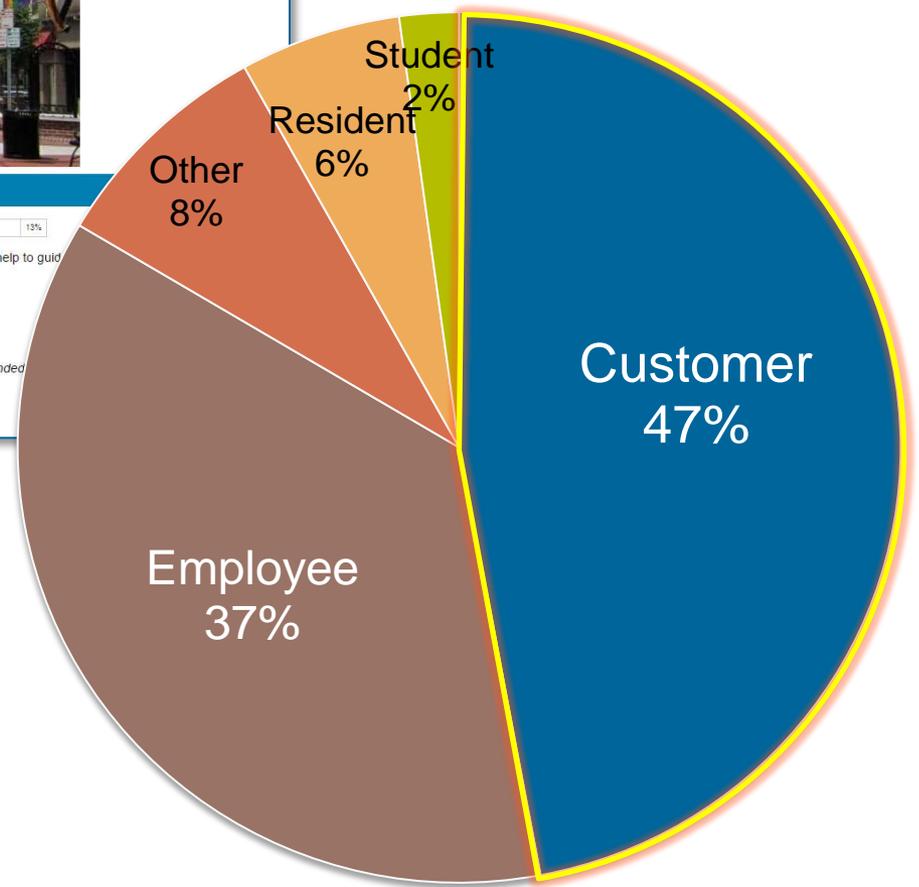
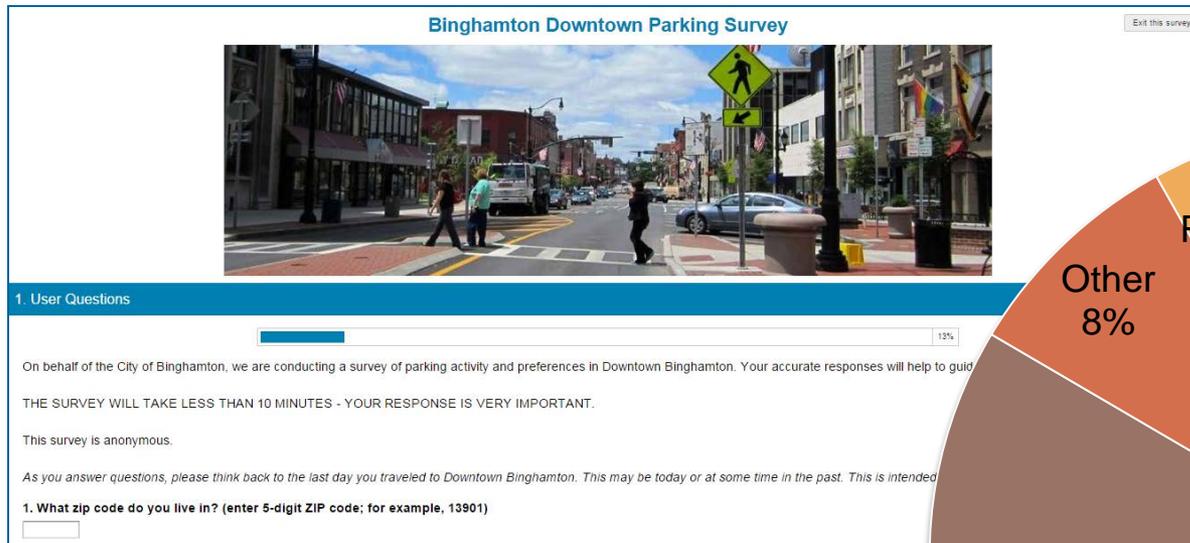
0 0.05 0.1 Miles

DRAFT

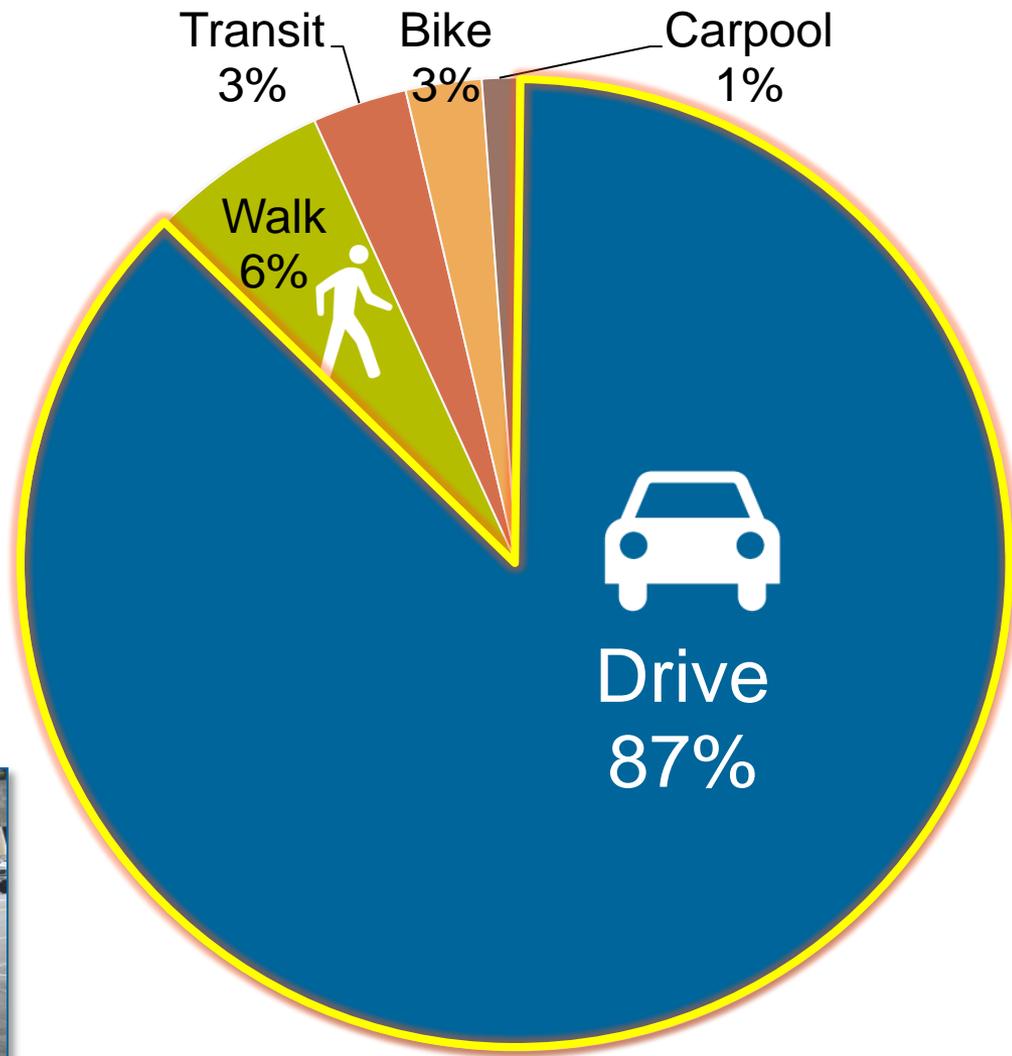
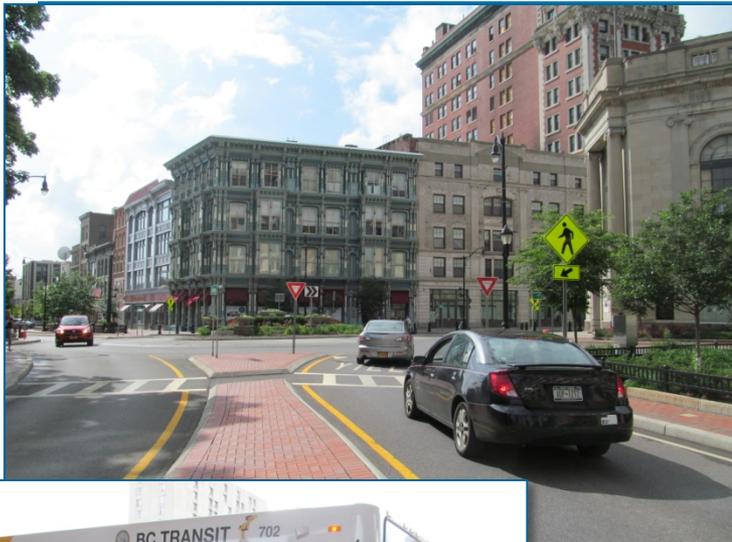
Data Sources: City of Binghamton, ESRI

Online Survey – 965 responses

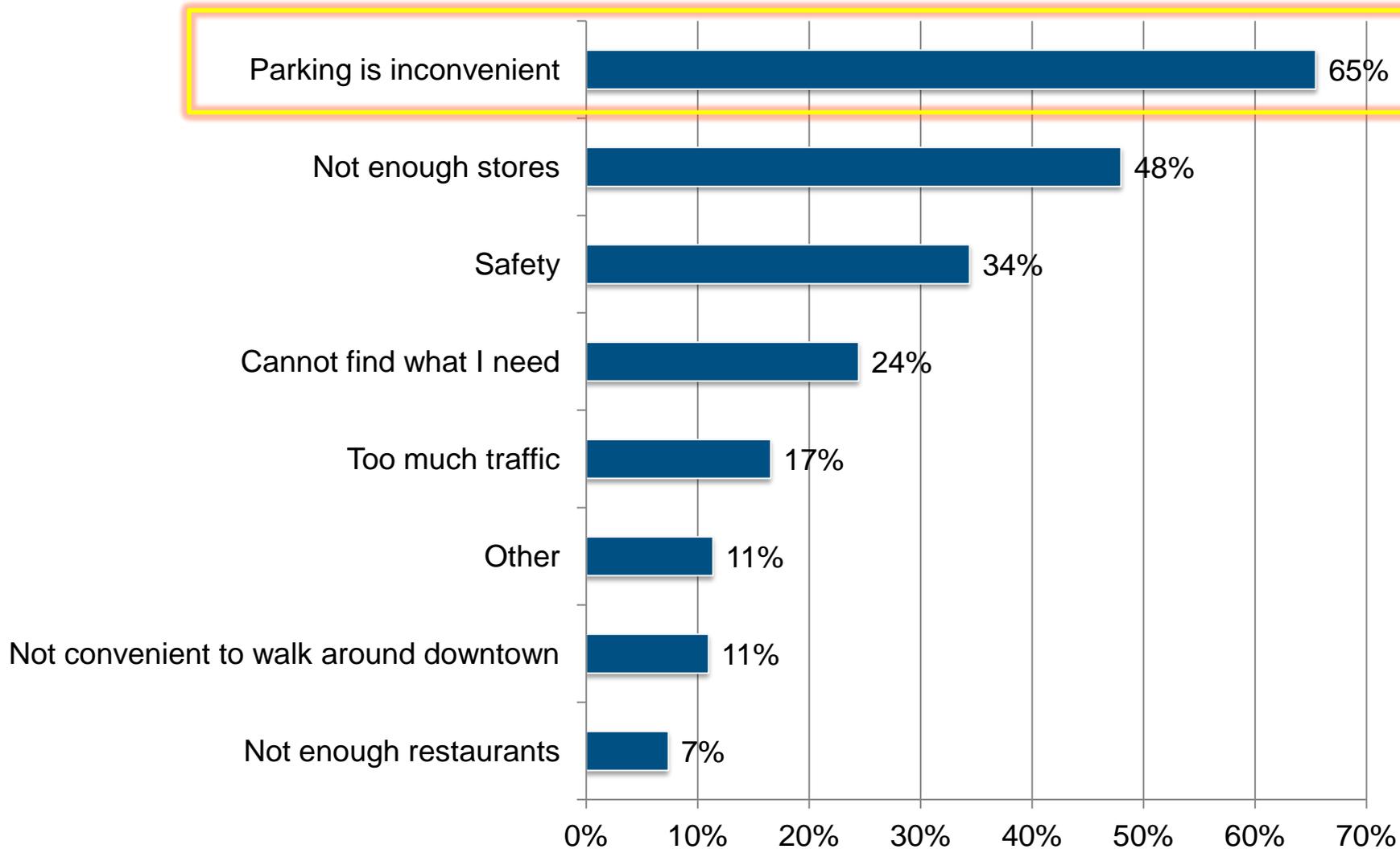
www.binghamtonparkingsurvey.com



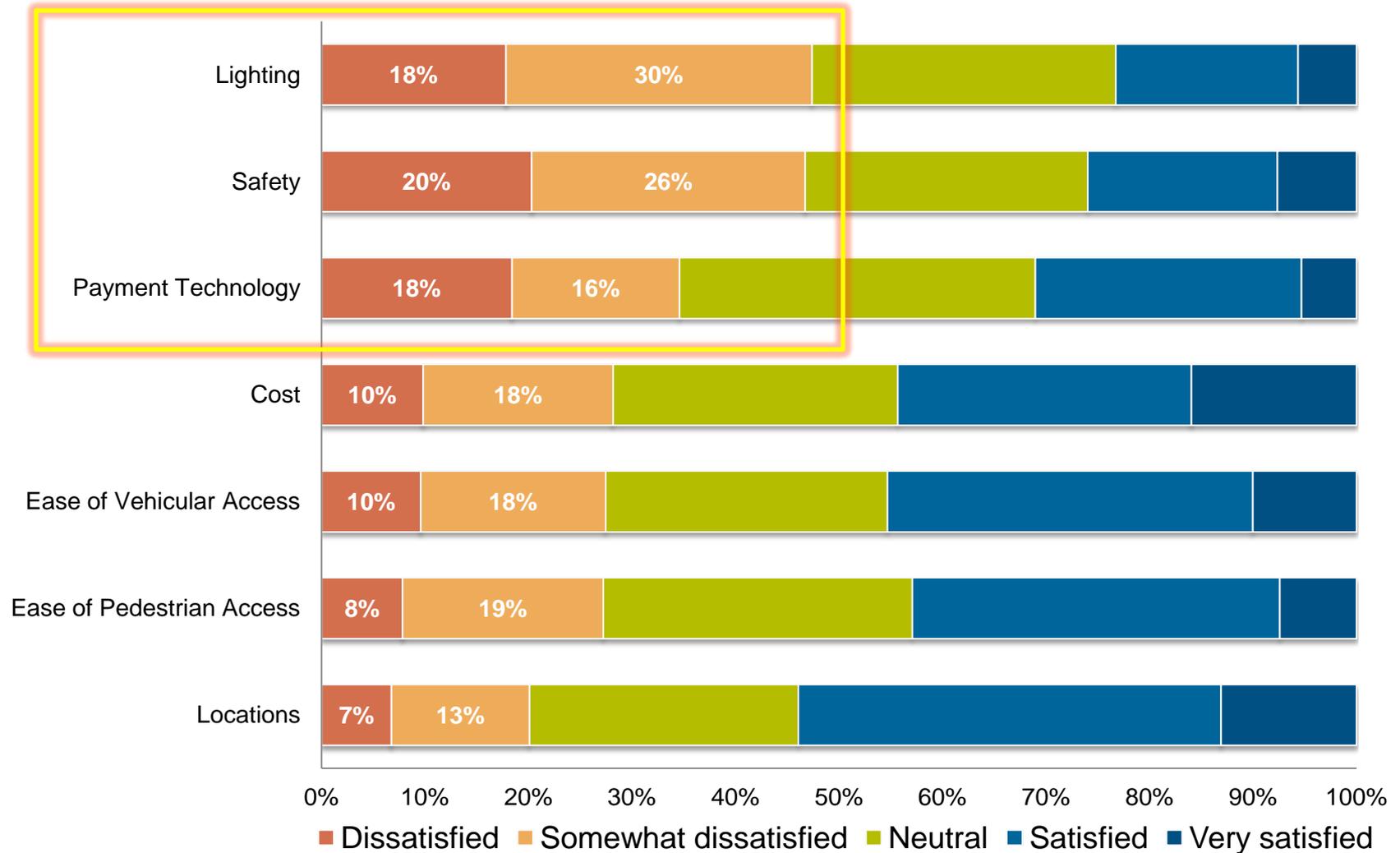
Mode Split – 87% Drive to Downtown



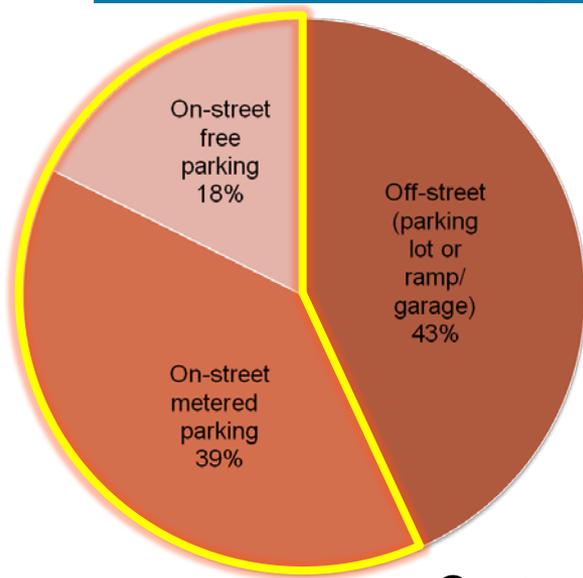
Parking is a top reason NOT going to Downtown



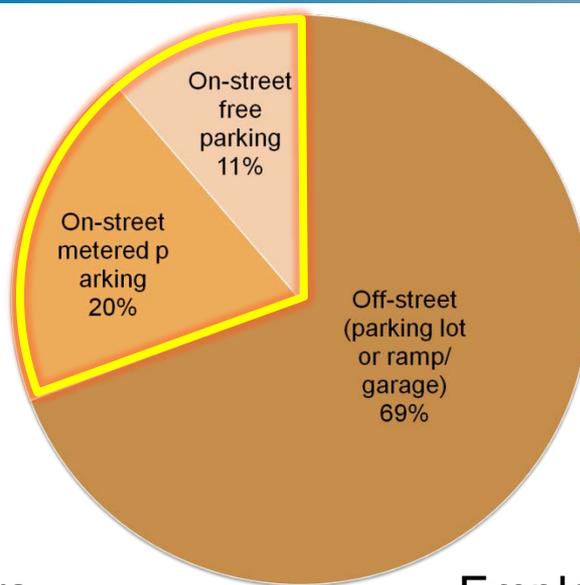
Not Satisfied with Lighting, Safety and Technology



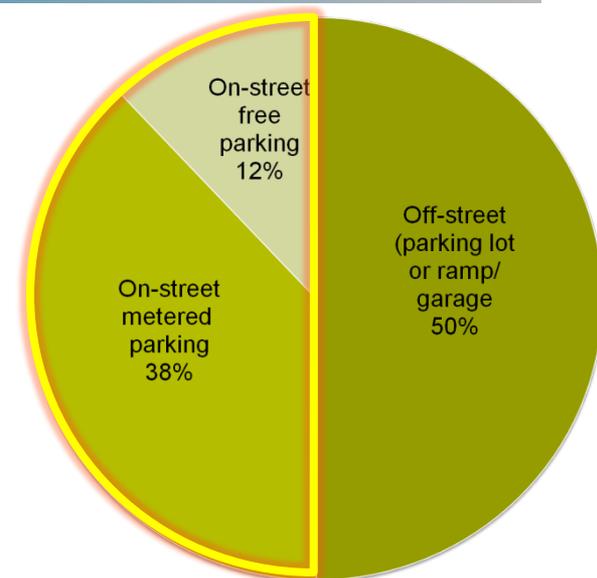
On-Street Parking is Preferred



Customers



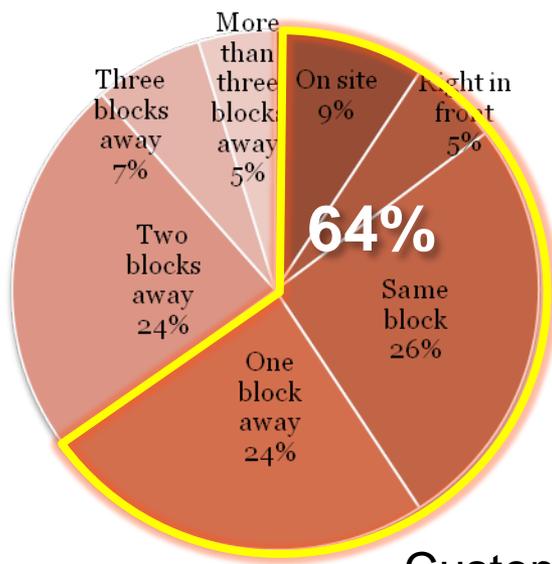
Employees



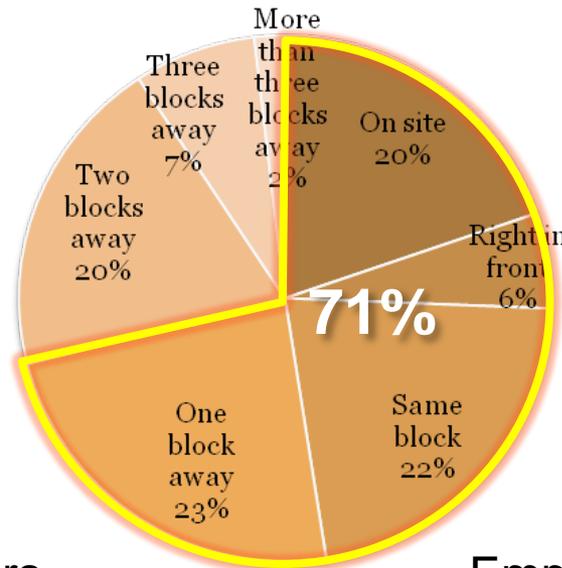
Residents



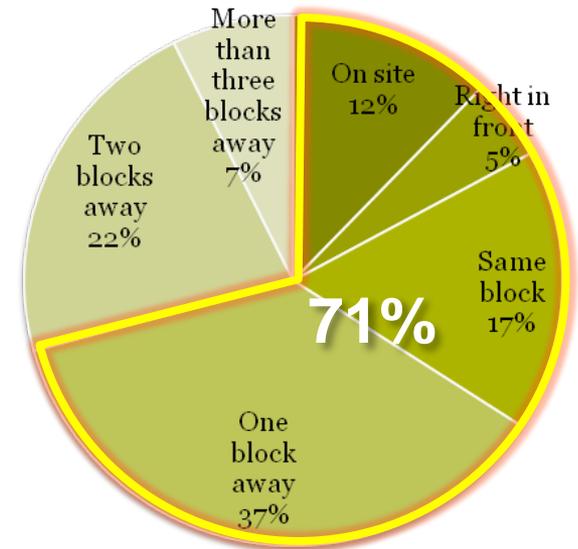
All users park within one block of destination



Customers



Employees

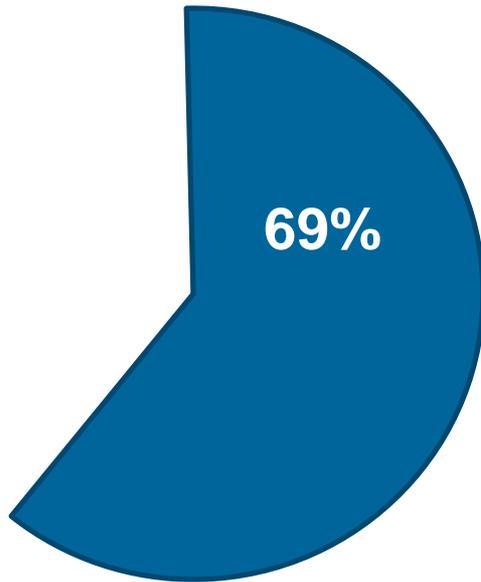


Residents

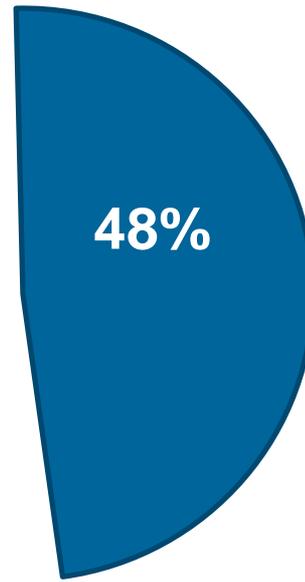


How many customers find parking within 5 minutes

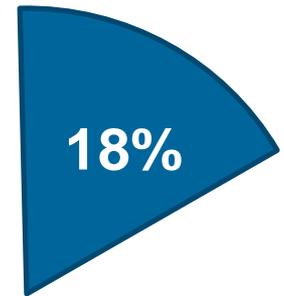
... Today



... on Average



... Worst Day



Stakeholder Interviews

Interviewees:

- City and BMTS staff
- Mayor and City Council
- NYSDOT
- Housing Developers
- Downtown Binghamton Businesses
- Broome County Arena
- Broome County Jury
- LAZ Parking
- Binghamton University

Themes:

- Perception of lack of parking availability
- Coordination among stakeholders is needed
- Lack of clear information and signage related to parking
- Need for event parking management
- Need to improve ramp conditions and management
- Want new payment technology



Land Use & Parking

Modeling Parking Demand

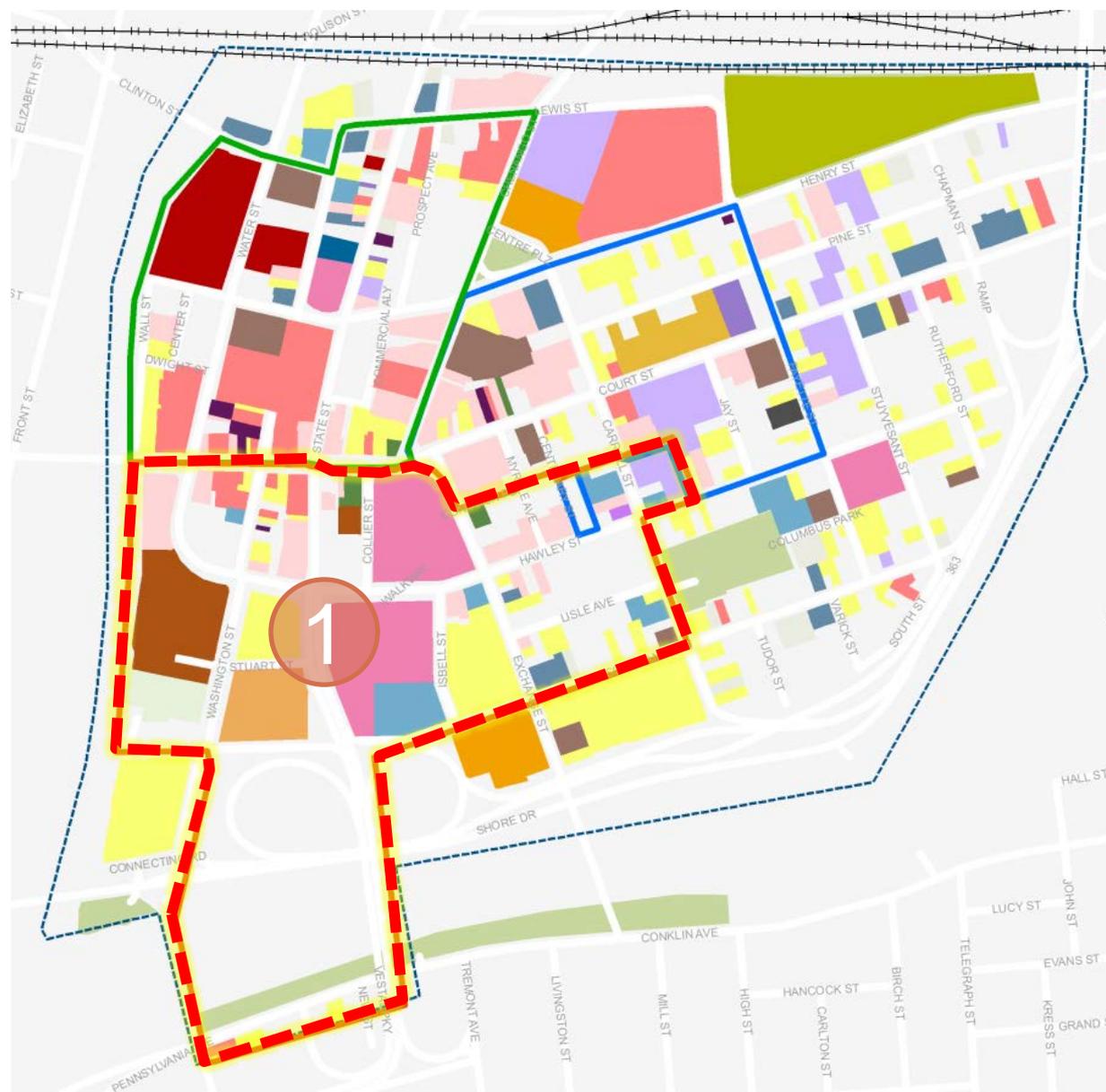
1. Parse existing land use and adjust for vacancies
2. Calculate how much parking is “needed”
3. Compare to actual parking supply and demand
4. Next: build out scenarios

Sub Area 1 – Today's Land Uses

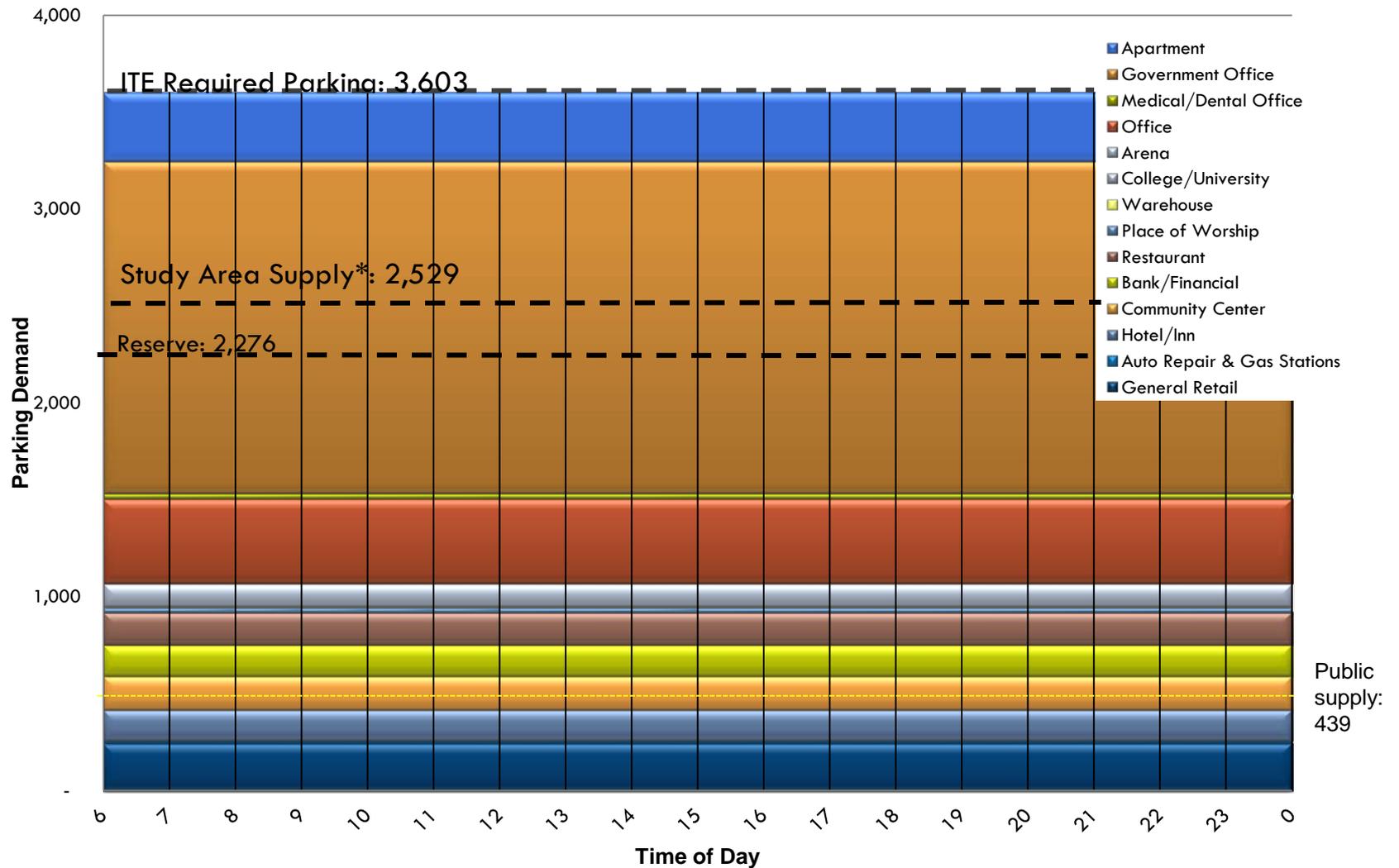
SubArea-1

Land Use	GFA	Units
Apartment		332
Arena		4,679
Auto	6,307	
Bank	39,586	
Community Center	152,591	
Govt Office	573,515	
Hotel		250
Medical Office	8,160	
Office	281,351	
Place of Worship	6,616	
Restaurant	31,456	
Retail	97,846	
University		545
Warehouse	5,066	

**TOTAL 1,202,494 sqft
+ 332 residential units**

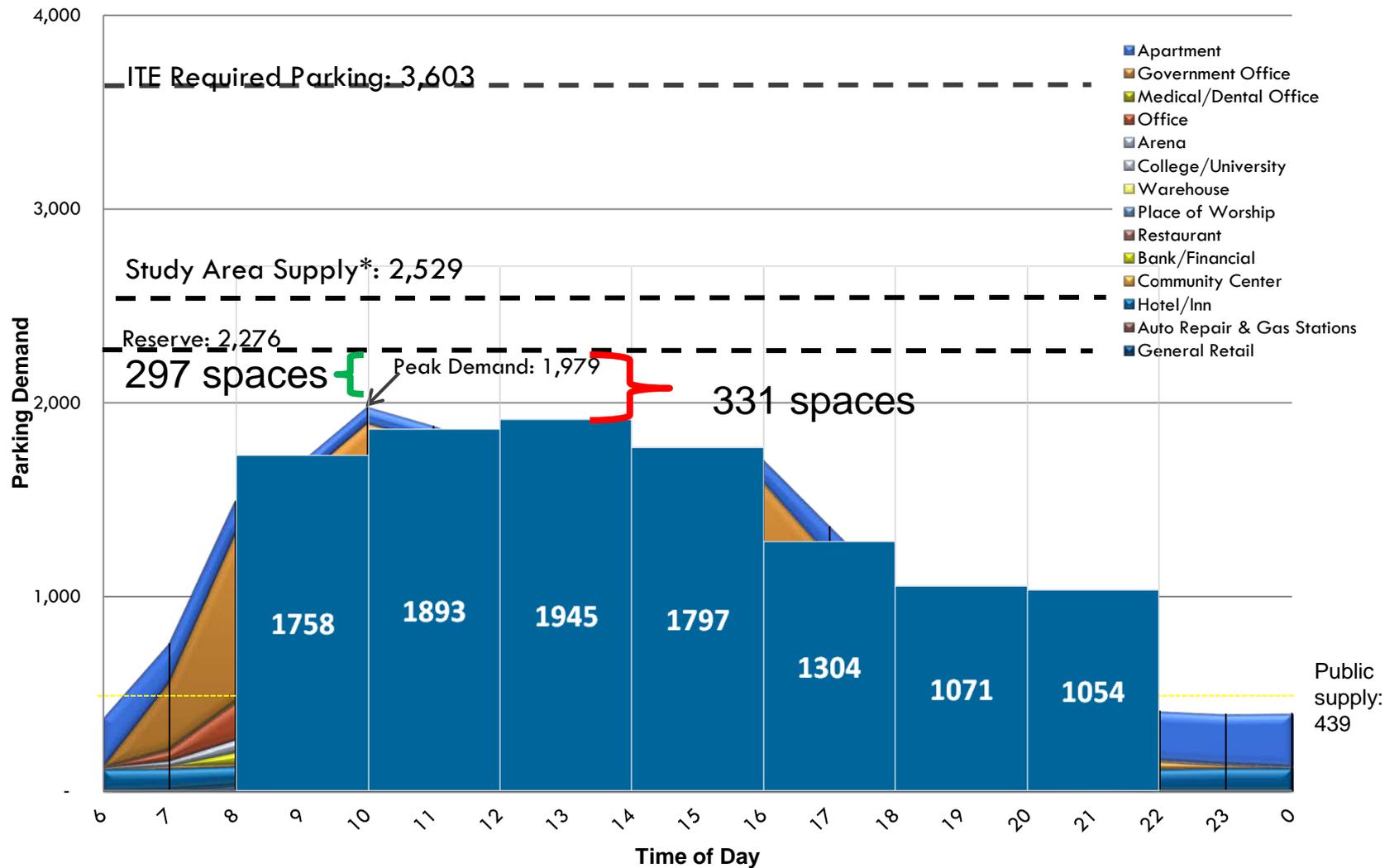


Sub Area 1 – Typical “Required” Parking (No Events)



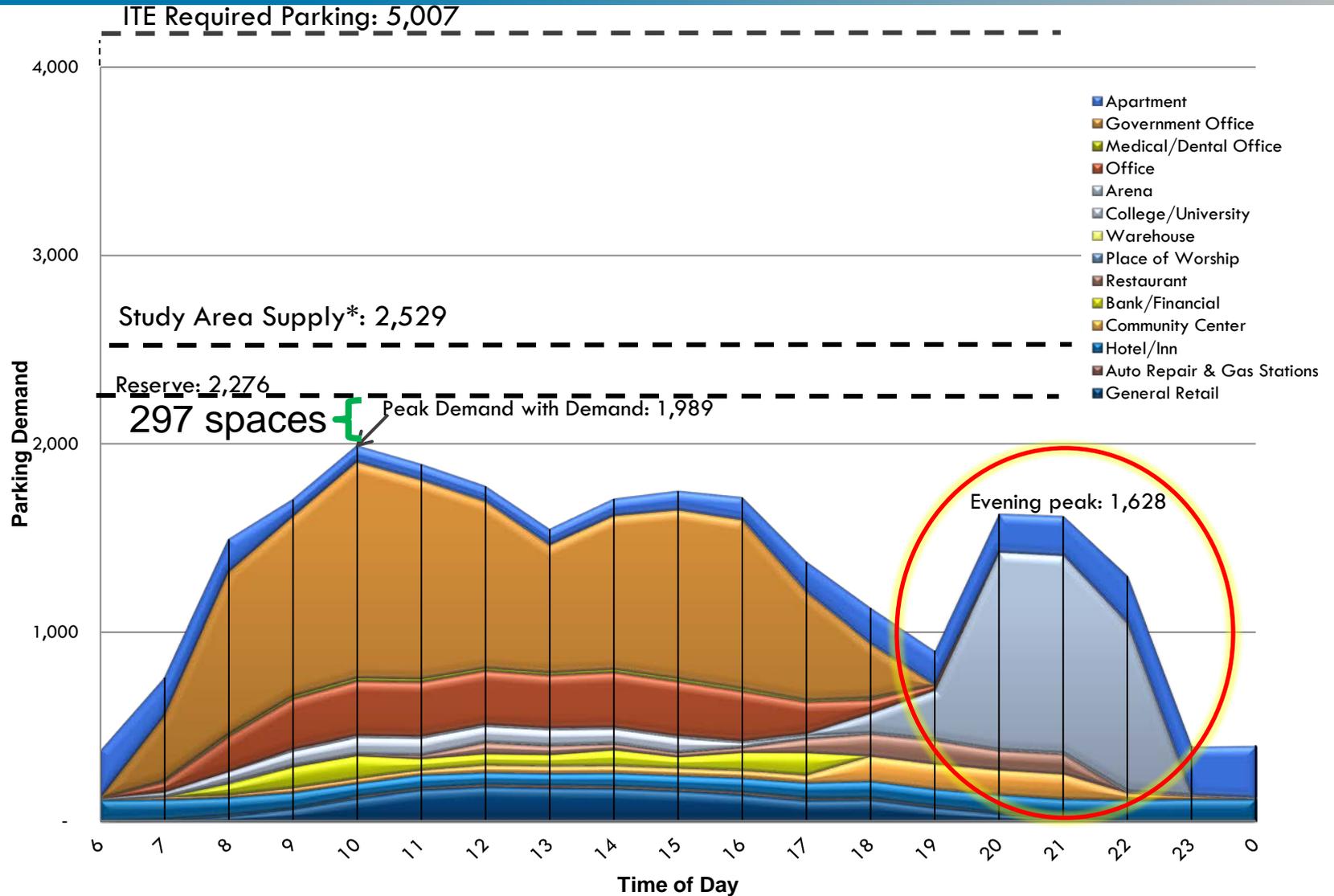
* Collier Street Ramp not included in supply

Sub Area 1 – Estimated and Observed Parking (No Events)



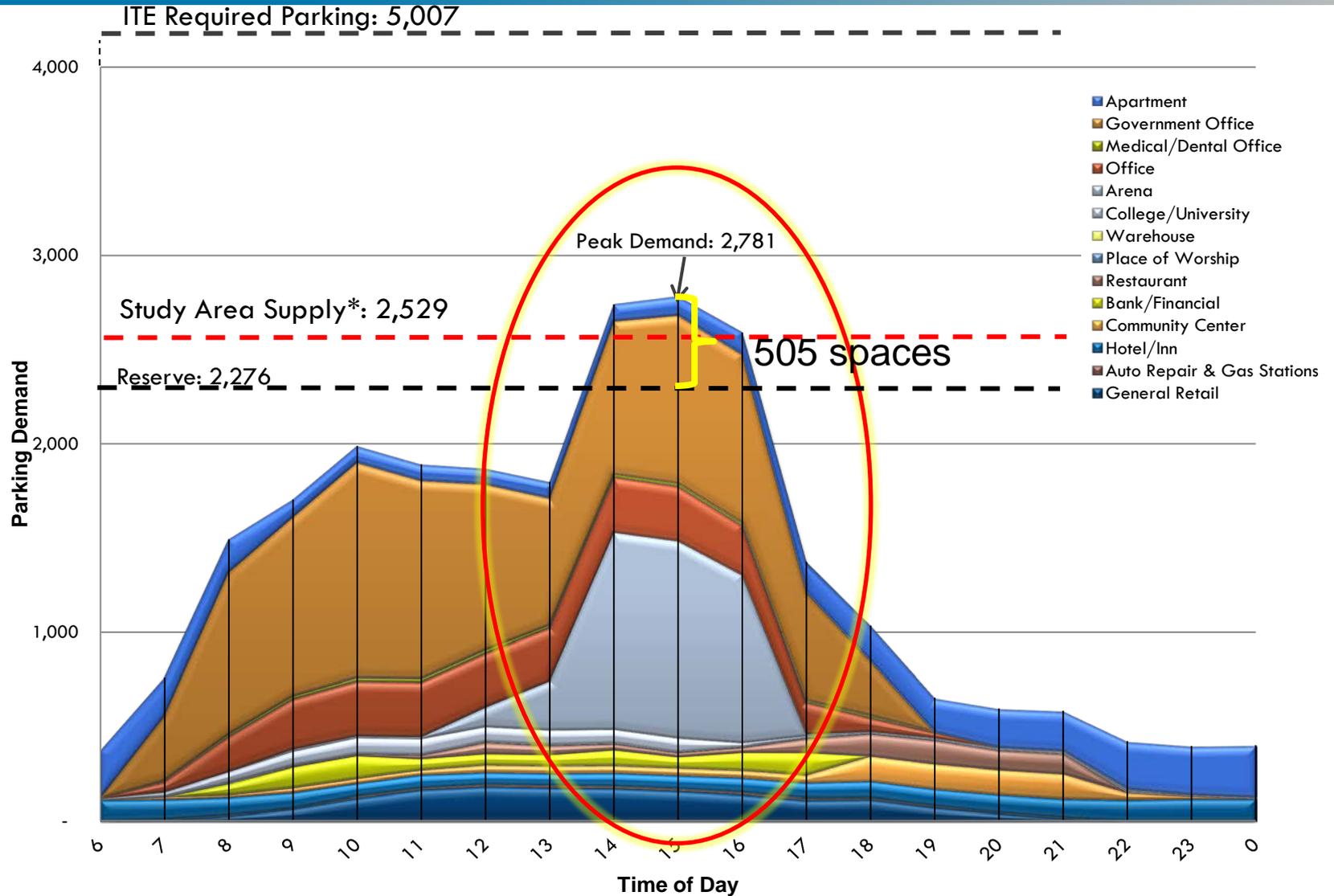
* Collier Street Ramp not included in supply

Sub Area 1 – Estimated Parking (Evening Arena Event)



* Collier Street Ramp not included in supply

Sub Area 1 – Estimated Parking (Daytime Arena Event)



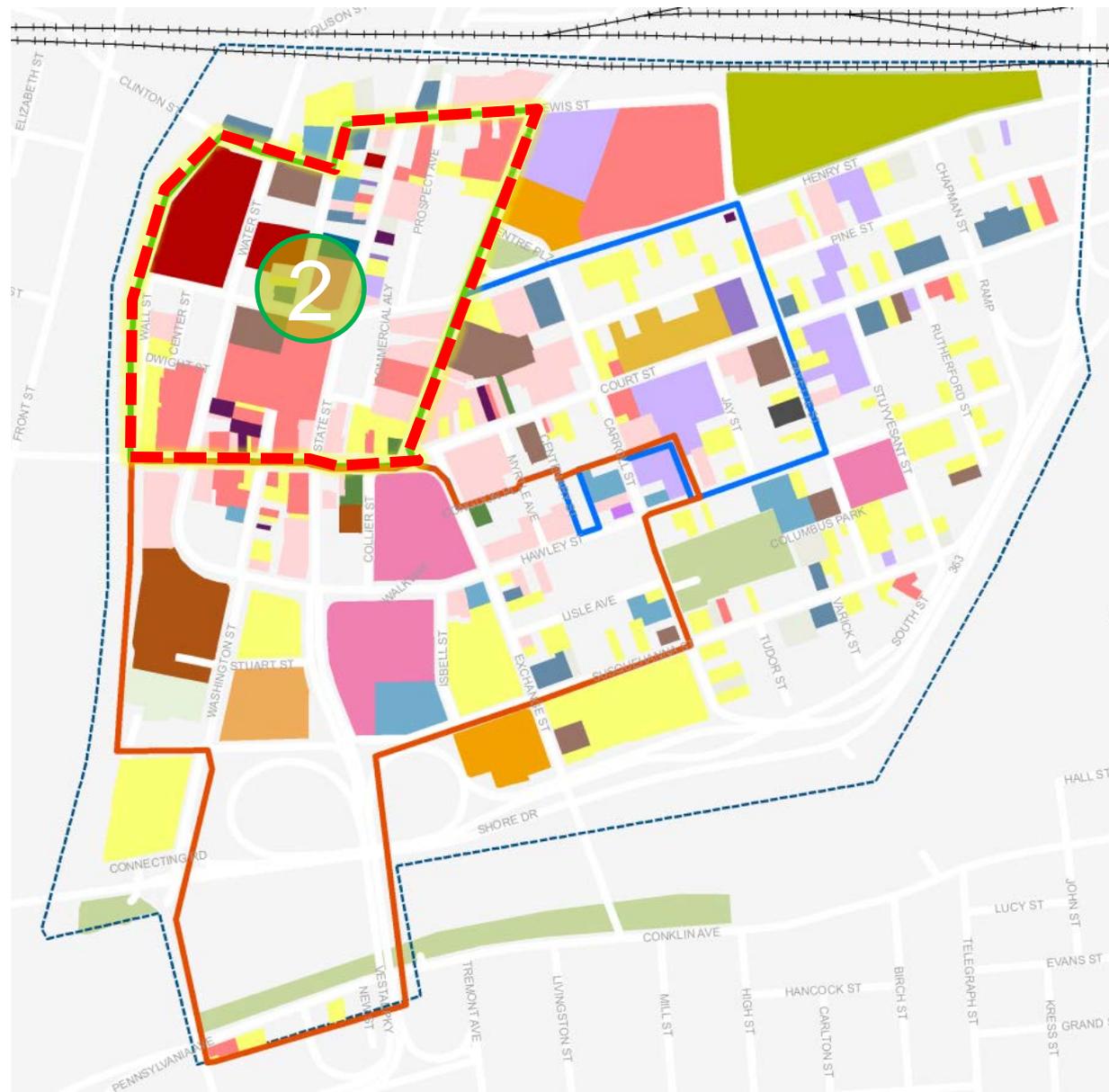
* Collier Street Ramp not included in supply

Sub Area 2 – Today's Land Uses

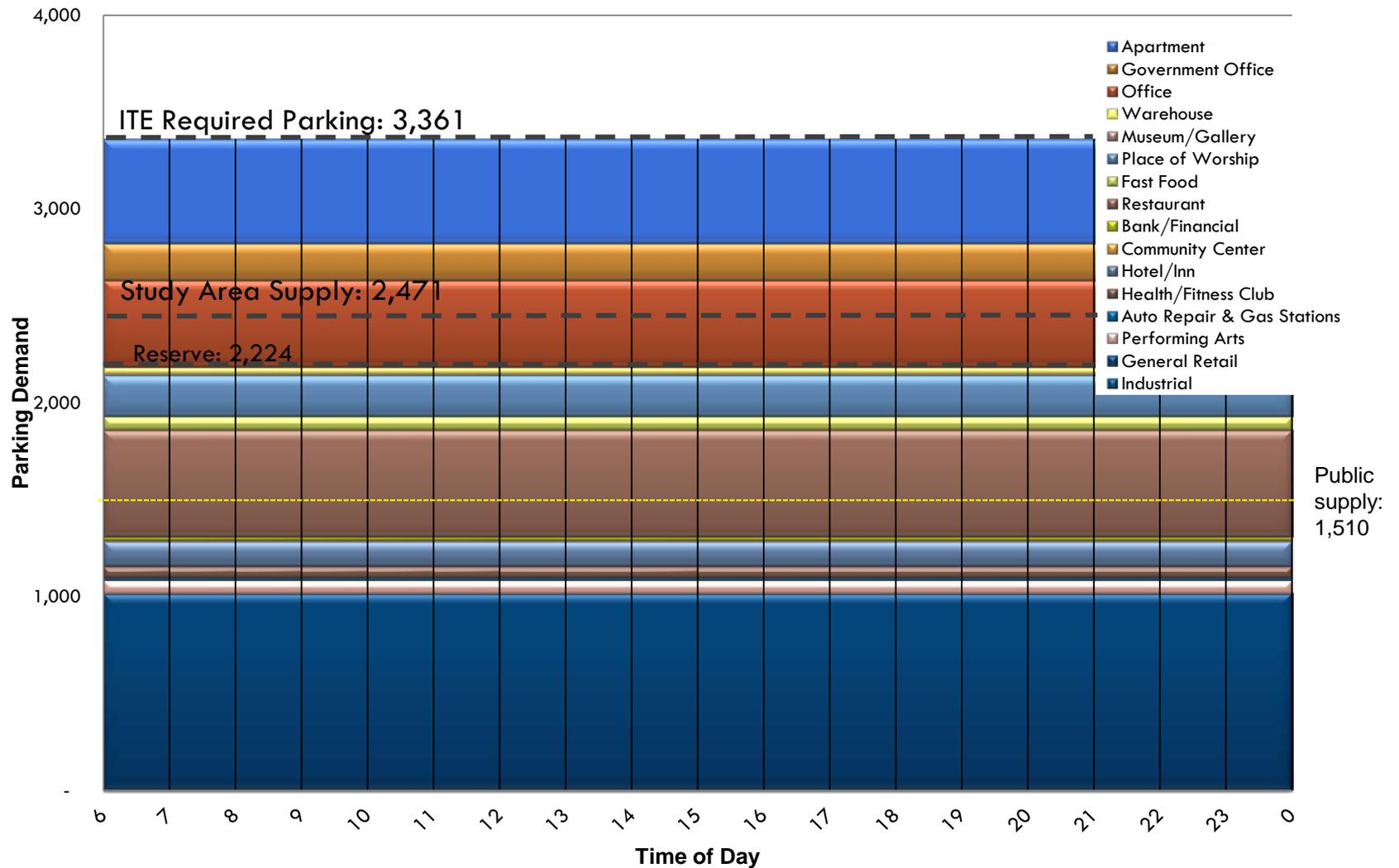
SubArea-2

Land Use	GFA	Units
Apartment		498
Auto	5,994	
Bank	4,080	
Community Center	4,072	
Fast Food	8,526	
Govt Office	63,930	
Health/Fitness Club	10,594	
Hotel		207
Light Mfg	7,200	
Museum/Gallery	5,637	
Office	286,834	
Performing Arts	22,061	
Place of Worship	56,078	
Restaurant	102,261	
Retail	407,844	
Warehouse	70,843	

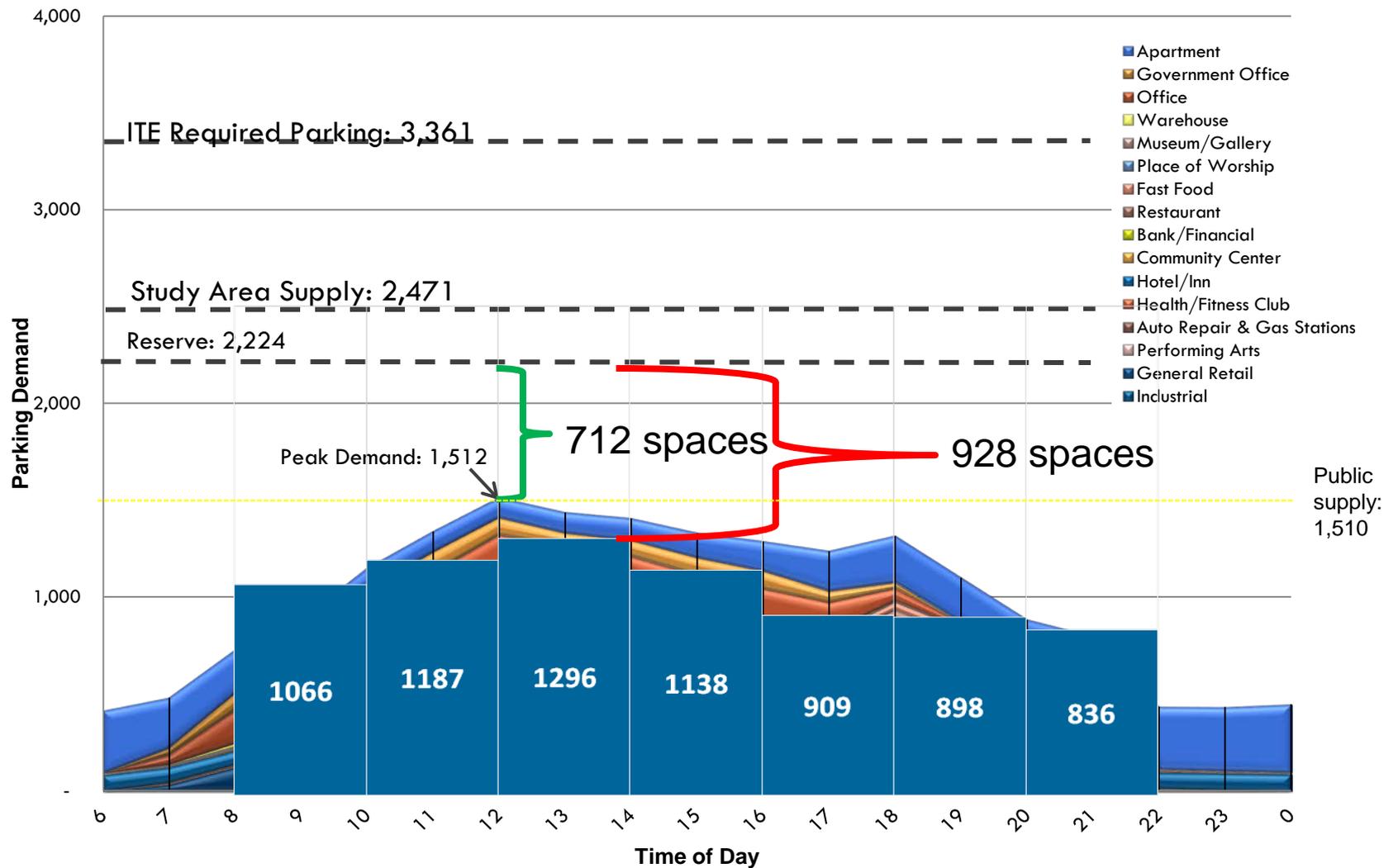
**TOTAL 1,055,954 sqft
+ 498 residential units**



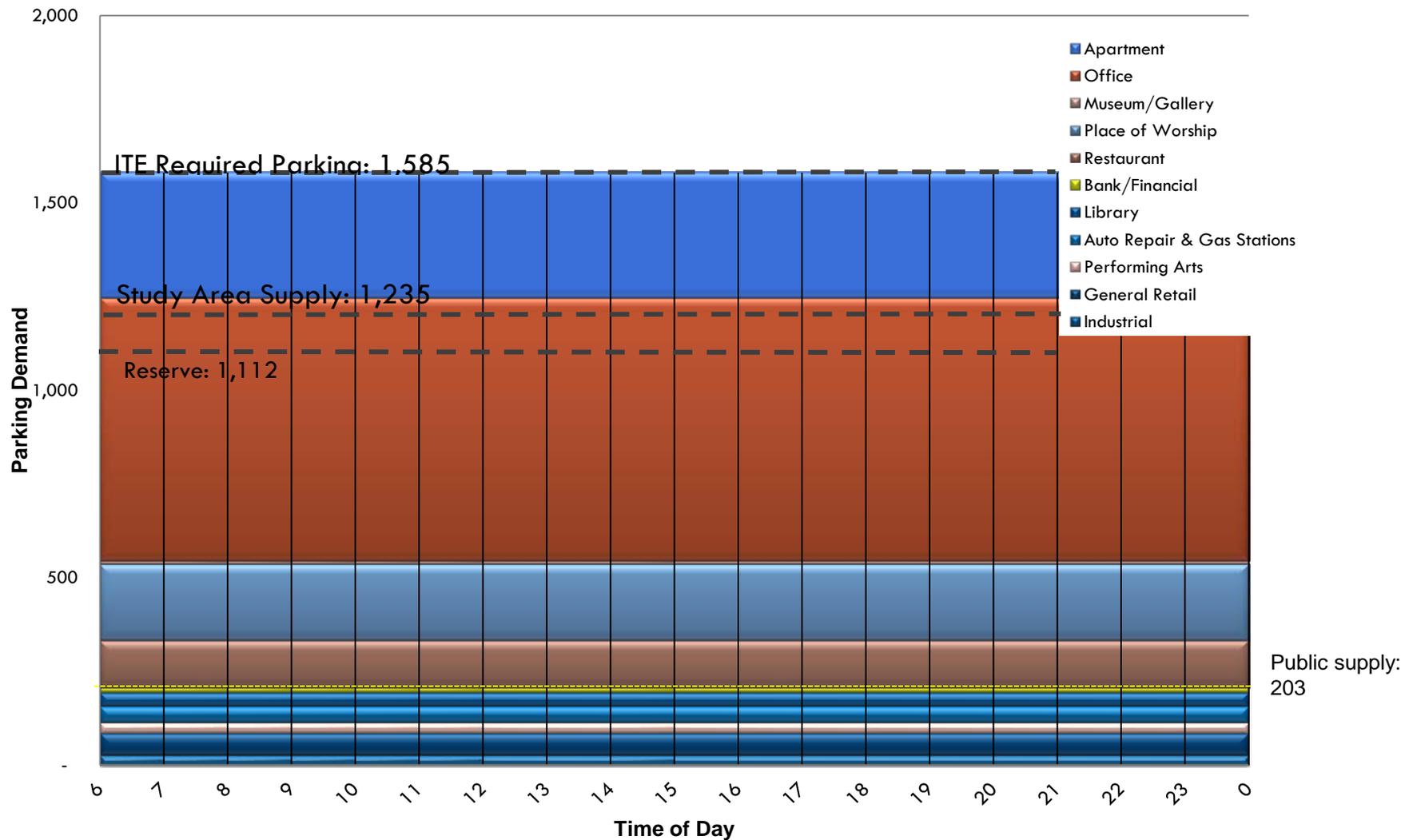
Sub Area 2 – Typical “Required” Parking



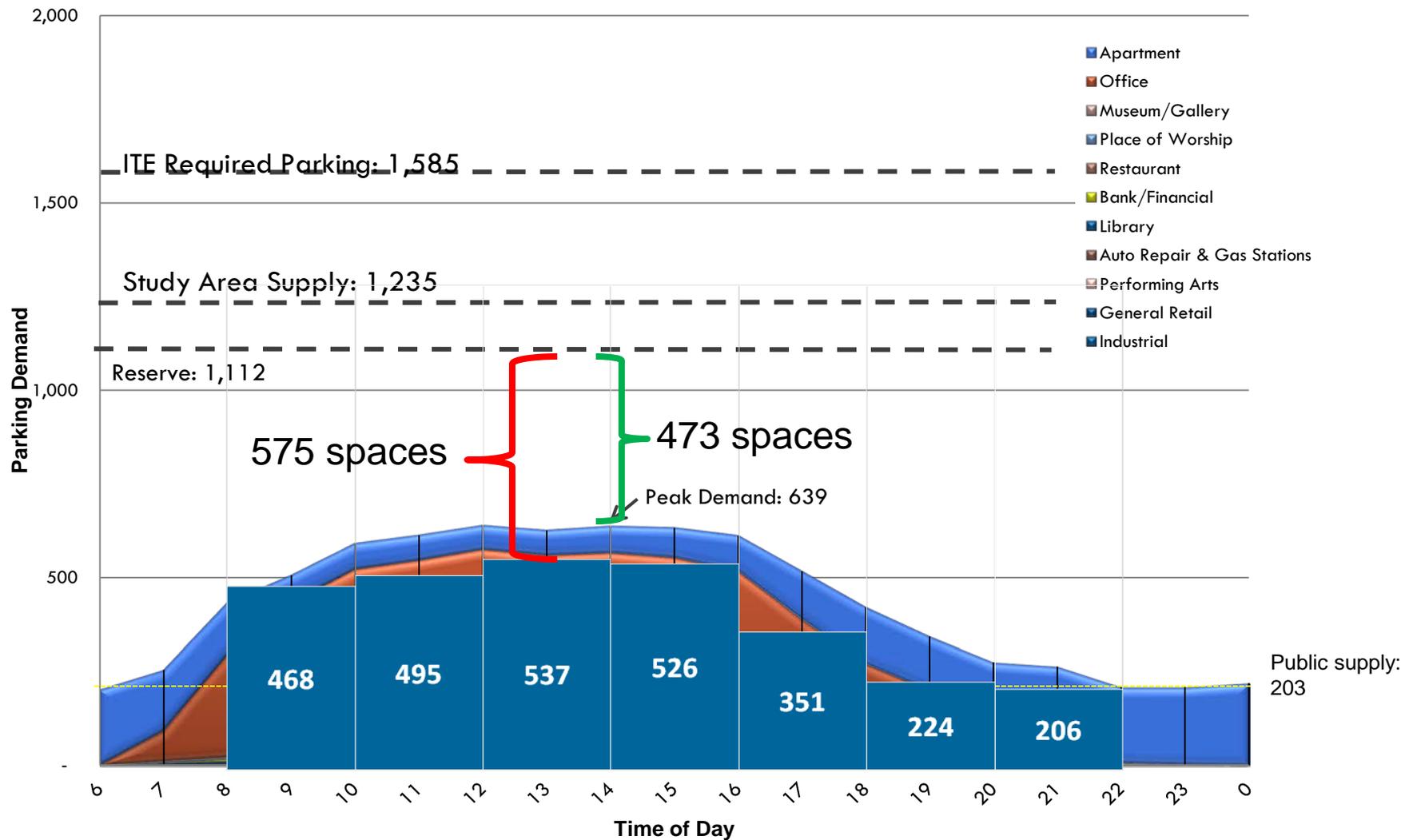
Sub Area 2 – Estimated and Observed Parking



Sub Area 3 – Typical “Required” Parking



Sub Area 3 – Estimated and Observed Parking



Land Use and Parking Key Findings

- Overall capacity, particularly in evenings
- Event parking significantly impacts supply
- Parking Demand Ratios:
 - Area 1: 1.62 spaces / 1,000 sq ft
 - Area 2: 1.23 spaces / 1,000 sq ft
 - Area 3: 0.78 spaces / 1,000 sq ft



Initial Considerations

Initial Considerations

- Coordinate On- and Off-Street Management
- Add Parking in Core Areas
- Improve User Experience
 - Signage and information
 - Downtown environment
 - Technology
- Better Use Restricted Parking

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Coordinate On- and Off-Street Management



Court Street: \$0

Off-Street: \$1/hr



Coordinate On- and Off-Street Management



On-Street: \$0
Access



Off-Street: \$1/hr
Convenience

Considerations for a complete parking system

Price + Time Limits

- 11 on-street regulations with price and/or time
- On-street vs. off-street price
- What are time limits doing for customers?

On-street Parking	
15 Minute Free	
15 Minute Meter (\$0.50/hr)	
30 Minute Free	
30 Minute Meter (\$0.50/hr)	
1 Hour Free	
1 Hour Meter (\$0.50/hr)	
2 Hour Free	
2 Hour Meter (\$0.25/hr)	
2 Hour Meter (\$0.50/hr)	
4 Hour Meter (\$0.50/hr)	
Meter No Time Limits (\$0.50/hr)	

Span and Days of Week

- Regulate where/when there is demand
 - 8am? 9am? 10am? to 7pm? 8pm? 9pm?
 - Add Friday and Saturday to late Thursday hours?
- On-street vs. off-street price
 - Can incentivize by time of day/ day of week

Best Practice: Focus on Availability

- Not turnover. Turnover \neq Availability
- Not time limits. Time limits \neq Availability
- Pricing is the right tool. \$\$\$ \Rightarrow Availability

\$\$\$



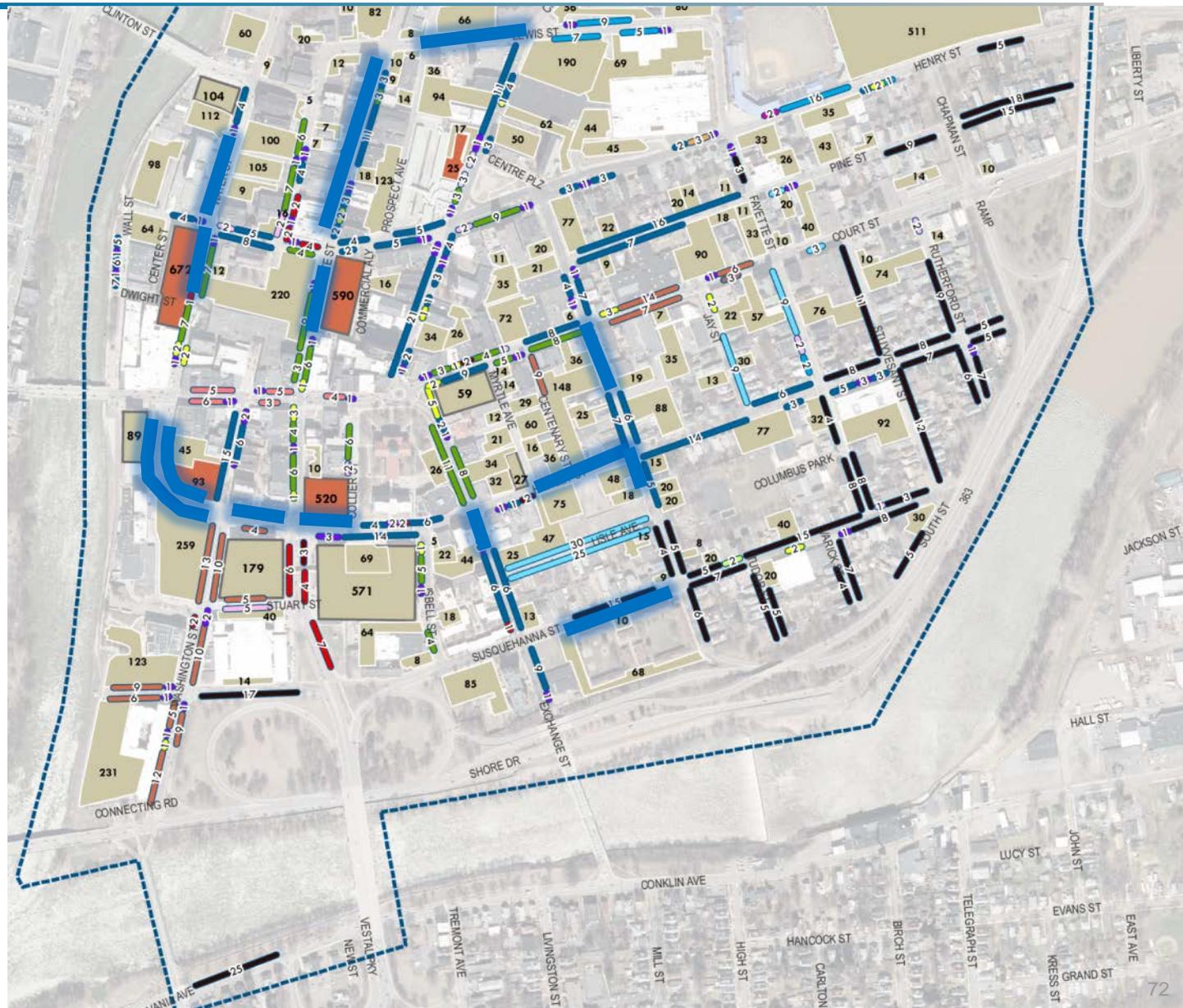
- Let customers stay for ice cream
- Match policy to behavior
- Use carrots not sticks (parking tickets!)

Initial Considerations

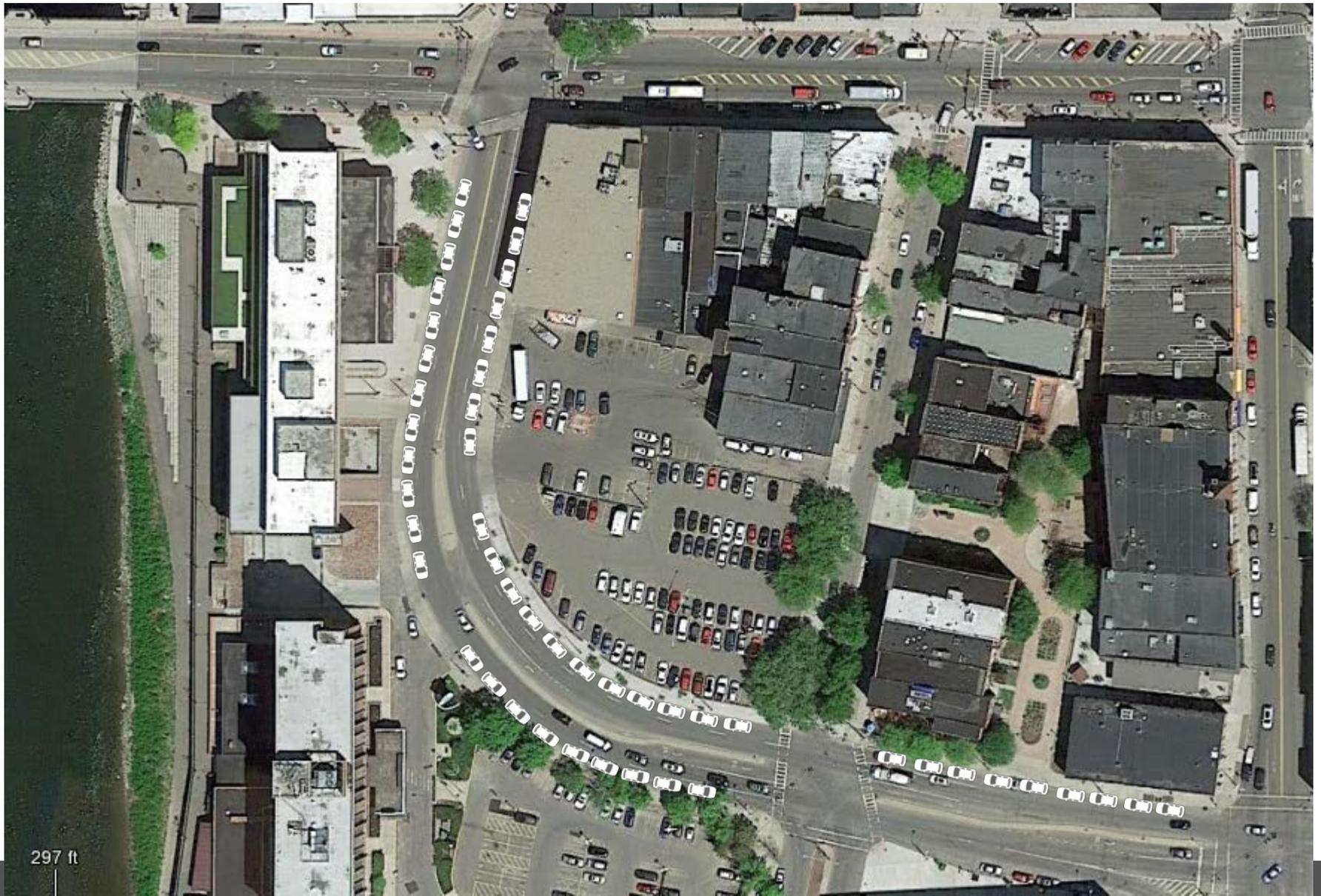
- Coordinate On- and Off-Street Management
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Stripe More On-Street Parking?

Potential to stripe at minimum 100+ spaces on-street within existing right-of-way



Add On-Street Parking? (Example: ~50 spaces)



297 ft

Initial Considerations

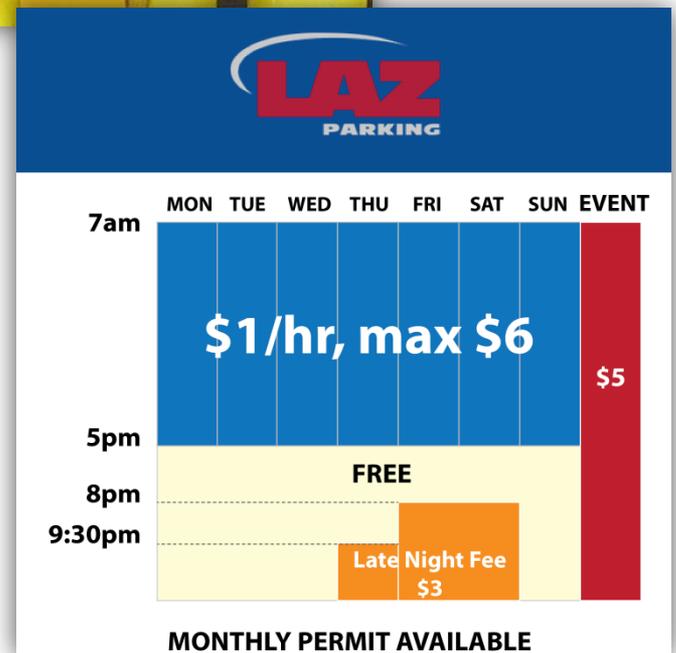
- Coordinate On- and Off-Street Management
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User Experience - Signage



No signage on time limit, meter span, and price

Ramp Entrance Signage



A blue rectangular sign with a white 'P' and the text 'PUBLIC PARKING' mounted on a building facade. The sign is positioned on the left side of the image, with a brick building and a clear blue sky in the background.

P

PUBLIC
PARKING

EXTERIOR SIGNAGE



INTERIOR SIGNAGE

FOUNTAIN SQUARE EXIT

2

LEVEL

2

2

2A

2B

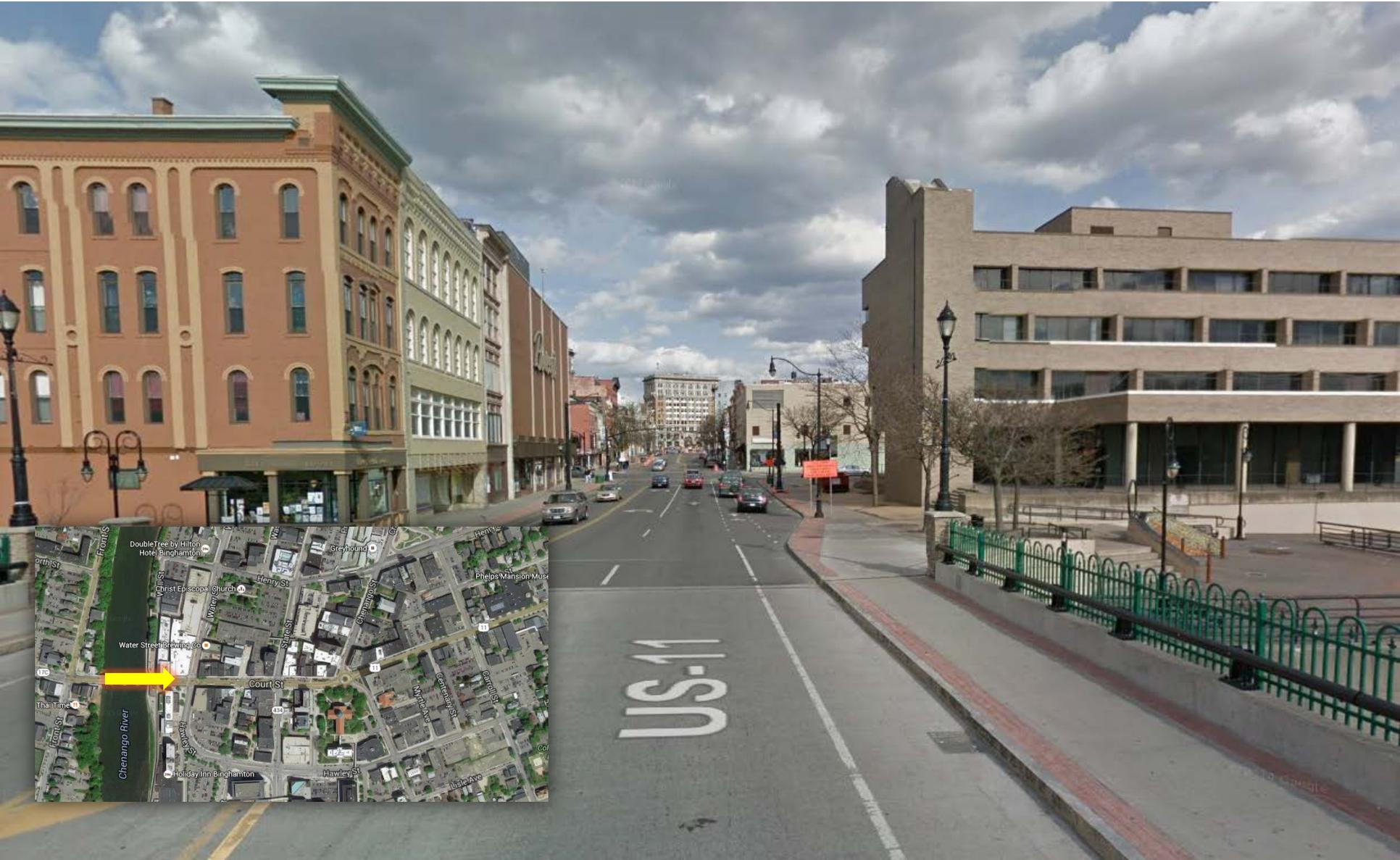
1



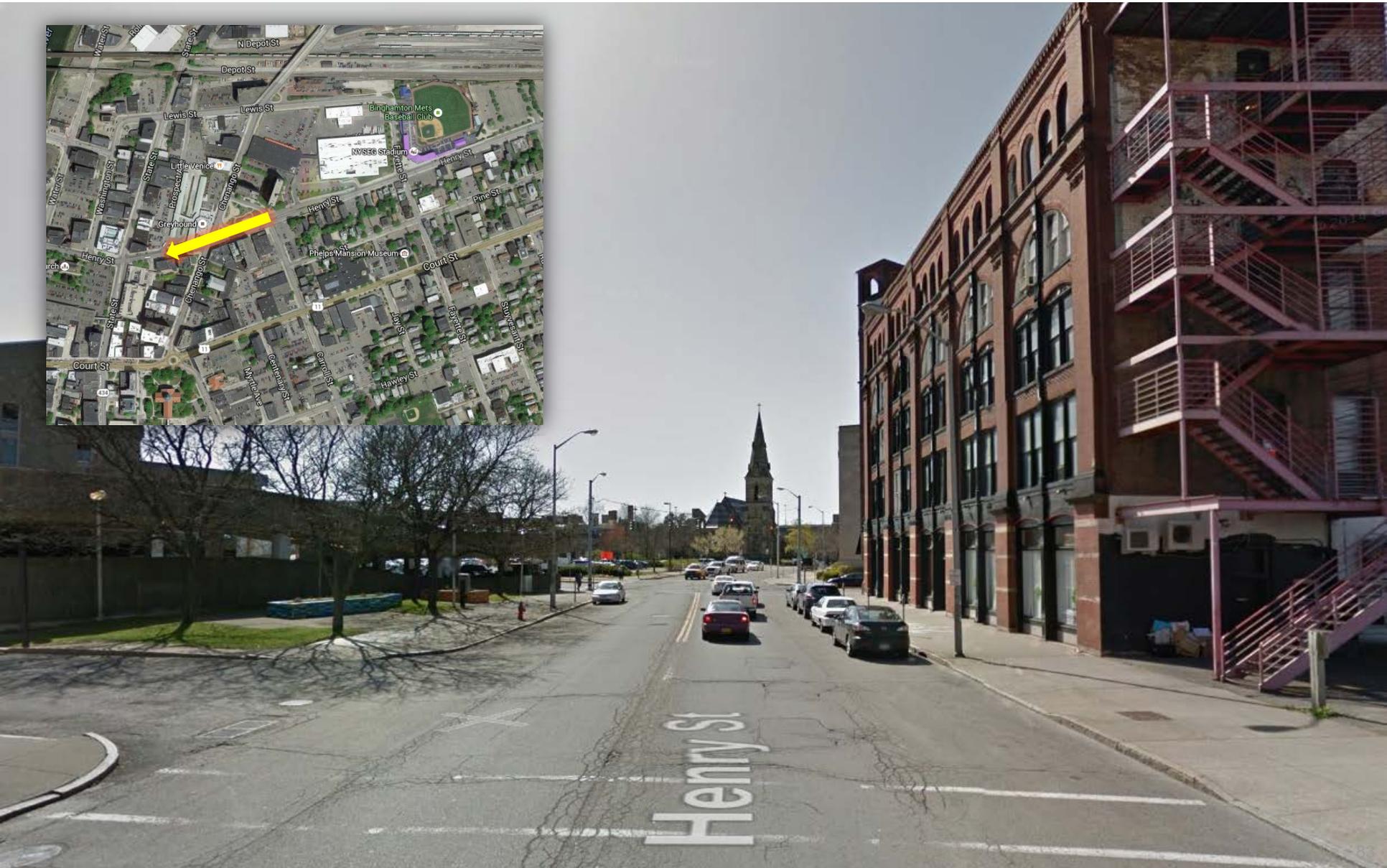
Lighting



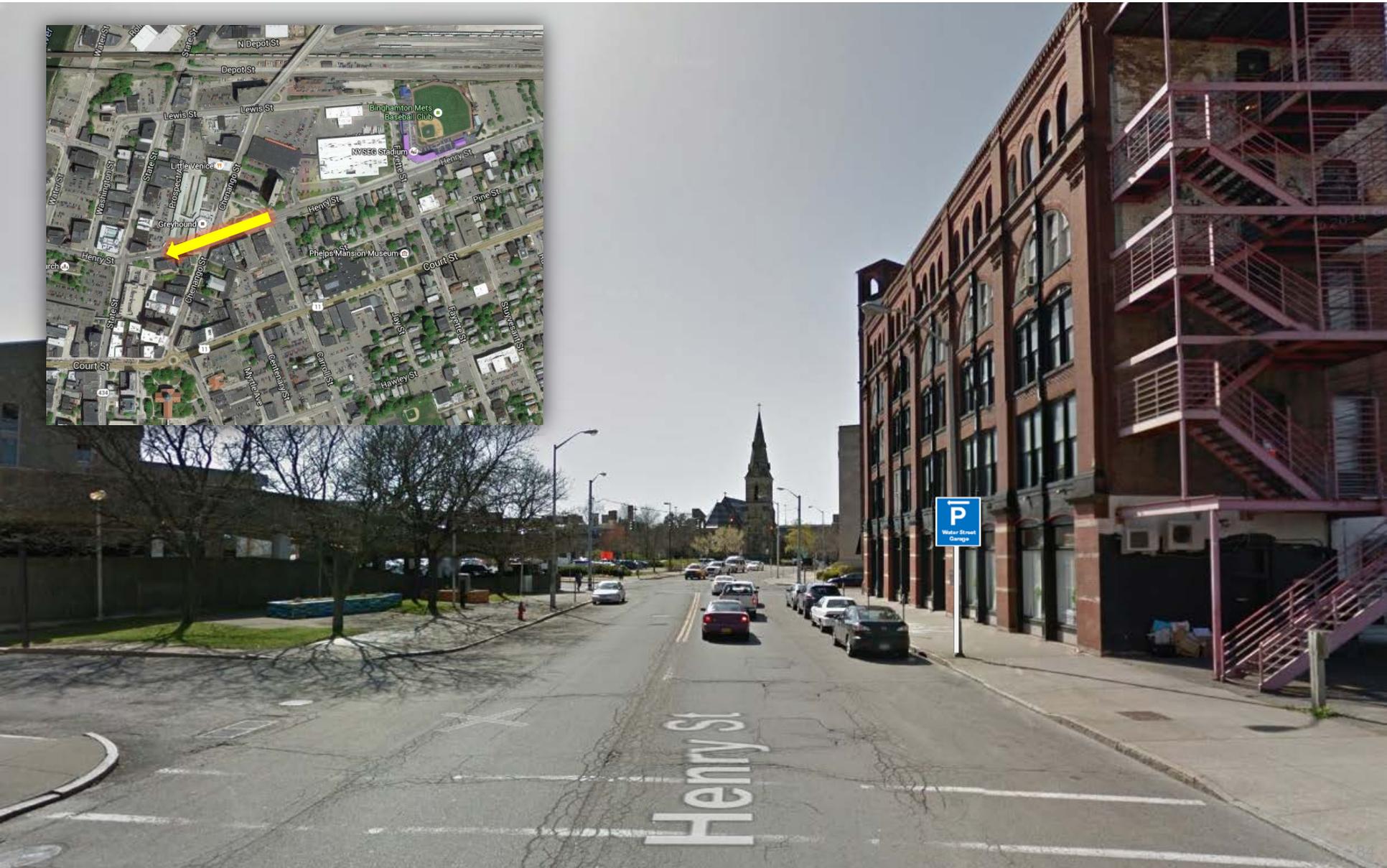
Directional Signage - Today



Directional Signage - Today



Directional Signage - Concept





State Street Ramp - Today



State Street Ramp - Concept

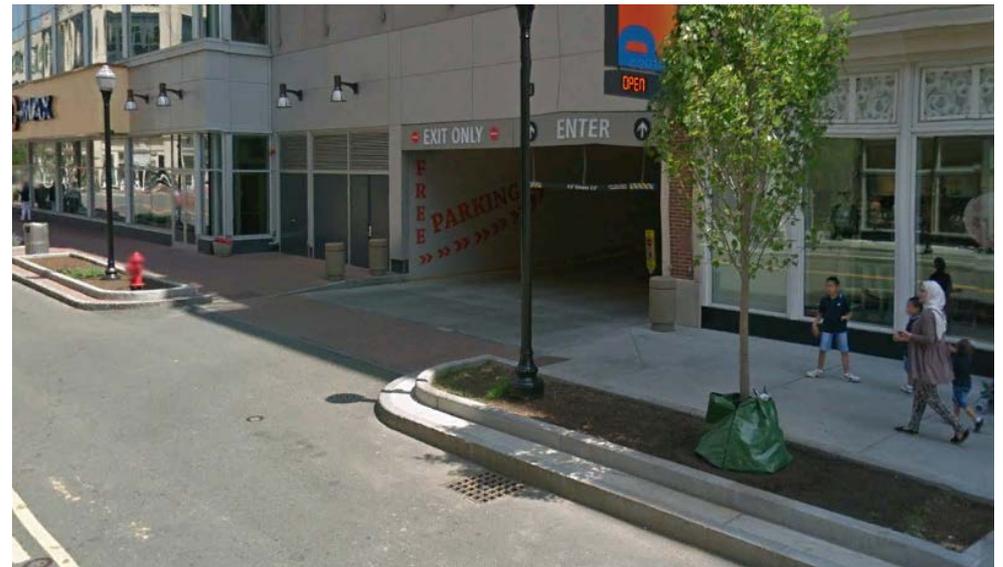
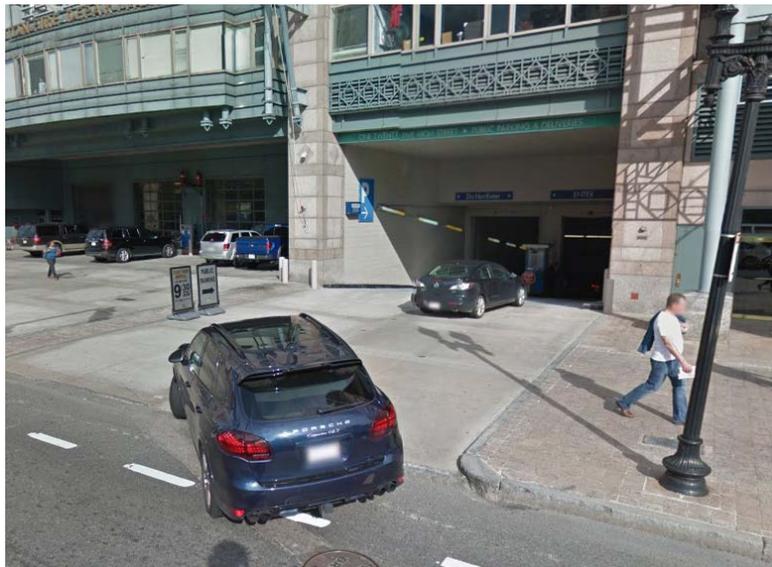
Garage Screening Example



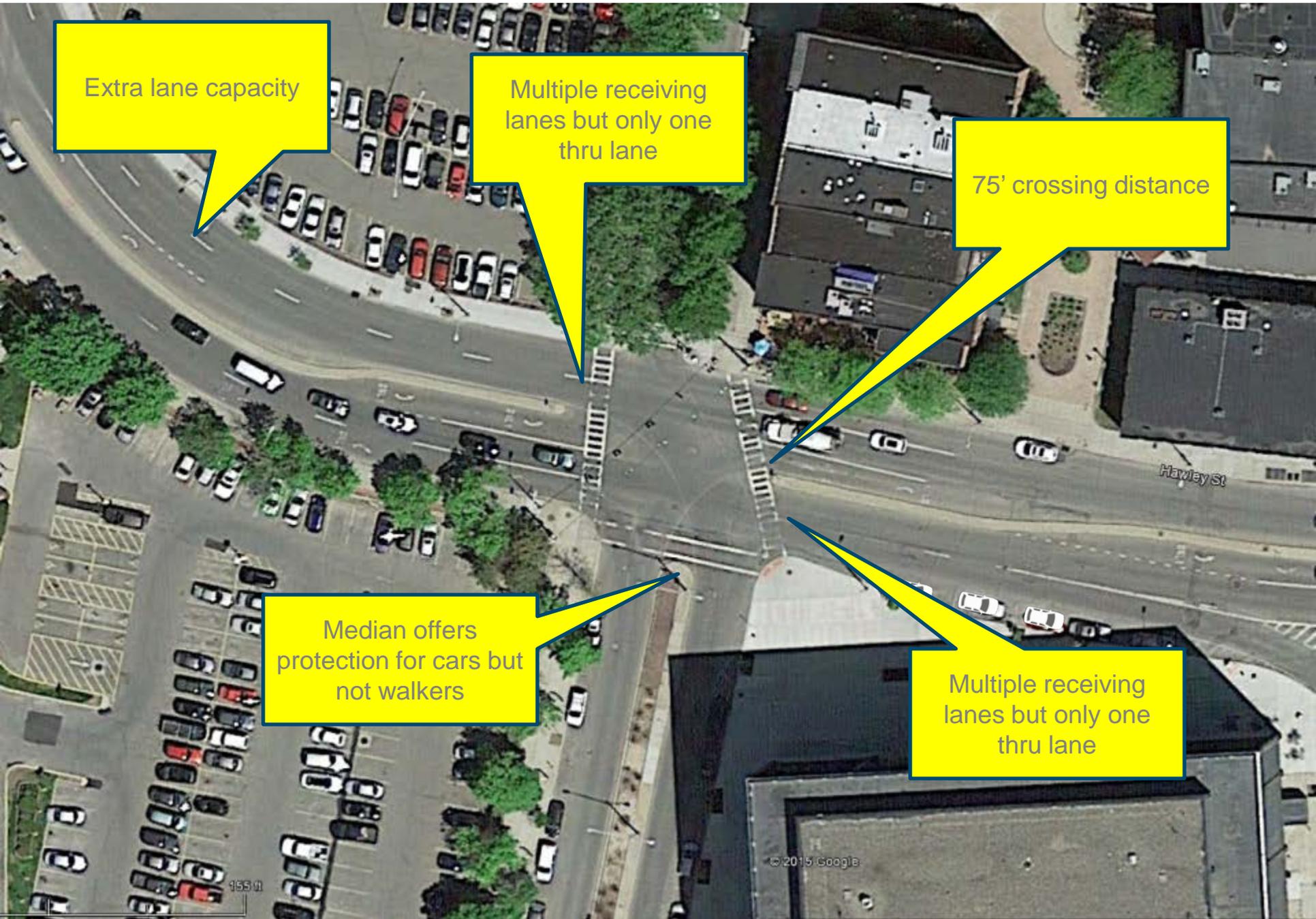
Garage Ground Floor Uses Example



Pedestrian Accommodation Across Entries



Washington and Hawley



Extra lane capacity

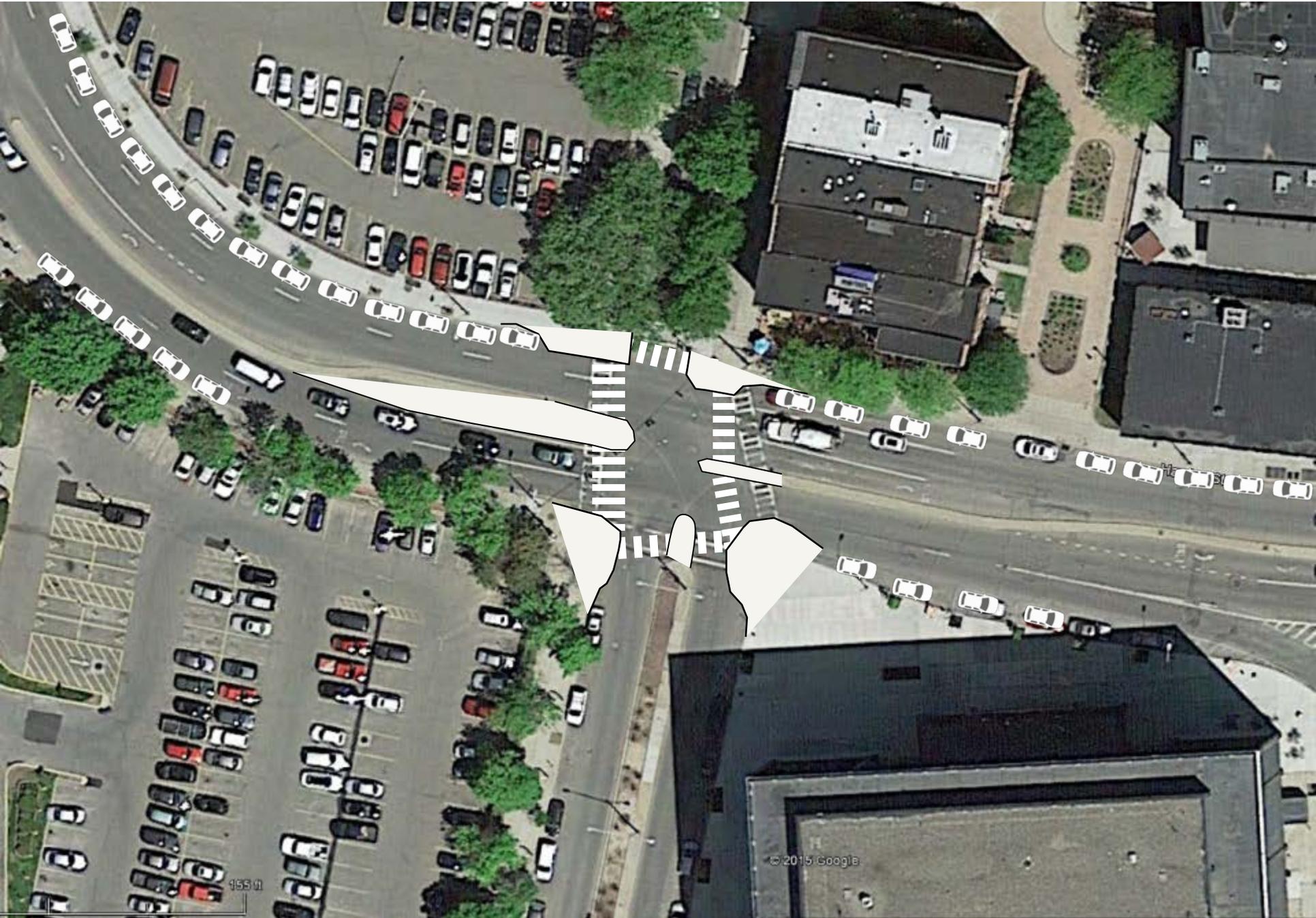
Multiple receiving lanes but only one thru lane

75' crossing distance

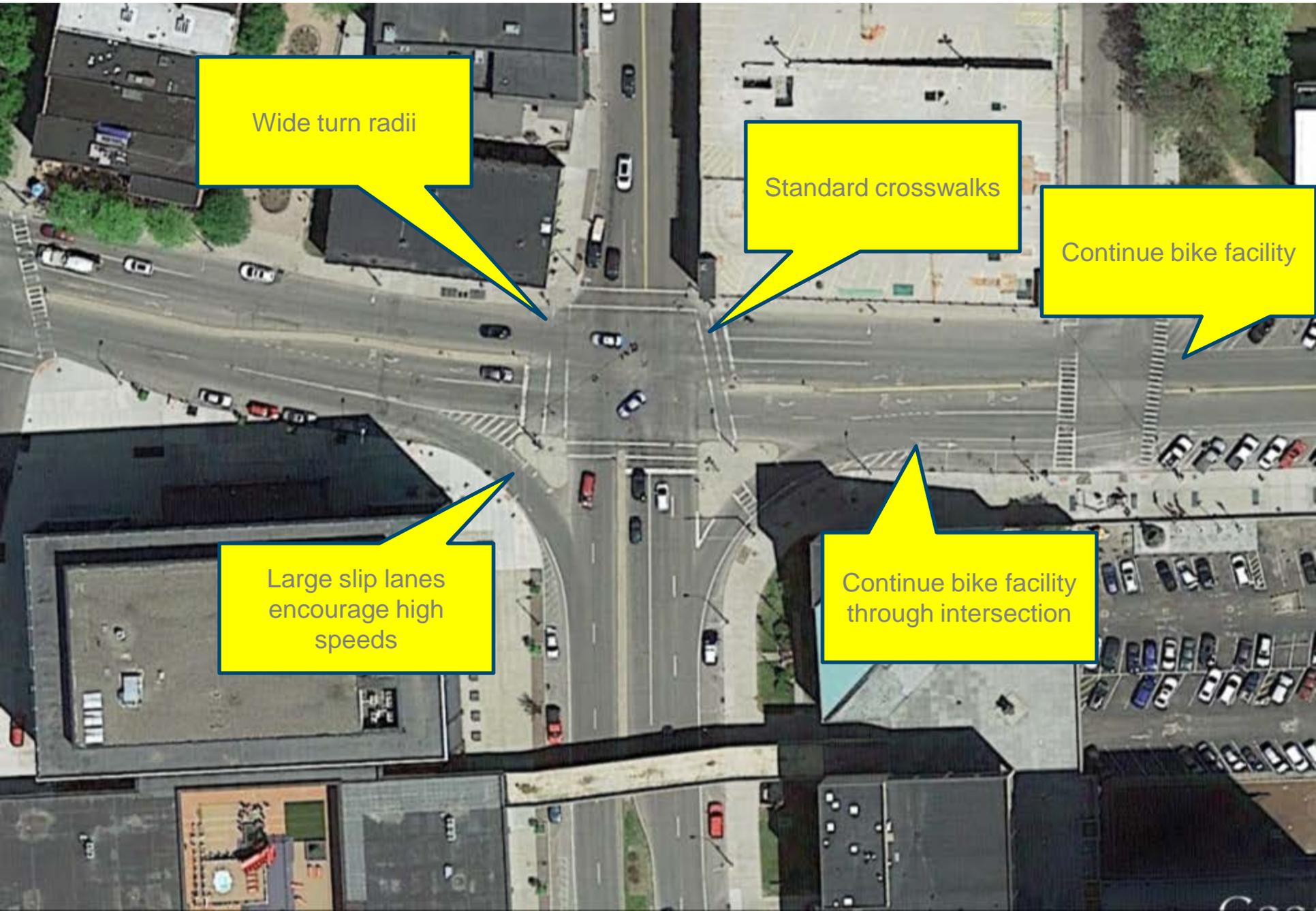
Median offers protection for cars but not walkers

Multiple receiving lanes but only one thru lane

Washington and Hawley



State and Hawley



Wide turn radii

Standard crosswalks

Continue bike facility

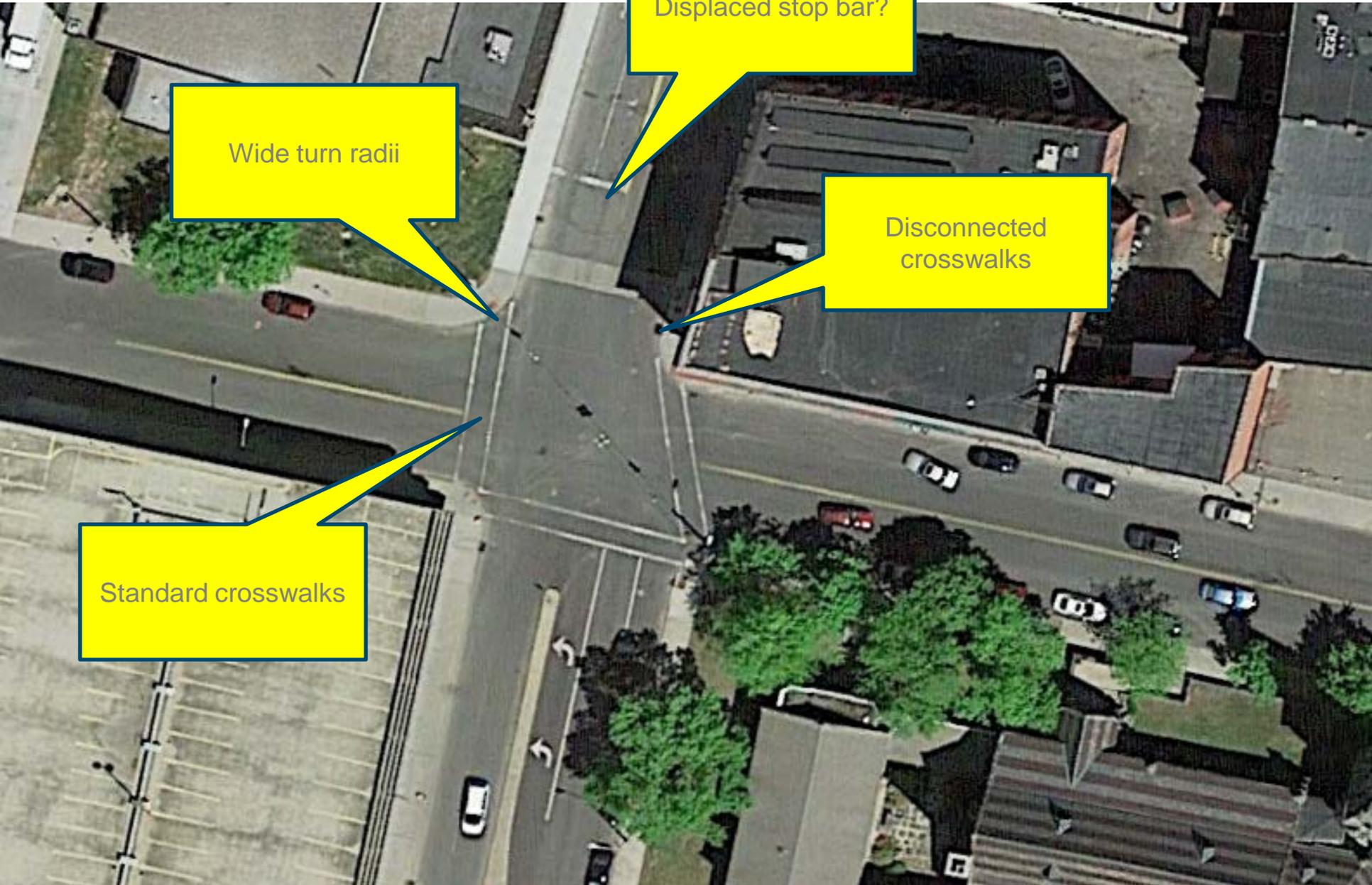
Large slip lanes
encourage high
speeds

Continue bike facility
through intersection

State and Hawley



Henry and Water



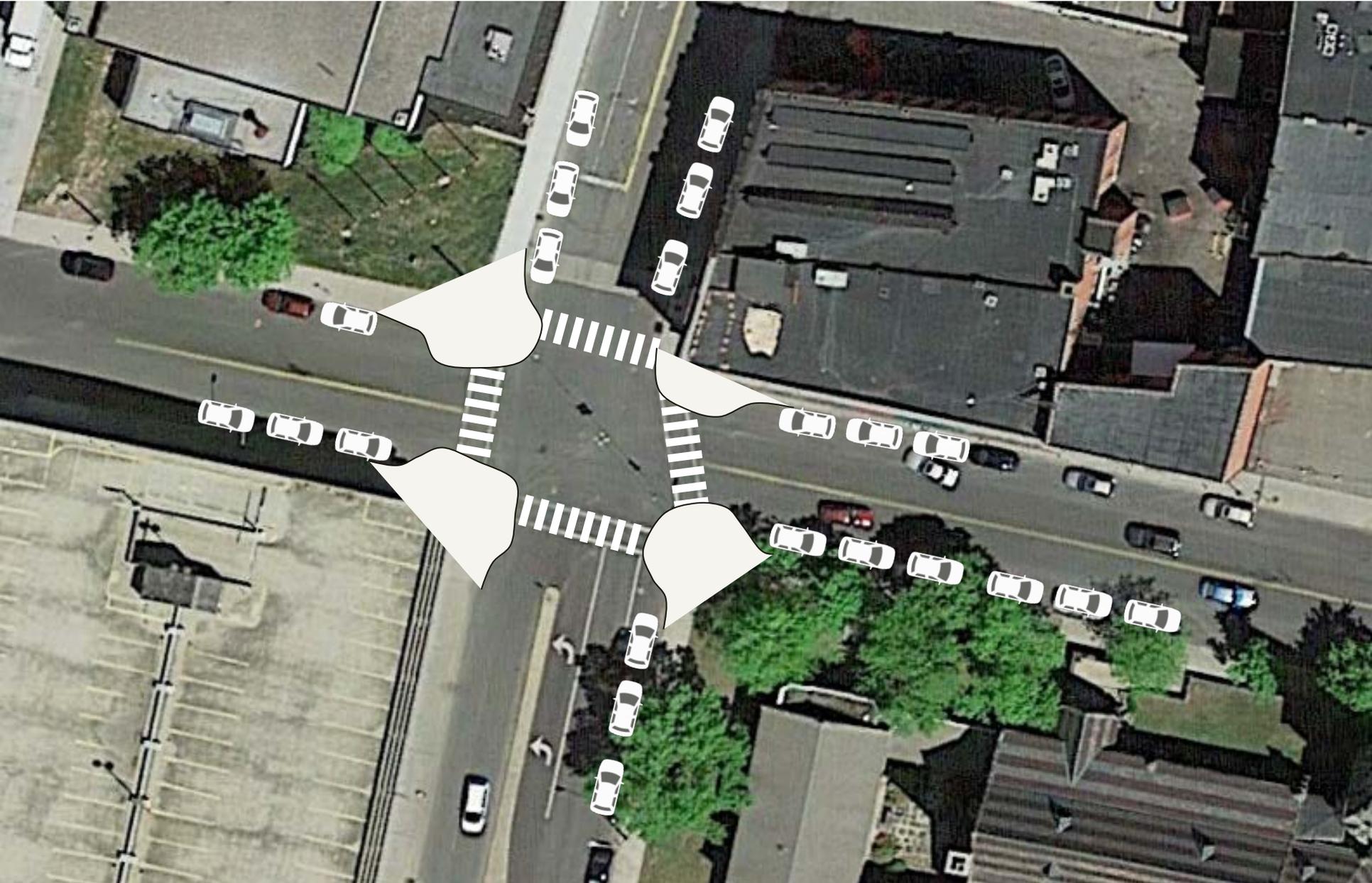
Wide turn radii

Displaced stop bar?

Disconnected crosswalks

Standard crosswalks

Henry and Water



User Experience - Technology



Use Convenient Parking Technology



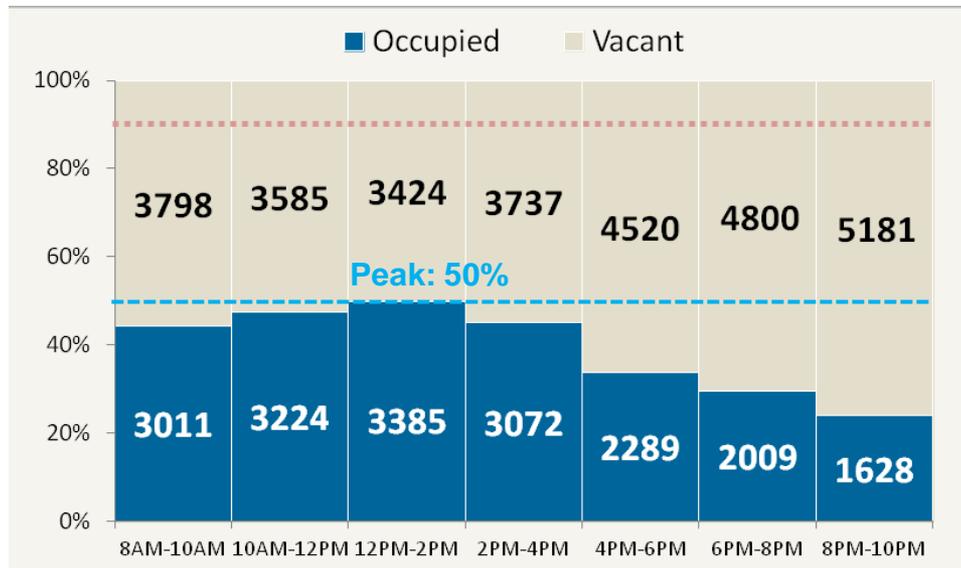
- Make it easy and convenient
- Use technology to pay by coin, debit/ credit, and cell
- Can combine meters & kiosks
- Can offer a “first 10 minutes free” option
- Integrate with enforcement equipment

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Better Use Restricted Parking

Off-Street Restricted Access Parking



- Already happening on small scale
- More efficient
- Use spaces throughout day
- Less expensive than building more
- Collaboration between businesses

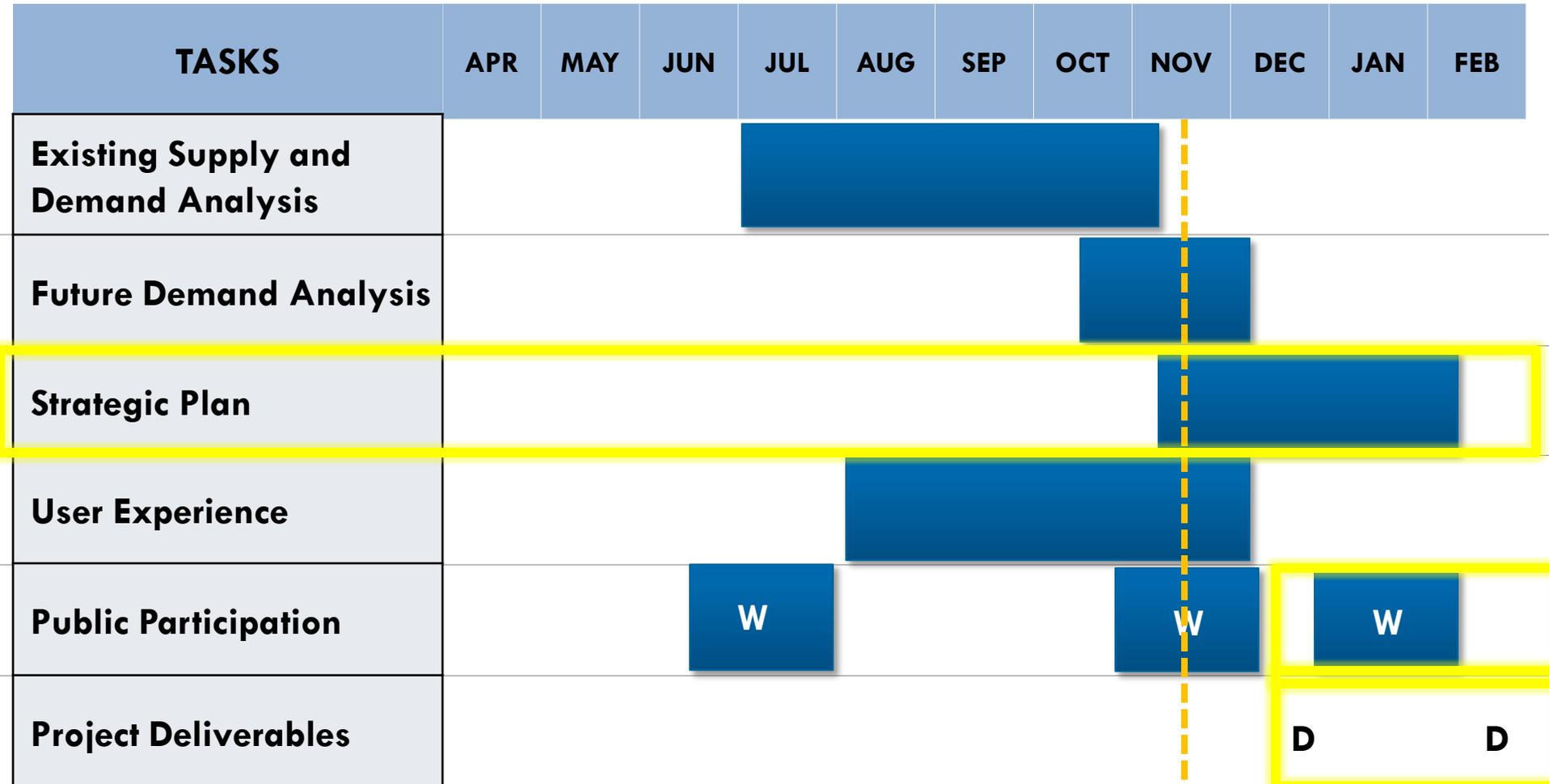
Other Considerations

- Other technology
- Governance/ administration
- Permit program
- Pricing zones
- Zoning code
- Disabled parking regulations
- Circulation
- Curbside management policies
- Multimodal access
- Reporting
- Placemaking
- Enforcement



Next Steps

Next Steps



W-Public Workshop, **D**-Deliverables

Thank You!



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